



The Society for Broadband Professionals

has pleasure in announcing its

SPRING 2013 LECTURE MEETING

“THEN, NOW AND WHERE TO?”

to be held on

WEDNESDAY 17 APRIL 2013

at

The Institution of Engineering and Technology
(Council Chambers)
Savoy Place
LONDON
WC2

Registration at 9.00 am

“THEN, NOW AND WHERE TO?”

9.00 am **COFFEE AND REGISTRATION**

9.30 am ***President's Welcome and Society Update***

9.40 am ***Chairman's Keynote Introduction and Overview***

9.45 am ***“Evolving the Transmission Network beyond SDH”***

Alan Corfield, Transmission Engineering Consultant

VIRGIN MEDIA

An appraisal of how the Transmission Network is migrating from traditional TDM based transmission to leverage the scale inherent in Optical Infrastructures and the obvious benefits of packet-based networking. The Virgin Media Network will be highlighted as an example of this and the relevant emerging technologies will be introduced.

10.35 am ***“Addressing Key Challenges in Effective Test Automation As Applied to Multi-Screen Digital TV”***

John Maguire, Director of Product Strategy, TV Technology

S3 GROUP

Digital TV service providers, both incumbent and new, are in a race to deliver compelling new multi-screen services to their customers. To deliver these services they are developing ever more complex delivery platforms from multi-vendor head-end installations through to multiple devices in the living rooms of their consumers. As the system engineering complexity of these platforms has risen so, too, has the demand to apply automation to the challenge of verifying their operation to reduce time-to-market and improve quality.

This presentation will examine some of the key challenges in effectively applying automation to this fast-moving area and the types of technology that are being deployed to meet these challenges. It will discuss the relative merits of deterministic reference-based video quality MOS measurement versus non-reference perceptual measurements; internal ‘white-box’ development testing versus ‘blackbox’ production system testing, and ways to accelerate test case development without introducing undue ‘brittleness’ into the reliability of the automated test environment.

TV continues to play a huge role in the daily media consumption diet of most people worldwide. According to iDate Research, the number of TV households worldwide will grow by almost 10% to reach 1.502 billion in 2016. There are huge changes underway in the services being delivered and the technology used to deliver them to this growing viewer base. This presents us with many interesting new technical challenges still to be overcome.

11.25 am ***“Moving Customers to 21st Century Service”***

Jim Farmer, Chief Network Architect

AURORA NETWORKS

The best medium for serving customers with video, voice and data in the late 20th century was HFC. FTTH is a newer and better technology, and is the service medium of this century. One of the impediments to implementing it, however, is the installed base of equipment managed by DOCSIS-based management systems. It is not reasonable to convert all of an HFC system to FTTH at one instance. Rather, the likely scenario will be to build system additions and to do major overhauls with FTTH, whilst continuing to operate adequate existing HFC systems. This dictates the use of a common management platform, and since DOCSIS was there first, it is logical that new FTTH systems conform to the DOCSIS management methods.

Accordingly, US CableLabs have undertaken to define a way to implement DOCSIS management of EPON FTTH systems. This paper describes the output of that work to-date, and discusses what else is necessary to achieve common management of DOCSIS and EPON systems. We shall also discuss architectural variations in FTTH systems, which can maximise the use of existing fiber, while minimising the amount of new fiber needed. By using a common management system, services may be migrated over time to the newer technology, without customer disruption and without re-training of personnel.

- 12.15 pm BREAK FOR LUNCH**
- 1.30 pm “Enigma Code Cracking”**
 Alan Watson
In preparation for the SCTE’s Summer lecture meeting at Bletchley Park in Buckinghamshire, a special presentation will be given by Alan Watson on wartime operations and the cracking of the Enigma Code at Bletchley Park.
- 2.00 pm “Coexistence of LTE 800 / Cable Services – A Briefing**
 Dipl. Ing. Carsten Engelke, Director Technology
ANGA
The frequency situation from mobile services will be presented as will the situation on Downlink/Uplink with the cable channels. Two short videos will be played depicting the usage of a LTE UE and the impact to cable services. Discussions on possible future measurements and impact will also be held.
- 2.50 pm “DOCSIS 3.1 Standards Update”**
 An LGI EXECUTIVE REPRESENTATIVE approved by
CABLE EUROPE LABS
As Cable Operators face the rising threat from Telecom companies deploying VDSL and FTTX technologies, they have responded with the development of a new DOCSIS specification designed specifically to compete in this market.

