

Kindly Hosted & Sponsored by: **Bird & Bird**

This SIG is championed by George Grayland of Nokia Siemens Network, Peter Montgomery of GSMA, Tom Rebbeck of Analysys Mason and Iain Stanbridge of EE.

Venue: Bird and Bird, 15 Fetter Lane, London, EC4A 1JP

AGENDA

12:00 **Registration & Networking over Lunch & Refreshments**

13:00 Introduction to the Mobile Broadband SIG by **Peter Montgomery of GSMA**

13:10 Welcome from our host – **Graeme Maguire, Partner, Bird & Bird**

Session chaired by **Peter Montgomery of GSMA**

13:20 **“The Future of M2M”**

Tom Rebbeck, Research Director, Analysys Mason

Tom will present Analysys Mason's view on the market today and the drivers for M2M. He will look at the potential benefits and value of M2M, and also explore some of the barriers and challenges to greater adoption. His talk will also discuss the value chain for services. Finally, he will touch on how the M2M is moving to an Internet of Things (IoT) world.

13:40 Q&A

13:45 **“Pervasive Wireless Networks for Machines”**

Tony Milbourn, VP Strategy, u-blox AG

As mobile networks start to adopt LTE as their human users consume Internet on the move, the growth in M2M connections mainly uses GSM, a technology that operators would like to switch off! Communicating machines rarely need broadband, so their communications can be carried effectively using low-cost GSM modems. To really enable the Internet of Things wirelessly, networks capable of pervasive coverage – significantly better than GSM; supporting very low cost modems – cheaper than GSM; and moreover capable of operating for years on a single battery; are needed. LTE, being designed for broadband on the move for smartphones and tablets, meets none of these criteria. There are moves in 3GPP to adapt LTE for new classes of device to meet these needs; whilst other technologies that are either proprietary or “industry standards” are also emerging. This presentation will consider the needs of machine communications from the perspective of a device supplier and discuss the evolution of standards.

14:05 Q&A

14:10 **“Transportation: this is the age of the train”**

Andrew Hobbs, VP – Solutions, Airspan

As demand for train travel is at an all-time high, train operators are under increasing pressure to deliver services on-time, and provide real-time updates to passengers. With the network pushed to the limit, real-time telemetry is increasingly important to monitor both the track and the train, to minimise disruption. Security is also becoming increasingly important, with a transition from local caching of video, to real-time monitoring. This presentation will consider these challenges, and explore how next generation networks can meet these requirements, yet also support a new business model to provide additional revenue streams for the network provider.

14:30 Q&A

14:35 **Coffee/Tea & Networking**

Session chaired by **Iain Stanbridge** of **EE**

15:05 **"Scaling the Future Mobile Network for the Growth of the Thing"**

Alan Krisciunas, Senior Capacity Manager, EE

Exploring the future scaling questions that industry may face to prepare mobile networks for the predicted explosion of m2m and the much discussed internet of things. With the potential of an influx of devices with varying demands, how does this complement or conflict against existing modes of operation. What actions can an operator take to start to adapt their existing network model and what traditional scaling solutions need to be challenged to prepare for the "The Thing".

15:25 Q&A

Session chaired by **George Grayland** of **Nokia Siemens Network**

15:30 **"Security in V2X Communications"**

Paul Martin, Chief Technology Officer, Plextek

Development of prototype functions using Vehicle to Anything communications is advancing rapidly with new and more advanced features being regularly announced and demonstrated by Tier 1 automotive and semiconductor companies. As features such as vehicle platooning and cooperative avoidance start to be considered for the mainstream, then appropriate communications pathways and overarching information security measures need to be considered. This presentation introduces the context of vehicle to vehicle, vehicle to infrastructure and vehicle to person communications and looks at the issues, both technical and societal that have to be solved.

15:50 Q&A

15:55 Open Forum Session with all speakers and chaired by **George Grayland** of **Nokia Siemens Network**

16:40 Closing Remarks from **George Grayland** of **Nokia Siemens Network** and fill in evaluation forms

16:45 **Event Close**

With the permission of the speakers, presentations will be loaded to the Cambridge Wireless 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 & 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

Profile of Host & Sponsor

Bird & Bird

Bird & Bird is an international law firm with 25 offices in 17 countries. Having been at the forefront of developments in international communications law since the 1980s, we have unrivalled expertise in advising on matters ranging from smaller innovative projects to some of the largest, most complex and ground-breaking transactions and disputes of recent years. We have acted for many of the world's leading communications, broadcasting and internet companies, together with those providing new and innovative services, and are proud to have helped our clients achieve real commercial advantage. We are renowned for our creative and often original solutions, some of which have shaped the global communications landscape. We are recognised internationally as an undisputed market leader in the communications sector and our team includes a significant number of lawyers who are acknowledged as leading individuals in the communications field. Our international communications sector group comprises more than 80 lawyers across Europe, the Middle East and Asia. This cross border strength ensures our clients receive a consistently high level of service across jurisdictions and that our team can implement complex multi-jurisdictional transactions smoothly and efficiently. For more information, please visit: www.twobirds.com

Profile of SIG Champions

George Grayland, Nokia Siemens 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 Telefónica 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.nokiasiemensnetworks.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 has recently rejoined Analysys Mason as Research Director, 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 www.analysysmason.com

Iain Stanbridge, EE

Iain is a Principal Network Architect in EE's Network Strategy team, 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 UK, Iain worked for Siemens Research at Roke Manor. He has an MEng in Electrical and Electronic Engineering from the University of Birmingham. For more information please visit www.ee.co.uk

Profile of Speakers

Andrew Hobbs, VP – Solutions, Airspan

Andy is VP of Solutions at Airspan, responsible for Mobile Solutions for major Operators across the world. Andy has over 15 years experience in the telecommunications industry, working in Product Management, Business Development and Engineering. Prior to joining Airspan, Andy worked for Samsung in Europe, responsible for Product Management and strategy. He has a BEng in Electronic Engineering from Manchester University. For further information please visit: www.airspan.com

Alan Krisciunas, Senior Capacity Manager, EE

Senior Capacity Manager for EE within the Network Strategy Team with over 10 years' experience. Currently responsible for technical demand forecasting to support network growth and future services. For more information please visit www.ee.co.uk

Paul Martin, Chief Technology Officer, Plextek

Paul joined Plextek Consulting in 2011 and his current role is Chief Technology Officer where he has led innovation in automotive and defence technologies and is now advising government on innovation strategy. Novel technologies range from GPS denied vehicle navigation through Cyber defence to applications of M2M in MOD. Prior to this Paul was Technical Director for a wireless base station manufacturer acquired by Cobham plc. Here Paul developed a world first high density 2G/3G base station creating a new market for this technology and managed the introduction and volume manufacture of a complete product suite. In his career, Paul has led the creation of bespoke radio interface, management and security protocols for Fixed Wireless Access technologies ultimately deployed to millions of customers. Paul also led the integration of novel 3G technologies into advanced system designs ranging from new RF power amplifier architectures through to the first integration of system management incorporating both IT and cellular telecommunications domains. For more information please visit www.plextek.com

Tony Milbourn, u-blox AG

For further information please visit www.u-blox.com.

Tom Rebbeck, Research Director, Analysys Mason
See profile in SIG Champions.