



EVOLVING SECURITY THREATS AND ADVANCED SECURITY TECHNOLOGIES

Date: 19th – 21st March 2018

Venue: Wolke 19, Vienna

Please take note of these dates.

Further details will follow shortly.



INTRODUCTION

The threat landscape has evolved—and is continuing to evolve—at an almost unimaginable pace, especially in the cyber world. Cyber terrorism (perpetrated by both States and individuals) has become an enormous threat to businesses, industries and governments around the world. Political upheavals in several regions of the world (greatly assisted by the development of smart phones, internet and social media technology) have led to the rapid rise of terrorist groups using more and more sophisticated tools and weapons. Although difficult to predict on a long-term basis, the frequency and magnitude of attacks perpetrated by malicious individuals, including lone wolves and insiders from across the political spectrum, is unlikely to decline in the near- and medium-term future.

Nuclear operators and other nuclear security stakeholders are already investing significant resources to cope with these continuously evolving threats and need to look for new approaches and advanced technologies that will help to ensure they remain one step ahead of their adversaries. Some high-risk facilities already deploy remotely-operated weapons and automated mobile detection systems.

important benefits is data analytics, which enables the analysis of huge amounts of data in near real-time. On the other hand, technology has also resulted in such negatives as cyberterrorism and the creation of improvised explosive devices that can be easily transported, hidden and detonated.

Clearly, rapid changes are going to continue taking place in the years ahead. Nuclear reactors will change, including the deployment of small modular reactors, and the threats—many of which have not even been anticipated yet—will evolve. It is crucial that those with responsibility for nuclear materials understand the nature of such change and put strategies and structures in place to mitigate it.

KEY OBJECTIVES

The purpose of this workshop is to discuss technological changes that might take place in the coming decades and how nuclear organisations and other nuclear security stakeholders can strategically anticipate and prepare to meet them. Set against the societal backdrop of human rights and corporate governance, this workshop will ask:

- To what extent is it reasonable or necessary for the nuclear sector to deploy advanced security technologies, such as simulation and modelling, remotely operated weapons systems, robotic guards, advanced biometrics, stress analysis technology and data analytics? When should new technologies be implemented?
- What impact will the miniaturisation of technology and 3D printing have on both the potential threats and defence of nuclear facilities?



Unfortunately, technology is fundamentally a two-edged sword. On the one hand, it has led to such benefits as the development of sophisticated modelling and simulation programmes, advanced biometrics, stress analysis technology, robotic guards and remotely operated weapons systems. One of the most



FINDING THE BALANCE: EVOLVING SECURITY THREATS AND ADVANCED SECURITY TECHNOLOGY

- Do we fully understand our security expenditure and is it focused on the right things? Is the current cost of manned-guarding (which is 10% to 15% of annual operating costs for a nuclear power plant) preventing proper investment in the development of an effective and balanced security programme? How do we demonstrate a return on investment when we invest in a new technology?
- Can technology completely replace human beings in the future? What is the role of artificial intelligence?
- How can organisations make better use of data analytics to manage the security of the nuclear materials in their facilities and during transport? Can data analytics help organisations better identify insider threats and move their security posture from one characterised by hindsight to one characterised by insight?

TARGETED AUDIENCE

This workshop aims to bring together experts and leading thinkers in advanced security. We are looking to invite no more than 50 delegates for this prestigious event so that the workshop can benefit from the exchange of best practice in different sectors and enable WINS to publish the findings and proposals for further research. Attendees will be expected to meet their own costs for travel and accommodation. Workshop costs will be met by WINS. No registration fee is required.

We welcome applications from the following:

- Security managers from the nuclear industry and other critical infrastructures
- Regulators and other governmental organisations
- Law enforcement agencies
- Transport security and communications experts
- Nuclear facility and engineering/systems designers
- Leading researchers and practitioners in advanced security technologies
- Experts in data analytics and associated technological fields
- Business managers who approve security expenditure
- Security experts, consultants and vendors

This interactive, professionally facilitated workshop will consist of presentations, plenary and group discussions. It will be conducted in English and draw only on unclassified information. Based on the workshop findings, WINS will produce a Special Report on Advanced Security Technologies to complement its existing publications on Tracking Technologies, Big Data and Modelling & Simulation tools.



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LOCATION

Wolke 19
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CONTACT INFORMATION

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