

Intelligent Defence Series Three - A programme of round tables, analytical papers and conclaves arranged by Cityforum with advice from the Development, Concepts and Doctrine Centre of MOD in London

First Round Table

The Fourth Industrial Revolution – implications for defence and security

Technology, strategy, acquisition and operations

24 March 2020 – Central London

Website Agenda

Principal Sponsor

BAE SYSTEMS

Hosted by



This is a working agenda for a round table discussion conducted strictly under the Chatham House Rule. The structure is one of (mostly) short contributions (c.10 mins) followed by extended discussion with the plenary (45-60 mins) at the end of each session. All session titles, bullets and running order are provisional and the final agenda will evolve/be confirmed in consultation with confirmed contributors & wider stakeholders. Any comments / suggestions would be welcome.

Chaired by: Ms Heather Beeby *Maritime and Land UK Head of Strategy* BAE Systems

Opening address – the StratCom overview

Lieutenant General Robert A. Magowan *Deputy Commander* Strategic Command

Followed by a discussion guided by Ms Heather Beeby

Session One: Fourth industrial revolution and gaining defence advantage

Appraising the science and technology: What to expect? At what speed? With what implications?

- *Changing technologies (virtual and cognitive) – information advantage: data, intelligence, warfare, cyber (5G, 6G+), SA, sensing*
- *Changing technologies (physical) – kinetic conflict – propulsion, energy etc.*
- *Adapting commercial technologies for defence and security applications*

Expert contributors on a number of significant areas:

Cyber Security, Computing and AI

Professor Mark Briers *Programme Director* The Alan Turing Institute's Defence and Security Partnership and *Professor of Cyber Security and AI* Cranfield University

The future of telecommunications

Professor Mischa Dohler *Fellow* Royal Academy of Engineering and *Chair Professor of Wireless Communications* King's College London

Materials, energy and additive manufacturing

Professor Matthew Davidson *Director* Centre for Sustainable and Circular Technologies, University of Bath

Propulsion and autonomy

Professor Andrew Graves *former Co-Director* MIT's International Motor Vehicle Programme and *former Director* UK Lean Aerospace Initiative

Sensing and situational awareness

Speaker to be confirmed

Developments at the human-machine interface

Speaker to be confirmed

Followed by a round table discussion opened by Dr Bryn C. Hughes *Technical Director Dstl* and representatives from industry (to be confirmed)

Session Two: How to secure defence advantage

Thinking that emerges from the Cityforum Intelligent Defence and Smart Power series
Professor Paul Cornish *Chief Strategist Cityforum and Author of the 'Intelligent Defence Maximising Smart Power & Public Value' Report 2019*

An assessment from the corporate sector
A speaker from BAE Systems Applied Intelligence

A view from the Military
Speakers tbc

Followed by a panel discussion with an SME to be confirmed

Session Three: Where do we need to be and what is required in order to get there?

- *Using the cross-government review of defence, security and foreign policy to harness new technologies and ways of thinking*
- *Delivering digitalisation – Leadership, capability, collaboration and innovation*
- *Rethinking procurement*
- *Identifying 5 practical action points for the integrated review*

Opening address
Mr Charles Forte *Chief Information Officer MOD*
&
A representative from another sector

An assessment from the NAO
Ms Yvonne Gallagher *Director Digital and Innovation National Audit Office*

What needs to change? What are the priorities? What should we wish for from the Integrated Review?
A representative from DE&S
A representative from MOD
A contribution from Cabinet Office or OGD
An industry perspective

Followed by a panel discussion with **Mr Toby Jones** *CEO ACE (Accelerated Capability Environment) Home Office* with a panellist from BAE Systems and an SME (to be confirmed)

Conclusions and Close