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Minutes, Technology and Standards Group 21 September 2005

Advanced Television Systems Committee

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The Advanced Television Systems Committee, Inc., is an international, non-profit organization developing voluntary standards for digital television. The ATSC member organizations represent the broadcast, broadcast equipment, motion picture, consumer electronics, computer, cable, satellite, and semiconductor industries.

Specifically, ATSC is working to coordinate television standards among different communications media focusing on digital television, interactive systems, and broadband multimedia communications. ATSC is also developing digital television implementation strategies and presenting educational seminars on the ATSC standards.

ATSC was formed in 1982 by the member organizations of the Joint Council on InterSociety Coordination (JCIC): the Electronic Industries Association (EIA), the Institute of Electrical and Electronic Engineers (IEEE), the National Association of Broadcasters (NAB), the National Cable Television Association (NCTA), and the Society of Motion Picture and Television Engineers (SMPTE). Currently, there are approximately 140 members representing the broadcast, broadcast equipment, motion picture, consumer electronics, computer, cable, satellite, and semiconductor industries.

ATSC Digital TV Standards include digital high definition television (HDTV), standard definition television (SDTV), data broadcasting, multichannel surround-sound audio, and satellite direct-to-home broadcasting.

Table of Contents

1. WELCOME, INTRODUCTIONS, AND DETERMINATION OF QUORUM	5
2. APPROVAL OF PROPOSED AGENDA.....	5
3. APPROVAL OF THE DRAFT MINUTES OF THE LAST MEETING	5
4. OPENING REMARKS.....	5
5. COMMENTS BY THE PRESIDENT (MARK RICHER).....	5
5.1 Status of Ballots	5
5.1.1 Comment resolution on TSG 642 ballot	5
5.2 Other	6
6. BRIEF REPORTS ON ACTIONS FROM THE PREVIOUS MEETING	6
7. NEW WORK ITEMS FOR DISCUSSION.....	7
7.1 Assigned by Board of Directors	7
8. DISCUSSION OF CODEC POLL RESULTS (BOB RAST).....	8
9. REPORT OF THE SPECIALIST GROUP ON PSIP METADATA COMMUNICATION, TSG/S1 (ART ALLISON)	9
9.1 Status Report	9
10. REPORT OF THE SPECIALIST GROUP ON VIDEO AND AUDIO CODING, TSG/S6 (PAT WADDELL).....	9
10.1 Recommendation to Advance TSGS6-356r6 to Candidate Standard Status	9
10.2 Recommendation to Advance T3S6-269r11 to Candidate Standard Status	10
10.3 Recommendation to Advance T3S6-277r11 to Candidate Standard Status	10
11. REPORT OF SPECIALIST GROUP ON DATA MULTIPLEX/TRANSPORT, TSG/S8 (MARK EYER).....	11
11.1 AHG Status Report	11
11.2 Recommendation to Advance TSGS8-588r2 to Candidate Standard Status	11
11.3 Recommendation to Advance TSG/S8-593r1 to Candidate Standard Status	11
11.4 Recommendation to Advance TSG/S8-594r4 to Candidate Standard Status	12
11.5 Other Business	12
12. REPORT OF THE SPECIALIST GROUP ON RF TRANSMISSION, TSG/S9 (CHARLES EINOLF).....	12
12.1 Status Report	12
13. DOCUMENT STRUCTURE GROUP REPORT (JOHN HENDERSON)	13
13.1 Status Report	13
14. REPORT OF THE SPECIALIST GROUP ON DATA BROADCAST, TSG/S13 (MIKE DOLAN).....	13
14.1 Caption Carriage in E-VSB and in New Codecs	13
14.2 ACAP Announcement	14
14.3 A/90 and A/95 Revision	14
14.4 Priorities	14

15. REPORT OF THE AD HOC GROUP ON BIT STREAM COMPLIANCE, TSG-1 (RICH CHERNOCK) .14

16. REPORT OF THE AD HOC GROUP ON SYSTEM RENEWABILITY MESSAGES, TSG-2 (ADAM GOLDBERG)14

17. REPORT OF THE SPECIALIST GROUP ON DIGITAL ENG (DANE ERICKSEN)15

17.1 Status Report 15

18. OTHER BUSINESS15

18.1 Liaison Report 15

19. SCHEDULE OF NEXT TSG MEETINGS.....15

20. ADJOURNMENT15

Minutes, ATSC Technology and Standards Group

National Association of Broadcasters
1771 N Street, N.W. Washington, D.C.
21 September 2005, 10:00 a.m. until 4:00 p.m. EDT

1. WELCOME, INTRODUCTIONS, AND DETERMINATION OF QUORUM

Chairman William Miller (SMPTE) called the meeting to order at 10:00 a.m. at the headquarters of the National Association of Broadcasters in Washington, D.C. He thanked NAB for hosting today's meeting.

Chairman Miller welcomed those in attendance and asked each person to identify him or herself. He reminded all participants of the confidentiality requirements of this meeting and the ATSC Patent Policy. The attendance list is given in **Attachment 1**. Secretary Jerry Whitaker (ATSC) reported that a quorum was present.

