

Minutes ATSC Technology and Standards Group (TSG)

National Association of Broadcasters
1771 N Street, N.W. Washington, D.C.
14 December 2005, 10:00 a.m. until 4:00 p.m. EST

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 November 29, with the last update posted on December 9 (**Attachment 2**). He outlined suggested changes, namely: 1) addition of a new Item 13.2a, "Presentation of Parameterized Service Type;" and 2) addition of a new Item under 15.4, "Caption Liaison Request." These changes were accepted 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 September 21 TSG meeting, distributed to the TSG reflector on December 7 (**Attachment 3**). No changes were requested and the document was approved as submitted.

4. OPENING REMARKS

Chairman Miller noted that TSG has a very full agenda today, and encouraged members to move the discussions along expeditiously. He added that an end-of-year reception will be held after today's meeting.

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: see http://www.atscmembers.org/sg/Ballot/ballot_status.html.

5.2 Other

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

- 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, in cooperation with SBE, is organizing a one-half-day seminar focusing on digital electronic news gathering (ENG). Set for February 21, the program will be held in conjunction with the 11th Annual Hollywood Post Alliance Technology Retreat in Palm Springs. The seminar will review the current ENG landscape and discuss what next-generation services and equipment will be needed to meet emerging broadcast requirements. Program details and registration information can be found on the ATSC Web site: <http://www.atsc.org/seminars/2006/techretreat06.html>
- 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.
- ATSC staff is developing logos for use with key standards; current efforts are focused on ACAP and PMCP. He said the work is ongoing and will be considered by the Board at a future date.
- ATSC staff is working to develop on-line balloting capabilities. He said a test run of the system would likely occur within the next few weeks.
- The *IEEE Proceedings Special Issue on Digital Television* project is winding down, with publication scheduled for January 2006. Mr. Whitaker thanked all of the contributors and reviewers who assisted in preparation of the papers. He said special thanks goes to the other members of the ATSC Guest Editor Board—Yiyan Wu (CRC), Tom Gurley (consultant), Graham Jones (NAB), Rich Chernock (Triveni), and Glenn Reitmeier (NBC).
- ATSC Director of Communications Lisa Hester has accepted a new position as Vice President of Marketing for a high tech company with headquarters in the Washington, D.C., area. Mr. Richer said that, although we will miss her at ATSC, it's a tremendous opportunity for Lisa. While she was only with ATSC for a little over one year, Lisa's contributions have been significant. Mr. Richer said he will miss her creativity, enthusiasm, and boundless energy. Lisa will be with ATSC through the end of the year.

6. BRIEF REPORTS ON ACTIONS FROM THE PREVIOUS MEETING

The following action items were developed at the last meeting of the Technology and Standards Group:

- 1) Art Allison to forward to ATSC staff revised wording of TSG-653 for inclusion in PS/53D.
Completed.
- 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.
Completed. The ballot was issued on November 29.
- 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.
Completed. The document was posted on December 3 (**Attachment 5**).
- 4) Brian Markwalter to work with Jerry Whitaker to share the S6 document described above with CEA members.

Completed.

- 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.

Completed. The document is posted as CS-TSG-658.

- 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.

Completed. The document is posted as CS-TSG-659.

- 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.

Completed. The document is posted as CS-TSG-661.

- 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.

On agenda.

- 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.

Completed. This document is posted as CS-TSG-660.

- 10) Mark Eyer to work with Jerry Whitaker and Pat. Waddell to develop appropriate text to accompany the posting of TSG/S8-594r4.

Completed. The text is posted on the Candidate Standards page of the ATSC Web site:

http://www.atsc.org/standards/candidate_standards.html

- 11) ATSC staff to consider public posting of PS/606, pending resolution of the open normative reference issue.

On agenda.

- 12) Mike Dolan to review S13-312 and bring back a final document to TSG for consideration at the December 9 meeting.

Completed. The document was posted to the TSG reflector on November 3; it has since been renumbered to TSG-666 (**Attachment 6**).

- 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.

Completed.

