



EMERGING DISRUPTIVE TECHNOLOGY ASSESSMENT SYMPOSIUM

# INFORMATION, KNOWLEDGE AND DIGITAL DISRUPTION

MARITIME MUSEUM, SYDNEY, AUSTRALIA 10-11 APRIL 2017

dst.defence.gov.au/edtas











Defence Science and Technology Group in partnership with UTS and Noetic Group are hosting an Emerging and Disruptive Technology Assessment Symposium (EDTAS) on Information, Knowledge and Digital Disruption. EDTAS helps the Next Generation Technology Fund (NGTF) understand the impact, be it transformation or disruptive, of emerging and potentially disruptive technologies for Defence and National Security, in the 10–20+ year timeframe.

The objective of the symposium is to shape future Defence research and preparations for emerging and disruptive trends in Information, Knowledge and Digital Disruption in a smart city environment.

- Four main themes will be explored: Technologies in 2040, Application in a Smart City 2040, Capability Concepts, and Socio-Economic, Legal and Ethical considerations for Information, Knowledge and Digital Disruption.
- A key outcome from the symposium will be a Big Picture Assessment Report developed through the workshop contributions of all attendees.
- This symposium will provide a number of opportunities.
  These include networking and partnering, an understanding of strategic and S&T challenges and an input to shape long term Defence and National Security guidance

#### INFORMATION, KNOWLEDGE AND DIGITAL DISRUPTION

The question of how Defence will operate in this future remains open. How will the transformational impact of knowledge gained from these technologies change Defence? How will our future organisational and command structures operate with the agility and flexibility offered by digital technologies? And equally, how will our adversaries adopt and use such technologies. The fusion of technologies and the way in which they are adopted will create new, uncharted opportunities for Defence. The growth of data, the fusion of technologies and the complexity it poses, will disrupt the manner and way Defence does business. The Symposium will explore these challenges with a view to identifying the key research areas and areas for future industry focus that will ultimately improve Defence capability.

#### **TECHNOLOGIES IN 2040**

Information technology continues to gain momentum, shaping and shifting the way we operate. In the next 10 to 20 years, new technologies such as the internet of things, big data, artificial intelligence, machine learning, robotics, automation and virtual/augmented/mixed reality will transform the way we live our lives. In the Defence context this rapid change (resulting in disruption) presents both an opportunity and a threat.

#### **APPLICATION IN A SMART CITY 2040**

Cities in 2040 will be hyper-connected information nodes in the digital mesh. This environment could open up many different applications which could highly benefit society. A smart city presents challenges in the national security domain and how Defence interacts with this environment is an important insight for forward strategic planning.

#### **CAPABILITY CONCEPTS**

The fusion of technologies and the way in which they are adopted will create new, uncharted opportunities for Defence. The growth of data, the fusion of technologies and the complexity it poses, will disrupt the manner and way Defence does business. The Symposium will explore these challenges with a view to identifying the key research areas and areas for future research and industry focus that will ultimately improve Defence capability.

## SOCIO-ECONOMIC, LEGAL AND ETHICAL CONSIDERATIONS FOR INFORMATION, KNOWLEDGE AND DIGITAL DISRUPTION

What economic, societal, political, Defence and National Security implications should we expect over the next 20 years? What technologies will be here to help us? What is the current state of art of these technologies? This symposium aims to explore and assess how technology may disrupt the manner and way Defence does business.

### LIVE STREAMING VIA YOUTUBE

EDTAS will be streamed live via YouTube. We encourage you to comment and ask questions throughout the symposium via Twitter by tagging your tweets with #EDTAS

Visit the DST Group YouTube channel: www.youtube.com/DSTOvideo