

Minutes, Technology Group on Distribution 17 April 2002

Advanced Television Systems Committee

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The Advanced Television Systems Committee (ATSC), is an international, non-profit membership organization developing voluntary standards for the entire spectrum of advanced television systems.

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 Committee 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 180 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.

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Minutes, ATSC Technology Group on Distribution (Draft)

10:00 a.m. – 4:00 p.m., NAB, 1771 N St. NW, Washington, D.C.
17 April 2002

1. WELCOME, INTRODUCTIONS, AND DETERMINATION OF QUORUM

Chairman Ralph Justus (CEA) called the meeting to order at 10:00 a.m. at the headquarters of the National Association of Broadcasters in Washington, D.C. He welcomed those in attendance and asked each person to identify themselves. The attendance list is given in **Attachment 1**.

2. APPROVAL OF PROPOSED AGENDA

Chairman Justus asked for consideration of the draft agenda (**Attachment 2**). Several additions to the agenda were offered, noted in Attachment 2 as redline changes. The agenda was then accepted as amended.

3. APPROVAL OF THE DRAFT MINUTES OF THE FEBRUARY 13 MEETING

Chairman Justus called member's attention to the draft Minutes of the February 13, 2002, T3 meeting, which were distributed to the T3 reflector on March 28, 2002 (**Attachment 3**). Secretary Jerry Whitaker (ATSC) stated that corrections to the attendance list had been identified by John Henderson (Hitachi) and Jonathan Courtney (Sun). No further changes were requested and the draft Minutes were accepted as revised.

4. OPENING REMARKS

Chairman Justus congratulated NAB on an excellent convention. He said it was a watershed event for broadcasting in general, and for digital television in particular. He observed that T3 has made considerable progress in moving important documents forward since the last meeting, and he thanked all participants for their hard work.

5. COMMENTS BY THE PRESIDENT (MARK RICHER)

Mark Richer (ATSC) said that the NAB Convention, just concluded, was an important one for the ATSC. He said that a number of papers relating to digital television were presented at the Broadcast Engineering Conference. In addition, a number of important product announcements that advance the roll-out of DTV were unveiled. Mr. Richer added that the DTV Store exhibit went very well, with good overall traffic and visits from a number of industry leaders, including FCC Chairman Powell. Again this year, the DTV Store was co-sponsored by ATSC, NAB, and CEA.

Mr. Richer also reported on a demonstration of an end-to-end DASE system, which was shown at the DTV Store. He said the demonstration went quite smoothly and showed the considerable power of both the declarative and procedural functionality of DASE. The demonstration was based on technology and support provided by the Korean Broadcasting System (KBS), LG Electronics, Samsung Electronics, Aircode, icube, and Alticast.

Mr. Richer also called member's attention to the ATSC annual meeting, set for May 15 in Washington, D.C. He said the event will be held at the Radisson Barcelo Hotel, and urged members to attend. He said technology demonstrations are planned. Those interested in participating in technology demonstrations or in sponsorships should contact the ATSC office.

5.1 Status of ballots

Mr. Richer reported on the status of current ballots, specifically:

5.1.1 Membership ballots

Data Broadcast A/90 Corrigendum 1: approved, 25 yes, 0 no; editorial privilege 24 yes, 1 no.

Data Broadcast A/90 Corrigendum 2: 23 yes, 0 no; editorial privilege 21 yes, 1 no.

Synchronized/Asynchronous Trigger Standard: 23 yes, 1 no; editorial privilege 23 yes, 0 no.

PSIP A/65A Amendment 3: 25 yes, 3 no; editorial privilege 29 yes, 1 no.

Data Broadcast A/90 Amendment 1: closes May 14, 2002

5.1.2 T3 ballots

ARM (re-ballot): closes April 23

PSIP A/65A Amendment 2: Closes April 23

PSIP A/65A Amendment 1A: Closes May 2

5.2 Other

There were no other items to report.

6. BRIEF REPORTS ON ACTIONS FROM THE PREVIOUS MEETING

Chairman Justus observed that activities are proceeding on action items from the February 13 meeting, with follow-up reports on today's agenda from each specialist group.

6.1 Action Items from February 13 Meeting

The following action items resulted from the T3 meeting of February 13, 2002.

