Planning Team 1 report on 3DTV

Planning Team 2 report on Next Generation Broadcast TV

Presentations and papers from the ATSC symposiums on Next Generation Broadcast Television (PT-2).

1.

"Advanced Video Codecs: What's on the Horizon?"
Anthony Vetro, Mitsubishi Electric Research Labs, Cambridge, MA.
ATSC Symposium on Next Generation Broadcast Television, October 19, 2010.
Advanced Video Codecs: What's on the Horizon?

2.

"A Revolutionary Digital Broadcasting System: Achieving Maximum Possible Use of Bandwidth."
Naohisa Kitazato, Yoshiharu Dewa, Robert Blanchard and Mark Eyer, Sony Corporation, San Diego, CA.
ATSC Symposium on Next Generation Broadcast Television, October 19, 2010.
A Revolutionary Digital Broadcasting System: Achieving Maximum Possible Use of Bandwidth (manuscript)
A Revolutionary Digital Broadcasting System: Achieving Maximum Possible Use of Bandwidth (slides)

3.

"Next-Generation High Efficiency Video Coding (HEVC) Standard."
Gary J. Sullivan (Co-chair JCT-VC, Chair VCEG, Co-Chair Video in MPEG), Microsoft, Redmond, WA.
ATSC Symposium on Next Generation Broadcast Television, February 15, 2011.
Next-Generation High Efficiency Video Coding (HEVC) Standard

4.

"Transmission Technologies for Next-Generation Digital Terrestrial Broadcasting: Increasing Transmission Capacity toward Super Hi-vision."
Kenichi Murayama, Makoto Taguchi, Takuya Shitomi, Hiroyuki Hamazumi and Kazuhiko Shibuya, Japan Broadcasting Corporation (NHK), Tokyo, Japan.
ATSC Symposium on Next Generation Broadcast Television, October 19, 2010.
Transmission Technologies for Next-Generation Digital Terrestrial Broadcasting Increasing Transmission Capacity toward Super Hi-vision (slides)
Transmission Technologies for Next-Generation Digital Terrestrial Broadcasting Increasing Transmission Capacity toward Super Hi-vision (manuscript)

5.

"Meeting the Requirements of Next-Generation Broadcast Television Audio."
Robert Bleidt (Fraunhofer USA DMT), Harald Fuchs, Stefan Meltzer, Stephan Schreiner (Fraunhofer IIS) and Skip Pizzi (Consultant), Fraunhofer-Gesellschaft, Munich, Germany.
ATSC Symposium on Next-Generation Broadcast, October 19, 2010.
Meeting the Requirements of Next-Generation Broadcast Television Audio (slides)
Meeting the Requirements of Next-Generation Broadcast Television Audio (manuscript)

6.

"Next-Generation 3-D Audio Creation, Transmission and Reproduction."
Jean-Marc Jot, DTS, Inc., Calabasas, CA.
ATSC Symposium on Next Generation Broadcast Television, February 15, 2011.
Next-Generation 3-D Audio Creation, Transmission and Reproduction

7.

"Latest Trends in Worldwide Digital Terrestrial Broadcasting and Application to the Next Generation Broadcast Television Physical Layer."
Lachlan Michael, Makiko Kan, Nabil Muhammad, Hosein Asjadi and Luke Fay, Sony Corporation, San Diego, CA.
ATSC Symposium on Next Generation Broadcast Television, October 19, 2010.
Latest Trends in Worldwide Digital Terrestrial Broadcasting and Application to the Next Generation Broadcast Television Physical Layer (slides)
Latest Trends in Worldwide Digital Terrestrial Broadcasting and Application to the Next Generation Broadcast Television Physical Layer (manuscript)

8.

"Beyond Coding: 3D and beyond."
James D. Johnston, DTS, Inc., Calabasas, CA.

ATSC Symposium on Next Generation Broadcast Television, October 19, 2010.
Beyond Coding: 3D and beyond

9.

