

TV 3.0: NEW BUSINESS MODELS

This panel will discuss the new opportunities and business models which the next TV generation will create for the radio broadcast industry. The evolution of digital terrestrial television represents the construction of a new platform that expands knowledge of the consumer's experience and unifies the multiplatform experience offer. TV 3.0 transforms the user's experience by offering greater customization, rich and customized interactions, enhancing the viewer's engagement. For the broadcasters, it's about incorporating the typical business models of the digital ecosystem in free-to-air TV maintaining the reliability attributes, reach and quality. This session will be an opportunity for the industry to build, through the broadcaster's experience from different parts of the world, the vision of future free-to-air TV business in Brazil.

Chair: **Ana Eliza Faria and Silva** - **Strategy and Regulatory Manager in Technology Area of Globo TV**

- **RECENT EFFORTS IN JAPAN TO DEVELOP NEW INTEGRATED BROADCAST-BROADBAND SERVICES**

Speaker: **Masaru Takechi** - *Research Engineer for Hybridcast deployment, NHK STRL and Senior Research Engineer, NHK Engineering System Inc.*

As Integrated Broadcast-Broadband (IBB) systems can combine web based technologies with broadcast systems, its services can be made in more flexible and personalized manner. For example, use of viewing history allows service providers to tailor the services for each viewer. In this session, recent Japanese market status and activities toward building the new services in this kind are addressed including some trials performed by using actual broadcast systems and "Smartphone first" service paradigm. Some trials of the services will be presented.

- **NEXT-GEN DTTB IN JAPAN - TECHNOLOGIES AND SERVICES**

Speaker: **Masayuki Sugawara** – *President of DiBEG (Digital Broadcasting Expert Group)*

DTTB is an essential service for the people's life in Japan and is expected to maintain its position in the future. To realize this it is needed to meet increasing user requirements for both quality and convenience aspects.

This presentation will discuss the relationship between the user requirements and the technology elements in the next-gen DTTB R&D projects in Japan. It also discuss the future development of Hybridcast, the IBB system which has been already widely deployed in Japan, from the service aspect.

- **5G: A POTENTIAL FUTURE FOR THE BROADCASTING**

Speaker: **João Vadoros** - *Eurovision Services Business in Brazil*

- Two channels are enough for our DVB-T2 network. What can we do else?
- Should we switch to DVB-T2 or wait for 5G?
- We are thinking of phasing out DTT in the next decade and delivering all our terrestrial services over wireless broadband networks. We request the EBU to direct its

efforts toward making 5G a viable large scale distribution platform for both linear and on-demand audiovisual services.

Those are just a few queries which has been driven EBU to evaluate and recommend the key resources for the future of distribution given the different kind of audiovisual media, the content consumption transformation and the variety of devices.

In a new user context, the challenge is to find the best balance for an advanced user experience bringing the right content and valued service to each user/device, while keeping the broadcaster's perspective of a network performance, coverage and user adoption with a suitable business model.

In this talk, we aim to present and discuss the key requirements and use cases EBU Members plan for the future of our business and the role 5G could play in the content Distribution..

- Speaker: **Skip Pizzi** - *Vice President, Technology Education and Outreach at NAB*

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|  | <p>Chair: Ana Eliza Faria e Silva - Strategy and Regulatory Manager in Technology Area of Globo TV</p> <p>An electrical engineer from UNICAMP, she holds a Master's in subjective evaluation of video from UNICAMP, an MBA in Management from the Dom Cabral Foundation and an MBA in Telecommunications from IBMEC. She has been involved in several ground-breaking projects in video transmission and Digital TV standardization in Brazil. She is currently Strategy and Regulatory Affairs manager in the technology department at TV Globo. Former Director of Technology of SET, Ana is an active contributor to the UIT where she is deputy coordinator of the Broadcasting Study Group.</p> |
|  | <p>Masaru Takechi - Research Engineer for Hybridcast deployment, NHK STRL and Senior Research Engineer, NHK Engineering System Inc.</p> <p>Since Mr. Takechi joined NHK in 1990, he studied many areas of broadcasting technologies at its Science and Technology Research Laboratories including satellite digital broadcasting system, multiplexing, and middleware and interactivity. Among them, his particular interest is middleware and architecture of interactive TV. His research contributed to receiver architecture and system design of Japanese interactive TV systems and Integrated Broadcast-Broadband (IBB) systems, namely BML, ARIB-J and Hybridcast. He has also actively participated both domestic and international standardization in many area. He has been a major contributor in ARIB, IPTV Forum Japan, ITU-R, and ITU-T. He took a lead to create more than 15 ITU-R and ITU-T Recommendations and ITU-R Reports for interactive TV systems, IBB systems, and accessibility.</p> |
|  | <p>Masayuki Sugawara – President of DiBEG (Digital Broadcasting Expert Group)</p> <p>Masayuki Sugawara joined NHK in 1983. He researched solid-state image sensors, HDTV cameras, and the UHDTV system at NHK STRL from 1987 to 2015. At present, he is the chairman of digital broadcasting experts group (DiBEG) and an executive engineer at NEC Corporation. He is serving as the Asia-Pacific region governor of SMPTE for his second term. He is a SMPTE Fellow, a Senior Member of IEEE, and a member of IEICE, and an ITE Fellow.</p> |
|  | <p>João Vандoros - Eurovision Services Business in Brazil</p> <p>João Vандoros is in charge of Eurovision Services Business in Brazil, the operational company of EBU. He is post-graduated in Telecommunications by Unicamp and got his bachelor degree as Electrical Engineering at Mackenzie University. Since 2000, has been working in Broadcasting Engineering, focusing his carrier in the content contribution and distribution segment with professional background at the Mackenzie's Digital TV Lab, TVA (Pay TV Operator), Radio and TV Bandeirantes and GfK (as consultant).</p> |



Skip Pizzi - Vice President, Technology Education and Outreach at NAB

Skip Pizzi is Vice President, Technology Education and Outreach, at the National Association of Broadcasters (NAB) in Washington, DC, USA. His career has spanned the broadcast and digital media industries, working in audio engineering at NPR, and in audio production, media standards and technical policy at Microsoft. He was also an editor at Broadcast Engineering magazine, and a columnist for several other international industry publications. He remains a technology journalist, editor, author and trainer today. His most recent book is A Broadcast Engineering Tutorial for Non-Engineers, 4th edition, published by Focal Press. He is currently Associate Editor on the NAB Engineering Handbook, 11th edition, which will be published later this year. Skip serves as Vice-Chair of the Advanced Television Standards Committee (ATSC) Technology Group 3 (TG3), which is developing the ATSC 3.0 standard. He is also a member of the Board of Directors of the Ultra HD Forum. Skip is a graduate of Georgetown University, where he studied Electrical Engineering, International Economics and Fine Arts