7. NEW WORK ITEMS FOR DISCUSSION

7.1 Assigned by Board of Directors

7.1.1 SRM Carriage

Chairman Miller called attention to the New Work Item Proposal submitted to the ATSC Board of Directors on September 28 (**Attachment 7**) on System Renewability Messages (SRM). Mr. Richer reported that the Board approved this work. Chairman Miller suggested that TSG/S13 take on the work. Mike Dolan (TBT, chair of S13) agreed. Mr. Dolan said he would bring back a draft Work Plan for consideration at the next meeting. Chairman Miller invited all interested parties to participate in the S13 work.

8. ARCHITECTURAL TEAM

8.1 Document Structure Group Report (John Henderson)

John Henderson (Hitachi) called attention to the document structure project, details of which have been distributed to each of the specialist group reflectors. He emphasized that the changes being proposed are entirely editorial, and are designed to simplify the process by which A/53 is updated.

Art Allison (NAB) suggested that each of the specialist groups involved should be asked to review the proposed changes, in particular Part 1, and to report back with any concerns at the February 8 meeting. Chairman Miller observed the consensus of the committee to proceed in this manner. He directed Mr. Whitaker to add this item to the February 8 agenda.

Chairman Miller directed the Architecture Team to develop a proposed timeline for integrating the changes and to offer guidance on how to move forward. He asked Mr. Henderson to report back at the February 8 meeting.

9. PLANNING COMMITTEE LIAISON REPORT (STERLING DAVIS)

Sterling Davis (Cox Broadcast, chair of the PC), reported on developments at the last meeting of the Planning Committee, which was held December 13. He reported on a presentation from Mark Eyer (Sony) and Mr. Allison on a proposed “Parameterized Service Type,” which will be discussed as agenda Item 13.2a.

Mr. Davis also reported that an ACAP demonstration project is being developed, led by Jon Dakss (NBC Universal). He said the demonstration will be an end-to-end project, focusing on a particular television program or series. The target venue for the demonstration is the 2006 NAB Convention. Mr. Richer urged interested parties to join the ACAP trial reflector by contacting Mr. Whitaker.

9.1 PC-1 AHG Status Report

Mr. Henderson outlined the current status of work in the PC-1 AHG. He said the discussions have been productive, and added that all parties have recognized the need for give-and-take. He said the committee has been working to find common ground, recognizing that developing a transition plan is a difficult task. He encouraged interested parties to participate in the PC AHG.

10. 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 8**).

10.1 Status Report

Mr. Allison reported that ACAP support capability has been incorporated into the schema. He said the XML modular design approach is being incorporated, with a plan for completion of the revision by 19 January 2006. He noted that a plug-fest has been deemed desirable, although no action is planned until new draft is completed.

Mr. Allison reviewed the current S1 milestones, namely:

- Restructured PMCP with ACAP support to Proposed Standard by the end of 2005—now expected by Q1 2006.

- Guide to PMCP is currently stalled, as there are no volunteers to work on the project at this time.

Mr. Allison also noted the S1 interest in the proposed PMCP logo now being designed.

11. 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 9**).

11.1 Status Report

Mr. Waddell called attention to the assignment of code points for CS/TSG-659, “Candidate Standard: Amendment to ATSC Digital Television Standard, Doc. A/53D, to define Video System Characteristics of AVC as new Annex F,” specifically for the ITU-T T.35 registered data structure that carries closed captions, bar, and AFD data. ATSC applied for, and was assigned, a registered value of 0x31 for the `itu_t_35_provider_code` field. The current version of the Candidate Standard, CS/TSG-659r1—as posted on the ATSC web site—includes this value.

Mr. Waddell noted there is an urgent need for a liaison statement to the SCTE DVS AVC Drafting Group relating to work on captions. He said the current draft uses SCTE-21 as a model, and is not intended to use the caption mechanism documented in CS/TSG-659r1. Chairman Miller said this topic will be discussed further during the S13 report.

