

ICIN Tutorials on NFV and WebRTC

Delegates to <u>ICIN 2013</u> in Venice can attend two new and highly topical pre-conference <u>tutorials</u> on the afternoon of Monday October 14. The tutorials will be followed by a Welcome Reception kindly sponsored by the **Open Mobile Alliance**. That's in addition to three keynote presentations supporting an outstanding set of technical presentations providing insights into the future of network services and applications. Full details of the **ICIN 2013 Programme** including technical sessions, keynotes, and tutorials can be downloaded <u>here</u>.

Tutorial 1: Network Functions Virtualization Demystified (13:00-15:00)

Dr Igor Faynberg and Dr Hui-Lan Lu, Alcatel-Lucent, USA

Network functions virtualization is both a concept and a broad initiative to use CPU virtualization and other Cloud Computing technologies to "cloudify" the functions and allow them to run on general-purpose hardware. The concept, as introduced by a group of network service providers in October 2012, is applicable to a range of network functions in mobile and fixed networks from the data plane to control plane to applications. Examples of such network functions are routers, Evolved Packet Core (EPC), IP Multimedia Subsystem (IMS), load balancers, and firewalls.

This tutorial is geared to telecom professionals skilled in networking technologies, but it assumes no prior knowledge of computing virtualization technologies. The latter will be explained so as to demystify the "virtualization" part. After that, the tutorial will briefly describe the ETSI Industry Specification Group for Network Functions Virtualization effort. Key economic and technological issues will be outlined – security among them. With that the benefits of NFV in developing new services will be demonstrated.

Tutorial 2: WebRTC & Carrier Network: a Technical Overview & Market Context (15:30-18:30)

Dean Bubley (Disruptive Analysis, UK), Tim Panton (Tropo, UK)

WebRTC brings real-time voice, video and data communications into the browser, providing web programmers with the tools to build communications into their apps. It also gives communications providers/telcos easy access to a new web platform for their services. WebRTC is already "live" in various web and enterprise scenarios, and several of the more forward-looking telcos are already exploring commercialisation options. By early 2014 there will be a billion devices supporting it – rising to almost 4bn by end-2016.

This tutorial will describe the technical underpinnings of WebRTC and its future roles in telco networks, services and business models. The technical part of the session focuses on key differences from more conventional VoIP deployments. The rest of the session discusses the key contextual changes in the telecoms business, user behaviour, and wider technology ecosystem that are driving WebRTC to become a pivotal enabler. It will analyse the trend away from traditional "per-minute" telephony towards other new forms of voice or video. For operators, it will make the opportunities bigger; the threats worse; and everything much faster-evolving.

The primary focus of **ICIN 2013** is twofold, addressing both how to make networks smarter with a stream on the **transformation of Telcos' networks** and how to make smarter things with these networks with a stream on **the future of real-time communications**. <u>REGISTER NOW</u>!

You will find additional information on our web site at www.icin.co.uk.

As the chairmen of the Technical Programme Committee and International Advisory Board, we look forward to welcoming you in Venice at ICIN 2013.

Stuart Sharrock, Chairman ICIN International Advisory Board chair@icin.co.uk Bruno Chatras, Chairman ICIN Technical Programme Committee <u>cfp@icin.co.uk</u>