- 1) Richer to pursue obtaining an OUI from IEEE (carried forward from the December 5, 2001 meeting). *Completed*
- 2) Specialist group chairs Eyer, Lechner, and Crinon to consider the direction given by the Board regarding possible new standards and revisions to existing standards necessary to implement the "robust mode" of transmission currently under development in specialist group T3/S9. Specific assignments include the following:
 - Eyer, as T3/S6 chair, to consider the video/audio coding issues encompassed by Item #1 of the Board recommendations, and to report back to T3 at the April 17 meeting with a plan for moving forward. A work plan should be provided to T3 as appropriate. *On agenda*
 - Lechner, as T3/S8 chair, to consider the transport stream issues encompassed by Items #2, 3, and 4 of the Board recommendations, and to report back to T3 at the April 17 meeting with a plan for moving forward. A work plan should be provided to T3 as appropriate. *On agenda*
 - Crinon, as T3/S13 chair, to consider the data broadcasting issues encompassed by Item #5 of the Board recommendations, and to report back to T3 at the April 17 meeting with a plan for moving forward. A work plan should be provided to T3 as appropriate. *On agenda*
- 3) Tollefson and Allison to prepare an "issue brief" document for consideration by the Board of Directors that addresses certain high-level issues related to the work of the VSB Enhancement Specialist Group. Specifically, the work of T3/S9 is focused on making a technology decision relating to VSB enhancements, but that it cannot draw conclusions over whether the improvements that it ultimately recommends make good business sense to implement by broadcasters and receiver manufacturers. This document shall be posted to the

- T3 reflector for comment and revision (as necessary) before being delivered to the Board.
Carried forward
- 4) Crinon to forward to ATSC staff Amendment 1 to ATSC Standard A/90 (T3-565) for a four week vote of the full membership. *Completed*
 - 5) Crinon to forward to ATSC staff Corrigendum 1 to ATSC Standard A/90 (T3-563), as amended following disposition of comments received during the T3 ballot, for a four week vote of the full membership. *Completed*
 - 6) Crinon to forward to ATSC staff Corrigendum 2 to ATSC Standard A/90 (T3-564), as amended following disposition of comments received during the T3 ballot, for a four week vote of the full membership. *Completed*
 - 7) Crinon to forward to ATSC staff the draft Synchronized/Asynchronous Trigger Standard (T3-561), as amended following disposition of comments received during the most recent T3 ballot, for a four week vote of the full membership. *Completed*
 - 8) Crinon to work with Whitaker to address editorial comments received during the membership ballot of the IP Multicast with Sessions Standard. Upon completion, ATSC staff shall post the finished document on the ATSC Web site. *Completed*
 - 9) Weiss and Lechner to complete the review process for the revision to Amendment 1 to A/65A relating to Directed Channel Change with the goal of moving the document to a ballot of T3. The specific procedure is as follows: The document shall be distributed to T3/S8 for a two week comment period, and if no new substantive comments are received as determined by the AHG (chaired by Mr. Weiss), the document shall be forwarded to a two week comment period of T3, and finally if no new substantive comments are received as determined by the AHG, the document shall—upon the approval of the Chairman of T3—go to a four week ballot of T3. *Completed*
 - 10) Eyer to integrate certain clarifying language into the draft Amendment 2 to A/65A, as revised to address comments received during the T3 ballot of the document, and to then forward the finished Amendment to ATSC staff for a four week re-ballot by T3. *Completed*
 - 11) Hamilton to forward to ATSC staff Amendment 3 to A/65A, as revised to address comments received during T3 balloting, for the issuance of a four week ballot of the full membership. *Completed*
 - 12) Allison and Henderson to review the Board resolution relating to robust mode transmission and to report back to T3 on whether any clarification of terminology relating to such work is necessary or appropriate. *Carried forward*
 - 13) Richer and Chairman Justus to report to the Board of Directors that T3 recommends the final report of the Ad Hoc Group on Code Point Issues be designated as a Technology Group Report. *Completed*
 - 14) Whitaker and Richer to develop a plan for moving forward with a Code Points Registry and to report back to T3 at the April 17 meeting. *Completed, On going*
 - 15) Whitaker and Lechner to review comments received during the T3 ballot of the draft Recommended Practice, “Program and System Information Protocol Implementation Guidelines for Broadcasters,” and to take steps necessary to resolve those comments, with the goal of moving the document to a ballot by the full membership. *On agenda*
 - 16) Chernock to chair the DASE-2 Scope and Requirements Ad Hoc Group and to report back at the next T3 meeting—or earlier if possible—with a set of recommendations for moving forward on DASE-2. Also serving on the AHG are Allison, Goldberg, Weiss, Pizzi, Adams, and Huang. *Completed, on agenda*

- 17) Chairman Justus to contact the co-chairs of the Applications Subcommittee and inform them of the work of the DASE-2 Scope and Requirements Ad Hoc Group, and invite their involvement as appropriate. *Carried forward*
- 18) Dolan to post T3-558e (draft ARM Standard) to the T3 reflector for a two week review period, after which the comment resolution group chaired by Mr. Dolan shall deliver to ATSC staff a document for ballot by T3 for a period of four weeks. *Completed*
- 19) Eyer to form a comment resolution ad hoc group within T3/S6 to address comments received during the T3 ballot of Amendment 1 to A/53B, and to report back to T3 regarding the disposition of those comments. *Completed, on agenda*
- 20) Koo and Patel to begin work on a draft revision of A/49 and to report back at the next T3 meeting with recommendations on how to proceed. *Ongoing* (report due at next T3 meeting)

7. NEW WORK ITEMS FOR DISCUSSION

7.1 Assigned by Board

Mr. Richer reported there were no new work items assigned by the Board.