2. APPROVAL OF PROPOSED AGENDA

Chairman Miller asked for consideration of the draft agenda, distributed to the TSG reflector on August 23, with the last update posted on September 16 (**Attachment 2**). He suggested several changes in the order of agenda items, which were accepted by the committee. No further changes were requested and the draft agenda was approved as amended.

3. APPROVAL OF THE DRAFT MINUTES OF THE LAST MEETING

Chairman Miller called members attention to the draft Minutes of the May 9 TSG meeting, distributed to the TSG reflector on September 8 (**Attachment 3**). Mr. Whitaker reported that an editorial correction was noted to the attendance list. In addition, additional clarifying text was proposed by Arturo Rodriguez (Scientific Atlanta) and Wendy Aylsworth (Warner Bros.). Mr. Whitaker briefed the committee on the proposed changes, which were accepted. No further changes were requested and the document was approved as amended.

4. OPENING REMARKS

Chairman Miller noted that TSG has a very full agenda today, and encouraged members to move the discussions along expeditiously. He also called attention to the demonstrations of VSB enhancements by Samsung/Rohde & Schwarz and ETRI, available during the breaks in Conference Room B.

5. COMMENTS BY THE PRESIDENT (MARK RICHER)

Mark Richer (ATSC) reported on current activities within the ATSC.

5.1 Status of Ballots

Mr. Richer called attention to the status of ballots (**Attachment 4**). He said further information can be found on the Ballot Status Page of the ATSC Members Web site: http://www.atscmembers.org/sg/Ballot/ballot_status.html

5.1.1 Comment resolution on TSG 642 ballot

Chairman Miller reminded the committee that TSG-642, the proposed full revision of A/53, was approved by TSG in a letter ballot that closed on 20 June 2005 (**Attachment 5**). Ballot comments were received from two members, and per the direction of the TSG Chair, comment resolution was undertaken by the S8-4 AHG, which drafted the original revision (**Attachment 6**). He said that while most of the changes agreed to by the comment resolution group are

editorial in nature, changes relating to Bar Data and Active Format Description may be considered substantive. Details of the proposed changes resulting from ballot comment resolution on this point are given in TSG-653 (**Attachment 7**).

Art Allison (NAB) **moved** that the substantive changes described in TSG-653 to the Proposed Revision of A/53D with Amendment No. 1 (PS-642, balloted as TSG-642) be approved by TSG. **Second** by Mark Eyer (Sony). Discussion focused on specific elements of the proposed changes, with comments from Mr. Eyer, Pat Waddell (Harmonic), Graham Jones (NAB), Chairman Miller, Merrill Weiss (MWG/Tribune), and Adam Goldberg (Sharp). Suggested wording changes were offered and accepted by the committee (**Attachment 8**). Restating the motion,

“**moved** that the substantive changes described in TSG-653 to the Proposed Revision of A/53D with Amendment No. 1 (PS-642, balloted as TSG-642), with editorial clarifications agreed to in this meeting, be approved by TSG.”

The motion was approved on a show of hands.

5.2 Other

Other items included in Mr. Richer's report included the following:

- Mr. Richer called attention to recently approved changes to the ATSC Bylaws that now require a 2/3rds majority for approval by TSG of Candidate Standards, Recommended Practices, and Standards.
- The ATSC Web site and ATSC Members Web site have been updated. Mr. Richer said the changes are intended to make the sites more useful for members, and to make information and documents easier to find.
- The schedule of meetings for 2006 has been set and posted on the ATSC Web site. Mr. Richer specifically called attention to the Annual Meeting, to be held on May 10.
- ATSC and NAB have agreed to once again sponsor and organize the *DTV HotSpot* at the spring NAB Convention in Las Vegas. Mr. Richer invited organizations interested in participating in the event to contact him.

6. BRIEF REPORTS ON ACTIONS FROM THE PREVIOUS MEETING

- 1) Sam Narasimhan to post a summary of relevant MPEG standards to the TSG reflector for information purposes. [2005-02-09]
Completed. The document was posted to the TSG reflector on September 19 (**Attachment 9**).
- 2) Rich Chernock to lead an AHG to study and respond to the Board motion regarding verification of ATSC transport streams.
Completed. On agenda.
- 3) Jerry Whitaker to set up a reflector and document repository, if needed, to support the AHG on Transport Stream Verification.
Completed. The reflector is tsg-1.
- 4) John Henderson to lead an Architecture Team study of the A/53 document structure and report back to TSG at the September 21 meeting with recommendations.
Completed. On agenda.

