

AGENDA

09:00 **Registration & Networking over Refreshments**

09:30 Introduction to the Small Cell SIG by **Simon Saunders** of **Real Wireless**

09:45 Welcome from our host - **Anthony Waller, Partner** of **Olswang**

09:55 Welcome & Presentation from our Joint Sponsors Agilent Technologies/Microlease
Morgan Hanson, Sales & Business Development Manager, Agilent Technologies
"Introducing the Latest in Handheld RF & μ W Analyzers from Agilent"

Session One: National and Regional Government – The Role of Small Cells in Britain's Growth and Innovation Agenda - Chaired by Simon Saunders of Real Wireless

10:15 **Simon Towler, Deputy Director, Head of Telecommunications Policy, Department of Culture, Media and Sport (DCMS)**
"Small Cells and Broadband Britain"
The government's ambition is to see a transformation in broadband in the UK – with high speed fixed and mobile connectivity as widely available as possible. The dramatic growth in mobile data traffic and the potential of mobile broadband to support economic growth and social inclusion are just a couple of the challenges and opportunities facing governments including the UK. Wireless technologies including small cells can play a key role in realising the government's broadband plans."

10:30 **Robindhra Mangtani, Principal Advisor, Ofcom**
"Regulatory Challenges Associated with Deployment of Small Cells"
As consumers' usage of mobile data increases, mobile networks are evolving in order to cater for it, developments such as: increasing the use of spectrum, new technologies such as LTE and the enhancement of the macro layer through technologies such as MIMO, CoMP, SON is planned to deal with this demand along with small cell deployment, addressing the need for capacity and coverage. Mobile network operators and third party wholesalers on their behalf are deploying new types of small cells in mobile networks. WiFi offload using unlicensed spectrum is the most commonly known type of small cell, but there are others including micro/pico cells and femtocells using licensed, unlicensed or shared spectrum, all these solution require regulatory review on issues including: spectrum usage & allocation, backhaul, power, spectrum allocation databases and suitable sites.

10:45 **Chris Stratton, RICS Telecoms Forum & MLL Telecom Ltd**
"Small Cell Deployment – The Statutory Hurdle: Town & Country Planning (De-)Regulation of Small Cell Roll-out"
A review of the town & country planning rules relating to telecom equipment deployment, focussing on small cells and what the Government is trying to do to reduce the burden.

11:00 Panel Session with Session One Speakers

11:25 **Coffee/Tea & Networking**

Session Two: Small Cells and Big Cities - Chaired by Zahid Ghadialy of eXplanoTech

11:55 **Robert Woolley, Senior Commercial Development Manager, Transport for London**
"Moving People, Goods and Bits: Small Cells and Transport for London"
The talk will describe how TfL will assist the mobile network operators to successfully serve customers using small cells on TfL assets.

12:10 **Ian Jones, Senior ICT Consultant, Leeds City Council**
“Small Cell Expectations – A Local Government View”

This session will describe how the Leeds and Bradford wireless concession includes both Small Cell and Wi-Fi technologies and how Small Cell technology supports the digital ambitions of both cities.

12:25 Panel Session with Session Two Speakers

12:50 **Networking Lunch**

Session Three: The Role of Third Parties in Aligning Small Cell Incentives - Chaired by Simon Fletcher of NEC Telecom MODUS

13:50 **Jonathan Freeman, Director, Capacity Solutions, Arqiva**
“Delivering Urban Capacity”

Achievement of the industry ambition of ubiquitous high capacity networks throughout urban areas requires alignment of sometimes competing stakeholder requirements. For small cells to succeed in the UK the solution must be cost effective, scalable and standardised across different urban locations. This presentation explores how this can be achieved, analyses outstanding challenges, suggests potential solutions and details a roadmap to achieve mass deployment.

14:05 **Mark Harrop, Director, BT Wholesale**
“The Golden Goose Feels the Heat”

A suppliers perspective: observations on outdoor WiFi, the local authority concession model and the potential implications for WiFi and small cell deployment

14.25 Panel Session with Session Three Speakers plus **Kevin Baughan, Director of Metro Wireless, Virgin Media Business**

14:50 **Coffee/Tea & Networking**

Session Four: Operator and Vendor Perspective chaired by Simon Saunders of Real Wireless

15:20 Panel Session with **Paul Ceely, Head of Network Strategy, EE, Mark Harrop, Director, BT Wholesale, Simon Saunders, Director, Real Wireless, Zahid Ghadiy, Managing Director, eXplanoTech & Simon Fletcher, Senior Manager, NEC Telecom Modus**

16:15 **Fill in Evaluation Forms and Event Close by Simon Saunders of Real Wireless**