7.2 Implementation Subcommittee

Art Allison (NAB) reported there were no work items to discuss.

7.3 Other

There were none.

8. REPORT OF ARM SPECIALIST GROUP, T3/S18 (MIKE DOLAN)

Mike Dolan, T3/S18 chair, reported on the work completed to date in the Application Reference Model specialist group.

8.1 Status Report

Mr. Dolan reported that the sole task of T3/S18 since the last T3 meeting was to address comments from T3 members on the ARM draft previously provided to T3 for two weeks, immediately following the last meeting, and then to resolve ballot comments of the approved ARM letter ballot. Five editorial comments from one company were received in the two week pre-ballot period. Since they were editorial, he said these will be addressed as part of the ballot comment resolution rather than update the document before ballot. The document has been submitted to a re-ballot of T3, with a closing date of April 23.

9. REPORT OF THE SPECIALIST GROUP ON RF TRANSMISSION, T3/S9 (JOHN TOLLEFSON)

John Tollefson (PBS) reported on activities within the T3/S9 RF Transmission specialist group, which held its most recent meeting yesterday (**Attachment 4**).

9.1 Status

Mr. Tollefson reported that the NxtWave/Zenith and Philips systems are now being tested. He said VETC has completed reference receiver testing, and that laboratory testing is scheduled to be completed at ATTC today. VETC will begin field testing on May 1, pending equipment modifications from one respondent.

Mr. Tollefson reported that backward compatibility testing has begun at CRC. These tests will include the Broadcom proposal. He added that laboratory testing of the Broadcom system may take place independently of VETC. Robert Seidel (CBS) is working on testing options relating to Broadcom. Mr. Tollefson said that field testing of the Broadcom system is currently an open issue.

Mr. Tollefson reported that the testing program is running behind schedule. VETC expects to complete their work by the end of July. He also said that a sub-group led by Mr. Seidel has been formed to analyze the test data.

9.2 Draft Standard

Mr. Tollefson reported that the drafting group led by John Henderson (Hitachi) has completed a first draft revision of A/53, which has been posted on the T3/S9 Web site. The draft is to be used as a guide to testing and simulation. He said the draft currently includes only dual-stream proposals.

Mr. Tollefson said T3/S9 expects to see a distributed transmission draft standard in May. He explained that this project is on a separate track from the other VSB enhancement work.

9.3 Liaison with T3/S8 and Application Subcommittee

Mr. Tollefson reported that liaison work with T3/S8 is proceeding, and he thanked the members of T3/S8 for their efforts.

9.4 Schedule

Mr. Tollefson said that the T3/S9 Work Plan has been revised to reflect delays in various areas. Current schedule highlights include the following:

- Interim test reports due from VETC during May and June.

- May 1 – Laboratory test data available to T3/S9.

- May 17 – Broadcom hardware available.

- July 31 – Field test data available to T3/S9.

- September 30 – Revision to A/53 recommended to T3 by T3/S9.

9.5 Other Issues

Mr. Tollefson reported that T3/S9 yesterday received a briefing from Max Muterspaugh (Thomson) on the CEA Smart Antenna Interface. He said this work represented an important step forward for DTV reception. The specialist group also received a briefing from Steve Smith (representing LINX) regarding the new LINX receiver technology demonstrated at the NAB Convention. Mr. Tollefson observed that technology held considerable promise for improved DTV reception.

In response to questions from members, Mr. Tollefson explained the planned route for moving forward and the meeting schedule that is anticipated. He said that, regarding the ultimate recommendation of the specialist group, all options are on the table.

10. REPORT OF THE SPECIALIST GROUP ON DATA BROADCAST, T3/S13

Richard Chernock (IBM) reported on the work currently underway in T3/S13.

10.1 TSFS status

Mr. Chernock said that work continues on the Transport Stream File System, with a draft document expected within the next few weeks. He said certain issues remain, but that those are being addressed through reflector traffic. Mr. Chernock suggested that a route for moving forward could involve, upon finalization in T3/S13, posting to the T3 reflector for a two week comment period, followed by a ballot of T3. Mr. Richer encouraged T3 to move forward in that manner. Bernard Lechner (consultant) suggested a comment/review process similar to that used for A/65A Amendment 1A. Chairman Justus concurred, suggesting that the committee craft a way for moving forward to a ballot of T3 prior to the next T3 meeting.

Bill Miller (ABC) **moved** that the TSFS Standard, upon finalization in T3/S13, be posted to the T3/S13 reflector for a two week comment period, and if no substantive issues are raised, the document shall be posted to the T3 reflector for a two-week comment period. If no substantive comments are received during this comment period, the document shall be sent to a four week ballot of T3. **Second** by Mr. Chernock. The motion was **approved** on a voice vote.

