Joint Security & Defence SIG and KTN event
'Technology without borders: how to assert sovereignty in a connected world'
29 September 2015
Hosted by OLSWANG

*The Security & Defence SIG is championed by **David Chater-Lea** of **Motorola Solutions**, **Euros Davies** of **Airwave**, **Nicholas Hill** of **Plextek Consulting**, **Tim Phipps** of **Cambridge Consultants** and **Paul Tindall** of **Sepura**.*

Venue: Olswang LLP, 90 High Holborn, London, WC1V 6XX

AGENDA	
12:00	Registration & Networking over lunch
13:00	Introduction to Security & Defence SIG from **Paul Tindall, Sepura**
13:05	Welcome from our partner, **Mark Littlewood,** Head of Sensor Systems, **The KTN**
13:15	Welcome from our host, **Elle Todd** of **Olswang LLP**

Context setting from the SIG Champions

13:20	1.	Overview and scene setting - How does technology affect our national security? **David Chater-Lea** of **Motorola Solutions** Emergency services, power, defence, communications and transport
13:25	2.	The future problem - Virtualisation moves technology beyond national boundaries **Tim Phipps** of **Cambridge Consultants** Increasing abstraction of technology innovation away from fixed hardware implementations allows for greater portability and less control. (Internet, Cloud, OTT, NFV).
13:30	3.	Complication - The supply chain is more complicated than you'd think **Paul Tindall** of **Sepura** What is really inside your technology product. China manufacturing, India software, US radio, UK user interface. Talk about the need to control key, strategic components.
13:35	4.	Possible resolution - Commercial technology **Euros Davies** of **Airwave** For emergency services communications you could build and control your own network (Airwave), or you could hope to reuse a commercial network (ESN). Discusses the key considerations for ESN users.
13:40	5.	Possible resolution - Regulation will control technology flows **Tim Phipps** of **Cambridge Consultants** We can restrict leakage of innovation by export control. (But this can be just a limit on free trade). National laws can control the technology used within our borders.

Session chaired by Tim Phipps of Cambridge Consultants

13:45	**'International data flows in a post Snowden era'** **Elle Todd,** International media and technology lawyer, **Olswang LLP** Elle will look at what sovereignty means post-Snowden. How are the balances of power and tensions between surveillance and privacy, economic growth and terrorist fears shaping up and how is this affecting data flows over national boundaries? What is motivating the latest developments in international data issues and what might a 'post post-Snowden' era look like?
14:05	Q&A
14:10	**'A view from the Cabinet Office'** **Dr Nigel Brown, Lead for Resilient ICT Strategy, Cabinet Office**

14:20 '**Security assurance – ways, means & outcomes**'

Paul Thorlby, CTO Security (Cyber Information & Training Division)**, Qinetiq**

Traditional approaches to security assurance tend to focus on providing inputs to an assurance method, rather that the assurance outcomes sought. These approaches often do not scale well, nor do they work well in practice with complex global supply chains. Exploring security assurance in outcome terms (what am I trying to achieve) and that seeks to align incentives, may open up new and more effective approaches. The talk will also share some learning points from a novel approach developed for providing information security assurance for a national scale radio network.

14:40 Q&A

Session chaired by **David Chater-Lea** of **Motorola Solutions**

14:45 Refreshments & Networking

15:15 '**End-to-end cyber security management**'

Dave Francis, Cyber Security Officer**, Huawei UK**

The thrust of the talk will be as follows: There is no such thing as a European, American or Chinese product as all products are constructed from the global supply chain. Management of supplier processes is as important as internal processes due to the volume of 3rd party components used in modern products. Transparency is essential to trust. The danger of confusing security with the illusion of. We need to collaborate across all sectors. How we are keen to share our experience and hear the experiences of others.

