

**Location SIG****'Location and communication for emergency response'**Tuesday 12<sup>th</sup> December 2017**Sponsored by KTN and supported by RIN**This SIG is championed by David Bartlett, **u-blox**; Bob Cockshott, **The KTN** and Ben Tarlow, **Qualcomm**.**Venue: The Bradfield Centre, 184 Cambridge Science Park, Milton Road, Cambridge, CB4 0GA****AGENDA**

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|--------------|--|
| <b>12:30</b> | Registration and networking with refreshments  |
| <b>13:30</b> | Welcome to CW  |
| <b>13:35</b> | Introduction to the Location SIG from Bob Cockshott, The KTN   |
| <b>13:50</b> | <b>Session chaired by SIG Champion, Bob Cockshott, The KTN</b><br><b>Andy Proctor, Innovation Lead for Satellite Navigation and PNT, InnovateUK</b>  |
| <b>14:10</b> | Q&A  |
| <b>14:15</b> | <b>Alastair McMahon, Analytics Director, O2</b><br>This session will introduce the work of the O2 data unit and outline the sources of data we use to build location and demographic insights for our clients, concluding with case studies and current innovation activities. |
| <b>14:35</b> | Q&A  |
| <b>14:40</b> | <b>Speaker tbc</b>   |
| <b>15:00</b> | Q&A  |
| <b>15:05</b> | <b>Refreshments and networking</b>   |
| <b>15:25</b> | <b>Session chaired by SIG Champion, Ben Tarlow, Qualcomm</b><br><b>Tom Self, Partnerships Manager, What3words</b>  |
| <b>15:45</b> | Q&A  |
| <b>15:50</b> | <b>Speaker tbc</b>   |
| <b>16:10</b> | Q&A  |
| <b>16:15</b> | Panel session with all speakers chaired by <b>SIG Champion, Ben Tarlow, Qualcomm</b>   |
| <b>16:45</b> | <b>Final remarks</b>   |
| <b>16:50</b> | <b>Event closes</b>  |

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 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. 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. [www.cambridgewireless.co.uk](http://www.cambridgewireless.co.uk)

## Profile of sponsor

### KTN

Profile to follow. [www.ktn-uk.co.uk](http://www.ktn-uk.co.uk)

## Profile of supporter

### Royal Institute of Navigation

The Royal Institute of Navigation (RIN) is a learned society with charitable status. Formed in 1947, its aims have always been threefold:

- To unite all those with a professional or personal interest in any aspect of navigation in one unique body;
- To further the development of navigation in every sphere;
- And to increase public awareness of the art and science of navigation.

Navigation encompasses the science, the technology and the practice of getting from A-B on land, in the air, on seas and rivers, and in space. The RIN exists to study, to practice and to inform the public about one of the broadest and most diverse subjects in the world. In 2007, in recognition of the importance of its work, the RIN was granted a Royal Charter by Her Majesty Queen Elizabeth II. [www.rin.org](http://www.rin.org)

## Profile of SIG Champions

### David Bartlett, Senior Principal Engineer Positioning, u-blox

David Bartlett works in the positioning technology (R&D) group at u-blox with a focus on hybrid positioning: bringing together GNSS with terrestrial systems such as UWB and V2X, primarily in support of future autonomous vehicle, driverless car and robotics applications but also for IoT and indoor positioning. Prior to this he was CTO and co-founder of Omnisense delivering high precision indoor IoT tracking solutions. He also worked at Cambridge Positioning systems with a focus on cellular positioning and network aided GNSS techniques. [www.u-blox.com](http://www.u-blox.com)

### Bob Cockshott, PNT Lead; Quantum Lead, The KTN

After graduating in Astronomy Bob worked for 25 years in the space industry as a systems engineer and project manager developing electro-optical and RF payloads. Bob joined the Location and Timing KTN in 2006, becoming KTN Director in 2008. Bob continues to cover all position, navigation and timing technologies and applications, and now looks also looks after quantum technology commercialisation following the launch of the £270m UK National Quantum Technology Programme. [www.ktn-uk.co.uk](http://www.ktn-uk.co.uk)

### Ben Tarlow, Senior Staff Engineer, Qualcomm

Ben has worked in positioning for 15 years, developing algorithms for satellite, cellular and other terrestrial RF technologies. At Qualcomm, Ben works in the Advanced Algorithms group, where current research areas in location are data fusion, use of sensor data for positioning and fitness applications; one day, he hopes to be given the remit to explore the area of olfactory positioning. Ben has a background in Pure Mathematics and a PhD in Combinatorics. He has over 20 different patents filed or granted, mostly on subjects relating to positioning. [www.qualcomm.com](http://www.qualcomm.com)

## Profile of speakers

### Andy Proctor, Innovation Lead for Satellite Navigation and PNT, InnovateUK

Andy joined InnovateUK in 2013 and focusses on Satellite Navigation & Position Navigation and Timing (PNT) across all sectors, including both the Innovate UK activities and as the UK lead delegate to the European Space Agency (ESA) Programme Board for Navigation (PBNV), providing a governance role for ESA activities within the flagship EU Galileo and EGNOS Navigation programmes. Andy also leads the UK contribution to the ESA Navigation Innovation programme (NAVISP). Andy is the founder and chair of the Cross-government working group on Position Navigation and Timing and also sits on the UK Space Weather working group and UK Space/TechUK PNT Committee. Andy has held engineering, business and consultancy positions within a variety of organisations; military, governmental and commercial, both large and small, for over 20 years. His particular interest is in new product development, new market entry and helping companies move towards being customer



funded. He has experience in multiple sectors including Space, Telecommunications, Defence and Automotive, plus has a large amount of international business experience having worked in the USA, Asia and mainland Europe. Andy is a Fellow and Trustee of the Royal Institute of Navigation and holds a Master's degree in Strategic Sales and Management. [www.gov.uk/government/organisations/innovate-uk](http://www.gov.uk/government/organisations/innovate-uk)

**Alastair McMahon, Analytics Director, O2**

Alastair has worked in the built environment sector for 15 years. He is currently Analytics Director for the Telefonica O2 Data Unit, providing data driven insights for public sector infrastructure, environment and strategic planning projects. Prior to joining O2, Alastair worked in city planning for Atkins on UK transport infrastructure assessment and overseas development projects in Colombia, Nigeria, Rwanda, India and China. Alastair studied architecture and cities at UCL's Bartlett School of Architecture. [www.o2.co.uk/business](http://www.o2.co.uk/business)

**Tom Self, Partnerships Manager, What3words**

Profile to follow. [what3words.com/](http://what3words.com/)