



Sparking Innovation in Science and Technology for Security

23 June 2010

8.40 Registration, Tea and Coffee

9.00 - 9.15 Introduction

Speakers: Dr George Loukas, Leader, Security and Sensing Group, LTN

Jennifer Cole, Head of Emergency Management, National Security and Resilience, RUSI

9.15 – 9.35 Keynote Address

Speakers: **Improving Government Engagement with Academia and SMEs**

- UK counter-terrorism strategy
- Seeking innovation: existing ideas, new applications
- Support from the Private Sector

Neil Stansfield, Deputy Director, CONTEST, Science & Technology, Home Office

9.35 - 9.50 Funding Avenues

Speakers: **An Introduction to the Global Uncertainties Programme**

- Major areas of focus
- What Research Councils can bring to the Area
- How to engage with the Programme

Dr John Wand, Programme Leader, Research Councils UK Global Uncertainties Programme

9.50 - 11.20 **Session One: Innovations in Tools and Techniques for Detection and Protection**

Chair: Professor Martin Gill, Director, Perpetuity Group and Consultancy International

Speakers: **Intelligence from Multiple Sources: Process, Analysis and Action**

- Turning data into actionable intelligence
- The machine-human relationship
- Protecting the public

Senior Government Official

Smart CCTV: More is not enough

- Application drivers
- Technology barriers
- Bridging the gaps
- Research challenges

Professor Shaogang Gong, Professor of Visual Computation, Queen Mary, University of London

Technology Innovations in Surveillance - working with Government and SMEs



- Challenges big industries face
- Engaging different communities
- From technology to products

Alan Varco, Chief Technology Officer, Finmeccanica (UK) Battlespace Solutions

Delivering innovative technologies for security: An SME perspective

- Understanding what's needed
- Identifying the challenges: technical, organisational, commercial
- Stimulating, delivering and sustaining innovation
- Case study examples and future trends

Dr Moira Smith, Managing Director, Waterfall Solutions

11.20 - 11.50 Tea and Coffee, Poster Session

11.50 - 13.05 Session Two: Innovations in Biometrics: Security with Privacy

Chair: Kate Ray, LTN

Speakers Industry Perspective

Richard Chisnall, Director, Security Technology, QinetiQ

Recent progress in biometrics

- New biometrics on the block
- Limits of understanding
- New analyses

Professor Mark Nixon, Information, Signals, Images, Systems Research Group, University of Southampton

The biometric industry – a high growth revenue opportunity or a technical race to maximize losses?

- How can an SME keep up with product evolution in an embryonic market?
- Performance, accuracy, usability, security: the jargon, myths and reality
- Key drivers to success: commercial and technological

Dr Stewart Hefferman, CEO, OmniPerception

Government Perspective

Catherine Mealing-Jones, Director, Business Change, Border Transformation Group, UK Border Agency

13.05 - 14.30 Lunch and Poster Session

14.30 - 15.50 Session Three: Technological Innovations in Biosecurity

Chair: Jennifer Cole, Head of Emergency Management, National Security and Resilience, RUSI

Speakers: The white powder paradox and other CBR risk management challenges associated with mass transit rail

- Understanding the environment
- Dealing with ambiguous incidents
- A technological 'wish list'

Adrian Dwyer, Force Counter-Terrorism Risk Advisor, British Transport Police

The Fire Service response requirements in a Bio environment

- Usability
- Detection capability
- Logistics

Tony Biles, HazMat Policy and Response, London Fire Brigade



Industry Perspective

Bill Mawer, Smiths Detection

Novel vaccines design and biosecurity

- Using government funding
 - Applying basic academic findings
- Professor Brendan Wren, Professor of Microbial Pathogenesis, LSHTM

Hospital CBRNE defence

- CBRNE threats and targets and hospital defence
- 2004 Olympic's medical/hospital CBRNE defence: problems identified
- London hospital CBRNE defence: Case study

Col (Dr) Ioannis Galatas, Head, Department of Asymmetric Threats, JMID, HNDGS

A look at two contrasting approaches to government support for innovation in SMEs

John Attridge, Life Sciences Director, Chelsea Technologies Group

15.50 - 16.20 Tea and Coffee Poster Session

16.20 - 17.20 Breakout Sessions: Choose one of our round-table workshops led by experts

Session One: Strategies for Engagement

Building healthy eco-systems around large clients

- SME/Academic with large industry
- SME/Academic with government
- International collaborations in security

Led by Sidney Kristiansen, SME Pact and Paul Lewis, Technology Strategy Board

Session Two: Risk Assessment and Horizon Scanning

- 'Scanning' as a means of information retrieval is typically inefficient .
- Current processes and systems tend to displace scanning in favour of focused 'searching'; these work efficiently, but only in areas already known to be important.
- A qualitative risk assessment shows that there is a growing need for [horizon] scanning, to cover gaps in our understanding of what areas might be, or become, important.

Dr David Holland-Smith, Design Architect, Dstl Horizon Scanning Programme and Hardin Tibbs, CEO, Synthesis Strategic Consulting Ltd

17.20 - 17.35 Summary and conclusions

Speaker: Neil Stansfield, Deputy Director, CONTENT Science and Technology, Home Office

17.35 Conference Close