15:35 Q&A

15:40 '**Skating on quicksand**'

Peter Davies, Technical Director, **Thales e-Security**

This talk will discuss the types of security that can reasonably be expected to be implemented over the top of untrusted networks together with an analysis of some of those that cannot. It will discuss the types of solution that might be necessary in order to successfully implement a security solution over the top of an untrusted network and the types of threats that implementing such a solution might introduce.

16:00 Q&A

16:05 Open Forum/debate with all speakers and **The KTN** chaired by **Paul Tindall of Sepura**

16:40 **Closing Remarks from Paul Tindall of Sepura**

16:45 **Complete Feedback at** https://www.surveymonkey.com/r/SD290915 **and Event Closes**

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

Profile of Organisers

Cambridge Wireless (CW)

CW is the leading international community for companies involved in the research, development and application of wireless and 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 19 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

Profile of Joint Supporter

Knowledge Transfer Network

The KTN is the UK's innovation network. It is a single overarching national resource, funded by Innovate UK to stimulate innovation. It works with businesses of any size, universities, research and technology organisations as well as funding bodies, government and Europe. KTN brings together businesses, entrepreneurs, academics and funders to develop new products, processes and services. Formed by the merger of 15 KTNs, the Knowledge Transfer Network launched in April 2014 to offer a more joined-up support for UK business growth through innovation. KTN aims to improve business performance through innovation by building collaborations and by driving the flow of people, knowledge and experience between business and the science-base, between businesses and across sectors. The membership of KTN has been growing during the course of the last six years with over 60.000+ members now participating via the web platform: www.**ktn-uk**.co.uk

Profile of Host

Olswang

Olswang is a pioneering firm with a distinctive approach to business law. Thanks to its decisive, connected and highly-commercial people, they have built an unparalled technology, media and telecoms practice, which makes Olswang the firm of choice for true innovation. Headquartered in London, Olswang has an international presence spanning Belgium, France, Germany, Spain, the UK and Singapore. Its clients include major multinational corporations, companies listed on the London Stock Exchange and AIM, private-equity backed groups, established private companies as well as early stage/high growth organisations. Olswang is a Founder Member of Cambridge Wireless and the Legal SIG which generates discussion and develops legal best practice in the wireless and technology sector. For further information visit www.**olswang**.com

Profiles 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 further information, visit www.**motorolasolutions**.com

Euros Davies, Airwave

Euros works in the Radio Network team within Airwave Solutions as the Radio Network Design and Network Optimisation Manager, where he and his team are responsible for Airwave Radio Design. Euros' role covers both the current Tetra network used by all emergency services and responsibility for development and production of new designs for innovative technical solutions and products. He holds a number of patents in Wireless communication systems/technology.

Euros joined BT's Advanced Radio Communication team at Adastral Park, Martlesham in Sept 1999 after graduating from Swansea University with BEng (Hons) degree in Electronics and Radio Communications. At "Adastral Park" he worked on a number of radio design projects, where he supported a number of internal customers such as Cellnet, PSRCP (later became Airwave). He joined O2 in 2002 after BT demerged its mobile business interest and has since taken responsibility for the Radio Access network for Airwave.

For further information, visit https://www.**airwavesolutions**.co.uk/home/

Nicholas Hill, Plextek Consulting

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. Subsequently, he set up and led an R&D Management Council and implemented a two-year R&D improvement plan. 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 as a member of the Institution of Engineering and Technology and has co-authored a patent on radio location and tracking technology.

For further information, visit www.**plextek**.com

Tim Phipps, Cambridge Consultants

Tim Phipps has a long track record of working on leading edge wireless technology development. Tim is responsible for Wireless Business Development at Cambridge Consultants. Prior to working at Cambridge Consultants, he has worked for Plextek, TTPCom, Symbionics and TTP to develop new business of strategic importance for manufacturers of mobile handsets software and wireless communications ICs. 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 Security and Defence SIG, Tim's objective is to restore technology leadership to organisations that promote public safety and the civil society. For further information, please visit www.**cambridgeconsultants**.com

