

Virtual Networks SIG**'Infrastructure: Virtualisation or Beautification? Choose Both!'**

24 January 2024

This SIG is championed by **Julie Bradford** of **Real Wireless**, **Andrew Palmer** of **CGI** and **Paul Rhodes** of **AtlasEdge Data Centres**

Venue: Mills & Reeve, 24 King William Street, London EC4R 9AT

AGENDA

- | | |
|-------|--|
| 13:00 | Registration, tea, coffee and networking |
| 13:30 | CW welcome and introduction to topic by Andrew Palmer, Virtual Networks SIG Champion |
| 13:45 | Welcome from host: Alison Ross Eckford, Partner, Technology & Outsourcing, Mills & Reeve |
| 13:50 | Session chaired by Andrew Palmer, Virtual Networks SIG Champion & Consulting Director, CGI
'Digital Twins – Let's NOT talk about urban lamp posts!'
Dave Happy, Managing Director, Telint, Chair UKTDTF, Chair UKTIN EWG, and Non-Executive Director Jet Engineering
Starting in the fields and on the beaches, we will look at how digital twin mapping will also impact those parts of the UK that, to coin a phrase, most operators do not reach! |
| 14:10 | Q & A |
| 14:15 | 'Extend the edge: Opening new opportunities for service providers and neutral hosts building 5G networks'
John Bretherick, Business Development Manager, Fujitsu Network Communications
Virtualized RAN can deliver significant benefits for service providers. These benefits – and opportunities – increase in an open architecture. This presentation explores Open vRAN deployment stages, considerations, and advantages – including increased capacity and flexibility, rapid energy savings, and increased Fronthaul range. |
| 14:35 | Q & A |
| 14:40 | Refreshment break and networking |
| 15:10 | Session chaired by Julie Bradford, Virtual Networks SIG Champion & Head of techno-economic analysis, Real Wireless
'A beautiful path to virtualisation'
Adam Withers, Commercial Lead, Streetscape and Shueb Ahmed, Commercial Lead, Fibre, Boldyn Networks
Boldyn Networks has taken an approach to keep networks simple and free of clutter while remaining impeccably effective and future-proof. Using our work in London and Glasgow as examples of how aesthetics for all parts of a network, not only helps eliminate 'blemishes' but also supports existing and future evolutions of virtualisation. |
| 15:30 | Q & A |
| 15:35 | 'Edge Cloudification: How it Benefits (Open v) RAN'
Paul Rhodes, Director of OpenRAN, AtlasEdge Data Centres
AtlasEdge's ambition is to bring the benefits of the Cloud, but with the added benefit of very low latency, to Telecoms Operators, Private Networks and Enterprises. In addition to the economic benefits which this delivers, hosting RAN Compute in Edge DataCentres also reduces the volume of equipment needed in the public domain. In addition to boosting the business case for Neutral Host Infrastructure Providers this helps the aesthetics of mobile networks to the point where we might call them beautiful?! |
| 15:55 | Q & A |
| 16:00 | Panel session chaired by Julie Bradford, Virtual Networks SIG Champion |
| 16:40 | Wrap-up |
| 16:45 | Event close |

Profile of organisers

Cambridge Wireless (CW) www.cambridgewireless.co.uk

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 over 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 20 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 major conferences and start-up competitions along with other high-quality industry networking events and dinners. CW partners with other international industry clusters and organisations to extend its reach and remain at the forefront of global developments and business opportunities.

Profile of host

Mills & Reeve www.mills-reeve.com

Legal and intellectual property advisers on all corporate and business areas ranging from strategy, IP protection, commercial agreements, due diligence to dispute resolution - especially on patents, trademarks, designs and copyright, with special interests in healthcare and education sectors.

Profile of SIG Champions

Julie Bradford, Head of techno-economic analysis, Real Wireless real-wireless.com

Julie has worked in the wireless industry for over 15 years. At Real Wireless, she is a thought leader in 5G business case analysis including understanding 5G use cases, quantifying (in financial terms) the operational and socio-economic benefits of 5G services and understanding network dimensioning and cost implications under 5G virtualised networks. She has most recently led Real Wireless' techno-economic analysis on the EC Horizon 2020 5G-MoNArch project. Inspired by the project's smart sea port testbed constructed by HPA, Nokia and DT in the Port of Hamburg, this analysis included quantifying the operational benefits of 5G to port authorities and other port users and the cost implications of delivering these industrial grade wireless services from existing mobile infrastructure via network slicing supported via the virtualised 5G-MoNArch network architecture. Previously, Julie was Communications Engineer at QinetiQ UK, consultant at PA Consulting UK, and Senior Systems Engineer for Airvana UK.

Andrew Palmer, Consulting Director, CGI cgi-group.co.uk

Andrew has more than 30 years of experience in IT, Telecoms and TV and Media, having worked in various roles for IBM, AT&T, Ericsson, Motorola and Arris. Andrew's present role is to leverage existing CGI capabilities that match the needs of our clients in the Telecoms sector, as well as building new capabilities that will support the emerging and changing needs of our client base. Andrew has proven experience in developing and delivering complex SI and Services solutions that meet both business and technology needs. Andrew has co-authored "UK Telecoms For Dummies", an essential guide to the complicated UK Telecoms sector as well as articles for publications such as the Cambridge Wireless Journal including "How do we build the new world of 5g?". He frequently speaks at conferences and provides media commentary on industry topics like 5G, IoT and Smart Cities, as well as being a member of the Digital Policy Alliance's Smart Society Working Group, techUK Spectrum Policy Forum and the Cambridge Wireless Virtual Networks Special Interest Group.