10.2 Other Issues

Jeff Kraus (NCTA) reported that at a recent SCTE DVS meeting, a document prepared by Eddie Schwalb (Microsoft) dealing with aggregated event tables was considered. The intent of this work was to facilitate use of A/90 data broadcasting techniques on cable television systems. Mr. Kraus suggested that it might be more appropriate for ATSC to undertake this work, perhaps as an amendment to A/90, since such functionality might be of value in other applications. He suggested that T3/S13 take a look at this document and consider whether it was an appropriate work item for the specialist group.

Mark Eyer (Sony) and Mr. Chernock agreed that this would be a useful activity. Additional discussion followed regarding the proposal. Mr. Kraus suggested that a liaison should be set up between SCTE DVS and T3/S13. Chairman Justus asked Mr. Chernock to post the draft document to the T3/S13 reflector and to bring back to T3 a proposal for moving forward, if there was consensus within the specialist group that such work would be appropriate.

11. REPORT OF THE SPECIALIST GROUP ON SATELLITE BROADCAST, T3/S14-A (DIPAK SHAH)

Dipak Shah (DIRECTV) reported on activities relating to T3/S14A.

11.1 Overview of Consolidated Draft Specification

Mr. Shah reported that work continues on the draft specification. He said current work is focused on combining all of the elements into a final draft. Mr. Shah said he expects to be ready to present the document to T3 at the June meeting. Chairman Justus asked Mr. Shah to distribute an advanced copy of the document two weeks prior to the next T3 meeting to provide sufficient time for review.

12. REPORT OF THE SPECIALIST GROUP ON DATA MULTIPLEX/TRANSPORT, T3/S8 (BERNIE LECHNER)

Mr. Lechner (consultant) reported on current activities in the specialist group.

12.1 Appointment of new T3/S8 chair

Mr. Lechner announced that he officially stepped down as chair at the last meeting of T3/S8 (meeting #53), and that Mr. Eyer has agreed to take on the task of chairing the specialist group.

Mr. Allison **moved** that:

“Whereas Bernard J. Lechner has served as the chair of ATSC Specialist Group T3/S8 for over 8 years;

And whereas he has given freely of his time in pursuit of technical standards, contributing many man-years to the work of the ATSC;

And whereas he has given dedicated service and made valuable contributions to the work of the ATSC;

And whereas his contributions have led to important enabling technologies relating to digital television;

Now therefore be it Resolved that Mr. Lechner is hereby recognized for his work on behalf of the Advanced Television Systems Committee, and that the Technology Group on Distribution formally takes note of his efforts with thanks and appreciation.”

Second by Mr. Miller. The motion was **approved** unanimously on a voice vote.

12.2 Status of Work on Amendment to A/53 Annex C

Mr. Eyer called member's attention to Draft Amendment 2 to A/53B (**Attachment 5**), which was distributed to the T3 reflector on April 16. He explained the reasoning for the changes proposed and asked for comments from T3 members. He said the document will be considered shortly by T3/S8, followed by consideration by T3. Mr. Lechner suggested moving the document forward in a manner similar to that agreed to by T3 for the TSFS draft standard. Mr. Allison suggested that this document follow the normal meeting process. Chairman Justus observed consensus that this amendment follow the usual meeting procedure.

12.3 Status of Amendments to A/65 PSIP

Mr. Eyer outlined the amendments pending to A/65A, specifically:

PSIP A/65A Amendment 1A: currently at T3 ballot—closes May 2

PSIP A/65A Amendment 2: currently at T3 ballot—closes April 23. Mr. Eyer asked that the AHG which developed the document be assigned as a comment resolution task force, and Chairman Justus so directed.

PSIP A/65A Amendment 3: approved by the ATSC membership on April 1

12.4 Status of Work on Content Identification and Replacement of A/57

Mr. Eyer reported that work continues on document T3/S8-479r1, which was distributed to the T3 reflector on April 16 (**Attachment 6**). He said considerable progress has been made of late, and he encouraged comment from T3 members. Mr. Miller outlined certain reference issues in the draft standard, and suggested a route for moving forward.

Mr. Eyer also called members attention to T3/S8-462 (**Attachmen 7**), which is intended to serve as a guide to the creation of standards in television content distribution by related organizations including SMPTE, SCTE, CEA, and others. Work on this project is being led by Paul Kempter (Nielsen).

12.5 Status of Work on Advanced EPG Functionality

Mr. Eyer reported that the AHG on Advanced EPG Functionality, chaired by Gomer Thomas (Triveni), has held a number of teleconferences and has been making slow, but steady, progress. He said the current target schedule is to have a complete draft document ready to present to T3/S8 in early June, and hopefully to receive approval from the specialist group to submit the draft standard to T3 at its next meeting.

