

Broadcom:

Proposed standard created unjustified complexity and data capacity penalty with no demonstrated improvement to 8-VSB reception

CEA:

Should be a candidate standard, not a full standard, at this time.

Dolby:

While Dolby is voting yes, we are concerned that EVSB does not meet all the requirements expressed by broadcasters. We would like to see the T3/S9 work continue, and for S9 to evaluate additional technology that might ultimately satisfy additional broadcaster requirements. If approval of this T3 ballot leads to a stoppage of further work in T3/S9, we anticipate that this could cause the EVSB ballot of the full ATSC membership to fail.

Harmonic:

Harmonic is greatly concerned that any major change in the ATSC standard could slow or destabilize the current DTV transition just as momentum seems to be building in the industry.

LINX:

- 1) The standard needs a supporting consensus to ultimately succeed. A consensus in favor does not exist. ATSC should consider identifying and addressing concerns to create a consensus.
- 2) At the start of the process broadcaster requirements were defined. The proposed standard does not meet those requirements. An explanation is warranted.
- 3) DC field data indicates reception success for normal data was less than for standard data. That problem needs to be understood and presumably corrected. Successful reception for enhanced data should be compared to standard data, not to normal data, in which case the benefit is reduced.

Microsoft:

Microsoft would prefer to see more details of other emerging approaches and how they could be incorporated into the proposed standard toward solving mobility and pedestrian problems before a final ballot however we believe this is basically a broadcaster issue so we will abstain.

NAB:

The editorial replacement of "Normal" with "Main" as the word to describe the un-enhanced stream and processing was not completely done. Related to this the control signal that currently is labeled 'N/E' should be changed to be 'M/E' to reflect the shift in the descriptive word chosen. The dotted line around the right part of figure D5.1 which includes the words 'post-mux' is left over from an earlier draft where the group of functions was addressed and is no longer needed. The note in the top part of figure D5.2 which says "NOTE Field Sync carried throughout" should say "Note: Field sync carried through functional blocks up to and including the SYNC MUX", or add dotted line surrounding the blocks through which the signal is carried, or delete the note.

NBC:

ATSC should coordinate further advancement of an enhanced VSB standard with related developments in transport and coding – **ONLY** when a complete application is available should the related draft standards be put forward as a package for ATSC and for approval.

Philips:

The proposal is based on 16-state trellis coded 8-VSB system. Such a system provides some marginal performance gain at only higher mix ratios. The performance of such a system at low mix ratios for which many broadcasters are interested is very poor. We also believe that the proposal cannot do mobile or pedestrian as demonstrated by the VETC results. As a result it would be difficult to provide a much needed mobile service and thus would fail to gain worldwide support.

Samsung:

- The VSB enhancement activity started three years ago was intended to improve 8-VSB to be able to support mobile and pedestrian reception. [Mobile reception connately covers all other reception environment.] Field-tests with proposed revision to A/53, Annex D (Zenith/ATI E-VSB) show it cannot support mobile services.
- The proposed E-VSB does not readily improve main (Normal) 8-VSB reception. It does, however, provide an independent robust stream transmission. But the goal is supposed to improve main stream (normal) 8-VSB. Samsung can not support incremental enhancement.
- Moreover normal 8-VSB receiver designs have improved significantly and are still improving. The R&D efforts with better understanding of over-the-air reception environment will make normal 8-VSB performance satisfactory. The smart, active antenna technology should even help indoor reception.
- Better robust schemes which would support mobile services (limited alphabet symbol and/or Transversal R-S coding) should be looked into for 8-VSB enhancement. Acceptance of proposed E-VSB could prevent any further enhancement.

Warner Bros:

Warner Bros congratulates manufacturers in the development of improvements to the 8-VSB standard. Further improvements are still encouraged to provide the consumer more reliable access to broadcast digital television in the entire array of possible uses. We further encourage the ATSC and its members to work as a single body in setting a strategy for a planned, generational growth of this digital broadcast technology.

XFSI:

- 1) Insufficient consideration was given to alternative proposals, such as the 4-VSB system proposed by ETRI.
- 2) The proposed Enhanced 8-VSB System does not support the needs of reception by mobile receivers.
- 3) Insufficient study has been given to the issue of how to integrate video, audio, data, and PSI that may appear in a robust and non-robust transport stream.
- 4) Any proposed system should not be published as an amendment to A/53, but should be published as a separate ATSC Standard.
- 5) Any proposed system must first go through a Candidate Standard phase of at least 6 months.
- 6) Any proposed system must be accompanied by compliance testing materials.
- 7) Any proposed system must be accompanied by explicit patent disclosures from all relevant IP holders.