

CBS votes "No" on both Questions 1 and 2 on the ATSC T3 Ballot
Revision of A/53B Annex D Relating to an EVSB Transmission Mode"
For the following reasons

1. The "robust stream's" original claim was to improve the reception of the normal 8 VSB signal and thereby improve overall DTV reception. The ATSC/VETC field-test data from New Haven showed that there was NO improved reception in the presence of the robust stream. The Washington data showed that there was actually a 4-5 % DECREASE in the receiveability of the standard 8VSB signal in the presence of the robust stream. In short the "robust system" fails to meet its own performance goal.
2. The robust stream field test data showed that pedestrian and mobile reception was "spotty at best" and not a viable application.
3. If the robust stream is approved then the current time line calls for it to be submitted to the FCC for approval in the next few months without a fully defined system including the audio/video compression format, making it impossible for receiver manufacturers to incorporate the technology into receivers. The service model that defines what information will be conveyed on the robust stream is not yet established.
 - One proposal is to use the robust stream to carry a low-resolution audio channel, to "ride out dips in signal". This reduces television to a digital radio service. If a consumer is experiencing macro blocking, they will change channels. The audio compression system to be used is still undefined.
 - In another, the data rate of the robust stream is seen to be variable from a very small amount of data up to the FULL CHANNEL, which, at the higher data rates, would change the total concept of broadcast DTV and HDTV altogether. Full channel robust stream will cause existing receivers to "GO DARK".
 - In another, a 1.5 Mbps is dedicated to carrying the low-resolution audio/video and an additional 1.5 Mbps carries the forward error correction signal, for a total robust stream of 3 Mbps. This will reduce the video data rate of the HDTV signal to less than 16 Mbps, resulting in a reduction in HDTV quality. Full quality HDTV cannot be transmitted in less than 19.4 Mbps.
4. The proposal is premature and, as a minimum, requires further ATSC testing and a more complete definition of the application(s). Since the robust stream is to be backward compatible with standard 8VSB, there is no need to rush to implement it at this time.
5. Present ATSC digital receivers have greatly improved, and are still improving, at a rapid rate. With each improvement, such as diversity reception, smart antennas,

and integrated RF front end / equalizer designs there is less need for such a sub-channel "work-around" such as the robust channel that reduces the available multiplex and HDTV transmission bit capacity. Electing to perform "radical surgery" on the standard should be delayed until other receiver improvements have been fully explored and developed.

6. A change now in the ATSC transmitted signal to incorporate a robust signal will once again slow down the DTV/HDTV rollout. CE manufacturers will need to evaluate the need, design, and commercial value of the change to their receivers and will slow down the production of present digital receivers against a potential obsolescence problem. Consumers hearing the public press "buzz" of yet another change in the U.S. digital system will simply postpone their purchases of DTV/HDTV receivers to await the outcome.
7. The cable industry will not voluntarily carry the robust channel. They have a robust channel, and they don't need another one. If a broadcaster dedicates 3 Mbps to the robust stream it will not reach 70% of their audience (i.e. cable & satellite). Of the remaining 30% of over the air viewers, less than half will benefit from the robust stream. For a broadcaster to give up 3 Megabits of review producing capacity that will only benefit a small segment of their audience is not economically justifiable.
8. While the robust stream is optional for both the broadcaster and the receiver manufacture, it will not be viable for a broadcaster's practical use unless all, or most, of the DTV/HDTV receivers in his service area are equipped with the Robust mode.
9. A 3 Mbps, or greater, robust channel transmission will limit the number of multiplex SDTV channels available to the broadcaster.
10. The robust stream will NOT meet viewer expectations. The interests of a consumer buying a \$1,500 - \$2,000 HDTV receiver will not be served if they receive only a low resolution 1.5 Mbps standard definition signal, arguably poorer than today's NTSC.