





CALL FOR PAPERS

Technical Paper Abstracts Must Be Submitted to SCTE•ISBE by Friday, March 30, 2018

The Society of Cable Telecommunications Engineers (SCTE), along with its global brand, the International Society of Broadband Experts (ISBE), is seeking proposals for papers and presentations for technical sessions that will be conducted during the annual Fall Technical Forum at SCTE•ISBE Cable-Tec Expo® 2018. Expo is set for Monday through Thursday, Oct. 22–25, in Atlanta.

The Expo 2018 Program Committee, chaired by Kevin Hart, EVP and Chief Product and Technology Officer, Cox Communications, will review all technical abstracts. The Fall Technical Forum is a collaborative production of SCTE•ISBE, NCTA, and CableLabs® providing unsurpassed thought leadership for the industry.

The Expo 2018 Program Committee targets these key areas:

- Wireline Access Network
- Wireless Access Network
- Internet of Things (IoT)
- Digitizing the Customer Experience
- Virtualization & Cloud
- Operational Transformation
- Business Services
- Video Services
- Virtual Reality (VR) & Augmented Reality (AR)
- Security

For those whose abstracts are chosen, two templates will be available to complete the papers and presentations:

- 1. One focused on white papers describing new and emerging technologies
- 2. One focused on operational practices providing field guidance



Abstracts addressing the 10 topic tracks identified here will be given priority.

Beyond the traditional workshop setting, submitters of what the committee considers to be particularly distinguished abstracts will be offered the special opportunity to deliver their papers and presentations in Expo's **Innovation Theater**, prominently located in the Expo Exhibit Hall.



Wireline Access Network

- The future of DOCSIS®/FDX
- DOCSIS®/RFoG/PON playbooks
- Future proofing fiber and node architectures
- Use cases of coherent optics
- RPHY trade-offs and planning/implementation
- Comparison of Distributed Access Architecture (DAA) options
- The future IP network—solutions and architectures for cloud control and applications
- Last-mile technologies/smart segmentation—the cable industry will have access to many technologies (5G fixed, 5G mobile, LPWAN, Wi-Fi, FTTP, FDX, D3.1, etc.) to facilitate customers' future requirements. How do we optimize network architectures to meet future demands of both consumers and businesses?



Wireless Access Network

- 5G and cable—how do we capitalize on the opportunities for the cable industry?
- The evolution of wireless technologies and cable's role
- Economics of multi-use case/multi-band 5G deployments
- 5G use cases—beyond fixed wireless access (FWA)
- CBRS 3.5 GHz use cases
- What are the challenges and implications of 5G low-latency requirements for DOCSIS®?
- Mobile any-haul—how do we leverage cable-based technologies to provide front-, mid-, and back-haul for mobile delivery?
- Architectures and economics of emerging fixed wireless access strategies for greenfield and brownfield overlay scenarios (comparing HFC, WiPON/WiGig, 5G, and FTTH)



Internet of Things

- Monetizing IoT
- Network opportunities to enable IoT solutions
- Industry alignment and standards on IoT technologies
- Comparison of LPWA technologies and realizable use cases
- Enabling smart cities with sustainable solutions



Digitizing the Customer Experience

- · Predicting network and service issues in advance of service or customer impact
- Network and operations automation—what are the possibilities of today, and what does the future hold?
- Network and IT operations convergence in a virtualized future
- Network programmability—what is it, what's coming up, and what does it mean for your operations?
- The home, center of the future ecosystem—consumers are demanding a truly converged experience, so how does the cable industry embrace the fragmentation and develop a truly integrated approach for consumers?
- Shifting from speeds to experiences—with speed becoming more of a commodity, the future will be focused on experiences. What are solutions that require development to meet the experiences customers are demanding?
- Agile testing and launching services more rapidly—how do we leverage these methodologies to improve service velocity?



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Virtualization & Cloud

- Virtualization & Cloud 101—an overview
- Cloud computing—what are the implications of software-defined everything on cable networks?
- New product development—enabling dynamic product development leveraging multi-vendor orchestration
- · Critical design considerations when virtualizing E2E network components and services
- SDN clients in end-user cable devices—what are the opportunities for nextgeneration CPE?
- Is AWS friend or foe?
- What are real-world examples of operators successfully implementing service orchestration to improve operational efficiencies?
- How will operators manage vCCAP in the cloud?
- · Voice-controlled services



Operational Transformation

- How will machine learning/artificial intelligence impact the cable industry?
- Real-time visibility and analytics to enable actionable intelligence and network automation



Business Services

- Leveraging/optimizing the network for both residential and business service requirements
- What opportunities does network slicing provide for the future of cable networks?



Video Services

- · Transitioning to an all-IP world
- Advanced video services (HDR, UHD)
- Emerging compression standards (e.g., H.265, H.266)
- Challenges and opportunities in delivering in-home video over Wi-Fi



Virtual Reality and Augmented Reality

- VR/AR solutions to aid the technician workforce
- Cable delivery of VR/AR services and network implications



Security

- Security as a Service (SaaS)
- Blockchain
- IoT security
- · Security analytics

While abstracts on the above specified topics will be given priority, other topics addressing current cable industry technical, engineering, operational, and business issues will also be considered.



WHAT DO YOU PROPOSE?

Enter each submission separately to:

SCTE•ISBE Cable-Tec Expo® 2018 Abstract Submissions at www.scte.org/callforpapers18 by Friday, March 30, 2018. Please limit each abstract submission to 300 words.

Include:

- Paper title
- Brief description of proposed session content
- Name of author/presenter
- Company
- Mailing address
- Telephone/fax numbers
- E-mail address

Previously published papers and product-specific presentations will not be accepted. Abstracts must be tailored for workshop learning and provide real-world examples that attendees can apply to their everyday work.

The SCTE•ISBE Cable-Tec Expo® 2018 Program Committee will announce selected papers and presentations by **Monday, April 30, 2018**.

Selected participants will be required to complete and submit an electronic version of their paper and associated PowerPoint presentation by **Friday, July 27, 2018**, for inclusion in the *SCTE•ISBE Cable-Tec Expo® 2018 Fall Technical Forum Proceedings*.

Please direct questions regarding Fall Technical Forum 2018 and its abstract submission process to **EXPO_info@scte.org**.



