DEFENCE iQ EDITORIAL THEME 2020

INNOVATION AND ENTERPRISE TRANSFORMATION IN DEFENCE

Includes

Concept Note

Content Themes

Defence iQ Sandbox

Submissions and Style Guide

Contact the Editor

Defence iQ

Editor's Foreword

'The world is changing'. It is difficult to find a defence policy whitepaper, doctrine note or op-ed today that doesn't open with this statement, or one like it. The defence community is going through something of an intellectual, cultural and technological transition, and this is very much underpinned by a recognition that *something* has changed, or is *changing*, within and across international political, social, economic and military domains.

This observation is commonly in reference to technology. Such is the rapid rate and scale of technological development today, and the decline of governmental control over its direction, the military finds itself in a new predicament. The democratization of innovation and the diffusion of power across the commercial sector means that the West is no longer an arbiter of progress, nor is their military advantage a given. Recognizing this new reality, NATO nations are reflecting upon established processes and models of thinking to usher in a new 'culture of innovation'. A culture that enables them to, at the very least, keep pace with technological change and become empowered technological actors in the digital age, able to rapidly identify and exploit new capabilities for joint all-domain operations, engender new industrial models, and foster a spirit of entrepreneurialism removed from the shackles of risk aversion and bureaucratic myopia.

This, of course, has practical implications for industry. The need to design new collaborative commercial models to deliver capabilities at speed and at scale for joint all-domain operations is critical, especially against a backdrop of new threats against industry, such as cyber espionage and IP theft, and the growing influence of entrepreneurs, SMEs and startups. How, though, to bring forth such change is the challenge for the defence community. Indeed, it is not so much that we do not have the industrial or intellectual resources to develop new capabilities, nor the warfighters able to exploit them. Rather, it is at the intersection of leadership, education, and design thinking within military and industrial establishments where innovation is stymied.

Defence iQ's Editorial Theme 2020 will focus on this problem set, with contributors from the military services, defence policy, acquisition, traditional and non-traditional defence industry, S&T and academia. Our objective is to engender a new hub of disruptive intellectual commentary and analysis, provoking debate and discussion across national services and across alliances, when collaboration and the cross-fertilization of ideas about the present and future defence enterprise has become more important than ever.

Through its weekly articles, op-eds, webinars and whitepapers, Defence iQ and its Editorial Board, contributors and industry partners will inform, educate and inspire the current and next generation of disruptive thinkers, innovators and smart customers in defence.

Themes and Topic Areas

The content themes and problem statements below are intended to provide our contributors, members and readers with a broad overview of Defence iQ's editorial direction for 2020. Many of the topics will be applied to the nuances of the specific services and operational domains, as well as different national governments, so that our membership can gain a cross-section of perspectives and case studies on the current and future state of the defence enterprise and defence technologies.

Culture and Organisational Transformation

Defence iQ will be exploring the concept of 'innovation in defence' and will be reaching into the commercial sector for ideas about how to create environments were innovation can flourish.

- What does a 'culture of innovation' look like for defence, and what are the barriers to achieving it?
- What can the defence community learn from industry about fostering cultures where innovation can flourish?
- With the adoption of joint all-domain concepts of operation, how should the Army, Air Force and Navy adapt to ensure innovation can flourish and systems can be integrated at pace across all domains?

Policy and Doctrine

Defence iQ will be publishing a series of guidebooks on service, national and allied defence innovation policies, providing our members and readership with a unique information hub for comparative analyses and policy initiative case studies.

- What does an innovation policy cover – at the single service, cross-service and governmental levels - and what are the barriers to implementation?
- What role do industry bodies play in addressing and advancing cross-cutting policy issues?
- How do policymakers balance the conceptual and actual tradeoffs between innovation policy, resource, and capability?
- How will acquisition adapt to suit Joint All-Domain Operations/Command and Control doctrine?

Acquisition Paradigms and Delivery

Changes to existing acquisition and capability delivery paradigms will enable innovation in defence. Defence iQ will be seeking contributions from leaders in industry, programme management and delivery to understand how these changes will be implemented and the implications for future procurement programmes.