16:20 **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

Cambridge Wireless is a leading industry forum and vibrant community with a rapidly expanding network of companies actively involved in the development and application of wireless technologies. In addition to high level networking dinners, educational events and business development activities, Cambridge Wireless runs an annual Future of Wireless International Conference along with the Discovering Start-Ups initiative to support emerging, innovative wireless companies. Over 15 Special Interest Groups focused on specific technologies and market sectors, also provide opportunities for members to meet, form partnerships to exploit new commercial opportunities, and share knowledge and information about the latest industry trends and hot topics. Cambridge Wireless has partnerships with other leading industry clusters and organisations around the world to extend its international reach and to keep members up to date with the latest global developments and business opportunities. For more information, please visit www.cambridgewireless.co.uk

Profile of Sponsors

Agilent Technologies

Agilent Technologies, the world's premier measurement company offers a full range of the latest wireless test equipment that spans the entire lifecycle from early design and development through to volume manufacturing, network deployment and service assurance. For more information, please visit: www.agilent.co.uk

Microlease

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. Microlease is also Agilent's Authorised Technology Partner in the UK, Ireland and Italy. Our strong partnership with Agilent gives you access to the best Agilent equipment supported by an unbeatable range of Microlease financial solutions. For more information please visit: www.microlease.com.

Profile of Host

Olswang

Olswang is an international law firm and a European leader in technology, media, telecommunications and real estate. We strive to deliver innovation in our business, our clients' businesses and the wider industries they compete in. Established over 30 years ago, we've grown to over 700 people, including more than 100 partners, across eight international offices. We're also proud of our long-established best friends' network, consisting of leading independent law firms throughout the world. Our culture is meritocratic and progressive. We strongly believe that our people are among the brightest and most commercially minded the profession has to offer, evidenced by the close, trusted relationships they inspire. For more information, please visit: www.olswang.com

Profile of SIG Champions

Simon Fletcher, NEC Telcom MODUS

Simon Fletcher has working in the communication industry for over 10 years, having represented NEC in Global joint venture enterprises developing 3G and 4G radio access products; working in various Systems and Project Management roles. Recently he has completed a spell as the Steering Board representative for NEC Corporation in LSTI (LTE SAE Trials Initiative) and is engaged in the management of 3GPP RAN1 standards development and early stage product innovation processes. Simon is a member of the Board of the Mobile Virtual Centre of Excellence (MVCE), Industrial Chairman for the EPSRC/MVCE Green Radio Programme, and on behalf of the MVCE Board leads discussions on new Open Innovation initiatives targeted to launch in 2012. For more information please visit: www.t-modus.nec.co.uk

Zahid Ghadialy, eXplanoTech Ltd.

Zahid has been associated with the mobile industry for over 12 years. He has worked in various technical and non-technical roles with mobile industry leaders like Alcatel-Lucent, Samsung, NEC and Anritsu. Managing Director and Co-Founder of eXplanoTech Ltd., Zahid works with many small and midsized mobile industry players: training, consulting on projects and helping them to recruit the right people. In his spare time he maintains 3g4g.co.uk and is an active blogger at 3g4g.blogspot.com. You can also follow him on twitter @zahidtg. For more information please visit: www.explanotech.com

Simon Saunders, Real Wireless

Simon is an independent specialist in the technology of wireless communications, with a technical and commercial background derived from senior appointments in both industry (including Philips and Motorola) and academia (University of Surrey). As co-founder of Real Wireless, he is responsible for overall technical capability and direction. He is an author of over 140 articles, books and book chapters. He has acted as a consultant to companies including BAA, BBC, O2, Ofcom, BT, NTL, Mitsubishi and British Land and was CTO of Red-M and CEO of Cellular Design Services Ltd. Simon speaks and chairs a wide range of international conferences and training courses and has invented over 15 patented wireless technologies. Particular expertise includes in-building wireless systems, radiowave propagation prediction, smart antenna design and mobile system analysis. He has served on technical advisory boards of several companies, Visiting Professor to the University of Surrey, member of the industrial advisory board at University College London and was founding chairman of Small Cell Forum (formerly Femto Forum), which he chaired from 2007-12. He is a member of the Ofcom Spectrum Advisory Board. For more information please visit: www.realwireless.biz.