- 5) Adam Goldberg to lead an AHG consisting of interested TSG members to work toward arriving at an agreement on the question: “Should ATSC embark upon SRM work, and if so, what form should the document take?” The response to TSG from the AHG should include the reasoning for the recommendation. The AHG is to use the output documents developed by the SRM AHG as input.
Completed. On agenda.
- 6) Jerry Whitaker to set up a reflector and other necessary facilities for use by the new TSG AHG on SRM.
Completed. The reflector is tsg-2.
- 7) ATSC staff to issue a 2-week TSG ballot on T3S2-006r9.
Completed.
- 8) Craig Smithpeters to prepare a change summary sheet to accompany the TSG ballot on T3S2-006r9.
Completed.
- 9) ATSC staff to issue a TSG ballot on CS/T3-614A, following a brief review period for integration of any modifications necessary because of changes specified in PS/52Br4.
Completed.
- 10) Craig Todd to develop a brief “change document” to accompany the ballot on CS/T3-614A.
Completed.
- 11) ATSC staff to issue a TSG letter ballot on the proposed revision of A/53C described in TSGS8-580r1 as a Proposed Standard.
Completed.
- 12) ATSC staff to issue a TSG letter ballot on the proposed revision of A/65B described in TSGS8-581r1 as a Proposed Standard.
Completed.
- 13) Mark Eyer and TSG/S8 to review “PS/606” and report back with recommendations on how to proceed, specifically how to deal with the open normative reference issue.
Completed. On agenda.
- 14) ATSC staff to issue a membership ballot on TSGS9-672A as Corrigendum No. 1 to A/110.
Completed.
- 15) ATSC staff to issue a TSG letter ballot on the proposed revision of A/110 with Corrigendum No. 1 described in TSGS9-171r1 as a Proposed Standard.
Completed.
- 16) ATSC staff to issue a TSG letter ballot on the proposed revision of A/53C described in TSGS9-266r2 as a Proposed Standard.
Completed.

7. NEW WORK ITEMS FOR DISCUSSION

7.1 Assigned by Board of Directors

Mr. Richer reported there were no new work items for TSG from the Board.

8. DISCUSSION OF CODEC POLL RESULTS (BOB RAST)

Bob Rast (Micronas,) reminded the committee that S6 sought guidance from TSG to resolve an impasse regarding the number of advanced codecs that should be standardized for use in E-VSB. TSG appointed an ad hoc group to determine a process by which the impasse could be resolved. Members of the AHG are Ms. Aylsworth, Craig Tanner (Sharp), Chairman Miller, and Mr. Rast, who served as chair of the AHG.

Mr. Rast said the AHG concluded that business issues beyond the technical focus of S6 were blocking the ability of the specialist group to resolve the impasse. That is, he explained, business issues dominate technical considerations. The AHG therefore recommended a poll of TSG members. The results of that poll are as follows:

Question 1: Should the ATSC, at this time, standardize at least one video codec in addition to MPEG-2, for use in E-VSB?

- 28 Yes (57%)
- 21 No
- 5 Abstain

Question 2: If the outcome on question 1 is yes, then should the ATSC standardize two video codecs in addition to MPEG-2, for use in E-VSB?

- 23 Yes
- 23 No
- 7 Abstain

The poll tally and member comments are available on the ATSC Members Web site. See: http://www.atscmembers.org/sg/T3/codec_index.html.

Mr. Rast reported that 17 of the poll responses included comments. Some comments clarified the vote being made. In the case of six comments, the AHG felt a response was appropriate (**Attachment 10**).

Mr. Rast reviewed the AHG's recommendations (**Attachment 11**), namely:

- Focus on consensus building; an ATSC membership poll would not be productive at the present time.
- Request that the Planning Committee develop a better supporting business case for advanced codecs, with a goal of completion within the next six months.
- In parallel, decide whether to elevate the S6 and S8 working draft documents to candidate standards status.
- Move the advanced codec documents no further than the CS level pending a solid business case.

Mr. Rast noted that the Planning Committee, which met yesterday, discussed the advanced codec issue and decided to form a group to explore it.

Sterling Davis (Cox Broadcasting), chair of the PC, said a large AHG has been formed to develop a transition and business plan (including relative timing) to facilitate reaching consensus within ATSC concerning the use of advanced codecs in the main stream and/or in E-VSB. He said the group will hold its first meeting on October 11. Mr. Davis said he will post a note to both the PC and TSG reflectors calling attention to this work, and inviting interested persons to participate.

The draft charge for the PC group is as follows:

“To develop a transition and business plan (including relative timing) to facilitate reaching consensus within ATSC concerning the use of advanced codecs in the main stream and/or in E-VSB.”

Mr. Rast opened the floor to discussion. A wide range of comments were offered, including the importance of a transition plan for any new codec and the marketplace realities of consumer options. Mr. Rast recognized the need to identify common problems and solutions among the various industry segments that make up the DTV universe. He encouraged interested persons to join the PC AHG.

Chairman Miller noted a **motion** from the AHG, to dissolve the AHG since its work has been completed. **Second** by Pat Griffis (Microsoft). The motion was **approved** without objection.

9. REPORT OF THE SPECIALIST GROUP ON PSIP METADATA COMMUNICATION, TSG/S1 (ART ALLISON)

Art Allison (NAB), chair of TSG/S1, reviewed current work of the specialist group (**Attachment 12**).