11.2 Recommendation on TSGS6-356r8

Mr. Waddell called attention to TSGS6-356r8, “Working Draft Revision of A/53-D Annex A” (**Attachment 10**), which was first brought before TSG at the September 21 meeting. He explained that the primary focus of the document is closed caption syntax reformation, with a secondary focus of adding coding formats from SCTE 43 to Table A3. He noted that S6 has complied with the action items relating to this document from the last TSG meeting, and added that the document is now ready to go forward. Regarding the Table A3 extensions, Mr. Waddell said the changes reflect the current reality of consumer display devices, and that a number of stations already broadcast using these values. He said the proposed changes to Table A3 include the addition of SIF and QSIF for future use (e.g., “small screen services” type applications).

Mr. Waddell reported the consensus recommendation of S6 that TSG elevate TSGS6-356r8 to Candidate Standard for a period of time ending 15 May 2006. Chairman Miller recognized the **motion** from the S6 Chair on behalf of the specialists group. Discussion followed on the changes proposed for Table A3, with particular emphasis on the impact of additional formats on legacy receivers. Craig Tanner (Sharp) recommended that any formats that might make legacy receivers go dark should not be included. Chairman Miller offered that broadcasters will not do anything with their transport stream that might make receivers go dark. He further suggested that the guidance contained in the draft specification will tend to prevent operational problems in the field. Mr. Allison called the question. The motion was **approved** on a show of hands.

Mr. Waddell said S6 will continue to work on the image formatting elements of the document during the CS phase.

12. 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 11**).

12.1 Status Report

Mr. Eyer said the S8-1 E-VSB Transport AHG identified an error in the published CS documents relating to fallback audio. He explained the fallback audio elements in the Robust stream were not constrained to be tied to audio sources in the Main stream portion of that same Program—the “same Program” constraint was missing. S8 has agreed to update the published CS documents to correct this error.

12.2 Proposed Advancement of CS/TSG-661

Mr. Eyer called attention to CS/TSG-661r2, “Amendment No. 2 to ATSC Digital Television Standard, Doc. A/53D, to Define E-VSB Transport in Annex C.” This document was first published in October and later updated to incorporate comments received on the PS-642r2 ballot (Proposed Revision of A/53D with Amendment 1). Changes were also made to address the fallback audio issue described above.

Mr. Eyer, on behalf of TSG/S8, **moved** to advance CS/TSG-661r2 to Proposed Standard by means of a 4-week TSG letter ballot. The motion was **approved** on a show of hands.

12.2.1 Presentation on Parameterized Service Type

Chairman Miller stated that Mr. Eyer and Mr. Allison have drafted a proposal that could facilitate various transition issues, including a move to new codecs (**Attachment 12**). Mr. Eyer noted that market forces and the “chicken & egg” issue represent ongoing challenges. He said a “Service Type” model could be used to manage difficult transition issues.

Mr. Eyer suggested an architecture to define services requiring new codecs and allow such services to access them if they are needed, thereby permitting the industry to begin to establish a base of new-generation receivers. The presentation outlined a technical process whereby new service types could be utilized. For legacy receivers, the new service type would be ignored.

Under the “Parameterized Service Type” scenario, a new `service_type` would be defined (e.g., 0x07 = Parameterized Digital TV). The new descriptor would be present in the VCT and list the values of codecs that must be supported in the receiver for a given new channel. The list would represent a minimum set; not all codecs might be in use at all times.

The benefits of the proposed Parameterized Service Type architecture were outlined as follows:

- 1) The DTV Standard could be amended now to define a mechanism to transport new codecs in the Main Stream without any ATSC or industry commitment to one or two new codecs, or causing any public concern leading to disruption of the current market for DTV products.
- 2) A receiver with a type-*x* codec would be ready to support new services using the type-*x* codec.
- 3) Provides an easy method for the receiver to skip channels that cannot be decoded.
- 4) Market forces can determine the best next-generation codec, and the codec choice could be made via a de-facto standard.
- 5) This approach is backwards compatible with legacy receivers

6) This approach can be used to signal future new service structures.

Mr. Allison and Mr. Eyer suggested that TSG formally consider this concept. A wide-ranging discussion followed, with some of the benefits and potential pitfalls identified. Chairman Miller recognized that this approach could solve certain transition issues, but that considerable work remains to be done before formal consideration by TSG.