- How are existing contracting and intellectual property policies hindering innovation and what can be done to improve?
- How can we overcome the Valley of Death? What success stories can we draw from?
- How will digital technologies such as AI and data analytics improve acquisition processes and delivery?
- How will joint all-domain operational thinking impact the way that acquisition leaders identify and fund new capabilities?

The Industrial and Technological Base

The Defence Industrial and Technological Base is also facing disruption. New threats and global trends, industrial actors, technologies and policies will alter the way that the industrial base has operated, ushering in new relationships with military and government. Defence iQ will invite industry to reflect on these changes and demonstrate thought leadership in this new era of defence innovation and enterprise transformation.

- How are prime contractors adapting their cultures to keep pace with technological advancements in the non-traditional defence sector?
- Is the industrial base and acquisition process able to deliver innovation at scale?
- What barriers do SMEs, startups and non-traditional defence companies face when entering new defence contracts and how can these be overcome?

Recruitment, Retention, Training and Education

Wholescale innovation programmes in the defence community will have significant implications for training and education. Rapid adoption of new technologies and software-enabled platforms will challenge knowledge frameworks and require new models of recruitment, retention training and education for warfighters to exploit capabilities effectively, in peace and in conflict. Diversity of personnel must become a priority for the defence community to ensure that innovation and new approaches to problem solving can flourish.

- What organizational and procedural changes are required to recruit and retain a workforce fit for the digital age?
- How can the military ensure that training and education technologies keep pace with the rapid development of software-enabled capabilities?
- Can innovation be taught? How should training and education be modified in the acquisition space to create smarter customers?
- What further improvements in recruitment and retention can be made to attract a more diverse workforce in defence, particularly women and BAME individuals? What can government and military learn from the private sector?
- How might military and industry collaborate to ensure that veterans can transition into high-skilled opportunities in the particularly the technical industrial base?

Leadership

Culture is often developed from the top down, and as such military leadership is a critical pillar in the innovation debate today. Understanding the challenges that leaders face today in adopting new approaches to innovation and encouraging information-sharing with industry will be a central part of the editorial theme.

- How do we empower leadership to be innovative, to overcome risk aversion and normalize failure?
- What social, ethical or political factors hinder leaders to develop long-term visions for innovative technological investment?
- What defines innovative leadership?

R&D and T&E

Increased R&D funding and a new emphasis on early testing and evaluation of technology for more rapid capability delivery has become a core part of the defence community's innovation strategy at the individual service level. This presents opportunities and risks for industry, as well as the warfighter, in the future.

- How will industry exploit the opportunities that new testing and evaluation initiatives present, and how will they manage the associated risks and ensure return on investment?
- What opportunities exist for bi-lateral or alliance-level funding and collaboration on research and development?
- In the context of joint all-domain operations, how should experimentation adapt to ensure that systems can be integrated effectively in the battlespace and across domains?

Disruptive Technologies

Defence iQ has identified some core disruptive technologies to review over the course of 2020. A series of 'Guide To' white papers report will explore a specific technology that is transforming defence culture, capability acquisition and military operations. Report sponsors can shape the parameters of the research, offer case studies and advise as to how to integrate these technologies into existing operational or acquisition frameworks.

The Guide papers will explore the following, January-August 2020:

- Artificial Intelligence and Machine Learning
- Soldier Performance and Biotechnologies
- Blockchain
- Quantum Computing
- Advanced Materials
- Deep Fakes
- Digital Twins
- Augmented and Virtual Reality

Please enquire at alexander.stephenson@defenceiq.com to discuss rates and upcoming publications.

Defence iQ Sandbox

A New Intellectual Platform for Innovators in Defence

NATO allies and partner nations are setting up new Innovation Hubs and rewriting their defence industrial frameworks to encourage greater participation with the non-traditional defence sector. Defence iQ wants to align with these initiatives by providing a digital platform and a global readership which SMEs and startups can engage with.