9.1 Status Report

Mr. Allison noted that some implementations of PMCP currently exist, but that proprietary interconnections are still the rule. He added that strong support for the standard remains and that XML technology is continuing to evolve. He said the related SMPTE work in S.22 is progressing well.

Mr. Allison outlined current plans for the specialist group, specifically:

- PMCP with ACAP support to proposed standard by the end of 2005.
- Guide to PMCP ready for TSG consideration by the end of 2005.
- Move the logo program for PMCP forward.

Mr. Richer addressed the PMCP logo effort. He said the staff is working on a logo, and added the issue is on the agenda for the next ATSC Board of Directors meeting.

The committee broke for lunch at 11:30 a.m.

The meeting resumed at 12:30 p.m.

10. REPORT OF THE SPECIALIST GROUP ON VIDEO AND AUDIO CODING, TSG/S6 (PAT WADDELL)

Pat Waddell (Harmonic), Chair of TSG/S6, provided a status report on the work of the specialist group (**Attachment 13**).

10.1 Recommendation to Advance TSGS6-356r6 to Candidate Standard Status

Mr. Waddell explained that the primary focus of TSGS6-356r6, “Working Draft Revision of A/53-D Annex A,” (**Attachment 14**) is closed caption syntax reformation, with a secondary focus of adding image formats from SCTE 43 to Table A3, which he said reflects the current reality of consumer display devices. He expanded upon table formats issue, pointing out that:

- A number of stations already broadcast using these values.
- CIF and QCIF formats are provided for future use; i.e., “small screen service” type application.
- The proposed changes permit E-VSB implementations in a standardized manner.

Discussion followed on potential legacy receiver issues that might result from some of the proposed image formats. It was pointed out that the CS stage would afford an opportunity to gather implementation data. Other members argued that the document is not yet ready for elevation to Candidate Standard.

Mr. Waddell **moved** on behalf of TSG/S6 that TSGS6-356r6 be elevated to Candidate Standard status for a period of time ending 15 December 2005. Mr. Richer questioned whether the proposed end date of 15 December 2005 was sufficient time for securing feedback on this specification. Following further discussion, a CS period of at least 6 months was identified as reasonable. Mark Aitken (Sinclair) called the question.

Chairman Miller asked Mr. Waddell to restate the motion:

moved that TSGS6-356r6 be elevated to Candidate Standard status for a period of time ending 10 May 2006.

The motion was **seconded** by Mr. Rast. The Chair determined, by a show of hands, that there was not a 2/3 majority, as required; the motion **failed**.

Chairman Miller said that specific comments should be provided to S6 so the committee can bring back a consensus document at the next meeting. He also asked Mr. Waddell to prepare a redline of A/53 Annex A showing the exact changes being proposed, and to post the document to the TSG and S6 reflectors for comment. He encouraged those interested in this subject to participate in the S6 work.

Brian Markwalter (CEA) said he would work with Mr. Whitaker to share the document with CEA members as appropriate.

10.2 Recommendation to Advance T3S6-269r11 to Candidate Standard Status

Mr. Waddell called attention to T3S6-269r11, "Working Draft A/53-D Annex F for VC-1" (**Attachment 15**), which adds coding constraints and closed caption syntax/semantics for VC-1 and provides guidance regarding VC-1 use in a broadcast system. He said closed captioning reformation work is yet to be rolled into this draft, but added it will be done during the next several months. Mr. Waddell added that the caption syntax shown is technically sound.

Mr. Waddell **moved** to elevate T3S6-269r11 to Candidate Standard status for a period of time ending 15 December 2005. Discussion followed on the length of time for the initial CS period. Mr. Weiss argued that a three month period is insufficient; he suggested 6 months or longer.

Mr. Weiss, offering a friendly amendment, **moved** to extend the candidate standard period until 10 May 2006. **Second** by Bill Wall (Scientific Atlanta). The motion was **approved** on a show of hands.

Restating the original (Waddell) motion:

moved to elevate T3S6-269r11 to Candidate Standard status for a period of time ending 10 May 2006.

The Waddell motion was **approved** on a show of hands.

10.3 Recommendation to Advance T3S6-277r11 to Candidate Standard Status

Mr. Waddell called attention to T3S6-277r11, "Working Draft A/53-D Annex F for AVC" (**Attachment 16**), which adds coding constraints and closed caption syntax/semantics for AVC and provides guidance regarding AVC use in a broadcast system. He said this document tracks prior work done by DVB (ETSI TS 101 154 v 1.7.1).

Mr. Waddell **moved** to elevate T3S6-277r11 to Candidate Standard status for a period of time ending 15 December 2005.

Mr. Weiss, offering a friendly amendment, **moved** that the CS period for T3S6-277r11 be extended until 10 May 2006. **Second** by Mr. Allison. The motion was **approved** on a show of hands.

Restating the original (Waddell) motion:

moved to elevate T3S6-277r11 to Candidate Standard status for a period of time ending 10 May 2005.

Chairman Miller called the Waddell question. It was **approved** on a show of hands.