Driven by CableLabs and the MSO and vendor community, the new standard will combine advanced modulation and line coding schemes together with a significant step-up in upstream spectrum, delivering Gbps data rates in both downstream and upstream directions. This lecture provides an overview of the key elements of the DOCSIS 3.1 specification as well as an update on standards development.
- 3.40 pm BREAK FOR TEA**
- 4.10 pm “High Speed Broadband in Rural Communities (DSL Rings®)”**
 Stephen Cooke, Founder, President and Chief Technical Officer
GENESIS TECHNICAL SYSTEMS
People living and working in rural communities frequently find it challenging to access superfast broadband.

Stephen Cooke, President and CTO for Genesis Technical Systems, will discuss a systems engineering approach to using DSL Acceleration techniques to solve these challenges. Stephen will talk about delivering very high speed broadband to rural locations, and present the technology of a new and economical solution, DSL Rings®.

DSL Rings is a patented, award winning technology that delivers very high speed broadband, up to 400 Mb/s, over existing copper telecommunications networks, where distance from the exchange can often be a limiting factor in deploying traditional broadband solutions.
- 5.00 pm Closing Remarks**
 Dr Roger Blakeway, President
SCTE
- 5.10 pm - 7.00 pm SCTE COCKTAIL PARTY**
 This is being held in the Kelvin Lounge at the IET and all attendees are welcome to attend.

**This programme is correct as at the time of going to press.
 Any changes will be advertised on the SCTE website www.theSCTE.eu**

BOOKING FORM

SCTE Members

As usual, there is no charge for Members to attend the Lecture Meeting - just turn up. There is, however, an optional luncheon (with wine) on this occasion at the IET at the heavily subsidised rate of **£15.00 plus VAT per person (ie £18.00)**. If you wish to reserve your place for lunch, it is essential that this is booked beforehand and so please complete the form below and return it together with your cheque* made payable to the SCTE.

Alternatively, bookings can be made by telephoning the SCTE office on 01923 815500 or online via the SCTE website, http://www.thescte.eu/acatalog/lecture_meetings.html

If you wish to bring any non-Member guest(s), please see the non-Member charges below and return the form to the SCTE office together with a cheque* for the appropriate amount.

Non-SCTE Members

The charge for attendance at the day's Lecture Meeting is **£50.00 plus VAT (ie £60.00)**, plus an optional charge of **£15.00 plus VAT (ie £18.00)** for luncheon at the IET. For those of you who may subsequently wish to join the Society, we are pleased to announce that £20.00 of this fee is redeemable against your first full year's membership subscription provided that you apply by the end of May 2013.

If you wish to reserve places for the Lecture Meeting and/or luncheon, then please complete the booking form below and return it together with your cheque* made payable to the SCTE.

*** Payments may also be made by credit card - please contact the SCTE office or online through the SCTE shop at http://www.thescte.eu/acatalog/lecture_meetings.html**

Please complete and return to: SCTE
Communications House, 41a Market Street
WATFORD, Herts, UK WD18 0PN
Tel: + 44 1923 815500 Fax: + 44 1923 8030203
Email: office@thescte.eu
Website: www.theSCTE.eu

Alternatively, Members may book places via the SCTE website (details above).

Name
Address

Daytime Tel No Daytime Fax No
Mobile Tel No Email Address

SCTE Member YES*/NO* If NO, please send membership details YES*/NO*
* Please delete as applicable

1 Please reserve place(s) at the Society's Spring Lecture Meeting on Wednesday 17 April 2013 in the names of the following person(s):
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Note: Non-Member charge for each attendee is £50.00 plus VAT (ie £60.00).

2 Please reserve place(s) for the optional luncheon. Please note there is a charge of £15.00 plus VAT (ie £18.00) for each place booked.

I enclose a cheque for £ made payable to SCTE. All bookings will be confirmed.

Signed Date