

# IP – STANDARDS UPDATE / NETWORK MONITORING AND CONTROL

Increased complexity in IP-based systems and the growth in the number of audio, video, data, control and synchronism signals, often traveling on the same physical channel, make it imperative to use measurement and monitoring tools that assure compliance of these signals. This panel has experts on this topic, which involves standardizations of IP signals and their controls.

**Chair: José Antônio S. Garcia - SET Deliberative Council / IP Study Group  
Coordinator**

## • SMPTE STANDARDS ENABLING THE LIVE IP TRANSITION

**Thomas Bause Mason - Director of Standards Development -SMPTE**

SMPTE IP standards for live TV production are maturing and are being adopted by equipment manufactures. What are the different SMPTE standards which are driving the media industries IP transition? How do they play together and what are they areas they apply to? Get an overview on SMPTE IP standards and how they play into a full stack implementation of IP infrastructure.

## • MEDIA DATACENTER ORCHESTRATION AND MANAGEMENT

**Fábio Acquati - Technology Director – NGN Telecom**

Now that IP has firmly established itself as the new means of transportation for all types of media, broadcasters are facing the challenges of the change from SDI to IP, as well as the virtualization of infrastructure and the cloud, embarking on a new concept of Media Datacenter, something that makes it possible to provide a range of services and lots of flexibility, but increases the complexity with an infinity of flows, IP addresses, multicast and PTP. How can one have a complete overview of all the services and flows transiting through this datacenter, guaranteeing quality while avoiding package losses and bottlenecks? How does one orchestrate these services, extracting maximum functionality from this new structure and simplifying the operation? Come and give some thought to this, discussing it and more on our panel!

## • IN-DEPTH VIEW OF LAWO'S SYSTEM MONITORING & REALTIME TELEMETRY; SMART

**Tony Zare - Product Manager - LAWO**

The unification of IP networks and broadcasting flows present a set of challenges to ensure that the media is generated, processed and delivered within the standards. IP flow can frequently experience packet loss, jitter, degradation from encoding and violations during transportation, to mention the bare minimum. For the success of the operation, it is imperative to use the correct monitoring and viewing tools to proactively identify the degradations and disruptions to the services.

Join us for an in-depth discussion of the Lawo Smart system.

**• IP MEASUREMENTS****Eliésio Silva Júnior - Sales Manager – SEAL Broadcast and Content**

Monitoring of Equipment and Signal Flows on IP networks without compression, and Main Audio and Video Measurements on 2110-20 and 2110-30.

**José Antônio S. Garcia - SET Deliberative Council / IP Study Group Coordinator**

Technician in Electronics by ETE in Sta. Rita do Sapucaí in 1975 and Engineer in Telecommunications by Universidade São Judas in 1982. He has worked in television companies since 1975. Member of SET Deliberative Council - Technology Board, SBTVD Forum - Technical Module, UHD Brazil Project - Distribution Group and IP Study Group of SET - Coordinator.

**Thomas Bause Mason - Director of Standards Development –SMPTE**

Thomas Bause Mason is the Director of Standards Development for the Society of Motion Picture and Television Engineers (SMPTE). At SMPTE he is responsible for maintaining the technical infrastructure for both the standards community and SMPTE home office. Bause Mason, formerly owner of Open Media Consulting, began his career in Cologne, Germany, as a computer programmer for automation software in the nuclear and automobile industries. Before his move to Los Angeles, Bause Mason worked at West German Television (WDR) and Cologne Broadcasting Center, where he led the quality control department. In Los Angeles, he became a postproduction consultant and then built and managed the encoding operations for Ascent Media. Joining NBCUniversal in 2005, he focused on emerging technology, spending two years in London to support the company's international business. Throughout his career, Bause Mason has assisted industry organizations in the development of standards, technical recommendations, and study group reports. He holds several patents and is a SMPTE Fellow.

**Fábio Acquati - Technology Director – NGN Telecom**

Fábio began his career at Tektronix and has accompanied the evolution and transitions of video systems, participating in the early Digital TV tests in Brazil. He is currently a managing partner at NGN Telecom and works with network monitoring and management solutions, including video transportation. He is a member of the SET GEIP group, provides training and consultancy in the area, and continues to study technology with his partners, participating in implementations and proofs of concept, experiencing the challenges of the world of video.

**Tony Zare - Product Manager – LAWO**

Tony Zare is responsible for the technical and commercial success of LAWO's SMART product range. He manages the component life cycle of the SMART product family, specializing in monitoring and telemetry of media infrastructure. Passionate about "big data", correlations and now machine learning can be applied to current operations. Tony has over 20 years of experience in the broadcast industry, where he began as a project

engineer for ASIC high-speed integrated circuits, followed by 15 years in the development of onboard software and broadcast and network products. He holds a degree from the McMaster University in Computer Science and Mathematics, and is directing the strategy of the SMART (System Monitoring and Real-time Telemetry) family which he is positioning as the eyes and ears of broadcast networks, focusing on communication networks and media big data analysis.



**Eliésio Silva Júnior - Sales Manager – SEAL Broadcast and Content**

With 26 years of experience in the fields of free-to-air and closed television, telecommunications and new media in (projects / monitoring of complex systems/ special events/ operations/ multidisciplinary/ sales team leadership) developed in major Brazilian and multinational companies, such as 17 years at Globosat –TV System and Operations Supervisor, 3 years at TV Globo –TV System Operator, 7 years at Tektronix – sales manager, 2 years at Seal – sales manager; Eliésio has a Technological Specialization in Digital TV, Signal Compression and Quality - INATEL, MBA in Digital TV & New Media – UFF, a Graduate Degree in Logistics (Energy Supply/ Distribution Planning) – FGV, MBA in Business Management– UVA, an Undergraduate Degree in Electronics – FABES / Rio de Janeiro, and Specialization in Satellite-based Transmission – PUC Rio. He is also a Telecommunications Technician – ETRR / Rio de Janeiro and an Electronics Technician – ETRR / Rio de Janeiro.