Invitation to workshop:

Spectral Efficiency – a broader view of broadband?

Click Here… to register for free.

Date: Friday 10th September 2010

Time: 0930 to 1630 (Registration and refreshments 0900)

Venue: Royal Berkshire Conference Centre,
Madejski Stadium,
Reading,
Berkshire,
RG2 0FL, UK.

Directions: www.rbcc.org.uk/location.php

Background

The DCKTN Wireless Technology and Spectrum Working Group and UK Trade & Investment are hosting a workshop to investigate technology and engineering innovation that will enhance the use of spectrum whilst taking into account the business and market aspects to maximise return on these new technologies.

The upcoming allocation and auctioning of spectrum at 700, 800 and 2600 MHz will create unprecedented global opportunities to deliver economic and social value but the realisation of these opportunities will depend on the economics of the associated spectral and network investment and the quality and consistency of the end user experience.

Network economics have always been closely coupled to spectral efficiency. Improvements in spectral efficiency translate in to an ability to support more subscribers and or higher data rates per subscriber. The assumption is that higher data rates translate into additional user value.

User value has substantially changed over time. First generation phones were used predominantly as a means of person to person voice communication, second generation

phones added text, third generation phones add internet connectivity, changing how we relate to one another and interact with the physical world around us.

Spectral efficiency is traditionally measured in bits per hertz. This remains useful but other metrics are at least as important and becoming more important over time, for example the energy efficiency of the user's device directly determines the user's data duty cycle.

From an operators perspective spectral efficiency also has to include energy cost both for transmission and storage, the memory cost implicit in an IP network with wireless attached, measured in joules per bit or byte delivered or stored.

Network operators also need to realise improvements in investment efficiency, a function of market forces and the regulatory framework within which they need to work. This is a sum of the total cost of ownership measured in terms of bits per Dollar or Euros or Pounds per hertz of network bandwidth.

The objective of this workshop is to identify how a step function gain in social and economic value can be realised from present and future spectral and network investment drawing on case studies from innovative companies presently introducing new products and services that deliver against this broader definition of spectral efficiency analysed in the context of a changing political, social and regulatory environment.

The day is constructed around three topic areas which together will answer a number of key questions. The first two topics areas will investigate the Technology and Engineering innovation with a series of presentations from organisations providing either thought leadership or solutions in these areas, followed by a panel session which will address the Market and Business innovation challenges and opportunities.

Who should attend?

The aim of the workshop is to bring representatives from all parts of the value chain from companies already using radio spectrum, potential new entrants/users, through to the hardware and software companies implementing the technology or assessing the opportunities for technology innovation and business exploitation.

For more information regarding the event please contact:

Stuart Revell, DCKTN
Mobile+44 (0) 7836 512787
Email stuart.revell@dcktn.org.uk

Nitin Dahad, UK TI
Mobile+44 (0) 7787 128294
Email nitin.dahad@pera.com

Agenda: Spectral Efficiency Workshop

0900 Refreshments & Networking

0930 DCKTN & UKTI Introductions – Stuart Revell DCKTN & Nitin Dahad UKTI

1000 – 1200 Session 1 - Technology innovation – an assessment of the key technology and component enablers that will drive future user and network value. Time will be allocated for Q&A after each presentation.

- LTE & LTE Advanced presented by Steepest Ascent – Iain Stirling
- Software defined modems for future terminals, John Haine - Cognovo
- MIMO for consumer platforms & handsets, Brian Collins - Antenova
- MIMO for Infrastructure, David Barker - Quintel
- 15 minutes refreshment break included

1200 – 1315 Lunch

1315 – 1445 Session 2 – Network engineering innovation – examples of the engineering innovation needed to translate technology into user and network value. Q&A will be deferred to panel session 3.

- RF optimisation improving Network & Energy efficiency to drive EBITDA performance, Geoff Varrall RTT
- Small Cell Networks, Simon Fletcher - NEC
- Dynamic Radio Planning - S/W configurable networks, Christopher Millhouse, Symena & David Barker, Quintel
- Spectrum trading and sharing – Nigel Jefferies, WWRF

1445 – 1500 Refreshments break

1500 – 1630 Session 3 Market & Business innovation panel discussion – are market forces efficient or effective? What could be improved? Do market forces produce technologically efficient decisions? What are the implications for regulatory policy? Would additional competition increase or decrease fiscal investment efficiency, what are the implications for competition policy?

- Technology driving EBITDA performance
- Regulatory decisions driving innovation
- Spectrum trading and sharing
- Network business models

Panel: Network engineering innovation speakers joined by William Webb, Ofcom and chaired by Stuart Revell, DCKTN.

For more information regarding the event please contact:

Stuart Revell, DCKTN
Mobile+44 (0) 7836 512787
Email stuart.revell@dcktn.org.uk

Nitin Dahad, UK TI
Mobile+44 (0) 7787 128294
Email nitin.dahad@pera.com