12.6 Status of work on Directed Channel Change issues

Mr. Eyer observed that the T3 ballot on PSIP A/65A Amendment 1A will close on May 2. He suggested it would be efficient for T3 to designate a comment resolution task force to deal with comments that might be received during the ballot. Chairman Justus agreed with the suggestion, directing that comments received during the ballot be addressed by an ad hoc group consisting of the following persons: Weiss (chair), Eyer, Allison, and others which could include commenters.

12.7 Status of Work on Transport Issues Related to Enhanced 8-VSB Transmission

Mr. Eyer reported progress on the T3/S9-related work addressed by Mr. Tollefson earlier in the meeting. He said the AHG, chaired by Mr. Allison, is dealing with a number of tough issues, and he urged participation from T3 members in the effort.

12.8 Status of PSIP Implementation Guidelines for Broadcasters and Receiver Manufacturers

Mr. Eyer reported that Warner Johnson (ABC) has formed an AHG to resolve the comments received during the T3 ballot of the Proposed Recommended Practice on PSIP for Broadcasters.

Chairman Justus reported that work is progressing well on the CEA receiver Recommended Practice.

12.9 Status of Work on Review of Transport Sections of A/54

Mr. Eyer said T3/S8 is looking for volunteers to begin working on this task. He said the effort would begin in earnest next month.

12.10 Other Work Items

Mr. Eyer called member's attention to certain structural issues relating to A/53 Annex C and A/65, specifically the component_name_descriptor. He briefly outlined the issues involved and said that T3/S8 will consider this item at its next meeting.

The meeting broke for lunch at 11:55 a.m.

The meeting resumed at 12:45 p.m.

13. REPORT OF THE SPECIALIST GROUP ON DASE, S17 (GLENN ADAMS)

Glenn Adams (XFSI) briefed the committee on work currently underway within specialist group T3/S17.

13.1 Status of DASE Candidate Standard

Mr. Adams reported on discussions with Mr. Richer regarding the process for moving forward with the DASE-1 specification, now at Candidate Standard status. He said that, because of certain reference issues relating to other standards documents, which have not yet been completed, it may be necessary to use the full six month Candidate Standard period set by T3 at its December 5, 2001 meeting. He added that extension beyond six months could be necessary. In addition to the reference issues, Mr. Adams said certain technical issues may be revisited.

Mr. Richer commented that T3 must do something for the DASE-1 specification prior to the end of June, either to extend the Candidate Standard period or to move it forward as a Proposed Standard to be voted upon by the full ATSC membership. Mr. Richer said T3 should address this question at the June meeting, if not sooner. He said it was important for T3 to outline some sort of game plan for moving forward.

Mr. Adams suggested that T3/S17 discuss the route for moving forward on the DASE Candidate Standard and bring back a recommendation to T3 at the June meeting. He said the options would include: 1) extend the Candidate Standard status for a specified period of time, 2) recommend that DASE-1 be forwarded to a vote of the full membership, or 3) return the document set to the Working Draft status. Chairman Justus observed consensus on the part of T3 to proceed in this manner.

13.2 Joint S16/S17 Work Status

Mr. Adams reported that T3/S17 met once since the last T3 meeting. The meeting was held in conjunction with an T3/S16 meeting at the same location. The first day consisted of a joint ad hoc on the topic of HTTP support in DASE-2 and work underway in T3/S16 on transactional services. He said a detailed review of HTTP functionality was performed and preliminary conclusions were reached that support will be based on the HTTP 1.1 Standard.

13.3 DASE-2 Development Status Report

Mr. Adams reported that T3/S17 discussed and agreed to certain changes to the DASE-2 Requirements document based on feedback received from the T3 Ad Hoc on DASE-2 Requirements. A revision of the DASE-2 Requirements document (**Attachment 8**) was prepared for submission as an informational document to T3. Mr. Adams said T3/S17 decided to withdraw its request that T3 ballot the acceptance of this document. Mr. Adams said it was his understanding that additional recommendations had been made by the T3 Ad Hoc on DASE-2 Requirements beyond those received originally by T3/S17. He said these additional recommendations are expected to be discussed at the upcoming meeting of T3/S17.

Mr. Adams reported that a set of DASE-2 work assignments has been prepared based on volunteers to perform the technical development work (**Attachment 9**). These work assignments cover all priority #1 requirements and a number of priority #2 requirements as well. Mr. Adams said that during the time since the last T3/S17 meeting, a number of the assignments have been completed and submitted for T3/S17 review, which is expected to occur at the specialist group's next meeting.

13.4 Other Meeting Plans

Mr. Adams said T3/S17 will hold its next meeting on April 22–23 in Mountain View, CA (at Microsoft). Another joint meeting with T3/S16 is anticipated to occur on the topic of Authentication and State Management (i.e., *cookies*) in the context of HTTP.