Many of the SMEs and start-ups, who are spearheading technological innovation and ideation, struggle to make connections with the 'right' people in government and industry because they do not have an extended network inside the community. Some find procurement regulations challenging, especially when they are trying to move into new markets.

Defence iQ wants to collaborate with these companies and provide them with enhanced exposure via our digital platform and publications. Tying in with our theme on Innovation and Enterprise, our goal is to support innovators and disruptors and give them a platform to talk about their technologies, their approaches to problem solving, and share feedback on their experiences working in and through defence procurement, operational and policy channels. .

Our hope is that, through these initiatives, Defence iQ will become a recognized source of information for those who work in capability, programme management, and delivery, as well as the military leaders who are keen to keep pace with new technologies and new companies on the horizon but may not always have the time to attend events or workshops.

Please contact the Editor to discuss (alexander.stephenson@defenceiq.com).

Style Guide

General Guidance

- Keep your audience in mind. Defence iQ has an international readership, across military, government and industry. Although used to sector-specific terms, abbreviations and jargon, we urge our authors to be innovative, concise with their language and put forward meaningful ideas and arguments that are easily understood and scannable.
- Break up big paragraphs where possible to improve readability, and feel free to use bullet pointed lists.
- Try to use the active voice and balance the professional with the personal.
- Include valuable links to other reputable articles and papers. Feel free to reference your own publications where appropriate.
- Defence iQ will share new publications on its website, via social media and through newsletters and emails to our members. We encourage our authors to use their own channels to publicize their work.

Content Submission and Format

- Please submit any article, op-ed or report to Defence iQ according to this style guide and via a single Microsoft Word file. Please include any photos with references, tables or figures.
- Any references should follow the Harvard system.
- Please include a full bio and photo, plus reference to any Twitter handle, LinkedIn profile or associated publications, with submission to the Editor.

Content Length

- Articles intended for publication on the Defence iQ should be 400-600 words only.
- Opinion pieces intended for publication on the Defence iQ website or as a separate downloadable document should be 600-800 words.
- Reports and whitepapers published on the Defence iQ website as a downloadable document should be 1000-3000 words.

Title

- Please ensure that the title is no longer than 60 characters.
- Subtitles are accepted.

Abstract

- Please ensure that the abstract is no longer than 300 characters.

Headings

- Headings should be used to designate the major sections or themes of the article; three or four headings should be sufficient for a web article. Longer pieces may require more, with the author's discretion.

Photos, Tables and Figures

- The use of visuals is encouraged to break up text and retain readers. Please reference any photo, video, table or figure.

Grammar and Spelling

- Defence iQ publications are written in UK English. Please maintain consistent spelling throughout.
- Please use Oxford English spelling conventions (i.e. –ize endings, with exceptions such as 'analyse', 'revise' and 'advise').
- Abbreviations take a full point, contractions don't i.e. Mr or Dr / the Hon. Smith.

Quotations

- Quotations should be given in double quote marks, with single quote marks for quotes within quotes.

Numbers

- Numbers from zero to ten should be spelled out; numbers over 1000 use a comma as a thousand separator.

Dates

- Dates are given in the form 1 January 2009, and periods are given using a full span, e.g. 1993—1999.

Abbreviations

- Please fully capitalize all abbreviations i.e. UK MOD, U.S. DOD, NATO, RAF, USAF

Latin Terms and Foreign Language References

- Latin terms or foreign language references terms should be italicized.

Ethics and Language

- Defence iQ will not accept content that demonstrates bias against any person or persons based on their gender, sexuality, ethnicity, or religion. Please refrain from using any language that may be deemed offensive.

Contact the Editor

As Editor, Alex provides strategic oversight over Defence iQ's research publications and defines the editorial themes, writes papers and and works with government, industry and media partners to extend Defence iQ's global reach.

Alex Stephenson, Editor, Defence IQ
alexander.stephenson@defenceiq.com |+44 (0) 207 368 9479
Mail: Defence iQ, 129 Wilton Road, London, United Kingdom

Defence iQ