



# Smart and Intelligent Cities SIG 'Answering the scale-up challenge for Cities'

11th April 2017

# **Hosted by Digital Greenwich**

This SIG is championed by John Davies of CW, Paul Copping of Digital Greenwich, Zahid Ghadialy of Parallel Wireless and Tim Holmes of Fluxx

> Venue: Digital Greenwich, Royal Borough of Greenwich, 10th Floor, 6 Mitre Passage Greenwich, London SE10 0ER

AGENDA	
09:30	Registration and networking with refreshments
10:00	Introduction to Smart and Intelligent Cities SIG from John Davies, CW
10:10	Welcome from host, Paul Copping, Chief Innovation Officer, Digital Greenwich
10:20	Introduction to CW and the Smart & Intelligent Cities SIG from Bob Driver, CW
10:30	'The Wikipedia of Smart and Intelligent Cities – a pragmatic view'
	John Davies, CW
10:40	John Davies, CW  'What Technology (OS) Platform?'
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Panel discussion to consider the opportunities and challenges in the development of city wide IT and operating system (OS) platforms.

Panel to include:

- Mike Short, Telefónica
- Nigel Chadwick, Stream Technologies
- Ali Nicholl, lotic Labs
- Miranda Sharp, Ordnance Survey

#### 11:55 'Intelligent Transport Systems, Infrastructure and Smart Cities' Jennie Martin, ITS

ITS - using IT and communications technologies in surface transport applications - have been in use since the early 1980s. Smart City concepts challenge the ITS community to integrate with other systems serving city residents and commercial interests.

#### 12:15 Refreshments, lunch and networking

#### 13:15 'The Human Factors associated with Smart and Intelligent Cites'

# Ellie Wooldridge, Transport Systems Catapult

Human factors, is the study of how humans behave physically and psychologically in relation to particular environments, products, or services. We will hear how human factors interrelate to the platforms that are being developed to operate across cities.

#### 13:30 'What Procurement Platforms - The next step for cities'

- Paul Copping, Digital Greenwich
- **Brett Trafford, Fawley Waterside**

#### 14:00 Panel Session - 'What Procurement Platforms – The next step for cities'

Panel discussion to consider the opportunities and challenges in the development of procurement platforms for Cities both national and international.

Panel to include:

- Paul Copping, Digital Greenwich
- Andrew Loveless, Ordnance Survey
- Brett Trafford, Fawley Waterside
- Mike Short, Telefonica
- Jack Lomas, SenSat

#### 14:45 The SIG Interactive

A look at the priority themes of the SIG and a forward programme of activities

# 15:15 'Global Smart City Market: A \$1.5 Trillion Growth Opportunity in 2020' lain Jawad, Frost and Sullivan

Smart Cities are a \$1.5 Trillion global market opportunity by 2020. What do providers have to consider, and what does the opportunity actually look like in an emerging market such as India?

- 15:35 Q&A
- 15:40 Any Other Business
- 15:45 Event closes

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 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 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. Find out more at www.cambridgewireless.co.uk

## **Profile of host**

## **Digital Greenwich**

The Royal Borough of Greenwich launched its "Smart City" strategy on the 22nd October 2015. This set out how the Council proposes to implement "smarter" approaches to coping with the challenges ahead, and to create new opportunities for businesses and local communities, securing business regeneration and growth. Digital Greenwich is the Royal Borough of Greenwich's in-house team, setup to develop and implement its smart city strategy by:

- Leading the Council's engagement with stakeholders to develop a Service Transformation Roadmap to transform the way services are delivered.
- Advising the Council on its Ultra-Fast Broadband Strategy.
- Managing an Innovation Fund to pilot new approaches and develop the business case for roll-out of innovative ideas.
- Participating as hosts and subcontractors in Connected and Autonomous Vehicles projects including GATEway autonomous shuttles (TRL), MOVE-UK CAV advanced sensors (Bosch) and MAVEN autonomous vehicle management (Dynniq) and hosting Starship Technologies delivery robots.
- Engaging with leading cities, businesses and other organisations, committed to implementing smart city concepts, to harvest the latest thinking and good practice and ensure that Greenwich itself is a hub of excellence and forward thinking in this field.
- Developing a detailed framework to measure and to report publicly on a) the Borough's performance in delivering our Service Transformation Roadmap, and b) the benefits that this delivers, mapped against key performance indicators.
- Promoting citizen engagement and ensure its approach is citizen centric and rooted in neighbourhoods and communities.