Mr. Allison suggested that TSG direct S8 to consider the Parameterized Service Type approach and bring back a recommendation at the next meeting. Chairman Miller observed the consensus of TSG to proceed as suggested. Mr. Waddell pointed out that this proposal does not eliminate the need for continued work on new codecs.

12.3 Status of CS/TSG-660

Mr. Eyer called attention to CS/TSG-660, "Candidate Standard Amendment to ATSC A/53D to Define Transport of AVC Codec in Annex C." This document was first published in October and needs updating to incorporate comments received on the PS-642r2 ballot (Proposed Revision of A/53D with Amendment 1). He said this document also needs to be updated to address the fallback audio issue described above. Mr. Eyer noted that the CS period for CS/TSG-660 ends on 10 May 2006.

12.4 Status of PS-606

Mr. Eyer called attention to PS-606, "Proposed Standard: Amendment No. 1 to ATSC Standard: Program and System Information Protocol for Terrestrial Broadcast and Cable (A/65B)." This document was approved by the membership on 31 March 2005, but has not been published pending the availability of a normative reference: "ATSC Standard A/53C as modified by Amendments No. 1, 2 and 3 (2004)." Mr. Eyer explained that with passage of time, this reference is now obsolete. He said that approval of PS-641 will result in A/65C, and then PS-606 will become Amendment No. 1 to A/65C. Mr. Eyer said S8 needs to review PS-641 to ensure that PS-606 incorporates—and does not undo—any agreed changes. He suggested that TSG direct S8 to conduct such an analysis.

Chairman Miller observed the consensus of TSG that S8 be directed to update PS-606 to conform with the current state of references, and bring the document back to TSG at the February 9 meeting for consideration.

12.5 Status of TSGS8-593

Mr. Eyer called attention to TSG/S8 Doc. 593r1, "Draft Candidate Standard Amendment to ATSC A/53D to Define Transport of VC-1 Codec in Annex C." He reminded the committee that at the September 21 TSG meeting, S8 recommended publication of TSGS8-593r1 as a Candidate Standard; however, the motion failed. Mr. Eyer noted that S8 was given no explanation and was not asked to remedy any deficiencies in the document. He asked for guidance from TSG regarding the next step for TSGS8-593r1.

Chairman Miller suggested that TSG hold off on further action regarding TSGS8-593r1 pending further work on the Parameterized Service Type approach. He further suggested that the AVC Candidate Standard (CS/TSG-660) might be pulled back as well. Matthew Goldman (Tandberg) suggested this approach. He said important information is contained in the AVC CS and VC-1 draft, and that it should move forward. Mr. Waddell argued that the current process should continue, since there is a need to get these documents out to provide guidance to the industry. He acknowledged that a note on the Web site stating that a new approach is being considered would be useful. The Web site note concept was endorsed by Mr. Eyer, Merrill Weiss

(MWG), and others. Adam Goldberg (Sharp) questioned why TSG is discussing this document today, since a motion to advance TSGS8-593r1 was defeated at the September 21 meeting. Mr. Tanner echoed that sentiment. Mr. Waddell noted that the VC-1 Standard has advanced within SMPTE and that alone, he argued, is sufficient reason for TSG to reconsider the document.

Mr. Waddell **moved** to elevate TSGS8-593r1 to Candidate Standard. **Second** by Mr. Goldman.

Charles Einolf (UPN) **moved** to table TSGS8-593r1 until the February 8 TSG meeting, saying it was not noticed on the agenda that action would be requested at this meeting. **Second** by Mr. Tanner. The motion **failed** on a roll call vote: 13 yes, 17 no, 15 abstain.

Chairman Miller returned to the original (Waddell) motion. Mr. Waddell noted that a closing date on the Candidate Standard period needs to be specified; he suggested 15 May 2006. This amendment was accepted by Mr. Goldman (the seconder). It was further requested that a note accompany the public posting calling attention to the possibility of architectural changes resulting from the Parameterized Stream Type work. Restating the motion:

“**moved** to elevate TSGS8-593r1 to Candidate Standard for a period of time ending 15 May 2006, with the inclusion of a statement to accompany the public posting stating that a Parameterized Service Type approach is being considered.”

