



The New Face of War? Refresh the Approach to the Digitalisation of our Armed Forces!

Programme overview as of 29 August 2023.

All times are listed in **UK time**.

The overall design of the conference:

Among the many reasons to refresh the Western nations' approach to the Digitalisation of their Armed Forces the insights from the ongoing Ukraine war and the energising impulses from technological innovations are some of the most powerful and driving factors. This is obvious in the C5ISR field but affects all Armed Forces capabilities and posture aspects. The United Kingdom is one of the first countries to also react to this changing environment with a new and comprehensive grand strategy, the "Digital Approach to Deterrence and Defense". AFCEA Europe feels privileged to witness and support the emergence of this new concept which will drive digitalisation with tangible results in the years to come. Its presentation to the audience of senior experts will start the conference.

With such a new conceptual foundation, the lessons from the Ukraine war and the ever-increasing speed of innovation, especially in IT and the private sector, force us to consider a new approach in defence procurement and relationship to industry. This is the ultimate goal of the conference: To reflect upon needs, requirements, and solutions in digital technologies and to analyse, discuss and advise on new, more agile methods of acquisition for up-to-date C5ISR solutions and services. By debating new approaches in procurement, the conference attendees may help keep up the momentum and support the current awakening in defence IT procurement, which is necessary to quickly transform inventions and technological options into operational reality. This is the way to maintain the Western alliance's upper hand in the ongoing peer-to-peer competition and ultimately contribute to safeguarding peace in Europe and beyond.

3 October 2023

09:00 - 09:10 Welcome

09:10 - 09:40 **Opening Keynotes and Introduction to the Special Session on the UK Digital Approach to Deterrence**

09:40 - 10:20 **Presentation of the architecture of and "deeper dive" into "Digital Approach to Deterrence"**

10:20 - 10:50 **Networking BREAK**

10:50 - 12:20 **Session 1 "The Ukraine war lessons"**

Abstract: The Ukraine war, now in its second year, has shown much expected and unexpected engagement in C5ISR on both sides. Technology--both military-designed and from the private sector was used in sometimes very surprising ways. Warfare in the Electromagnetic spectrum hasn't been revolutionised in this war but has proved so far to be an essential part of the defense. As a - not so surprising - novelty, a digitally-developed country defends itself differently, in highly efficient ways, even more than traditional societies do. How the options that were available to and exploited by the Ukraine Armed Forces and the Ukraine population changed procedures and doctrines in establishing and maintaining superior C5ISR capabilities, with high agility being at the core of this session. Other lessons to be drawn are the continuous, close cooperation with national and international industry, the whole-of-a-government approach, and the employment of dual-use technology across sectors. What is the influence of this war on our own attitude in the West regarding digitalization in defense? What new C4ISR technology should be implemented soonest? How to adapt to policy and procedures?

Separate and special consideration should be given to Cyber defense, including information warfare aspects. If there have been new elements visible in recent years, how should we react to these? Does it also change our way of exploring new sources and resources?

10:50 -11:10 **Keynote "Different than expected ...? Why was Ukraine so successful in its digital defense?"**

11:10 - 12:00 **Panel discussion "There is more than the military capacity out there ...Implementing technology used in the private sector."**

The panel should highlight the contribution state-of-the-art technology made to Ukraine's success in defending itself, the private sector's engagement in supporting the Ukraine Armed Forces, and the skillfulness of how the Ukrainians exploited this technology and adapted it quickly for the battlefield. It may discuss the conditions for such adaptation processes in general. Also, examples from industry (defense IT and other sectors) are very welcome. Furthermore, it can be discussed if and how far the use of open standards and open sources are helpful or even mandatory nowadays. The discussion is not limited to the Ukraine war experience, other activities with similar results are welcome to be presented.

12:00 - 12:20 Industry presentation

12:20 - 13:20 **LUNCH networking BREAK**

13:20 - 16:20 **Session 2 “The Impulses from Innovations”**

Abstract: The ever-increasing speed of the innovation cycles in the private IT sector made it obvious that defense IT needs to be purchased in a much more expeditious way if the Western Alliance wants to keep its technological edge. In the face of more and more emerging disruptive technologies, the need for reform goes even beyond the “quick buy” and into the question of how innovation-friendly the Armed Forces are in general. Starting from this more sociocultural aspect, the discussion on how to field innovation by making it available to the warfighter may also include the procedures for how to detect new technologies, how to get it operationally useful, but also the challenges of sustainability, scaling, and supply of disruptive technologies. In addition, the questions of organising cross-harvesting and best-practice beyond the domain silos as well as how to deal with “unknown unknowns” of technology pieces in C5ISR may be discussed.

Also, the impact of the broader aspect of technology in general on national security is worthy of debate. Finally, the NATO DIANA program wants to unearth new technological advantages for NATO forces. Its particular importance in the field of future C5ISR needs to be emphasised. Identifying impulses, even demands from emerging and disrupting technologies and the industry’s innovative capacity for adapting the procurement system is the essence of this session. Industry can contribute significantly to this effort by providing their experience and eye-opening examples.

13:20 - 13:40 **Keynote “Innovational Thinking and the Military Ecosystem”**

The keynote may address the military approach and attitude towards innovations, in particular technological novelties. This can be a self-reflection by governmental speakers, an academic analysis, or a presentation by the industry that addresses new conceptual thinking methodologies such as DevSecOps. The context and organisational conditions under which non-conservative thinking becomes capable of understanding the impact and opportunities of both technological innovations and new architectural designs may also be discussed.