#### www.digitalgreenwich.com



# **Profile of SIG Champions**

#### Paul Copping, Digital Greenwich

Paul Copping is Chief Innovation Officer at Digital Greenwich, serving the Royal Borough of Greenwich, population 270,000. His role is to engage with industrial partners to deploy integrated technology solutions that will result in more innovative, agile and cheaper services for Greenwich citizens. Paul is currently working on connected and autonomous vehicles; 5G wireless; and a collaborative smart city procurement framework. Paul has an MBA in Marketing from Cass Business School and an MA in Spanish and French from the University of Cambridge. His earlier career background is in telecoms (Nortel, BT) and mobility (Transport Research Laboratory) with a focus on corporate development and innovation management. He is a Director of the City Protocol Society. <a href="https://www.digitalgreenwich.com">www.digitalgreenwich.com</a>

#### John Davies, CW

John has carried out a unique mix of strategic and operational roles with placements in the USA and Europe and partnerships in Asia. Over recent years much of his private sector and Government activities has been in the area of mobile and wireless communications, digital media, Smart Cities, Cloud and Big Data and M2M/IoT as well as emerging and disruptive technologies. Helping technology start ups in the UK and internationally sourcing technology and partners as well as provide due diligence in areas of M&A and stock listings. Operating as a UK Government Advisor John has briefed both UK and International Government Ministers and Departments on Smart Cities and respective technologies and applications. This has included providing international workshops, mentoring and consulting at senior levels. John has designed and ran awareness and implementation workshops for international companies and led international delegations to overseas markets, the most recent to Singapore and Malaysia in partnership with InnovateUK. John is an active member of the All Party Parliamentary Group for Smart Cities. John will be engaging with potential new international companies and organisations, and supporting CW member companies. www.cambridgewireless.co.uk

#### Zahid Ghadialy, Parallel Wireless

Zahid Ghadialy is a Solutions Architect with a fast-moving and innovative US-based young company called Parallel Wireless (PW) that is on a mission to make any cellular as easy and as cost-effective as Wi-Fi. With an extensive experience of over 18 years in telecom industry as an engineer, programmer, analyst, researcher, architect, trainer, product manager and technical marketer, Zahid is a technologist with a deep understanding of architecting world-class mobile products and solutions. Zahid is a member of Board of Directors at CW and was also previously a 'Small Cell SIG' champion. He is also a Non-Executive Director of explanoTech. www.parallelwireless.com

#### **Tim Holmes, Fluxx**

Tim is a Senior Consultant with Fluxx, the Farringdon-based innovation consultancy. Fluxx is currently working on several Smart Cities initiatives in the UK (including ones with Cambridge and Manchester), as well as the Middle East. He specialises in marrying technological feasibility (what can be done?) to business viability (will it scale and make financial sense?), with an absolute passion for keeping the citizen at the heart of design (what is the problem we are solving for users, and how do people want the experience to be delivered?). An MA in Theology from Trinity College, Cambridge has proved completely tangential to a career that encompasses 10 years in broadcast tv, television drama and feature film production, followed by 16 years at the helm of a learning & development consultancy specialising in employee engagement and productivity, plus a couple of promising recent start-ups (Move Mogul, Click & Clear), www.fluxx.uk.com

# **Profile of speakers**

# Paul Copping, Digital Greenwich

Profile as above. www.digitalgreenwich.com

# John Davies, CW

Profile as above. www.cambridgewireless.co.uk

# lain Jawad, Frost & Sullivan @Jawadlain

lain works with public economic development and innovation agencies across Europe in their policy and programme development with the support of Frost & Sullivan's global market and technology research and foresighting processes. Mega Trends and Smart City Developments are areas where lain has been engaged in projects on behalf of government agencies. <a href="https://www.frost.com">www.frost.com</a>

#### Jennie Martin, ITS @its\_uk\_org

Jennie joined ITS United Kingdom, the Intelligent Transport Society for the UK, in 1998. Prior to that, she worked in the City Engineer's Department at the Corporation of London, the local authority for the "Square Mile" financial district of London. Jennie began her working life with the then British Rail in 1986. Jennie has a BA (Hons) in History from Kings College London, and an MA from the UK's Open University. She wrote her MA thesis on the institutional framework of the introduction of camera technology for traffic applications in London. She started with ITS (UK) as Membership Secretary, and was promoted to Secretary General in 2004. Jennie is a past Chairman of the Network of National ITS Associations, an organisation of 25 European ITS associations. Jennie is originally from Sweden, but is now a happily naturalised Londoner. <a href="https://www.its-uk.org.uk">www.its-uk.org.uk</a>

#### Ellie Wooldridge, Transport Systems Catapult

Ellie Wooldridge is a Human Factors Specialist with a range of experience across Human Centric Design, Systems Thinking and Innovation. She studied her Undergraduate Degree in Ergonomics at Loughborough University. Since she has worked within the transport sector for Jaguar Land Rover and Transport Systems Catapult. She has a great intertest in the interaction between people and technologies. <a href="https://www.ts.catapult.org.uk">www.ts.catapult.org.uk</a>