Discussion followed on the question, focusing on whether it is necessary and/or appropriate to advance this document, given the possibility of a basic architectural change. Mr. Allison said the same treatment should be given to both the AVC and the VC-1 documents—either both at CS or both at Working Draft.

Chairman Miller called the question: it **failed**: 20 yes, 11 no, 11 abstain.

12.6 CA_system_id Registry

Mr. Eyer reported that ATSC has received requests for CA_system_id assignments from three organizations:

- USDTV
- Combined Conditional Access Development
- Microsoft

He pointed out that Section 4.1.3.1 of A/70A states that ATSC will manage such assignments:

“There shall be a Conditional Access Table (CAT), as defined in ISO/IEC 13818-1 [5]. ... A list of CA_system_id values shall be managed by ATSC. A set of CA_system_id values shall be given to each CA provider. NRSS-B CA modules shall filter the CAT table. NRSS-A CA modules may filter the CAT table.”

Mr. Eyer offered two possible options for addressing this requirement:

- Point applicants to the DVB registry and re-use the DVB assignments.
- Develop an ATSC registry and start issuing numbers. (He noted that the current ATSC Registry specifically excludes private assignments.)

Mr. Eyer proposed that the previous editor of the A/70 revision (Mr. Goldberg) be asked to lead a TSG-level AHG to devise a structure for assignment and documentation of CA_system_id values, and to report back with a plan at the February 9 TSG meeting.

Mr. Goldberg provided background information on this issue. He suggested that it would be simpler to redirect organizations to the DVB registry. Mr. Allison endorsed this approach. Mr.

Waddell suggested that S8 might want to consider revising A/70A to point users to the DVB registry. Mr. Eyer agreed that such work would be appropriate.

Mr. Richer said we should first communicate with DVB to coordinate this process. He suggested that the S8 chair work with him to develop a draft liaison statement to DVB. The committee endorsed this approach.

12.7 Language Announcement

Mr. Dolan identified a potential issue with regard to language announcement in the ATSC transport stream, specifically whether ISO-639 is sufficient to fully describe language options for feature films. Chairman Miller asked Jim Williams (MPAA) to look into this question and report back with a recommendation.

The meeting broke for lunch at 1:00 p.m. EST

The meeting resumed at 1:45 p.m. EST.

13. REPORT OF THE SPECIALIST GROUP ON DIGITAL ENG, TSG/S3 (DANE ERICKSEN)

Dane Ericksen (Hammett & Edison, representing SBE), Chair of TSG/S3, briefed the committee on current work within the specialist group (**Attachment 13**).

13.1 Status Report

Mr. Ericksen reported that S3 has held 21 meetings since being formed on 16 November 2004: 20 by conference calls, and one in-person meeting at NAB 2005 in Las Vegas. He said an in-person meeting is being considered for February 2006 in Palm Springs to coincide with the ATSC/SBE ENG Summit.

Mr. Ericksen noted that the Data Return Link (DRL) Working Draft (TSGS3-010r6) was posted to the TSG reflector for comment on September 27. This document has now progressed to a 16th draft, which will be posted to the TSG reflector after this meeting.

Mr. Ericksen reported that S3 now estimates the DRL Working Draft will be ready for TSG consideration as a Candidate Standard by 8 February 2006; he said the target for a request for elevation to Proposed Standard is 27 September 2006.

Mr. Ericksen added that progress on the Remote ENG Communications portion of the S3 work is not as encouraging. He said difficulties finding volunteers for this project are slowing the work. He said the current goal is to have a Working Draft ready for TSG consideration as a Candidate Standard by 9 May 2006.

Chairman Miller observed the consensus of TSG to accept the new document milestones.

14. 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 14**).

14.1 Status Report

Mr. Einolf reported that TSG/S9 last met on November 30 and viewed enhanced-VSB demonstrations from Samsung/Rohde & Schwarz and ETRI/Philips. He explained that S9 has received periodic updates on both projects from proponents.