11. REPORT OF SPECIALIST GROUP ON DATA MULTIPLEX/TRANSPORT, TSG/S8 (MARK EYER)

Mark Eyer (Sony), Chair of TSG/S8, reported on activities in the specialist group (**Attachment 17**).

11.1 AHG Status Report

Mr. Eyer said the S8-1 E-VSB transport AHG has completed refinements on the three documents it has been preparing:

- Codec-independent transport specification for E-VSB
- AVC transport element for E-VSB
- VC-1 transport element for E-VSB

He reported that S8-1 has specified Still Pictures support in TS-E for MPEG-2 video, and—for new codecs—has relaxed restrictions on PES alignment. Mr. Eyer said the documents provide for consistent treatment of both the VC-1 and AVC codecs.

11.2 Recommendation to Advance TSG/S8-588r2 to Candidate Standard Status

Mr. Eyer called attention to TSG/S8-588r2, “Working Draft Amendment No. 2 to A/53D” (**Attachment 18**), which was posted to the TSG reflector on June 20. He said this document is a replacement for A/53D Annex C (Transport) to add E-VSB support and fallback modes; it is not codec-specific.

Mr. Eyer, on behalf of S8, **moved** that TSG/S8-588r2 be elevated to Candidate Standard status for a period of time ending 15 December 2005. Mr. Allison suggested that the document is ready to go and should instead move forward as a Proposed Standard, since the specification—in an earlier form—has already seen wide distribution. Chairman Miller called the question. It was **approved** on a show of hands.

Mr. Allison **moved** that TSG authorize a 6-week letter ballot on TSG/S8-588r2 as a Proposed Standard.

Mr. Goldberg raised a **point of order**, stating that the motion was an attempt to change a decision previously made at this meeting. Chairman Miller sought to clarify the situation. Following additional discussion, Chairman Miller ruled that the Allison motion was **out of order**.

Chairman Miller asked Mr. Eyer to bring back a recommendation from S8 regarding the next step for TSG/S8-588r2 for consideration at the December 14 TSG meeting.

11.3 Recommendation to Advance TSG/S8-593r1 to Candidate Standard Status

Mr. Eyer called attention to TSG/S8-593r1, “Amendment to ATSC A/53D to Define Transport of VC-1 Codec in Annex C” (**Attachment 19**), which was posted to the TSG reflector on August 31. He said this document is a replacement for A/53D Annex C (Transport) to add E-VSB

support, audio/video fallback modes, and “unassociated/small screen service” using the VC-1 codec. It is a rework of the former T3-609.

Mr. Eyer **moved** on behalf of S8 to advanced TSG/S8-593r1 to Candidate Standard status for a period of time ending 15 December 2005. Mr. Waddell, offering a friendly amendment, **moved** to amend the motion on the floor to extend the CS period until 10 May 2005. **Second** by Mr. Weiss. The motion was **approved** on a show of hands.

Restating the original (Eyer) motion:

moved to advanced TSG/S8-593r1 to Candidate Standard status for a period of time ending 10 May 2005.

The Eyer motion **failed** a roll call vote. 15 yes, 12 no, 12 abstain.

11.4 Recommendation to Advance TSG/S8-594r4 to Candidate Standard Status

Mr. Eyer called attention to TSG/S8-594r4, “Amendment to ATSC A/53D to Define Transport of AVC Codec in Annex C” (**Attachment 20**), which was posted to the TSG reflector on August 31. He said this document is a replacement for A/53D Annex C (Transport) to add E-VSB support, audio/video fallback modes, and “unassociated/small screen service” using the AVC codec. It is a rework of the former T3-608.

Mr. Eyer **moved** on behalf of S8 to advance TSG/S8-594r4 to Candidate Standard status for a period of time ending 15 December 2005. Mr. Allison, offering a friendly amendment, **moved** to amend the motion on the floor to extend the CS period until 10 May 2005. **Second** by Mr. Weiss. The motion was **approved** on a show of hands.

Restating the original (Eyer) motion:

moved to elevate TSG/S8-594r4 to Candidate Standard status for a period of time ending 10 May 2005.

The Eyer motion was **approved** on a roll call vote: 18 yes, 9 no, 11 abstain.

Mr. Eyer observed that explanatory text is needed to accompany the posting of this document on the ATSC Web site. He took an action item to work with Mr. Whitaker and Mr. Waddell to develop the appropriate text.

11.5 Other Business

Mr. Eyer noted an action item from the previous TSG meeting: “TSG/S8 to review PS/606 and report back with recommendations on how to proceed; specifically, how to deal with the open normative reference issue.” He said S8 determined this question to be out of its scope. As it is really a document architecture issue, he suggested that the Architecture Team be asked to consider it.

Chairman Miller observed that PS/606 will need to sit on hold until a transport system is approved to convey it. He added that it should be made available on the ATSC Web site. Mr. Whitaker said he will work with Mr. Richer on this point.