He also reported that T3/S17 will hold its subsequent meeting on May 21–22 in Seoul, Korea. Mr. Adams observed this may be the first ATSC specialist group meeting outside the U.S. Holding the meeting in Seoul provides an opportunity for a number of Korean broadcasters, equipment manufacturers, service providers, and government parties to participate more actively in work on DASE. Given that DASE has been adopted as a Korean Standard for terrestrial broadcast of interactive services, there has been a great deal of development activity on the system. Mr. Adams added that after the T3/S17 meeting, a one day seminar on ATSC, DASE, and other iTV activities in Korea will be held at a Korean Broadcast Conference.

Mr. Richer praised T3/S17 for the Seoul meeting plan, saying it was an important step forward for ATSC in general, and DASE in particular.

13.5 ITU-R Liaison

Mr. Adams reported that in late March, the T3/S17 chair represented ATSC DASE activities at ITU-R Working Party 6M, where work is underway to specify recommendations related to harmonization of interactive multimedia content and environments. He said the U.S. National Body submitted the DASE Candidate Standard as an official input to the working party. In addition, both the U.S. National Body and NABA submitted documents containing guidelines and recommendations on this work, in which DASE was promoted for consideration by ITU. Copies of these documents were posted to the T3 reflector on March 22, 2002 (**Attachment 10**).

13.6 WC3 Liaison

Mr. Adams reported that he continues to represent ATSC and DASE at the W3C Hypertext Coordination Group. He said recent activity that intersects with DASE includes: finalization of DOM-2 HTML Module, development of CSS TV Profile, and acceptance of proposed modifications to XHTML by the HTML Working Group. This last item came about after a detailed discussion with the HTML Working Group and the authors of ATSC DASE Declarative Applications (DASE-DA) and of MHP DVB-HTML on the subject of improving the DTD (Document Type Definition) Conformance of XHTML in order to enhance interoperability between DASE-DA and DVB-HTML markup content.

Mr. Adams said the Scalable Vector Graphics (SVG) Working Group of the W3C has recently noted that DASE-2 Requirements have specified support for SVG as a priority #3 requirement. At the request of the T3/S17 chair, the chair of the SVG WG has solicited its members to participate in the T3/S17 work to include SVG support in DASE-2. Mr. Adams said Hewlett-Packard has contacted T3/S17 in regards to possible participation in this work.

13.7 Other Issues

Mr. Adams reported that Craig Smithpeters (Nielsen Media Research) has agreed to serve as the vice-chair of T3/S17. He said Mr. Smithpeters has been very active in T3/S17 over the past year, and that Nielsen continues to graciously sponsor T3/S17 meetings at its site in Dunedin, FL.

13.8 DASE-2 Ad Hoc Group Requirements Report

Following completion of Mr. Adam's formal T3/S17 status report, discussion resumed regarding the work of the Ad Hoc on DASE-2 Requirements (relating to Item 13.3, above). Mr. Chernock reviewed the process agreed to at the last T3 meeting, specifically: T3 assigned an ad hoc composed of Mr. Chernock (chair), Art Allison, Adam Goldberg, Jian Huang, Merrill Weiss, Glenn Adams, and Skip Pizzi to study the issue. He said the Ad Hoc had reached a consensus opinion that the Requirements Document submitted by T3/S17 to T3 (**Attachment 11**) should be characterized as a "work plan," rather than a formal requirements document. Mr. Chernock reported that the AHG felt the prioritization listed in the document represented a combination of T3/S17's view of relative importance as well as a measure of the resources available to allow completion of the various items by the dates promised.

Mr. Chernock stated that the Ad Hoc further felt the document should be revised to make the separation between work plan and requirements clear. He said document T3-571 (**Attachment 12**) is a recommendation by the Ad Hoc to T3/S17 on modifications to be made to achieve this goal. Additionally, he said, the group felt that a modified document of this nature should be submitted to T3 for informational purposes, with the message that should any organization feel that functionality they desire is not adequately prioritized or represented, then they should contribute resources to the activity necessary to allow it to be completed in a more timely fashion.

Mr. Chernock suggested that should T3/S17 wish to create a pure set of requirements, then they should be separated from any work plan aspects and that this activity should be performed in conjunction with T3/S17's customers: T3 and AS.

Mr. Adams, while disagreeing with certain conclusions of the AHG, said he—as T3/S17 chair—would be willing to re-examine the specialist group's plans for DASE-2. Chairman Justus asked for comments from T3 members on this issue.

Richard Streeter (CBS) observed that a significant disagreement exists regarding whether the conclusions of the AHG represented the consensus of the group. Comments were offered from several members, including Mr. Miller, who said it seemed clear that consensus was reached. Skip Pizzi (Microsoft) suggested that such a conclusion was not necessarily accurate.

