

# TIA 2012 Educational Tracks

*Updated: September 9, 2011*

## Track 1: Green ICT: Innovation in Energy Efficient Equipment, Services and Network Architecture

**DESCRIPTION:** Today's networks are designed for optimal capacity, not efficient energy use. What is needed is a major breakthrough, a radical re-design of networks, and that can only be achieved through the contributions of all essential participants, from basic and applied researchers and component suppliers to network operators, equipment and system suppliers and governments. TIA and GreenTouch are teaming up to showcase next generation products and services, and develop a series of educational sessions devoted to innovative thinking in the area of energy efficient network equipment.

## Track 2: Network Convergence

**DESCRIPTION:** The challenge for service providers is to establish scalable infrastructure to yield significant opportunities for reducing transport costs and increasing network efficiency. A converged network backbone leverages optics and delivers the lowest cost per bit for reliable transport across the backbone for the breadth of existing and emerging services. At the same time in the access network, a wide array of choice of access technologies presents long-term implications for networks ROI. This conference track explores the trends in next-generation transport and access platforms and show how these technologies can both enable new services and make use of currently deployed broadband access infrastructure.

## Track 3: Optimizing the Cloud

**DESCRIPTION:** Competition, cost pressures, and the demand for services and applica-

tions anytime, anywhere, and on any device are forcing telecom service providers to consider alternative delivery models to acquire and deliver IT services demanded by their customers. Service providers regard their networks as a strategic asset capable of driving incremental revenue and increased profitability, but how do they extract maximum value from that asset? The network is the connection fabric that builds the cloud for cloud computing, but a bunch of servers on a network and a cloud are distinguished from one another by the effectiveness with which you can allocate the resources from the pool to support the mission of the application. At TIA 2012, service providers will gain the information they need to insert themselves into the cloud services value chain by redefining their roles to expand beyond connectivity and provide Web-based application delivery services.

## Track 4: M2M and Embedded Mobile

**DESCRIPTION:** Network Operators have woken up to the opportunities that will exist in carrying the "new" traffic generated by M2M communications, and the emerging "Internet of Things." With 50 billion devices predicted to be connectable by 2020, the only remaining questions the operator must answer are "where is my position in the value chain?" and "what is the most economically effective way to get there?" These questions and more will be addressed in these series of sessions that focus on the business case for M2M, potential business models from the perspective of the Network Operator, the impact M2M has on future network architectures and the operational change that is

demand given the scale, performance and flexibility requirements.

### Track 5: Mobile Backhaul

**DESCRIPTION:** Smartphones and tablet devices are driving huge access network bandwidth usage, while users are demanding high quality, low delay voice and video services with ubiquitous coverage. This increase in bandwidth across limited spectrum is driving a growing number of cell sites, which in turn, puts pressure on mobile operators to find new ways to meet the capex and opex demand. In this series of sessions, you will explore the market dynamics of the mobile backhaul market, the architecture and applications that are driving business opportunity and the opportunities for broadband network operators and wireline carriers, as well as infrastructure partners and new entrants, to participate in the business of providing affordable, reliable bandwidth for the mobile network operator.

### Track 6: MultiScreen Video

**DESCRIPTION:** Telecom operators, both fixed and mobile, commonly provide TV as a part of their multiservice offerings. Today's operators, especially fixed operators, are showing strong interest in extending their TV service over multiple kinds of access and devices, in order to retain and expand their market position and grow new sources of income. The market is segmented into IPTV and mobile TV offerings that utilize separate solutions in the network and service layers. Offering both services today requires a duplication of user and content management functions, and a vertical approach with specific access technologies and devices in mind. What's more, these vertical systems are based on different sets of standards not historically designed with interoperability in mind. This series of sessions are designed to showcase the different tech-

nology approaches for a converged or 'multi-screen' strategy; to discuss the trends and drivers in the marketplace and to focus on the business value for fixed and mobile operators to implement a new, converged approach.

### Track 7: Optical – Roadmap to 100G

**DESCRIPTION:** The emergence of 100G Ethernet and optical transport is of critical interest to service providers worldwide, and is poised to have a dramatic impact on the way operators deploy optical and packet systems. 100G technologies play such a fundamental role in scalability of high bandwidth services that it will in fact be a stimulus for dramatic convergence of IP and Optical Technologies. This series of sessions focuses on the role next generation optical transport technology plays as service providers look to scale their networks to profitably meet the demands of traffic growth, while still providing the full range of capabilities for residential, business, mobile and cloud services.

### Track 8: Video Communications and Collaboration

**DESCRIPTION:** Analyst firms forecasts that enterprise expenditure on video conferencing will rise to \$3.8 billion in 2016, up from \$2.9 billion this year, providing a sizeable opportunity for a wide range of players in the ecosystem, from telecoms operators, video equipment vendors, integrators, and channel partners, to specialist video players. This series of sessions focuses on technology challenges (Interoperability, Interface and Integration) and Carrier opportunities in Managed Services with Visual Communications.