Mr. Einolf noted that a New Work Item Proposal has been submitted to the ATSC Board of Directors by Samsung/Rhode & Schwarz relating to their “Advanced VSB” proposal, and that it will be considered by the Board at its meeting tomorrow. C. B. Patel (Samsung) questioned whether the new work, if approved by the Board, could be assigned now to TSG/S9 in order to avoid waiting until the February 8 meeting to move forward. Chairman Miller observed the consensus of TSG to proceed in this manner.

14.1.1 E-VSB Implementation Guidelines Document

Mr. Einolf said that work has been completed on TSGS9-014, “Working Draft E-VSB Implementation Guidelines” (**Attachment 15**). He reported the consensus of the specialist group that the document be submitted to TSG for a four-week letter ballot as a proposed Recommended Practice. Chairman Miller recognized the **motion** from the S9 Chair on behalf of the specialist group. The motion was **approved** on a show of hands.

Mr. Einolf recognized the work of the S9-2 AHG in developing the document—in particular Wayne Bretl (Zenith), who led the effort.

15. 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 16**).

15.1 ACAP Signaling and Announcement

Mr. Dolan reviewed the scope of S13-278, “Working Draft ACAP Service Signaling and Announcement” (**Attachment 17**). He said the specification adds the ACAP DBD descriptor to the EIT, DET, and VCT for announcement, and provides recommendations on PSIP signaling. Mr. Dolan reported the consensus recommendation of TSG/S13 that S13-278 be elevated to Candidate Standard. Chairman Miller recognized the **motion** from the S13 Chair on behalf of the specialist group. Mr. Weiss suggested a CS period extending to 15 May 2006. This proposal was accepted by the group. The motion was **approved** on a show of hands.

15.2 Draft TSG Report on Captioning in E-VSB and with New Codecs

Mr. Dolan called attention to TSG-666, “Draft TSG Report on Caption Carriage in E-VSB and with new Codecs” (**Attachment 6**). He said the comments voiced at the September 21 TSG meeting have been addressed and that the document has been circulated to S13 without further comment. Mr. Dolan reported the consensus recommendation of S13 that TSG-666 be published as a Technology Group Report.

Mr. Richer explained that per the procedure specified in the ATSC Bylaws, TSG should make a recommendation to the Board with regard to the classification of informational documents—either a Technology Group Report or an Engineering Guide.

Mr. Allison **moved** that TSG-666 be approved and sent to the ATSC Board with the recommendation that it be published as a Technology Group Report. **Second** by Mr. Waddell. The motion was **approved** on a show of hands.

15.3 A/90 and A/95 Revision Status

Mr. Dolan reminded the committee of the status of these projects, specifically:

- A/95 requires harmonization with the ACAP object carousel. The editor/proponent for this project is no longer available.
- The A/90 revision needed to address: 1) various errata, 2) DST and AIT usage policy, and 3) DET optional. An editor for this project has not been identified.

Mr. Dolan advised TSG that the schedule for completion of this work is uncertain due to very low interest.

15.4 SCTE DVS Captions Liaison

Chairman Miller recognized the need for liaison with SCTE DVS relating to closed captioning. He said we need to impress on DVS the need for a unified approach to captioning. Mr. Dolan proposed that Mr. Allison, as the ATSC DVS liaison, convey the appropriate message to DVS and provide CS/TSG-659r1 and TSG-666 as input documents. Chairman Miller observed the consensus of the committee to proceed in this manner. He noted that ATSC would welcome input from SCTE on this matter.

16. REPORT OF THE ADHOC 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.

16.1 Status

Mr. Chernock reported good progress on developing the bit stream compliance working draft. He estimated that the draft specification should be completed in time for formal consideration at the May 9 TSG meeting. He noted the effort has good support from the key stakeholders. Mr. Chernock called attention to the work in progress, which can be found from the following link: <http://www.atscmembers.org/sg/T3/tsg-1/>

Chairman Miller encouraged interested persons to participate in the TSG-1 AHG.