Chairman Justus said he was pre-disposed to accept the recommendation of the AHG and to accept group's document as a work plan for T3/S17. Mr. Allison agreed, pointing out that the process suggested was appropriate in this case. Mr. Adams disagreed, saying it was unfair of T3 to impose certain requirements on T3/S17. He added that the process for developing a list of requirements within ATSC was unclear.

Following some discussion, Mr. Chernock **moved** that T3 adopt T3-571 as the DASE-2 work plan for the specialist group to follow, and that T3/S17 develop a schedule to carry out the necessary work, with identification of major milestones as appropriate. **Second** by Mr. Weiss. The motion was approved on a voice vote.

13.9 CableLabs Communication

Mr. Richer reported on a conversation he had yesterday with Richard Green from CableLabs relating to DASE and OpenCable. He called member's attention to a statement from Mr. Green, specifically:

"I believe that there would be significant advantage in harmonizing the OCAP specification with DASE. As we have discussed, if we can minimize the technical differences in the two specifications, the risk to manufacturers will be reduced. Since time-to-market is important to the Cable industry, harmonization can expedite the

deployment in the U.S. Also, working together to remove unnecessary differences could expedite the international standardization (in the ITU) as well. I would like to propose that we meet jointly with a team of software technical experts from both groups and assess the feasibility of such an effort.”

Mr. Richer described Mr. Green’s note a positive development and expressed the hope that it would help move DASE forward. He suggested that a small group be formed to work with CableLabs to pursue the proposed harmonization.

Mr. Allison said he strongly supports this initiative, saying it is important to explore the harmonization proposed. Mr. Adams agreed, saying a number of challenges exist but that work in this area is important for the future of DASE. He suggested that T3/S17 discuss this issue at its next meeting and explore methods for moving forward.

Jonathan Courtney (Sun) said such harmonization could serve as a good opportunity to refine certain technical issues relating to JavaTV implementation. Mr. Pizzi agreed that such work could be worthwhile for all parties. Additional comments of support were received from Brian Smith (Philips) and Jian Huang (Canal+ Technologies).

Chairman Justus observed the consensus of T3 to direct T3/S17 to initiate plans for discussions with CableLabs, working through Mr. Richer. He asked Mr. Adams to lead the effort and to report back to T3 as soon as possible. Mr. Richer was asked to respond immediately to CableLabs saying that ATSC would like to work with them.

13.10 ITU Correspondence

Mr. Richer called member’s attention to a letter from Brian Aldous, chairman of ITU-R Working Party 6M regarding “Progress Report on Harmonization of Procedural Functionalities for Interactive TV Applications.” He observed that this as a good step forward, and he suggested that a prompt response would be appropriate. Chairman Justus directed Mr. Adams for draft a response and forward it to Mr. Richer for preparation of an official ATSC response to Mr. Aldous’ letter.

14. REPORT OF THE SPECIALISTS GROUP ON TRANSACTIONAL SERVICES, S16 (EDWIN HEREDIA)

Edwin Heredia (Microsoft) reported on the work currently underway within the specialist group.

14.1 Activity Report

Mr. Heredia reminded the committee that the goal of the Transactional Services specialist group is to build the protocol infrastructure required to support transactional services using an interactive channel (a telephone modem, a cable modem, or other means). During the last two months, the specialist group has held two teleconferences and one face-to-face meeting in Los Angeles. The face-to-face meeting was coordinated jointly with T3/S17 to define how to support HTTP in ATSC platforms. Mr. Heredia said T3/S16 is planning to have another joint meeting with T3/S17 on April 22nd to finalize the HTTP discussions, and to determine common requirements regarding security.

Mr. Heredia reported that the specialist group is working to define the required protocol structure for interactive channels, in a manner compatible with current practice in networking and server/client communications. For this reason, he said the specialist group has determined that core protocols for remote connections should include TCP, IP, UDP, FTP, HTTP, and TLS.

Regarding service announcement, Mr. Heredia said the specialist group has determined that an announcement mechanism, compatible with PSIP, should be established to advertise applications with remote interactivity. The specialist group is still debating the extent of required

support for session management and establishment protocols, the need for late-binding mechanisms, and other issues.

15. REPORT OF THE SPECIALISTS GROUP ON VIDEO, S6 (MARK EYER)

Mr. Eyer reported on current activities within the specialist group.

15.1 Move to Forward to ATSC Ballot, the Revised Amendment No. 1 to A/53B

Mr. Eyer reported that comments received on the ballot of Amendment 1 to ATSC A/53B (to add Active Format Description to Annex A) have been processed by the resolution group in T3/S6. Of the eight comments received, all were deemed editorial in nature but one. The substantive comment involved the timing aspect of AFD and bar data, and upon reflection the group agreed that the oversight needed to be corrected. Language mirroring that found in the DVB AFD specification was agreed upon.

Mr. Eyer said a new draft Amendment 1 to A/53B (**Attachment 13**) and a comment resolution matrix (**Attachment 14**) were developed and distributed. Because these change were minor, he urged that T3 approve Amendment 1 for ballot to the full ATSC membership.