Paul Tindall, Sepura

Paul Tindall works in the Technology Office at Sepura PLC where he works on Advanced Technology projects, investigates future technologies and strategies and is responsible for the company's software architecture. Prior to this Paul was the Software Architect for the Wireless Division of U-Blox where he created a novel Software Defined Modem (SDM) Platform for the latest generation of Wireless User Equipment using Model Driven Development techniques to develop Modem Physical Layers on Heterogeneous Multi-processors platforms. He was the Technical Director and Uber-Architect at TTPCom SW Business Unit where he developed wireless technology for 13 years. Paul also works in the Defence industry on a variety of MOD Defence projects. Paul has a 1st class honours degree from the Royal Military College of Science and is a Fellow of the BCS. For further information, please visit www.**sepura**.com

Profiles of Speakers

Elle Todd, International media and technology lawyer, Olswang LLP

Elle is a partner at Olswang LLP and head of its Digital practice. She has over 15 years' experience in advising clients in the media and technology sectors from large corporations and household names to new tech start ups and entrepreneurs providing strategic and day to day advice to help them innovate, grow and succeed. She has particular experience in digital transformation, complex technology and procurement transactions and advisory work in relation to compliance, data and data protection.

Having spent the last 3 years setting up the firm's Asia operations from a base in Singapore, Elle also has a wealth of knowledge about Asia and helps companies in Europe and Asia to tap into respective markets and navigate international matters. Elle is individually recommended in the independent guide Chambers & Partners Asia Pacific edition 2015 and 2014 for Technology, Media and Telecoms which describes her as "an outstanding lawyer." Elle is also listed in the International Who's Who Legal for Internet, eCommerce and Data Protection 2012 as one of the world's leading practitioners in this field and also in the International Who's Who Legal for Information Technology 2013. She is author of the third edition of Gringras: The Laws of the Internet which is a key legal text book.

For further informaiton please visit www.**olswang**.com

Paul Thorlby, CTO Security (Cyber Information & Training Division), Qinetiq

Paul is a senior technical leader in QinetiQ with over 20 years' experience defining and delivering security related solutions and advice mainly for the National Security and Defence markets in the UK. He has held technical, project management, business development, strategy and business leadership roles and is currently Chief Technology Officer for Security in the Cyber, Information & Training business unit in QinetiQ. Paul represents QinetiQ externally at the UK Crypto Developer Forum (UK CDF), the Information Assurance Collaboration Group (IACG) and is an elected member of the TechUK Cyber Management Group. He chairs by invitation the Tech Partnership (formerly eSkills) employer steering group that is pioneering the development of national cyber security apprenticeships.

For further information please visit www.**qinetiq**.com

Dave Francis, Cyber Security Officer, Huawei UK

David Francis has been Huawei's Cyber Security Officer for the UK&I market since 2013. David started his career with British Telecom as an engineer and has held several positions in the IT sector in the UK and the US since. Prior to joining Huawei, David was a Chief Operating Officer with an eCommerce platform. Also, he has worked for Symantec for over 9 years, of which the last 5 as Vice President of Operations. At Symantec, David was responsible for the SaaS / cloud operations unit, consisting of over 300 staff globally. Working closely with corporate, government and local authority customers, he has a vast experience with cyber security challenges and requirements for both the public and the private sector. For further information, please visit www.**huawei**.com/en/

Peter Davies, Technical Director, Thales e-Security

As a Technical Director of Thales in the UK Peter has been their leading expert on Cryptography in the UK responsible for providing cryptography and information security direction and expertise on a variety of products and projects. Previous work includes the development and certification of flexible and interoperable commercial security solutions that are also widely used by governments; these solutions are available worldwide and support the security of both communications and infomatics in an international, multi grade environment. Peters specialist knowledge is at the core of the cyber defence and forensics activities that he undertakes combatting existential treats against business. Peter has, interacted on security and products at any level from Prime Minister, through Board to deep technical including Certification Labs and partners developing and sustaining business opportunities worldwide. Peter has generated patents in the area of digital DNA and his research covers aspects of technical security as well as aspects of super-identities and their role in combatting human based cyber-attacks. As well as contributing to standards Peter is a frequent speaker at international conferences and delivers lectures to postgraduate information and cyber security programmes in the UK and worldwide.

