

Joint ICT KTN and Cambridge Wireless Security and Defence SIG Event
“The Evolution of First Responder Communications - Making the Most of Available 4G Services”
26th November 2013

This event is hosted by Deloitte and lunch is jointly sponsored by Selex ES.

*This SIG is championed by Guy Kenyon of **Kenyon Consulting**, David Chater-Lea of **Motorola Solutions**, Nicholas Hill of **Plextek**, Tim Phipps of **Cambridge Consultants** and Rob Quarton of **Airwave***

Venue: Deloitte, Stonecutter Court, 1 Stonecutter St, London EC4A 4TR

AGENDA

10:30 Registration over tea and coffee

11:00 Introduction to the Cambridge Wireless Security & Defence SIG by **Guy Kenyon** of **Kenyon Consulting**

11:10 Welcome from our partner, **John Ames** of **ICT KTN**

11:20 Welcome from our joint lunch sponsor, **George Match** of **Selex ES**

11:30 Welcome from our host, **Antoine Grenier** of **Deloitte**

Session chaired by SIG Champion, **Tim Phipps** of **Cambridge Consultants**

11:40 ‘**Replacing Airwave with the Emergency Services Network (ESN)**’

Gordon Shipley, ESMCP Programme Manager – Home Office, ESMPC

The Emergency Service Mobile Communications Programme (ESMCP) is attempting to procure a national critical voice and broadband data service for police, fire and ambulance services. The current service, Airwave, is expensive and only supports narrow-band data so ESMCP will go to the telecommunications market in 2014 to invite proposals for ESN from late 2016 as Airwave contracts begin to expire. 4G LTE is a serious contender for ESN.

12:00 Q&A

Session chaired by SIG Champion, **Tim Phipps** of **Cambridge Consultants**

12:05 ‘**The Role of Information and Communications Technology for Public Safety Communications**’

Euros Evans, CTO of Airwave

This presentation will provide a view on how mobile communications and technology will continue to be a critical enabler to support front line public safety users. It will highlight the critical service capabilities needed to deliver mission critical voice and data communications, along with consideration for spectrum and the role of standards bodies and industry vendors.

12:25 Q&A

12.30 Lunch and Networking

Session chaired by SIG Champion, **Rob Quarton** of **Airwave**

13:30 ‘**The Standards Environment for Next Generation Systems**’

David Chater-Lea, Chairman ETSI TC TETRA and Critical Communications Evolution (TC-TCCE) WG4 Motorola Solutions UK

As communications technologies evolve to provide new services and applications to Public Safety users, it is important that the standards environment keeps pace so that users can procure equipment that meets harmonised standards, so can be competitively procured and will be fully interoperable when in service. Harmonised spectrum is equally important. The presentation will give an update of the current standards and spectrum environment for Broadband services for Public Protection and Disaster Relief, and the expected timescales for standards to be complete to enable equipment providing new services to be available.

13:55 Q&A

Session chaired by SIG Champion, **Nick Hill** of **Plextek**

14:00 'Technology Acquisition through Academic and SME Relationships'

George Matich, Chief Technologist (Communication & Network Systems) of Selex ES

This presentation will include a short introduction to Selex-ES Ltd, who are a globally defence solutions provider, and will be followed by an overview of the scope of our interactions with UK Academia and the UK SME community. The talk will include several case studies illustrating the scope and nature of specific interactions in both domains from concept studies, through development, and finally production equipment supply. The talk will then conclude with a summary of what we need and expect from these interactions.

14:05 Q&A

14:10 **Coffee/Tea & Networking**

Session chaired by SIG Champion, **Rob Quarton** of **Airwave**

14:40 'Critical Network Service Requirements for the Mobile Mission of Emergency Services'

Mark Adams, Director – Chief Architect Secure Mobility, Northrop Grumman

The Emergency Service Mobile Communications Programme (ESMCP) has the challenge ahead of it to define the performance, operational, and security requirements that will assure the successful deployment of the next generation of communications for the emergency services within the UK. This session will focus on the process undertaken by the U.S. Emergency Services in defining the requirements for their nationwide network called FirstNet. The session will discuss important requirements identified by the requirements process, lead by the U.S. National Institute of Standards (NIST), with a focus on the critical network services identified as a result of the activity. These critical functions were deemed by the user base to be necessary for providing agencies confidence in any future systems ability to meet their operational needs.