"Information Theory, Shannon Limit and Recent Advances in Error Correction Codes for Terrestrial DTV Broadcasting."
Yiyan Wu, Bo Rong and Gilles Gagnon, Communications Research Centre Canada, Ottawa, ON, Canada.
ATSC Symposium on Next Generation Broadcast Television, February 15, 2011.
Information Theory, Shannon Limit and Recent Advances in Error Correction Codes for Terrestrial DTV Broadcasting

10.

"Near-Capacity BICM-ID-SSD, Good for Future DTTB Systems."
Jian Song, Tsinghua University DTV Technology R&D Center, Beijing, China.
ATSC Symposium on Next Generation Broadcast Television, February 15, 2011.
Near-Capacity BICM-ID-SSD, Good for Future DTTB Systems

11.

"DVB-T2 in relation to the DVB-x2 Family of Standards."
Nick Wells (Chairman of DVB TM-T2 working group), BBC R&D, London, England, UK.
ATSC Symposium on Next Generation Broadcast Television, February 15, 2011.
DVB-T2 in relation to the DVB-x2 Family of Standards (slides)
DVB-T2 in relation to the DVB-x2 Family of Standards (manuscript)

12.

"On the Application of MIMO in DVB."
Joerg Robert, Institut für Nacrichtentechnik, Technische Universität Braunschweig, Braunschweig, Germany.
ATSC Symposium on Next Generation Broadcast Television, February 15, 2011.
On the Application of MIMO in DVB

13.

"Basic Study of Next-Generation Digital Terrestrial Broadcasting Transmission System for Handheld and Mobile Reception."
Yoshikazu Narikiyo, Masahiro Okano and Masayuki Takada, Japan Broadcasting

Corporation (NHK) Science & Technology Research Laboratories, Tokyo, Japan.
ATSC Symposium on Next Generation Broadcast Television, February 15, 2011.
Basic study of Next-Generation Digital Terrestrial Broadcasting transmission system for handheld and mobile reception (slides)
Basic study of Next-Generation Digital Terrestrial Broadcasting transmission system for handheld and mobile reception (manuscript)

14.

"A Hybrid MIMO System for Terrestrial Broadcasting of Next Generation ATSC."
Bong Gyun Jo and Dong Seog Han, Wireless Communication Laboratory, Kyungpook National University, Daegu, Korea.
ATSC Symposium on Next Generation Broadcast Television, February 15, 2011.
A Hybrid MIMO System for Terrestrial Broadcasting of Next Generation ATSC

15.

"Toward the Construction of Hybrid-CastTM."
Kinji Matsumura, Yasuaki Kanatsugu and Hisakazu Katoh, NHK Science and Technology Research Laboratories, Tokyo, Japan.
ATSC Symposium on Next Generation Broadcast Television, October 19, 2010.
Toward the Construction of Hybridcast (slides)
Toward the Construction of Hybridcast (manuscript)

16.

"Exploring Innovative Opportunities in ATSC Broadcasting: Convergence in the UHF Band in USA."
Mike Simon, Rohde & Schwarz, Columbia, MD, and Mark Aitken, Sinclair Broadcast Group, Hunt Valley, MD.
ATSC Symposium on Next Generation Broadcast Television, February 15, 2011.
Exploring Innovative Opportunities in ATSC Broadcasting:
Convergence in the UHF band in USA

17.

"Self-Organizing Broadcast Network."
Hyoungsoo Lim and Heung Mook Kim, Electronics and Telecommunications Research Institute (ETRI), Daejeon, Korea.
ATSC Symposium on Next Generation Broadcast Television, October 19, 2010.
Self-Organizing Broadcast Network

18.

"Surround Demystified."
Christophe Chabanne, Charles Robinson and Jeff Riedmiller, Dolby Laboratories, San Francisco, CA.
ATSC Symposium on Next Generation Broadcast Television, October 19, 2010.
Surround Demystified