12. REPORT OF THE SPECIALIST GROUP ON RF TRANSMISSION, TSG/S9 (CHARLES EINOLF)

Charles Einolf (UPN/MSTV), Chair of TSG/S9, reported on current work within the specialist group (**Attachment 21**).

12.1 Status Report

Mr. Einolf reported that S9 met yesterday and viewed two demonstrations: Samsung/Rhode & Schwarz, and ETRI/Philips. He said the background documents from these demonstrations and presentations are available from the S9 document repository on the ATSC Members Web site.

Mr. Einolf said work within the S9-2 AHG is progressing. He said S9 expects to present a Working Draft E-VSB Implementation Guidelines to TSG at the December 14 meeting. He encouraged persons interested in contributing to this work to contact Wayne Bretl (Zenith), who is leading the project within S9-2.

13. DOCUMENT STRUCTURE GROUP REPORT (JOHN HENDERSON)

John Henderson, Chair of the Architecture Team AHG on Document Structure (TSG-2), updated the committee on the work of the group (**Attachment 22**).

13.1 Status Report

Mr. Henderson provided an overview of the current state of the AHG work, specifically:

- A/53 and its various annexes have become difficult to maintain and update.
- A document organizational change is being discussed, not a change in document content or the DTV Standard itself.
- It is proposed that A/53 be reorganized into “Parts,” correspond roughly to the “Annexes” in the existing document, with some editorial changes to improve their independence and free TSG from the need to edit earlier Parts as new elements are added to the A/53 Standard.

Comments were offered on this concept from Mr. Allison, Mr. Aitken, Mr. Weiss, and others. Mr. Weiss recognized the value of this approach; however, he said it was not clear how the inter-relating elements might be updated. Mr. Waddell acknowledged that more than one step might be needed to complete the entire project. Chairman Miller said the intent is to structure A/53 more like an MPEG document. Mr. Dolan said that an initial redline demonstrated that the project would be practical.

Mr. Henderson called attention to additional A/53 structural changes that the AHG is considering, specifically:

- **Service Type Issue:** Service Type is in A/65, not in A/53. The AHG is considering adding a new section to Part 1 (which would be taken from A/65) that would remove the (only) normative reference to A/65 from A/53 and eliminate the present “circular referencing” between those documents.
- **ATSC Document Numbering.** As a replacement for ATSC’s current practice of identifying document revisions by letters of the alphabet, the AHG recommends identifying documents by year, the purpose being to simplify identification of the most recent version of a document.

Mr. Henderson said that, based on the feedback, the Architecture Team AHG will continue to work on these concepts and report its progress to TSG.

14. REPORT OF THE SPECIALIST GROUP ON DATA BROADCAST, TSG/S13 (MIKE DOLAN)

Mike Dolan (TBT), Chair of TSG/S13, updated the committee on work within the specialist group (**Attachment 19**).

14.1 Caption Carriage in E-VSB and in New Codecs

Mr. Dolan called attention to the final recommendations of S13 regarding caption carriage in E-VSB and in new codecs (document S13-312), which was posted to the TSG reflector on August 22 (**Attachment 24**). He said the recommendations are divided into scenarios:

- “Normal” programming
- “Non-normal” programming

- Captions only

Mr. Dolan said the caption report should be published in some form, perhaps as an informational document. Mr. Richer described the process for approval of informational documents, which are at the discretion of the Board of Directors. Mr. Krauss suggested that S13-312 be examined with an eye toward referencing only available documents. Mr. Dolan agreed to review S13-312 and bring back a final document to TSG for consideration at the December 9 meeting.

14.2 ACAP Announcement

Mr. Dolan noted the ACAP transport work item from S1 to add ACAP support to PMCP, including announcement. He reminded the group that S2 deferred this activity to S13.

Mr. Dolan said the requirements are complete and a basic design approach has been agreed to. He said the document is being drafted as a stand-alone standard or implementation guideline.

14.3 A/90 and A/95 Revision

Mr. Dolan reported that the revision work on A/90 and A/95 is currently on hold. He said an editor/proponent for A/95 (object carousel) revision is no longer available. He added that the schedule for A/90 revision is uncertain due to low interest.

14.4 Priorities

Mr. Dolan reviewed the current priorities of S13:

1. Conclude ACAP announcement and PSIP integration
2. Restart A/9x harmonization with ACAP transport

15. REPORT OF THE AD HOC GROUP ON BIT STREAM COMPLIANCE, TSG-1 (RICH CHERNOCK)

Rich Chernock, Chair of the TSG AHG on Bit Stream Compliance (TSG-1) updated the committee on current efforts (**Attachment 25**). He said a draft Scope has been developed and agreed to within the AHG (**Attachment 26**). He went on to review the document, which was accepted by the committee. Mr. Chernock encouraged interested persons to participate in the ongoing work.

Mr. Richer questioned whether the TSG-1 AHG should become a standing specialist group. Chairman Miller said this question can be addressed at a later date.