15:00 Q&A

Session chaired by SIG Champion, **Guy Kenyon** of **Kenyon Consulting**

15:05 **Overview of Today's Presentations**

Tony Antoniou, Chief Executive, BAPCO

Tony will reflect on the day's presentations and offer his thoughts from the customer's perspective.

15:25 Q&A

15:30 **Open Forum** chaired by **Guy Kenyon** of **Kenyon Consulting**

With all speakers and joined by **Cate Walton**, Technical Lead at the **Home Office**

16:15 Event Close & Complete Evaluation Forms

With the permission of the speakers, presentations will be loaded to the Cambridge Wireless website on the day following the event

Profile of Organisers

About Cambridge Wireless (CW)

CW is the leading international community for companies involved in the research, development and application of wireless & mobile, internet, semiconductor and software technologies. With 400 members from major network operators and device manufacturers to innovative start-ups and universities, CW stimulates debate and collaboration, harnesses and shares knowledge, and helps to build connections between academia and industry.

CW's 18 Special Interest Groups (SIGs) provide its members with a dynamic forum where they can network with their peers, track the latest technology trends and business developments and position their organisations in key market sectors. CW also organises the annual Future of Wireless International Conference and Discovering Start-ups competition along with other high-quality industry networking events and dinners. With headquarters at the heart of Cambridge, UK, CW partners with other international industry clusters and organisations to extend its reach and remain at the forefront of global developments and business opportunities. For more information, please visit www.cambridgewireless.co.uk

ICT KTN

Creating a competitive advantage for the UK by facilitating knowledge exchange on Information and Communications Technologies and accelerating innovation. This new KTN has been formed from a merger by the Digital Communications and Digital Systems KTNs with the objective of bringing competitive advantage to the UK by facilitating the exchange of knowledge on ICT technologies and capabilities. We plan to do this by acting as a 'Network of Networks', organising a range of events and providing support throughout the UK in association with other communities of interest and centres of excellence. For further information please visit: www.ictktn.org.uk

Profile of Sponsor

Selex ES

Selex ES, a Finmeccanica company, is an international leader in electronic and information technologies for defence systems, aerospace, data, infrastructures, land security and protection and sustainable 'smart' solutions. From the design, development and production of state-of-the-art equipment, software and systems to through life support, Selex ES partners with its customers to deliver the information superiority required to act decisively, complete missions and maintain security and protection for operational effectiveness. Selex ES provides C4ISTAR systems, integrated products and solutions for airborne, land and naval applications delivering mission critical systems for situational awareness, self-protection and surveillance based on proprietary radar and electro-optic sensors, avionics, electronic warfare, communication, space sensors and UAV solutions. Selex ES also owns advanced technologies, products and capabilities in the design, manufacture and integration of air and maritime traffic control and management systems, the monitoring and protection of green and blue borders, secure communication networks and the deployment of 'smart' solutions for managing systems and infrastructures. For further information please visit: www.selex-es.com

Profile of SIG Champions

David Chater-Lea, Motorola Solutions

David is a senior technologist working for Motorola in the areas of advanced system architecture and design. He is a specialist in wireless communication system security, a founder member of the TETRA Association Security and Fraud Prevention Group and has been working in the ETSI TETRA standardisation activities since 1994. He is currently chairman of ETSI TETRA WG4, looking at advanced air interfaces, and an active member of TETRA WG6 and TETRA Association SFPG. During a career which includes over 20 years at Motorola, he has worked on a variety of mobile radio products and systems designs, and is one of the original architects of Motorola's TETRA compliant digital communications system, Dimetra. David holds a BSc in Electronic and Electrical Engineering from the University of Birmingham, England, and is a Chartered Engineer and a Fellow of the IET. He holds a number of patents in the field of radio communications systems. For more information please visit: www.motorolasolutions.com

