



The Society of Cable Telecommunication Engineers

has pleasure in announcing its

AUTUMN LECTURE MEETING & AGM

**“DELIVERING TO THE END USER
– AND WILL HE LIKE IT?”**

to be held on

THURSDAY 4 OCTOBER 2007

at

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

Registration at 9.30 am

“DELIVERING TO THE END USER – AND WILL HE LIKE IT?”

9.30 am COFFEE AND REGISTRATION

10.00 am *President’s Welcome and Society Update*

10.10 am *Chairman’s Keynote Introduction and Overview*

10.15 am “Standards Update”
Dr Roger Blakeway, President
SCTE

**10.30 am “Digital Video Remultiplexing and Localization Overview -
Application to Digital Terrestrial Television”**
Serge Francois, Senior Technical Architect
MOTOROLA

The digitalization of video delivery to the end user has brought tremendous benefits in terms of quality and quantity of programming available to the customer but has also set new constraints on how content can be aggregated and managed.

In this lecture we will review various techniques available to aggregate and remultiplex video services into Multi Program Transport streams. We will especially focus our analysis on the requirements arising from the need to offer targeted content or to insert local television services in those Transport Streams.

As an illustration to our discussion, we will present an application of those remultiplexing and localization techniques in the context of Digital Terrestrial deployments.

**11.25 am “The Universal EdgeQAM - Simplifying a Multi-service Cable
Access Network”**
Ed Allfrey, Business Development Director – Cable
TANDBERG TELEVISION, part of the Ericsson Group

In this presentation we will look at utilising a single platform for Downstream QAMs, whether the service be VoD, Data, Voice, SDV or Broadcast. We will discuss how resources are shared between services, the efficiency gains from sharing capacity between services, the role of the Edge Resource Manager, and how capacity planning and node segmentation are greatly simplified with a universal EdgeQAM.

Finally we will look at how the Universal EdgeQAM creates a simple roadmap for a future migration of video services from DVB-C to IPTV over DOCSIS 3.0.

12.20 pm BREAK FOR LUNCH

1.45 pm “Let There be Light”
- Fibre to the home as the only viable data highway for end users

Joachim Brunzel, Product Manager Carrier
ADC KRONE

For network operators and service providers Europe is a market that offers at one and the same time manifold opportunities but also enormous demands for compatibility with existing network infrastructure. With established copper-based customer access networks transmission technologies such as ISDN or ADSL already hitting the limits of performance they will be completely swamped by new services. FTTH is the only logical solution, but building the outside plant in the hostile “great outdoors” will demand very high performance product solutions for the passive optical networks of the future.

The paper will look at xDSL including VDSL and goes on to compare FTTN (fibre to the node) with

FTTH/P (fibre to the home/premises). It will go on to discuss some key connectivity issues including topology and technology of the outside plant network, splicing in the field cross-connects and interconnects as well as test access and optical distribution frames in the exchange/central node.

2.40 pm “The Flat Panel Display as Reference Monitor - Goodbye CRT, Goodbye WYSIWYG?”

Dave Bancroft, Manager – Advanced Technology

GRASS VALLEY (UK) LTD

The cathode ray tube (CRT) is disappearing rapidly from the home, and its flat panel replacements look different, not just as a class, but also from one another. Broadcasters have to purchase their reference monitors from the same technology sources, so they potentially could soon be out of luck looking for what is after all supposed to be an accurate measurement tool. Could this mean goodbye to WYSIWYG in the production control room?*

Several professional organizations have taken up the challenge to remedy this situation, and the speaker, after surveying the problem, will report on the progress made in the group that he chairs in the SMPTE†, the Study Group on Display Technologies, as well as complementary efforts in the EBU.

* What You See is What You Get

† Society of Motion Picture and Television Engineers

3.35 pm BREAK FOR TEA

3.55 pm “3 GHz HFC Spectrum Overlay: Technology and Implementation”

Ron Shani, VP Technology

VYYO

The opportunity for cable system operators to generate increased revenue and improve competitive positioning through the deployment of new services – including 100 or more channels of high-definition television (HDTV), HDTV on Demand and DOCSIS 3.0, Ethernet and T1 services – is placing new demands on network bandwidth.

Typically MSOs have built their outside plant to service TV broadcast, with little room for advanced services. Most networks today operate up to 750 or 860 MHz, while allocating only a small portion (5 – 42 / 54 / 65 MHz) to upstream.

This is insufficient to handle the new requirements for launching high numbers of HDTV channels and high Internet data rates, not to mention the opportunity to service business customers. However, this limitation is imposed only by system electronics; physically, the coaxial cable can operate at frequencies that reach more than 3 GHz.

The presentation proposes a system that cost-effectively adds 650 MHz of downstream capability and a minimum of an additional 130 MHz upstream without replacing current infrastructure. It discusses networks' ability to handle signals approaching 3 GHz over existing coaxial cable and outlines an architecture that enables MSOs to use this new bandwidth to offer all new and advanced services, without giving up the existing services.

A high-capacity network requires equipment that uses the added bandwidth. As it would be impractical to replace all of the active elements involved, the proposed system has been designed to be compatible with all existing consumer premises equipment, node and headend equipment, thus making the new spectrum transparent.

The presentation further shows the successful results of field installation of such system.

4.50 pm Closing Remarks

Dr Roger Blakeway, President

SCTE

5.00 pm SCTE ANNUAL GENERAL MEETING

5.15 pm - SCTE COCKTAIL PARTY

7.00 pm THE TS QUEEN MARY, EMBANKMENT (opposite the IET building)

All attendees are very welcome to come along to the Cocktail Party.

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 on this occasion at the IET at the heavily subsidised rate of **£12.00 per person**. 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 online via the SCTE website, www.theSCTE.eu

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 £58.75)**, plus an optional charge of **£12.00** (inclusive of VAT) 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 October 2007.

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.**

Please complete and return to: SCTE
Communications House, 41a Market Street
WATFORD, Herts WD18 0PN
Tel: 01923 815500 Fax: 01923 8030203
Email: office@scte.org.uk
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 Autumn Lecture Meeting on Thursday 4 October 2007 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 £58.75).

2 Please reserve place(s) for the optional luncheon. Please note there is a charge of **£12.00** (inclusive of VAT) for each place booked.

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

Signed Date