17. OTHER BUSINESS

17.1 Liaison Reports

17.1.1 ATSC/CEA/SMPTE Collaboration on Captions

Mr. Dolan reported on the ongoing closed caption harmonization activity between ATSC, CEA, and SMPTE. He said the work is proceeding smoothly between the 3 organizations. Although no formal liaison reports from CEA or SMPTE are available, he offered an informal status report.

Mr. Dolan noted the draft reorganization of A/53 Annex A as it relates to captions. He said CEA has accepted the `cc_data()` structure syntax and semantics for inclusion in the draft 708C. He added that SMPTE has accepted 708B Chapter 11 (from CEA) and is in the process of sorting out related details on documentation, specifically SMPTE-333M, SMPTE-334M, and perhaps one or more new documents.

Chairman Miller observed that Mr. Dolan is active in all three groups.

17.1.2 ATSC/CEA/SMPTE Image Formatting

Graham Jones (NAB) provided background information on the joint ATSC/CEA/SMPTE activity focused on Active Format Description (AFD) and bar data. He said the liaison effort is

ongoing and that joint meetings of the appropriate group chairs have resulted in agreement on optimizing of AFD and bar data, including necessary constraints. He called particular attention to work in this area now underway within SMPTE S.22.

Mr. Jones updated the committee on other SMPTE activities of interest to ATSC, including:

- Status of the VC-1 standard
- Work in the area of lip sync, based in part on IS-191
- PMCP metadata work in S.22

17.1.3 Labeling Multicast Channels

Mr. Richer reported on a meeting yesterday in New York with a joint task force of TVB and AAAA, focused on possible naming conventions for multichannel call letters. Mr. Richer said the group is eager to find a resolution to this issue, which may involve ATSC at some point in the future. Lynn Claudy (NAB) also participated in the meeting. Mr. Richer said that he and Mr. Claudy briefed the task force on PSIP and PMCP, among other items.

18. SCHEDULE OF NEXT TSG MEETINGS

The next meeting of the Technology and Standards Group will be held on 8 February 2006.

Chairman Miller noted that the meeting time for the May 9 meeting is set for 11:00 a.m. until 5:00 p.m. EST, rather than the usual 10:00 a.m. until 4:00 p.m. EST.

19. ADJOURNMENT

There being no further business, the meeting was adjourned at 2:55 p.m. EST.

Action Items Developed at this Meeting

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

- 1) Mike Dolan and TSG/S13 to bring back a draft Work Plan on System Renewability Messages (SRM) for consideration at the February 8 meeting.
- 2) Specialist groups to review the proposed A/53 architecture changes, in particular Part 1, and to report back with any concerns at the February 8 meeting.
- 3) Jerry Whitaker to include the item "Feedback from Specialist Groups on Proposed Restructuring of A/53" on the February 8 agenda.
- 4) John Henderson and the Architecture Team to develop a proposed timeline for integrating the proposed A/53 architecture changes and to offer guidance on how to move forward.
- 5) Pat Waddell to forward to ATSC staff TSGS6-356r8 for publication as a Candidate Standard for a period of time ending 15 May 2006.
- 6) ATSC staff to issue a letter ballot on CS/TSG-661r2 as a Proposed Standard.
- 7) Mark Eyer and TSG/S8 to consider the Parameterized Service Type approach and bring back a recommendation at the next meeting.
- 8) Mark Eyer and TSG/S8 to update PS-606 to conform with the current state of references, and bring the document back to TSG for consideration at the at the February 8 meeting.
- 9) Mark Eyer and TSG/S8 to consider revising A/70A to point users to the DVB registry for CA_system_id values.
- 10) Mark Eyer to work with Mark Richer to develop a liaison statement to DVB relating to the A/70A CA_system_id registry issue.
- 11) Jim Williams to explore whether ISO-639 is sufficient to fully describe language options for feature films and report back to TSG with a recommendation.
- 12) Dane Ericksen to report to TSG/S3 that TSG accepted the revised Work Plan milestones as presented.
- 13) Charles Einolf to report to TSG/S9 that, should the ATSC Board approve the pending NWIP on the Samsung/Rhode & Schwarz "A-VSB" system, the specialist group should begin preliminary work.
- 14) ATSC staff to issue a letter ballot on TSGS9-014, "Working Draft E-VSB Implementation Guidelines" as a proposed Recommended Practice.
- 15) ATSC staff to publish S13-278, "Working Draft ACAP Service Signaling and Announcement" as a Candidate Standard for a period of time ending 15 May 2006.
- 16) Chairman Miller to report to the ATSC Board the recommendation of TSG that TSG-666 be published as a Technology Group Report.
- 17) Art Allison, as the ATSC liaison to SCTE to convey to DVS the need for a unified approach to captioning and provide CS/TSG-659r1 and TSG-666 as input documents to their current work.

