



## **Emerging Technologies and the CWC: Mobile Data Collection, Big Data and Artificial Intelligence**

Conference of States Parties to the Chemical Weapons Convention  
Monday 28 November 2016  
Antarctica Room, World Forum  
The Hague

13.00-15.00

The world is becoming increasingly connected through devices that collect and transmit data. By the year 2020 an estimated 50 billion devices will be connected to the Internet. Such devices include wearable monitors; stationary and remote monitoring systems; autonomous mobile systems, mobile phones, and even household appliances. The amount of data being generated is staggering, and necessitates scalable and intelligent analytics tools. Advances in artificial intelligence and the promise of quantum computing further fuel this data revolution, providing the means that enable use of this immense wealth of information in actionable ways.

Increased connectivity between individuals and the ability to passively collect data through a variety of stationary and mobile devices offers new opportunities for those involved in inspections and investigations to collect and analyse data in real time. Furthermore, such tools can help ensure chains of custody, and capture and integrate data streams that allow more holistic and robust analysis and assessment (both in real time and retrospectively). Mobile and wearable technologies are already being evaluated for their inspection and investigation relevant capabilities, especially in law enforcement applications. Alongside the benefits of data generating emerging technologies, are security concerns including cyber-attacks, proliferation and diffusion of sensitive information, and the potential of terrorist and criminal misuse of these technologies. These are security risks that could have unforeseen economic and social impacts.

This side event, presented by OPCW and UNICRI at the Conference of the States Parties to the Chemical Weapons Convention, will bring together experts who are evaluating and using such technologies. Applications in safeguards inspections, and crime scene investigation and management will be discussed alongside risks and concerns resulting from an unprecedented capacity to collect and access data. The event offers a unique opportunity to understand the possibilities and practicalities of adopting the ever more powerful technologies that are evolving around us.

The thematic content of this event compliments the finding of the OPCW Scientific Advisory Board's Temporary Working Group on Verification and is informative to the Board's upcoming Report on Developments in Science and technology to the Fourth Review Conference.



### **Event moderator:**

**Dr Christopher Timperley**, Chairperson the OPCW Scientific Advisory Board

### **Opening Remarks**

13:00 Opening remarks:

- Cindy Smith, Director of UNICRI
- Veronika Stromsikova, Director of Strategy and Policy, OPCW

### **Robot demonstration**

13.15 **Edwin Lustig**, Director of Robot Security Systems

### **Presentations**

13:20 *Emerging Technology and the work of the OPCW Scientific Advisory Board*, **Jonathan Forman**, OPCW Science Policy Adviser

13:30 *Artificial Intelligence and Robotics at the United Nations*, **Irakli Beridze**, Senior Strategy and Policy Advisor, UNICRI

13:40 *Current and future trends in emerging technology: security dimension*, **Landon Downs**, President, 1QBit, quantum computing software company

13:55 *Mobile and Wearable Technologies in Safeguards Inspections*, **Dr Dmitry Finker**, Technology Foresight Specialist, International Atomic Energy Agency (IAEA)

14:10 *The Generic Integrated Forensic Toolbox for CBRN Investigations*, **Dr Ed van Zalen**, Programme manager, CBRN, the National Forensics Institute (NFI), the Netherlands

14:25 *The use of big data in detecting subversive crime*, **Mr. W.A.P. (Xander) Beenhakkers**, Police commissioner and partner of The Hague Security

14:40 Discussion

### **Closing Remarks**

14:55 OPCW and UNICRI

**Lunch provided courtesy of OPCW at Antarctica Room, World Forum starting from 13.00**