

September 19, 2011



# TV TechCheck



The Weekly NAB Newsletter for Television Broadcast Engineers

## ATSC Opens Two New Standards Initiatives

The Advanced Television Standards Committee (ATSC) has recently added two groups to its standards development structure. The first is a new Specialist Group charged with developing specifications for DTV broadcast carriage of 3D TV, while the second is a new Technology Group that will chart the course for developing the next generation of DTV standards – the so-called “ATSC 3.0” initiative.

Both groups are the result of recommendations from recently completed studies conducted by two ATSC Planning Teams. Planning Team 1 (PT-1) spent the last year studying 3D perception, video technology, and content, and delivered its final report earlier this month. Meanwhile, Planning Team 2 (PT-2) considered a next generation for broadcast television, studying potentially applicable new and emerging technologies from around the world that might be used to develop a future DTV system from scratch.

### ATSC 3D TV

The 3D Specialist Group is called ATSC TSG/S12, and will apply the work and recommendations of PT-1 toward a plan for enabling backwards-compatible 3D capability in existing ATSC fixed and mobile services, via both realtime and non-realtime delivery.

The Specialist Group will be chaired by Dr. Youngkwon Lim of the Electronics and Telecommunication Research Institute (ETRI), based in Daejeon, South Korea – an organization already experienced with 3D over ATSC. (In its International Research Park booth at NAB 2011, ETRI demonstrated a system presenting compatible high-definition 3D content over a single ATSC channel, using a fixed-service signal for the left eye video, and a Mobile DTV signal for the right eye.)

The group is targeting completion of a standard within one year.

### ATSC 3.0

A longer-term project is the development of standards for ATSC 3.0, a potential successor format to the current ATSC DTV system. This will be the role of a new Technology Group at ATSC, called TG3, which will be chaired by James Kutzner, senior director of advanced technology for the Public Broadcasting Service (PBS). Kutzner also chaired ATSC’s PT-2, which is currently completing its Final Report on ATSC 3.0. He is also an ATSC board member, SMPTE fellow and IEEE member, and serves as vice chairman of the Open Mobile Video Coalition’s Technical Advisory Group.

PT-2 had conducted two Symposia on Next-Generation Broadcast Television (held in October 2010 and February 2011), inviting presentations from around the world. The group then conducted its own further research on the technologies presented at the Symposia, and other items that it investigated unilaterally. Based on these studies, PT-2 had previously concluded that sufficiently advanced technology was available (or under development) to warrant the creation of a new standard environment for DTV broadcasting that might not be fully backward compatible with the current system, and it called for creation of a mechanism within ATSC to begin such work. The new TG3 group is the result of that recommendation.

It is expected that TG3 will establish its own series of Specialist Groups to work on individual elements of ATSC 3.0, with the ultimate goal of producing one or more standards (and possibly additional recommended practices) for a new DTV format. Possible areas for such work identified by PT-2 include essence coding and related metadata, the physical layer of

next-gen DTV service, "hybrid TV" (over-the-air + online), new audience usage models and next-generation non-realtime content delivery.

TG3 is expected to begin its deliberations on ATSC 3.0 standardization this fall.

## **FEMA IPAWS Special Event - Prepared & Ready: The Final Stretch Before the Nationwide EAS Test**

**Save the Date for September 30, 2011 from 1:30 – 3:30 p.m. ET**

Please save the date for the final EAS Participant Virtual Roundtable discussion with government and industry leaders on September 30, from 1:30 – 3:30 p.m. ET. The discussion will involve a variety of topics and draft documents for feedback that will support updates to the EAS Best Practices Guide and Nationwide EAS Test Informational Toolkit.

Some examples include:

- Television and Cable EAS Background Slate
- Nationwide EAS Test Message Transcript Draft
- Public Service Announcement Audio Sample
- Nationwide EAS Test Data Reporting
- Required Monthly Test Activities and Findings.

The meeting will be held on Microsoft Live Meeting 2007 (*This [link](#) will be active the morning of September 30*). Additional information is available [here](#).



**October 13, 2011**  
Iowa Public Television - Johnston, IA  
**A REMINDER TO ATSC MEMBERS**

Want to learn the "basics" of the organization? Want to be refreshed on the DTV Standard and our upcoming work? A refresher course sounds perfect for you. On **October 13, 2011**, the ATSC will host a one day **ATSC Boot Camp** at the Iowa Public Television Facilities in Johnston, Iowa.