For further information lease visit www.**thales-esecurity**.com

Dr Nigel P Brown, Lead for Resilient ICT Strategy, Cabinet Office

Nigel works for the Cabinet Office at the centre of UK government in the Civil Contingencies Secretariat. The Secretariat works in partnership with government departments, the devolved administrations and key stakeholders to enhance the UK's ability to prepare for, respond to and recover from emergencies. Nigel focuses on security and resilience policy for the information and communications technologies and energy sectors. He has previously worked for technical and management consultancies, BP Exploration and the Health & Safety Executive. He is a chartered Chemical Engineer and holds BSc, PhD and MBA degrees from Imperial College, London.

For further information, please visit https://www.gov.uk/government/organisations/**cabinet-office**

Delegate List		
Name	**Organisation**	**Company Profile**
Melate Abebe	Adama Science and Technology University	Higher Institution
Colin Aitken	NextG-Com	Experts in cellular LTE protocol stack IP and services for M2M products and solutions.
Dr. Reza Akhavan	ICRI, Imperial College London	Academic, Research
Kais Al-Timimi	Datamation	
Steve Baker	The Technology Partnership plc	Technology innovation and product development in medical, industrial and consumer segments.
Michael Barkway	TTP	
Clive Barry	Photon Harvester ltd	Technology Development
Ashley Benn	Codenomicon	Security testing, softwaredecomposition analysis, intelligence/collaboration solutions
Wagari Berhanu	Private Campony	Private Campony
Hazel Biggs	Knowledge Transfer Network	KTN exists to accelerate innovation, faciltating conversion of ideas into new products and services
John Bisseru	Estatom	Developer of a small, secure, fast, multi-platform OS and OBDMS.
Nigel Brown	Cabinet Office	
Rick Chandler	Airworking	
David Chater-Lea	Motorola Solutions	
Ross Clarke	Fairfax County Economic Development Authority	US Economic Development Authority
Rob Clifford	Roke Manor Research Ltd	Contract R&D
Graham Collins	UCL	
Euros Davies	Airwave	.
Peter Davies	Thales e-Security	
Mark Dean	HGF Ltd	HGF Ltd - Intellectual Property Specalists