Nicholas Hill, Plextek

Nick joined Plextek in 2007 - based at the offices of a client in Malaysia - to provide technical coordination and consultancy for technology development projects, and to assist the client to improve the performance and efficiency of their R&D department of ~60 staff. This role involved developing in-car entertainment product concepts, requirement specifications and project plans, coordination between development teams in UK and Malaysia and providing technical support and assistance to the client team. Prior to joining Plextek, Nick worked as a hardware designer, embedded software designer, systems engineer and company director for a range of companies and on a diverse range of applications including, defence, aerospace, healthcare, scientific instrumentation and telemetry systems. He graduated from Liverpool University in 1982, is a member of the Institution of Engineering and Technology and has co-authored a patent on radio location and tracking technology. For more information please visit: www.plextek.com

Guy Kenyon, Kenyon Consulting

Guy Kenyon is an independent consultant specialising in secure fixed and mobile communications for those user communities who must have secure, resilient and reliable communications at all times. This includes the emergency services, government and national security organisations and their suppliers. Until early 2011, Guy worked for Northrop Grumman Information Systems, a large US based defence and government IT contractor. His work with the company included a seven year attachment to Airwave Solutions where, as a Systems Engineer, he focussed on the design and implementation of the nationwide secure TETRA communications system. In 2007, Guy implemented a TD-CDMA broadband wireless trial in Lewes with support by NPIA and Sussex Police – based upon a system fielded in New York City. In addition to next generation wireless, Guy's activities include secure networks, cyber security/information assurance and the development of secure shared services for UK government. For more information please email: guykenyon@talktalk.net

Tim Phipps, Cambridge Consultants

For 50 years, Cambridge Consultants has led the way in innovative product development. We are the development partner of choice to many of the world's leading blue chips as well as the virtual development team for ambitious start up companies. Tim is responsible for Wireless Business Development at Cambridge Consultants and has a long track record of working on leading edge wireless technology development and creating new business of strategic importance for product manufacturers. Over his career he's worked to introduce innovative new technologies at the earliest stage of their market development such as mobile phone operating systems, EDGE, GSM, Bluetooth and WiFi. As Champion of the Cambridge Wireless Healthcare SIG, Tim's objective is to create commercial discussions that further the interests of society. For more information please visit: www.cambridgeconsultants.com

Rob Quarton, Airwave Solutions

Airwave designed, built and operates the largest public safety radio communications network in the world, delivering critical voice and data communications to organisations that provide vital public services. This includes the police, fire and ambulance services as well as local authorities, utilities and transport providers. For more information please visit: www.airwavesolutions.co.uk

Profile of Speakers

Mark Adams, Northrop Grumman

Mark Adams is the Director of Secure Mobility for Northrop Grumman Information Systems (NGIS). He is a graduate of Johns Hopkins University Advanced Physics Laboratory with a Masters of Science in Electrical Engineering (MSEE). Mr. Adams is currently on staff working for the Vice President Technology and Engineering Group (TEG) of NGIS Dr. Neil Siegel. Mr. Adams has dedicated his efforts to reducing the complexity of deploying mobile solutions to government agencies worldwide. He has more than twenty eight years experience in the design, development, and integration of mission critical communication and sensor systems. Mr. Adams has spent the last 12 years researching new innovative approaches to mission operations using mobile data as a driving force behind reducing cost of operations, increasing efficiencies, and improving mission effectiveness. His research has led to, among other significant projects, the development of the Citywide Mobile Wireless Network for public safety in New York City (NYCWIn), the first private mobile broadband system of its type in the world. For more information please visit: www.northropgrumman.com

Tony Antoniou, British APCO (BAPCO)

British APCO is a growing community with extensive communications knowledge gained as a result of delivering real life public safety. British APCO fosters knowledge exchange in communications to support and improve the delivery of public safety.

