





'Mobile Broadband in the Real World: a look at current and innovative uses'

17 December 2014

# Sponsored by Microlease and Keysight Technologies

The Mobile Broadband SIG is championed by Tom Rebbeck of **Analysys Mason**, George Grayland of **Nokia Networks**, Peter Montgomery of **GSMA**, and Iain Stanbridge of **EE** 

# Venue: Corpus Christi College, Trumpington Street, Cambridge, CB2 1RH

AGEND	Α		
14:00	Reg	istration and networking with refreshments (NB. There is no lunch at this event)	
14:30	Introduction to CW Mobile Broadband SIG from Tom Rebbeck, Analysys Mason		
	Ses	sion chaired by SIG Champion, Peter Montgomery, GSMA	
14:40	'Fin	ding space for 5G: The Road to WRC 2019'	
	Mor	ay Rumney, Lead Technologist, of Keysight Technologies	
45.00	expe spe alloo spee	Moray will consider the vital aspect of allocating spectrum in which the projected services for 5G are expected to be deployed from around 2020. Topics covered will include a review of the current spectrum allocations and the process used by the ITU World Radio Council for new spectrum allocations at WRC 2015 and WRC 2019. Included will be a summary of the UK position on spectrum as developed by the UK Spectrum Policy Forum under the auspices of techUK.	
15:00	Q&/		
15:05		experiences from advanced markets – from Voice to Video'	
		brge Grayland, Senior Wireless Solutions Manager, Nokia Networks	
	Japa expe	LTE is now the dominant Mobile Broadband technology in several markets including Korea, an and the US. Korean networks offer advanced 4G services and capabilities beyond the erience of most Consumers in the UK. This presentation explores some of these and shows users benefit from the constant drive to be the world's leading 4G nation.	
15:25	Q&/	Å	
15:30	'Liv	e from anywhere - the mobile bonding revolution'	
		in Muir, SBJ Mobile Journalism, BBC News	
45 50	indu way	availability of high bandwidth mobile technologies has had a huge impact on the broadcast stry, in this session we'll look at how their adoption within the BBC has helped revolutionize the we're able to cover breaking news stories and events as well as the opportunities future less technologies might offer.	
15:50	Q&/	A	
15:55	Ref	reshments and networking	
	Ses	sion chaired by SIG Champion, Iain Stanbridge, EE	
16:25	'The	e Mission Critical User and Mobile Broadband'	
		athan Hamill, Vice President Government & Public Safety, Sepura plc	
	toda requ	s session will look at the exacting requirements of the Mission Critical user and what they rely on ay. Then we'll consider how broadband communication technologies can fulfil the MC user airements and explore the role of global standardisation. In conclusion we'll consider the	
16:45	prac Q&A	ctical and future options for the MC user.	
16:50		day, tomorrow and the future – managing data demand'	
		ette Stewart, Principal, Analysys Mason	
	the	resentation on a study Analysys Mason have completed with the GSMA and Huawei to assess benefits of mobile broadband services (with profiles of selected Asia Pacific countries), and	
17:10	tutu Q&A	re spectrum needs.	
17:15	Pan	el session with all speakers chaired by SIG Champion, Tom Rebbeck, Analysys Mason	



#### 17:40 Complete evaluation forms

### 17:45 Event closes

Delegates are invited to attend the Founders' Dinner pre-dinner drinks taking place in the OCR & NCR, Corpus Christi College, Cambridge, kindly sponsored by Microlease and Keysight

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

# Profile of Organiser

#### 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 Sponsor

#### **Microlease and Keysight Technologies**

**Microlease** is the expert in Test Equipment Management. We have over 30 years of experience offering the best test equipment with a range of financing options. With over 4,000 instruments to choose from covering a range of manufacturers and industries, Microlease can help deliver your projects on time and on budget. Whether you need equipment for short or long periods, we can help you easily acquire what you need, when you need it, with options that are ideal for your situation. Our portfolio of services includes rental, leasing and finance, buying new or used equipment, calibration, asset management and auditing and even a programme to buy back your unused equipment. **Keysight Technologies** is the world's leading electronic measurement company, transforming today's measurement experience through innovation in wireless, modular, and software solutions. With its HP and Agilent legacy, Keysight delivers solutions in wireless communications, aerospace and defense and semiconductor markets with world-class platforms, software and consistent measurement science. For more information please visit: www.Microlease.co.uk and www.Keysight.com

# Profile of SIG Champions

#### George Grayland, Nokia Networks

George Grayland is a Senior Wireless Solutions Manager with Nokia Siemens Networks. George joined Nokia Networks in 1998 and has held positions in both Product Management and Technical Sales for GSM, WCDMA and LTE networks. After periods working with Operators such as Telefonica and Deutsche Telecom on 3G, he is now based in the UK and is responsible for Mobile Broadband Networks Solutions working with two of the UKs larger MNOs as they plan their 4G network deployments. Prior to Nokia and NSN George held various positions at Philips Electronics in both R&D and Technical Marketing. He has a BEng. in Electrical and Electronic Engineering from the University of Bradford and is a Member of the IET. For more information please visit: www.NSN.com