Lawrence De'Ath	IFG Consulting	IFG Consulting helps European Mobile Operators with market focussed innovations
Paul Dillien	High Tech Marketing	High Tech Marketing offers sales /marketing services to the semiconductor and electronics industries
Alessandro Donati	Telecom Italia	Telecommunication
Anthony Dornan	STL Partners	Research & Consulting Company
Robert Driver	Cambridge Wireless	.
David Ellwood	iWireless Solutions	iWireless Solutions is a wireless systems integrator offering services that are end-to-end.
Stirling Essex	Espansivo	Helping organisations make better strategic decisions in technology, marketing and business devt.
Dave Francis	Huawei UK	Leading global telecommunications solutions provider
Kerry Frost	Watering Pipe Ltd.	Water technology RnD. Manufacture. IP and Invention.
Carl Gandeborn	Albany Developments Limited	Driving international expansion and entry into emerging markets
Bez Ghazani	ConnectVu Solutions	Wearable solutions, Integrates Live streaming of Video, Audio, Location and Data
Renato Goodfellow	British Telecommunications	
Dave Happy	Ordnance Survey	Coverage maps and boundaries - nationally and Internationally
Ward Hills	ionscope Ltd	Ionscope manufactures Scanning Ion Conductance Microscopes (SICMs) for imaging living cells.
Peter Hudson	Sepura plc	
Janice Hughes	Redshift Strategy	Strategic Management Consultancy
David jai-Persad	University of Greenwich	
Christopher Jones	STS Defence	STS Defence are a communications specialist, proving prducts & services in the security & defence sector
Daniel Jones	Kable	Market Intelligence & Consulting
Arnon Katz	Consultant	Procurement and Project Management Consulting
David Kenyon	Multiple Access Communications	Wirless technology product design and consultancy
Andrew Kern	UL VS Ltd	Test and certification organisation with speciality in RF and Wireless transmissions and securitry
Kit Kilgour	ip access Ltd	ip..access is a leading provider of 2G, 3G & LTE small cells with over 100 deployments worldwide
Emily Knight	SignalCheck	Network and Security consulting services
Mark Littlewood	The KTN	.
Andrea Lorenz	Cambridge TEC Ltd	Helps technology SMEs, academic institutions and industry associations to raise their profile
Pantea Lotfian	Camrosh Ltd.	Technology and Innovation Foresight consultancy
Joe Luong	Crypta Labs	Quantum Random Number Generator in a Mobile Device
Nigel Mackie	MASS	MASS provides cyber security of data through Information Assurance and secure ICT networks
Colin Mallett	Trusted Renewables Ltd	
Peter Mason	Welwyn Business Services	
George Matich	Selex ES Limited	Selex is a system solution provider to the global defence & aerospace market
Julian McGougan	Consultant	Independent TMT Policy & Regulatory consultancy
John McNicol	Nova Modus	Brings New Technologies to Business
Christopher Meewella	Meewella Consultants	Telecommunications and IT consultancy covering network and service design and IT solutions.
Juan L. Moreno	Enigmedia	Provision of secure VoIP services and other encryption solutions.

Alan Mulongo	IET	Electrical and Electronic Engineer
Abhi Naha	Cambridge Wireless	
Graham Norgett	CellMetric	
Michael Oliver	Thales	A major electronic systems company acting in defence, aerospace, airlines security and transport
Gerard O'Neill	Angetech Consultants	
James O'Reilly	UL (Underwriters Laboratories)	
Matthew Pack	Bird & Bird	
Tim Phipps	Cambridge Consultants	
Martin Pickford	EE Ltd	UK's Mobile Operator
David Pierce	Circuit Solutions (Cambridge)	Contract Electronics Manufacturing
Richard Pitman	Pitman & Co Ltd	Provides expertise on Government support mechanisms for R&D.
Haydn Povey	Secure Thingz ltd	IoT Security Products & Consultancy
Chris Rampton	Home Office	Governement science and technology organisation
Toby Richt	IC Strategic	
Simon Rockman	Blah Ltd	http://www.theregister.co.uk/
Shane Rooney	GSMA	GSMA
Jerome Rush	Passive Eye Ltd	Private entrepreneurial enterprise developing a self-powered GPS tracker.
Nabil Saheb	AMSolutions	small IT consultant company with 5 employers.
Raj Sandhu	Bikal	Video, audio & big data analytics for safety and surveillance.
Vikram Shah	AViSpace	
Siraj Shaikh	Knowledge Transfer Network	Co-host
Julian Szafraniec	Cisco	Network vendor
Philip Taylor	EnSilica Limited	EnSilica provides a full range of FPGA and ASIC Design, Verification and Implementation services
Steven Thain	UKTI Investment Services Team	Showing managment teams how to make the case for more UK investment
Paul Thorlby	Qinetiq	
Paul Tindall	Sepura Plc	
Elle Todd	Olswang	
John Townsend	Angetech Consultants	
Cate Walton	Home Office	UK Government Home Office
Robert Westwick	PA Consulting Group	PA is a consulting, technology and innovation firm.
Peter Wickson	Airwave	Public Safety Communications
Chris Williams	Filtronic Broadband	Filtronic are experts in RF conditioning products & solutions - Filters, Combiners, TMAs & Antennas
Greg Williams	FCO Services	
Lee Williams	National Instruments	Provider of Hardware and Software tools for Design, Test, Deployment and support
Robin Williamson	The KTN	KTN