Tony has both Board level and technical backgrounds in telecommunications, supplying complex communications into challenging environments worldwide. He has provided highly available, secure connectivity (telephony, mobile devices, video and data) into military, public safety, commercial and entertainment sectors. Since becoming Executive Director of British APCO in 2010, Tony has driven a transformation of the Association, focussing on its relevance and influence to its community. For more information please visit: www.bapco.org.uk/content

David Chater-Lea, Motorola Solutions

David is a senior technologist working for Motorola in the areas of advanced system architecture and design. He is a specialist in wireless communication system security, a founder member of the TETRA Association Security and Fraud Prevention Group and has been working in the ETSI TETRA standardisation activities since 1994. He is currently chairman of ETSI TETRA WG4, looking at advanced air interfaces, and an active member of TETRA WG6 and TETRA Association SFPG. During a career which includes over 20 years at Motorola, he has worked on a variety of mobile radio products and systems designs, and is one of the original architects of Motorola's TETRA compliant digital communications system, Dimetra. David holds a BSc in Electronic and Electrical Engineering from the University of Birmingham, England, and is a Chartered Engineer and a Fellow of the IET. He holds a number of patents in the field of radio communications systems. For more information please visit: www.motorolasolutions.com

Euros Evans, Airwave Solutions

Euros Evans was appointed as Chief Technology Officer for Airwave in May 2008. As well as his responsibility for Technology, Euros also leads and manages Products and Solutions development as well as Security. During his career in the Telecommunications industry, Euros has worked in many functions, including Marketing, IT, Technology and Operations. Euros has lead and delivered many large complex projects, engaging and managing suppliers both within the UK and off-shore. Euros holds a BA in Mathematics and Computing. For more information please visit: www.airwavesolutions.co.uk

George Matich, Selex ES

George has worked in the Defence and Aerospace Industry starting out with the GEC-MARCONI company for more than thirty years, during this time he has been involved in the research and development of numerous digital signal processing solutions for airborne products and communication systems that are now in service with both military and civil airline customers. During this time George has been chief engineer for a number of major projects such as US AIRPHONE System that continues to provide air to ground telephony for airline passengers and a spread-spectrum ranging system that supports terrain following requirements for military aircraft. George has worked closely with the UK CAA and the FAA on the development of the next-generation integrated voice/data communication system including its waveform design for international civil ATC applications. In his current role George works closely with the Academic and SME communities to ensure the company has the necessary underpinning research in place to support its future product and systems business aspirations. George has also been named as inventor on four company patents and has presented numerous papers at international conferences over the past 15 years. For further information please visit:

www.selex-es.com

Gordon Shipley, ESMPC

Gordon Shipley is the Director in the UK Home Office's Crime and Policing Group responsible for the Emergency Service Mobile Communications Programme (ESMCP), to procure a national voice and broadband data service for the police, fire, ambulance and other users. With a technical background and experience in public procurement, he was previously the Olympic Delivery Authority's Head of Systems and Technology, responsible for system integration and information technology, and delivering the Olympic Park's security projects. On commissioning from the Royal Military Academy, Gordon joined Royal Signals and served in a variety of signal units, airborne forces, and the infantry. He attended the Army Staff Course and was appointed to various staff and command appointments in UK and Northern Ireland, including the Ministry of Defence and the Procurement Executive. He attended the US Army War College before forming a joint C3I team at the British Embassy, Washington, reporting on US technical and operational capability. His final tour was as Chief of Staff at the UK Defence Academy. For further information please visit:

www.gov.uk/home-office

Profile of Additional Panellist

Cate Walton, Home Office

Cate Walton is a chartered engineer with a long career in the professional mobile radio sector. She has been involved with TETRA since the mid-90s, having held technical management roles for NB3, Dolphin Telecommunications, Airwave and the NPIA. She is currently leading analysis of the technical options for the Emergency Service Mobile Communications Programme. For more information, please visit: www.homeoffice.gov.uk