13:40 - 14:00 **Keynote “ Technology trends and impact on national security”**

14:00 - 15:00 **Panel discussion “Innovations across Domains and Sectors”**

Traditionally, innovations are implemented along service lines and within boundaries, only on rare occasions spreading over into other domains. The intention to harvest examples of successful innovations in other sectors may generally exist, but how can this strategy work on a broader basis. Identifying new features in the vast private sector e.g., that can be useful in the defense environment

seems unstructured. Successful concepts and procedures should be presented, specific technologies suitable for dual use may be addressed, and conditions, as well as limitations of such technology transfers, may be debated.

15:00 - 15:30 **Networking BREAK**

15:30 - 15:50 **Keynote "EDT's Relevance for Defence Digitalisation"**

15:50 - 16:30 **Fireside chat "How do we react to technological surprises (like Chat-GPT)?"**

19:00 ***Black-tie dinner at One Great George Street***

End of Day 1

4 October 2023

09:00 - 09:10 Welcome Day 2

09:10 - 12:10 **Session 3 "Digital Defense Strategy and EDT - How to Make it a Reality"**

Abstract: The insights and assessments presented on day one regarding impulses from the actual war and the technology landscape in C5ISR may be just two, but powerful influencing reasons for refreshing and reinforcing the digital defense strategy of the Armed Forces. Picking up the inaugural presentation of the "Digital contribution to Deterrence and Defense" conceptual idea and listening to the senior strategists from the UK MOD and NATO on the status of the various digital strategies provides the background for an in-depth discussion amongst senior military officials on what kind of technologies and specific steps are essential to digitalise the Armed Forces further intensively in its various tasks and missions. Again, the practical aspects of the implementation of EDTs and "fielding them" are becoming more relevant. What are the challenges and the strategies for turning inventions into innovations on the battlefield? How to involve the industry and the end-users? Practitioners will challenge the conceptualist.

09:10 - 09:30 **Keynote "Refreshing the UK MOD's Digital Strategy"**

09:30 - 09:50 **Keynote "Refreshing the Digital Strategy? NATO's view"**

09:50 - 10:50 **Panel discussion "Digital Exploitation for Defence (DX4D)"**

Abstract: Digital Exploitation for Defence (DX4D): The panel will consider how Defence is accelerating its shift towards a modern, integrated exploitation of digital and data game changers in support of military and business operations. The panel will focus upon coherence; data-centricity; and the ambition for digitisation pan-Defence within the programme. The panel will consider the challenges of delivering

across the themes of campaign advantage, capability deployment, and business ops within the context of ambitious timelines and competing priorities.

10:50 - 11:20 **Networking BREAK**

11:20 - 12:20 **Panel discussion (60 min) "How can EDT become operational reality - what digital innovations do we need at the sharp edge?"**

According to the DIANA concept, industry experience in defense projects plays an important role in helping to field ground-breaking innovations, in making products acceptable to the end-user, and in providing support for the products throughout their lifetimes. The industry may describe the conditions and present their ideas of an innovative way of cooperating with government and EDT entrepreneurs. The traditional defense industry also may highlight their engagement in delivering EDT developed on their own and showcase examples.

12:20 -12:40 Keynote "Long Term contribution of Cyber Defence to NATO's overall Deterrence and Defence"

12:40 - 13:40 **LUNCH Networking BREAK**

13:40 - 16:00 **Session 4 "Digital contribution to deterrence - the new agility in Defense IT procurement?!"**

Abstract: Recognising the logical requirements of the "Digital contribution to deterrence" concept, nations and defense institutions have already stepped up to explore new ways of procuring defense material, in particular goods with short technological life cycles in the C5ISR field. The actual war and the ever-increasing speed of innovation in IT make these notable approaches even more pressing. So, the need for increased agility is becoming obvious whereas agility also means more than speed. It is worthwhile to learn about the new initiatives from various nations, assess the potential impact and contribute to its further development. This is a task and an opportunity for the industry, experienced in past acquisition processes, but also equipped with knowledge about modern procurement and possessing a vision of a more agile and cooperative future. Valid concerns and requests may support such governmental activities and carry them further. In the end, by contributing to new methods and procedures in C5ISR procurement with thought leadership by all conference attendees and by reflecting the wartime and technological needs, the Digital contribution to Deterrence may also mark the start of a new relationship of industry, academia, and government.

13:40 - 14:40 **Multi-keynote presentation (15 min each) on new governmental procurement initiatives and industry-government cooperation**
"How to create an agile innovational ecosystem for times of war?"

14:40 - 15:40 **Panel discussion** (60 min) **“Agile procurement and continuous partnership: Contribution and Initial assessment from industry”**

There have been many approaches in the past and many ways of reaching a new quality in agile procurement. Industry may present their assessment, thoughts, and ideas, perhaps punctuated by the experience of successful projects, and explore the necessary pre-conditions for the new approaches in order to be sustainable. Beyond the delivery of products and services as the core of procurement, new forms of services, continuous development and after-sales cooperation, and closer relationship to all elements of the customer chain can be a field of innovative steps that may be discussed.

15:40 - 16:00 Closing **Keynote** (20 min) **“What is the right way ahead in C5ISR procurement?”**

Farewell