Profile of Speakers

Jonathan Freeman, Arqiva

Jonathan leads Arqiva's capacity solutions organisation, which is responsible for delivering a range of services to fixed and mobile network operators. Arqiva is focused on supporting the growth of mobile data and is creating a range of platforms - across cellular, WiFi and small cells - to deliver connectivity and capacity where required. Prior to joining Arqiva Jonathan worked in management consulting supporting a range of media and telecoms clients. For more information please visit: www.arqiva.com

Mark Harrop, BT Wholesale

Mark is currently leading BT Group's Wireless Cities activities and as Strategy Director in BT's Wholesale Division, has been responsible for the evolution of BT's managed small cell service proposition. Mark has held a variety of senior roles at BT, ranging from client management and contract delivery for some of BT's blue chip global customers to managing BT's device portfolio. Prior to BT, Mark has held senior marketing and product management roles in companies like NTL, Telstra and Energis as well as a number of tech start-ups. For more information please visit: www.btwholesale.com

Ian Jones, Senior ICT Consultant, Leeds City Council

Ian has been with Leeds City Council for over 15 years working on cross cutting digital programmes. He is currently working on a number of corporate initiatives including the Super Connected Cities programme, channel shift and Smart City strategy. For more information please visit: www.leeds.gov.uk

Robindhra Mangtani, Ofcom

Robindhra works for Ofcom as a Principal Advisor in the Strategy, Chief Economist & Technology Group. Focusing on research and providing strategic insights into how technology developments and infrastructure investment will affect competition and the markets Ofcom regulate. Before joining Ofcom, he had over 20 years experience spanning Regulation, Public Policy, Spectrum policy, M2M, Design & development and implementation of Mobile networks,

Application solutions, Global voice, Data, IP Interconnection & Peering, NGN, fixed, & satellite networks. For more information please visit: www.ofcom.org.uk

Chris Stratton, Board Member, Telecoms Forum Board, Royal Institute of Chartered Surveyors

Chris Stratton has supported the telecommunication industry on property related matters for 15 years. Initially appealing the refusal of planning permission for base stations, Chris also played a leading role in 3G equipment roll-out. For the last ten years, he has held various roles within MLL Telecom Ltd, deploying transmission networks for Operators, Government and Enterprise organisations. Chris is a Fellow of the Royal Institution of Chartered Surveyors and a Member of the Royal Town Planning Institute.

Simon Towler, Department of Culture, Media & Sport (DCMS)

Simon Towler joined the DTI in 1992. He has held a wide range of policy posts including in civil aerospace, international trade policy, nuclear issues, telecommunications policy and better regulation as well as a secondment to the British Embassy in Washington DC. Simon joined the Department of Culture Media and Sport in January 2011 when policy responsibility for the telecommunications sector was transferred from the Department of Business Innovation and Skills. He was appointed to his current post in June 2011 where he has responsibility within DCMS for telecoms regulation, broadband policy and spectrum policy.

For more information please visit: www.gov.uk/government/organisations/department-for-culture-media-sport

Robert Woolley, Transport for London (TfL)

Robert Woolley has worked in transport for over 20 years, mainly within London. Since joining London Transport (now Transport for London) in 1998 he has been involved in such diverse activities as developing cashless operation for London Buses, business planning for London Underground operations, running the Programme Management Office for the London Low Emission Zone within TfL's Congestion Charging directorate, and identifying and managing a large proportion of TfL's £5bn cost reduction programme. Since January 2012 Robert has been developing new commercial opportunities for TfL. As Senior Commercial Development Manager for telecoms, Robert is responsible for identifying and delivering commercial opportunities for fixed and wireless telecoms using TfL's assets. For more information please visit: www.tfl.gov.uk

Profile of Panellists

Kevin Baughan, Director of Metro Wireless, Virgin Media Business

Kevin is an experienced and innovative telecoms professional, actively exploring new business opportunities resulting from cutting-edge technologies and evolving Virgin Media's communication and entertainment portfolio. In his current role, Kevin is responsible for developing Virgin Media's metro wireless propositions, which included the recent acclaimed rollout of WiFi on the London Underground across 72 stations in time for the 2012 Olympic Games. In his previous role, Kevin was responsible for Virgin Media's technical strategy, guiding the company into leadership positions through the rollout of next generation broadband (DOCSIS 3.0) and TV (Tivo) platforms. Kevin sits on the Virgin Media Board Committee for Technology & Operations. Kevin has a proven track record of delivery for both UK and European service providers. Prior to Virgin Media, Kevin co-founded a start-up carrying out pioneering research into novel networking technologies for the US Air Force Research Labs with colleagues at the University of Birmingham. Kevin has also had a distinguished career with Nortel Networks, in both R&D and as the company's chief architect for cable operators across Europe. Kevin holds a BSc from Birmingham University, an MSc from Aston University and an MBA with distinction from Imperial College. He was an Honorary Professor from 1999 to 2008 at Birmingham University, where he advised the University's communications research team. For more information please visit:

www.virginmedia.com

Paul Ceely, Head of Network Strategy, EE

Paul is responsible for developing and communicating the medium to long term EE Network Strategy including the long term forecasts, and evolution of the network such as LTE, small cells. EE was formed in 2010 following the merger of Orange and T-Mobile in the UK, and launched the first 4G LTE network in the UK in October 2012. He has 14 years of experience in telecoms, primarily in Network Strategy, LTE, IP Transport and network security in Service Provider and mobile networks. For more information please visit www.ee.co.uk