Attachments

Attachment 1. TSG-668, Attendance List

http://www.atscmembers.org/sg/T3/2005_12_14/documents/Attachment_1_TSG-668_attendance_2005_12_14.xls

Attachment 2. TSG-664, Draft Agenda

http://www.atscmembers.org/sg/T3/2005_12_14/documents/Attachment_2_TSG-664r3_Draft_Agenda%20.doc

Attachment 3. TSG-654, Draft Minutes of September 21 Meeting

http://www.atscmembers.org/sg/T3/2005_12_14/documents/Attachment_3_TSG-654r2_Minutes.doc

Attachment 4. TSG-667, Status of Ballots

http://www.atscmembers.org/sg/T3/2005_12_14/documents/Attachment_4_TSG-667_Ballot_status.xls

Attachment 5. TSGS6-356r8 Change Tracking

http://www.atscmembers.org/sg/T3/2005_12_14/documents/Attachment_5_TSGS6-356r8x_CS_Revision_A53D_Annex_A-compare.pdf

Attachment 6. TSG-666, S13 Draft Caption Report (formerly S13-312)

http://www.atscmembers.org/sg/T3/2005_12_14/documents/Attachment_6_TSG-666_S13_Caption_Report.doc

Attachment 7. New Work Item Proposal on SRM Carriage

http://www.atscmembers.org/sg/T3/2005_12_14/documents/Attachment_7_NWIP_SRM_Carriage_final_list.doc

Attachment 8. TSG/S1 Status Report

http://www.atscmembers.org/sg/T3/2005_12_14/documents/Attachment_8_S1_2_TSG_Status%20Report_Dec2005.ppt

Attachment 9. TSG,S6 Status Report

http://www.atscmembers.org/sg/T3/2005_12_14/documents/Attachment_9_TSGS6-393r3%20S6%20Report%20to%20TSG%20for%20121405.ppt

Attachment 10. TSGS6-356, Working Draft A53D Annex A Revision

http://www.atscmembers.org/sg/T3/2005_12_14/documents/Attachment_10_TSGS6-356r8_CS_Revision_A53D_Annex_A.pdf

Attachment 11. TSG/S8 Status Report

http://www.atscmembers.org/sg/T3/2005_12_14/documents/Attachment_11_TSGS8-606r1_S8_Status_Report_12-05.ppt

Attachment 12. Parameterized Service Type Presentation

http://www.atscmembers.org/sg/T3/2005_12_14/documents/Attachment_12_Codec%20Impasse%20TSG%2012-05.ppt

Attachment 13. TSG/S3 Status Report

http://www.atscmembers.org/sg/T3/2005_12_14/documents/Attachment_13_TSGS3-057_S3_Status_Report.ppt

Attachment 14. TSG/S9 Status Report

http://www.atscmembers.org/sg/T3/2005_12_14/documents/Attachment_14_TSGS9_Status_December_2005.ppt

Attachment 15. TSGS9-2-014, Working Draft Recommended Practice

http://www.atscmembers.org/sg/T3/2005_12_14/documents/Attachment_15_TSGS9-2-014r21_E-VSB_IG_WD.pdf

Attachment 16. TSG/S13 Status Report

http://www.atscmembers.org/sg/T3/2005_12_14/documents/Attachment_16_S13-315R0-Status-20051215.ppt

Attachment 17. S13-278, ACAP Signaling and Announcement

http://www.atscmembers.org/sg/T3/2005_12_14/documents/Attachment_17_S13-278R7-ACAP-Ann-Design.doc