16. REPORT OF THE AD HOC GROUP ON SYSTEM RENEWABILITY MESSAGES, TSG-2 (ADAM GOLDBERG)

Adam Goldberg, Chair of the TSG AHG on System Renewability Messages (TSG-2), reviewed the recommendations of the group (**Attachment 27**) and answered specific questions from committee members. Mr. Richer said TSG should make a recommendation to the ATSC Board of Directors on how to proceed, and explained that the Board will need to authorize the work. Mr. Richer called attention to Section 10.4.1 of the Bylaws, which outlines the requirements for beginning work on a standard, recommended practice, or informational document.

Brad Hunt (MPAA) **moved** to request that the Board authorize the SRM work with the Scope and Work Plan as presented. **Second** by Mr. Waddell. The motion was **approved** on a show of hands.

Chairman Miller thanked the AHG for its work and observed the consensus of the committee that the AHG be dissolved. He asked Mr. Hunt to work up the formal submission to the Board.

17. REPORT OF THE SPECIALIST GROUP ON DIGITAL ENG (DANE ERICKSEN)

Dane Ericksen (Hammett & Edison, representing SBE), Chair of TSG/S3, briefed the committee on current work within the specialist group (**Attachment 28**).

17.1 Status Report

Mr. Ericksen reported that a number of meetings were held over the summer, averaging two or three per month. He noted a continued good level of participation in the work of the specialist group.

Mr. Ericksen said the DRL Working Draft specification, document TSGS3-010, is now in its 6th iteration. He said the WD will be posted to the TSG reflector within the next couple of days for comment. He encouraged TSG members to provide specific feedback on the document, and to participate in the work of TSG/S3.

Mr. Ericksen noted that the S3 Work Plan target for submission of a Working Draft document on ENG Communications by this meeting will not be met because of time restrictions of S3 members. From a practical standpoint, he reported, this milestone will need to move back to December 14. This change was accepted by the committee.

18. OTHER BUSINESS**18.1 Liaison Report**

Sterling Davis, Chair of the Planning Committee, reported on actions at the PC meeting held yesterday. He said there were a number of productive discussions, particularly with regard to advanced codec issues.

19. SCHEDULE OF NEXT TSG MEETINGS

The next meeting of the Technology Group on Distribution will be held on 14 December 2005.

20. ADJOURNMENT

There being no further business before the committee, the meeting was adjourned at 3:30 p.m. EDT.

Action Items Developed at this Meeting

The following action items were developed at today's meeting.

- 1) Art Allison to forward to ATSC staff revised wording of TSG-653 for inclusion in PS/53D.
- 2) ATSC staff to integrated TSG-653 and other changes agreed to by the S8-4 comment resolution AHG and thereafter issue a membership ballot on PS-642.
- 3) Pat Waddell to prepare a redline of A/53 Annex A showing the exact changes being proposed in TSGS6-356r6, "Working Draft Revision of A/53-D Annex A," and to post the document to the TSG and S6 reflectors for comment.
- 4) Brian. Markwalter to work with Jerry Whitaker to share the S6 document described above with CEA members.
- 5) Pat Waddell to forward to Jerry Whitaker T3S6-269r11, "Working Draft A/53-D Annex F for VC-1," for publication as a Candidate Standard for a period of time ending 10 May 2006.
- 6) Pat Waddell to forward to Jerry Whitaker T3S6-277r11, "Working Draft A/53-D Annex F for AVC ," for publication as a Candidate Standard for a period of time ending 10 May 2006.
- 7) Mark Eyer to forward to Jerry Whitaker TSG/S8-588r2, "Working Draft Amendment No. 2 to A/53D," for publication as a Candidate Standard for a period of time ending 15 December 2005.
- 8) Mark Eyer and TSG/S8 to bring back a recommendation from S8 regarding the next step for TSG/S8-588r2 for consideration at the December 14 TSG meeting.
- 9) Mark Eyer to forward to Jerry Whitaker TSG/S8-594r4, "Amendment to ATSC A/53D to Define Transport of AVC Codec in Annex C," for publication as a Candidate Standard for a period of time ending 10 May 2005.
- 10) Mark Eyer to work with Jerry Whitaker and Pat. Waddell to develop appropriate text to accompany the posting of TSG/S8-594r4.
- 11) ATSC staff to consider public posting of PS/606, pending resolution of the open normative reference issue.
- 12) Mike Dolan to review S13-312 and bring back a final document to TSG for consideration at the December 9 meeting.
- 13) Brad Hunt to work up a formal request to the ATSC Board of Directors that work on SRM carriage, with the Scope and Work Plan as developed by TSG-2, be undertaken by ATSC.

