

August 6, 2012



TV TechCheck



The Weekly NAB Newsletter for Television Broadcast Engineers

ATSC issues “Call for Input” on Next-Gen DTV Standard

For the last two years, the Advanced Television Systems Committee (ATSC) has been considering the development of a standard defining the next generation of digital television broadcasting. The Committee has entitled this effort “ATSC 3.0,” specifying that it need not maintain backward compatibility with the current DTV system (“ATSC 1.0”), nor the set of compatible extensions currently being standardized for that system (“ATSC 2.0”). ATSC created a top-level committee to drive this effort, entitled Technology Group 3 (TG-3).

Given the nature of such a new system, and its likely inherent requirement for a second “digital transition,” the benefits provided by the system will need to be substantial enough to justify the upgrade.

To appropriately consider the components and context of such a system, ATSC has launched a process by which it will gather input from a wide range of stakeholders. One method of encouraging and collecting such input is the issuance of a *Call for Input* (CFI), which the ATSC began limited distribution of last week.

This CFI requests the contribution of “Use Cases,” which present possible, real-world ways in which a future DTV system might be used by consumers. Ideally these use cases would involve functionality not possible in today’s system. To help formulate such “out-of-the-box” thinking, ATSC’s TG-3 has created a template for the submission of such use cases (shown below).

ATSC TG3/S1-005r2

ATSC 3.0 Call for Input

25 July 2012

SUGGESTED ATSC 3.0 INPUT SUBMISSION TEMPLATE

Please use the table below as a form, or simply as guidance for your submission(s). Feel free to add items to the table if necessary, and leave any fields that don’t apply blank.

Originator	<Your Name, Company, Industry Sector>
Input Title	<Title of feature or usage envisioned; should be explicit and as short as possible>
Description	<A brief description of the feature or usage envisioned, described from the user’s perspective, including the goal to be achieved>
Steps	<List the steps you envision in the typical application of this feature or usage> 1) Step 1 2) Step 2 3) ...Step n >
Variations	<List any significant variations on the usage/feature that you envision, if any>
Novelty of features	<Explain how the features are new compared to current DTV system>
Challenges	<List any obstacles you envision in achieving this feature or usage>
Interaction	<Does the feature or usage involve any responsive communication from the user to the broadcaster? If so, how is it used, and/or what purpose does it serve?>
Broadcaster Impact	<How does this affect the broadcaster?>
Regulatory Impact	<Do you believe the feature/usage would require any regulatory approvals?>
Comments	<Note any other remarks and/or issues regarding the envisioned feature or usage>

Prospective use-case contributors are encouraged to use the template (perhaps as simply a starting point) for their submissions, although alternate forms of contribution are also welcome.

TG-3 will use the contributions to formulate more holistic scenarios for the next-gen system, ultimately targeting development of a set of Requirements for ATSC 3.0 by year's end.

If you would like to provide input to this process, the CFI (which includes instructions and the template) is available for download [here](#). Multiple submissions from a single entity are acceptable, using a separate template form for each use case contributed.

For purposes of illustration, an example of a completed template is shown below.

SAMPLE ATSC 3.0 USE CASE

Originator	John Smith, Anyco Electronics, CE manufacturer
Input Title	Mobile TV Bookmarking
Description	User starts viewing a linear television program outside on a mobile device, then bookmarks a point in the program. Later, the user moves inside and resumes watching the program at the bookmarked point from a non-linear source.
Steps	<ol style="list-style-type: none"> 1) Viewer tunes into an over-the-air broadcast in real-time on a mobile device 2) Viewer has to stop watching, but bookmarks the program at the point when viewing ceased 3) Later the viewer wishes to resume watching the program from the point at which real-time viewing stopped. 4) The viewer accesses his/her bookmarks from a fixed TV, and resumes watching the program from an on-demand source. Playback begins at the point that earlier live, mobile viewing ended.
Variations	The resumed, on-demand viewing (step 4 above) could also be provided to a mobile device.
Novelty of features	There is no such capability that is available in standardized fashion for broadcast TV today (without requiring user-provided recording and storage of a program). This would be a wholly new and likely welcomed feature.
Challenges	For a proper user experience, bookmarking should only be possible for shows that will be stored and made available in on-demand form immediately or soon after the real-time broadcast concludes. Standardized formatting and storage of the bookmarks in the cloud will be required. Secure access to a user's bookmarks may also be desirable.
Interaction	Setting and storage of the bookmark will require a transmission path from the user's device to a server. Calling for resumed, on-demand playback from the bookmarked point will also require a request path from the user to the server.
Broadcaster Impact	This allows broadcasters' content to be viewed more conveniently and seamlessly by users across both real-time and non-real time domains.
Regulatory Impact	None.
Comments	Storage of the program would not need to be requested by the user on a local or cloud DVR. Broadcaster would simply let the user know during the real-time broadcast that the program will be available for later on-demand viewing; if so, the user can subsequently watch the program in its entirety from the on-demand source, or begin watching the program in progress from a bookmarked location.

TG-3 requests submissions of all use cases by August 17, 2012. The CFI includes further details on how to complete and submit your use cases.

Register today for the 2012 ATSC/SBE Audio Loudness Management Seminar!

Thursday, August 23, 2012 9:30 a.m. - 4 p.m.

PBS Chicago - WTTW



This informative program is a can't-miss day for station engineers, broadcast executives, the content creation community and other industry professionals. Leading industry experts will discuss critically important topics including:

- In-depth tutorial on ATSC's Recommended Practice A/85
- FCC rules regarding Commercial Audio Loudness Mitigation (CALM) Act
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Additional information and registration is available [online](#).

Call for Speakers and Proposals - Now Open

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