**Registration for this event is now open** – please visit the [seminar website](#) to register and begin planning to join us in October!

## **VSB Measurements Seminar *plus* 8VSB Specialist Certification Exam Review**

Friday, October 28 2011 6:00 – 9:00 p.m. (Exam Review)

Saturday, October 29, 2011 8:30 a.m. – 5:30 p.m. (Measurements Seminar)

KERA Studios, Dallas Texas

This updated seminar presented by Gary Sgrignoli of Meintel, Sgrignoli and Wallace will help you develop an understanding of the 8-VSB transmission system basics as well as measurement techniques. Practical test equipment information will be covered. Also included is new information on mobile/handheld DTV, distributed transmission and recent information on DTV reception. The [seminar](#) is designed for broadcasters, consultants, equipment manufacturers (broadcast, consumer, and test), translator/LPTV operators and cable operators. Friday's special SBE 8-VSB specialist certification exam review session is free. If you have questions, contact [Tim Schuessler](#), (972) 313-1333 or [Gay Sgrignoli](#), (847) 259-3352.

### ADVERTISEMENTS



## The First Public Trial of a TV White Space Database Begins Today

The FCC's Office of Engineering and Technology (OET) announced that on September 19, 2011, it will commence a 45-day public trial of Spectrum Bridge Inc.'s TV band database system. According to OET, the trial is intended to allow the public to test the database to ensure that it is correctly identifying channels that can be used by TV white space devices; properly registers facilities entitled to protection, such as licensed wireless microphones, cable head ends, etc.; and provides protection to all authorized services and registered facilities. The complete text of the OET Public Notice is available at [here](#).

The trial will begin at 8:30 a.m. EDT and parties may access the Spectrum Bridge's TV band database at: <http://whitespaces.spectrumbridge.com/Trial.aspx>.

Broadcasters are encouraged to test the database to ensure that it is providing accurate channel availability results and that wireless microphone and MVPD registration process is operating properly. One simple test is to query the database to determine the available TV channels for white space devices at a particular location and then register a wireless microphone use at that location on one or more of those channels to see if the database correctly takes those registrations into account. If any problems are found, please send that information to NAB's Technology department at [st@nab.org](mailto:st@nab.org).

## FCC Extends EAS-CAP Compliance Deadline to June 30, 2012

On Friday, September 16, the FCC released a *Fourth Report and Order (Fourth R&O)* in the EAS proceeding (EB Docket No. 04-296) which amends section 11.56 of the Commission's EAS rules extending the deadline requiring EAS Participants to be able to receive CAP-formatted EAS alerts as required by Part 11 from September, 30 2011 to no later than June 30, 2012.

On May 25, 2011, the Commission issued the *Third Further Notice of Proposed Rulemaking (Third FNPRM)* which sought comments on a wide range of tentative conclusions and proposed rule revisions that would more fully delineate and integrate CAP into the Commission's Part 11 EAS rules. Among other things, the *Third FNPRM* asked whether the existing September 30, 2011, deadline for CAP-compliance is sufficient or whether the Commission should extend or modify it so it would be triggered by some action other than FEMA's adoption of CAP. The Commission received 30 comments and 12 reply comments in response to the *Third FNPRM*. The majority of commenters requested a further extension of the deadline. (See [TechCheck from August 1, 2011](#).)

On July 29, NAB and a number of other broadcast organizations filed a petition asking the FCC to rule expeditiously on the deadline extension issue.

In the Fourth R&O the FCC stated that an extension of the current CAP compliance deadline is warranted and that they:

*"agree with commenters that argue that until the Commission has completed its rulemaking process, it cannot meaningfully impose a deadline by which EAS Participants must "receive CAP-formatted alerts." No one can comply with section 11.56 yet, because the Commission has not finalized all the key technical specifics necessary for receiving CAP-formatted alerts. Without having these specifics, no EAS Participant can claim that it is currently capable of receiving CAP-formatted alerts, even if it has equipment that could receive such alerts under one or more of the technical specifications being considered by the Commission."*

The fourth R&O is available on the FCC's Web [page](#).

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