#### Peter Montgomery, GSMA

Peter currently leads strategic partnership activities for the GSMA. He works with key stakeholders in the mobile telecoms market to collaborate on GSMA led industry initiatives with the aim of facilitating and triggering market expansion, enabling scale and fostering innovation. In turn lowering the barriers to widespread adoption of technologies such as mobile broadband and enabling new emerging solutions such as embedded mobile to gain a sure foothold. Having acquired a degree in Electrical and Electronic Engineering from Birmingham University, Peter moved swiftly into the commercial world where he led marketing and business development activities at Marconi, Symbian and then Nokia before arriving at the GSMA. For more information please visit: www.GSMworld.com

#### Tom Rebbeck, Analysys Mason

Tom is the Research Director at Analysys Mason, and has responsibility for the definition, delivery and management of its consumer telecoms research activities. Prior to returning to Analysys Mason, Tom was a Global Project Manager for Telefónica where he was involved in the launch of a number of mobile content services and applications



across the Telefónica footprint. Before this, he was Principal Analyst for Analysys Mason, and worked on numerous client projects. For more information please visit: <a href="http://www.AnalysysMason.com">www.AnalysysMason.com</a>

# lain Stanbridge, EE

As Principal Network Architect in EE's Network Strategy team, Iain is accountable for the evolution of EE's radio access network and spectrum strategy. Iain has been heavily involved in EE's 4G network plans and the 2013 spectrum auctions. He works closely with stakeholders in EE's operation and partners in the mobile ecosystem to develop new opportunities for the mobile network. Iain has held a number of Design, Architecture and Strategy roles in Orange UK and France Telecom Group, spanning radio and core networks. Prior to joining Orange, Iain worked for Siemens Research at Roke Manor. He has an MEng in Electrical and Electronic Engineering from the University of Birmingham and an MSc in Strategic Management from the University of Bristol. For more information please visit: www.EE.co.uk

# Profile of speakers

#### George Grayland, Nokia Siemens Networks Please see above

#### Jonathan Hamill, Sepura plc

Jonathan Hamill is a former British Police Officer who has experience of using mission critical communications in an operational environment. He is a Master of Enterprise Management (Durham University), a Chartered Manager and Fellow of the Chartered Management Institute. Leaving his law enforcement career to successfully transition to commercial life, he has held senior commercial roles, including responsibility for Sepura's domestic market in the UK & Ireland. His current role as Vice President Government & Public Safety is focused on three key responsibility areas; Sepura's global government and public safety business, its applications business (including the Helsinki based applications developer Portalify Oy, acquired by Sepura in 2013) and the group marketing function. For more information please visit: <a href="https://www.sepura.com/">www.sepura.com/</a>

#### Colin Muir, BBC News

Technology professional with over 15 years' experience within the TV and Radio broadcast industry. Played a key role in the adoption and development of mobile bonding and in encoding technologies on projects including the Olympic Torch Relay and Scotland 2014. Currently helping to support and develop their potential as Senior Broadcast Journalist, Mobile Journalism with BBC News. For more information please visit: www.bbc.co.uk/rd

# Moray Rumney, Keysight Technologies

Moray Rumney joined Hewlett-Packard in 1984 and has remained with the company through the spin-off to Agilent Technologies in 1999 and again with this year's spin-off to Keysight Technologies. During his 30 years in the electronic test equipment business Moray has had a varied career spanning manufacturing, R&D and technical marketing. Moray joined ETSI in 1991 to develop the GSM test standards. In 1999 he joined 3GPP to continue his work in standards for UMTS, HSPA and most recently LTE. During that time he was a major contributor to the development and specification of base station emulation equipment used for the development and conformance test of cellular phones. Moray is a frequent author and speaker at industry events. In 2009 he was technical editor of Agilent's book on LTE which had a second edition in 2013. Moray has been closely involved since 2009 with the development of radiated test methods for MIMO cellular phones and his most recent focus is on the test requirements for the emerging fifth generation of wireless communications. For more information please visit: www.Keysight.com

#### Janette Stewart, Analysys Mason

Janette Stewart is a Principal at Analysys Mason, who specialises in wireless technologies and radio spectrum issues. She has around 20 years' experience in radio engineering, spectrum policy and spectrum management. Janette began her career working for the UK spectrum regulator where she held various roles, latterly Senior Spectrum Engineer in the 3G Auction Team, where she was responsible for determining UK spectrum plans for the 3G licence award, interacting with CEPT and ITU working groups. Since joining Analysys Mason in 2001, her consulting experience includes researching market opportunities within the wireless sector, wireless network business planning, user requirement definition, spectrum strategy development and spectrum valuation. She has worked with a wide range of public and private sector clients including national regulators, fixed and mobile network operators, wireless industry trade associations and spectrum, technology co-existence in 800 MHz spectrum and 2.6 GHz spectrum valuation. She co-authors Analysys Mason's Spectrum Quarterly, a quarterly newsletter on spectrum-related market developments. For more information please visit: www.analysysmason.com/