# **Profile of panellists**

# Nigel Chadwick, Stream Technologies @StreamTechLtd

CEO and founder of Stream Technologies, Nigel has overall strategic responsibility & team leadership in respect of the globalisation of its IoT-X connectivity enablement platform and has to date played a key role in steering Stream to the company's current leading position within the wireless connectivity field. A chartered accountant and EY Entrepreneur of the Year 2016 Winner, he has substantial experience and wide ranging expertise in the M2M and IoT sectors, frequently presenting or moderating at specific events in the USA, Far East and Europe. Stream provides and enables global wireless connectivity designed for IoT & M2M across cellular, satellite and low power radio networks, including LoRa. Stream's IoT-X connectivity enablement platform facilitates Communication Service Providers and also Enterprise clients to effectively compete and manage connectivity within the IoT sector on a country/regional as well as global basis.

www.stream-technologies.com

## Paul Copping, Digital Greenwich @digigreenwich

Profile as above. www.digitalgreenwich.com

# Jack Lomas, SenSat @sensatag

We are an award-winning geo-spatial tech start up whose mission is to digitise the world, recreating places and objects in incredible detail to render them into a virtual environment. Our mission is to build technologies that make important information about the world accessible to everybody. We recently were commended as the most innovative technology to be introduced to construction in the past year and our backers include: Innovate UK, the European Regional Development Fund, the Digital Catapult and the Business and IP Centre. <a href="www.sensat.co.uk">www.sensat.co.uk</a>

## Andrew Loveless, Ordnance Survey @ordnancesurvey

Profile to follow. www.ordnancesurvey.co.uk

#### Ali Nicholl. lotic Labs @ioticlabs

Focused on communication and engagement working across lotic Labs' clients and projects, Ali is passionate about enabling and empowering individuals and organisations to experience and exploit the IoT economy. He is focused on collaboration within and amongst communities and the co-creation of transformative services and solutions, bringing disparate organisations together to share data and knowledge to create solutions through community design. He supports individuals and organisations through the flexible design process to generate prototypes swiftly that prove out bottom-up solutions, ongoing revenue generation and new business models and capabilities. iotic-labs.com

### Miranda Sharp, Ordnance Survey @mhsharp1

Miranda Sharp created Ordnance Survey's Smart Practice, setting new and perhaps surprising directions for Great Britain's national mapping agency. She heads a team combining geospatial insights, innovation, and incubation support for projects and start-ups that want to seize the golden opportunities now emerging from a 'Smarter' world. The Internet of Things, connected and autonomous vehicles and 5G telecommunications all require a place dimension, but Miranda is most enthused by what this new technology will do to change business models and support better public services. Originally a chemist, Miranda is also a recovering rugby player. <a href="https://www.ordnancesurvey.co.uk">www.ordnancesurvey.co.uk</a>

# Mike Short, Telefónica

Dr Short has held positions in Electronics and telecommunications for over 40 years. He left Telefonica full time in December 2016 to take up a wider consulting role and establish Airedale Advisors. He has had experience with 5 Generations of Mobile technology and mobile data services. including pioneering 5G innovation research. He has been involved in mobile licence bids, network launches and in recent years Innovation for business development in areas as diverse as Mobile Messaging, Mobile TV, Digital healthcare, Connected Cars, Smart Metering, Smart cities and Emergency services. He is a former elected Chairman of the global GSM Association, the UK Mobile Data Association, and a past President of the Institution of Engineering and Technology (IET - 2011/2012). He holds current Visiting Professor positions at the Universities of Surrey, Coventry, Leeds and Lancaster, and was awarded a CBE by the Queen in 2012 as a national honour for services to the Mobile industry. <a href="https://www.o2.co.uk">www.o2.co.uk</a>

# Brett Trafford, Fawley Waterside @fawleywaterside

Brett has spent a career in marketing. Until 1997, for 12 years, he was marketing director in Formula One. From that time on, he worked as a VC to exploit Scottish University IP and technologies, until 2010, when they were divested of their last technology investment and Brett retired. Due to a global network, and his background as a deal maker, Brett was asked by Hampshire County Council to mentor colleagues in the public sector. During this time, via the local enterprise partnership, he worked on a regeneration programme with Whitehill and Bordon, in East Hants. Brett became interested in smart cities and joined Fawley Waterside to deliver an intelligent merchant city in Southern Hampshire. <a href="https://www.fawleywaterside.co.uk">www.fawleywaterside.co.uk</a>