Attachments

- Attachment 1.** Attendance List
http://www.atscmembers.org/sg/T3/2005_09_21/documents/Attachment_1-TSG-663_2005-09-21_attendance.xls
- Attachment 2.** Draft Agenda
http://www.atscmembers.org/sg/T3/2005_09_21/documents/Attachment_2-TSG-636r6_Draft%20Agenda.doc
- Attachment 3.** TSG-632, Draft Minutes from May 9 Meeting
http://www.atscmembers.org/sg/T3/2005_09_21/documents/Attachment_3-T3-632r2_minutes.doc
- Attachment 4.** Status of Ballots
http://www.atscmembers.org/sg/T3/2005_09_21/documents/Attachment_4-Ballot_status_09-28-05.xls
- Attachment 5.** TSG-642, Revision of A/53
http://www.atscmembers.org/sg/T3/2005_09_21/documents/Attachment_5-TSG-642_Revision_A53D.doc
- Attachment 6.** TSG-648, Comment Resolution on TSG-642
http://www.atscmembers.org/sg/T3/2005_09_21/documents/Attachment_6_TSG-648r2.doc
- Attachment 7.** TSG-653, Proposed Changes to AFD and Bar Data
http://www.atscmembers.org/sg/T3/2005_09_21/documents/Attachment_7-TSG-653_BAR-AFD_change.doc
- Attachment 8.** TSG-653, as Revised During the Meeting
http://www.atscmembers.org/sg/T3/2005_09_21/documents/Attachment_8-TSG-653_BAR-AFD_change-revised.doc
- Attachment 9.** TSG-655, MPEG Liaison Report
http://www.atscmembers.org/sg/T3/2005_09_21/documents/Attachment_9-TSG-655_MPEG_liaison.doc
- Attachment 10.** Codec Poll Responses
http://www.atscmembers.org/sg/T3/2005_09_21/documents/Attachment_10-TSG_Codec_Poll_Responses.pdf
- Attachment 11.** Report of Codec Impasse AHG
http://www.atscmembers.org/sg/T3/2005_09_21/documents/Attachment_11-Report_of_ImpasseAHG.ppt
- Attachment 12.** TSG/S1 Status Report
http://www.atscmembers.org/sg/T3/2005_09_21/documents/Attachment_12-TSG-656_TSGS1_Status%20Report.ppt
- Attachment 13.** TSG/S6 Status Report
http://www.atscmembers.org/sg/T3/2005_09_21/documents/Attachment_13-TSGS6-380_S6_Report.ppt
- Attachment 14.** TSGS6-356r6
http://www.atscmembers.org/sg/T3/2005_09_21/documents/Attachment_14TSGS6-356r6_CS_Revision_A53D_Annex_A.pdf
- Attachment 15.** T3S6-269r11
http://www.atscmembers.org/sg/T3/2005_09_21/documents/Attachment_15-T3S6-269r11_CS_A53D_AnnexF_VCI.pdf

- Attachment 16.** T3S6-277r11
http://www.atscmembers.org/sg/T3/2005_09_21/documents/Attachment_16-T3S6-277r11_CS_A53D_Annex%20F%20AVC.pdf
- Attachment 17.** TSG/S8 Status Report
http://www.atscmembers.org/sg/T3/2005_09_21/documents/Attachment_17-TSGS8-597_S8_Status_Report_9-05.ppt
- Attachment 18.** TSG/S8-588r2
http://www.atscmembers.org/sg/T3/2005_09_21/documents/Attachment_18-TSGS8-588r2_WD53C_Amd_2.pdf
- Attachment 19.** TSG/S8-593r1
http://www.atscmembers.org/sg/T3/2005_09_21/documents/Attachment_19-TSGS8-593r1_VC-1_EVSB.pdf
- Attachment 20.** TSG/S8-594r4
http://www.atscmembers.org/sg/T3/2005_09_21/documents/Attachment_20-TSGS8-594r4_AVC-EVSB.pdf
- Attachment 21.** TSG/S9 Status Report
http://www.atscmembers.org/sg/T3/2005_09_21/documents/Attachment_21-ATSC%20T3S9%20Status%20September%202005.ppt
- Attachment 22.** TSG-2 AHG Status Report
http://www.atscmembers.org/sg/T3/2005_09_21/documents/Attachment_22-A53%20structure%20for%20TSG%209-21-05.ppt
- Attachment 23.** TSG/S13 Status Report
http://www.atscmembers.org/sg/T3/2005_09_21/documents/Attachment_23-S13-314R0-Status-20050921.ppt
- Attachment 24.** S13-312
http://www.atscmembers.org/sg/T3/2005_09_21/documents/Attachment_24-S13-312R1-Caption-Report.doc
- Attachment 25.** TSG-1 AHG Status Report
http://www.atscmembers.org/sg/T3/2005_09_21/documents/Attachment_25-TSG-1%20Adhoc%20on%20Bitstream%20Verification%20Status.pdf
- Attachment 26.** TSG-1 AHG Scope
http://www.atscmembers.org/sg/T3/2005_09_21/documents/Attachment_26-TSG1-001_Scope.doc
- Attachment 27.** TSG-2 AHG Status Report
http://www.atscmembers.org/sg/T3/2005_09_21/documents/Attachment_27-report%20TSG-2%20ad%20hoc%20group%20on%20System%20Renewability%20Messages.ppt
- Attachment 28.** TSG/S3 Status Report
http://www.atscmembers.org/sg/T3/2005_09_21/documents/Attachment_28-TSGS3-041_Status%20Report_Sept2005.ppt