Paul Rhodes, AtlasEdge Data Centres www.atlasedge.com

Paul has a B Eng in Communications Engineering from University of Hull and worked in the wireless industry internationally for over 30 years. At AtlasEdge he is responsible for RAN and Open vRAN Public and Private network architecture, strategy. He has deployed 4G and 5G small cell networks in both classical architecture and as dark-fibre disaggregated RAN networks and is currently refining the technical and cost implications of centralised classic and virtualised networks. During his career Paul has worked in Telco Vendors and Infrastructure Providers, significantly for Ericsson, Nokia, Samsung, CityFibre and World Wide Technology in Technical and Commercial roles in both Europe and North America. He is also an Expert Working Group Member in Wireless Networking at UKTIN.

Profile of speakers

Shueb Ahmed, Boldyn Networks www.boldyn.com

Shueb Ahmed is the commercial fibre lead at Boldyn Networks and is responsible for fibre investments and developing buy/sell partnerships. His remit covers the commercialisation of fibre infrastructure (existing and new) for use in 4G/5G, mobile networks, fixed/carrier networks and public networks. Shueb has been working in telecommunications for 17 years with a range and in-depth experiences in technical, commercial and strategy. He is an engineer at heart with a focus on business. Prior to joining Boldyn Networks in 2022, Shueb was O2's technical strategy lead for fibre and x-haul networks and was central to the pre-integration activities in the £31bn O2-Virgin Media joint-venture looking at network evolution for xRAN, PON and Edge/Cloud networks. Shueb spent 12 years at O2 and prior to that, his experience over 5 years at Orange/France Telecom and EE were key in his experience and his contributions to the industry.

John Bretherick, Fujitsu Network Communications www.fujitsu/global/products/network

John Bretherick is Director of Business Development at Fujitsu Network Communications, where he focuses on the Fujitsu open networking portfolio, including Optical and Open RAN solutions, for Europe. John has over 35 years of experience in telecom, holding roles in engineering, sales, marketing and business development for both global service providers and equipment vendors. He has a long history of developing customized solutions for global IT, system integrators, and communication service providers, as well as vertical market experience in pharmaceuticals, utilities, government, and health sectors. John is married with two children, lives in Ilkley West Yorkshire, where he enjoys many sports including golf and cycling.

Dave Happy, Telint

Dave obtained his Masters Degree from Exeter (UK) and Tilburg (Netherlands) winning 2 scholarships. He has over 37 years expertise in the sector, beginning with Motorola in PMR and Cellular, US WEST and Virgin Media where he obtained their PTO and International Facilities licences, helped build their first Satellite Earth Station, oversaw a £40m subsea cable project, and assisted with France Telecom/Orange's acquisition of a stake in the business. Before organising, writing, winning and managing several 5G research bids to DCMS, he was with Samsung Electronics, as a Vice President in their EU R&D operation, where he won a Digital Europe award from his peers for technical excellence. He also won the individual collaboration award from The Department of Digital Culture Media and Sport and UK5G for his 5G work in 2022/3.

He is the current Chairman of the UK Telco Data Task-Force ("UKTDTF"), an advisory group mentored by the Department for Business and Trade, working with the Geospatial Commission and DSIT, and comprising Governments, Industry, academia and 5G test-beds. He is a former pro bono non-Executive Director of BT's "Connected Earth" operation and a Non-Executive Director of 5G connected buoy company Jet Engineering. He was also appointed Chair of the UK Telecoms Innovation Network Security Expert Working Group in 2023. He also sits on the All Party Group for Digital ID. He was co-author of the multi-award winning 5G Rural Dorset 5G testbed, whose partners included the Satellite Applications Catapult and Dorset Council, and the recent Dorset Open Network Evolution bid, working with ARM, Vodafone and Keysight Technologies. He is a fan of all things Dorset and most things cycling!

Paul Rhodes, AtlasEdge www.atlasedge.com

Profile above

Adam Withers, Boldyn Networks www.boldyn.com

Adam Withers is the Streetscape commercial lead at Boldyn Networks and has been working in mobile telecommunications for 17 years. Adam is responsible for the commercialisation of the TfL above ground estate, consisting of over 90,000 vertical assets inc. Lighting/CCTV Columns, Bus Shelters, Land and Buildings. Bringing to market a unique portfolio of assets that can support use cases such a 4G, 5G, Wi-Fi, Private Networks, IoT, EV etc. creating a new layer of connectivity across London. Previously, he was sales and business development director at NET CS, developing and growing NET CS's business and extending the reach of its products or services in the UK the market with a specific focus on neutral host and venues. Adam holds a strong technical/engineering background being technical director and technical lead for 5 years, delivering neutral host and MNO dedicated 2G, 3G, 4G, 5G, DAS, Macro, Micro, Small Cells, as well as private networks and C/ORAN deployments.