Mr. Eyer **moved** that T3-560r1 as amendment by T3/S6-148 be forwarded to a vote of the full membership. **Second** by Mr. Miller. Discussion followed relating to references and issues regarding certain field definitions. The motion was **approved** on a voice vote.

15.2 Discussion on New Chair for T3/S6

Mr. Eyer announced that he was stepping down as chair of T3/S6 because of his T3/S8 commitments. He announced that Mr. Miller has agreed to serve as the chair of T3/S6.

Chairman Justus thanked Mr. Miller for taking on the task, and asked him to integrate audio activities in the work of the specialist group. Mr. Miller agreed that this would be appropriate, and **moved** that the scope of T3/S6 be expanded to include the work previously done in the specialist group on audio. **Second** by Mr. Eyer. The motion was **approved** on a voice vote.

16. OTHER BUSINESS

Mr. Allison noted that no liaison currently exists between ATSC and SCTE DVS following the resignation of Regis Crinon as T3/S13 chair. Chairman Justus asked Mr. Allison to serve as the liaison. He observed consensus that T3 should recommend to the Board that Mr. Allison serve as the ATSC liaison to SCTE.

17. SCHEDULE OF UPCOMING T3 MEETINGS

The next meeting of the Technology Group on Distribution will be held on June 25, 2002, in Chicago. The current 2002 T3 meeting schedule is as follows:

August 14, 2002

October 8, 2002

December 2, 2002

18. ADJOURNMENT

There being no further business before T3, Chairman Justus adjourned the meeting at 2:30 p.m.

Action Items Developed at the April 17 Meeting

The following Action Items were developed at the T3 meeting of April 17, 2002.

- 1) Whitaker to post the ballot results summary provided in printed form at this meeting to the T3 reflector.
- 2) Chernock to post to the Proposed TSFS Standard, upon finalization in T3/S13, to the T3/S13 reflector for a two week comment period, and if no substantive issues are raised, the document shall be posted to the T3 reflector for a two-week comment period. If no substantive comments are received during this comment period, the document shall be delivered to ATSC staff for a four week ballot of T3.
- 3) Chernock to post the draft aggregated event table document developed by Eddie Schwalb to the T3/S13 reflector and to then bring back to T3 a proposal for moving forward, if the specialist group determines that such activity would be appropriate work for T3/S13.
- 4) Shah to distribute an advanced copy of the Proposed Satellite Broadcast Standard, upon finalization in T3/S14A, to the T3 reflector two weeks prior to the next T3 meeting to facilitate review and comment.
- 5) Eyer to form a comment resolution AHG to address comments received during the T3 ballot of A/65A Amendment 2.
- 6) Eyer to form a comment resolution AHG to address comments received during the T3 ballot of A/65A Amendment 1A. The ad hoc group shall consist of the following persons: Weiss (chair), Eyer, Allison, and others which could include commenters.
- 7) Adams to bring to T3/S17 the question of moving forward on DASE-1, currently at Candidate Standard status, and to return a consensus recommendation to T3 at the June 25 meeting. The possible options shall include: 1) recommend to extend the Candidate Standard status for a specified period of time, 2) recommend that DASE-1 be forwarded to a vote of the full membership, or 3) recommend that the DASE specification be returned to the Working Draft status.
- 8) Adams to report to T3/S17 that T3 adopted T3-571 as the DASE-2 work plan for the specialist group to follow, and that T3 directs the specialist group to develop a schedule to carry out the necessary work, with identification of major milestones as appropriate.
- 9) Adams to report to T3/S17 the expression of interest from CableLabs regarding DASE harmonization, and that the specialist group is directed to initiate plans for moving forward on such efforts, working through Richer—initially at least. Adams shall lead the effort and to report back to T3 as soon as possible on important developments.
- 10) Richer to respond to Richard Green of CableLabs regarding DASE harmonization, reporting that ATSC would like to work with them to the extent possible.
- 11) Adams to draft a response to Brian Aldos, chairman of ITU-R Working Party 6M, regarding correspondence titled “Progress Report on Harmonization of Procedural Functionalities for Interactive TV Applications.” Adams shall forward a draft response to Richer for preparation of an official ATSC response.
- 12) Eyer for forward to ATSC staff T3-560r1 as amended by T3/S6-148. Staff shall then send the document to a vote of the full membership.
- 13) Chairman Justus to report to the Board of Directors that T3 recommends that Art Allison (NAB) serve as the ATSC liaison to SCTE

Attachments

Attachment 1: Attendance list

http://www.atsc.org/sg/T3/Apr_17_2002/Documents/attachment_1_t3_attendance.doc

Attachment 2: Draft agenda

http://www.atsc.org/sg/T3/Apr_17_2002/Documents/attachment_2_draft_t3_agenda_4_17_02_revB.doc

Attachment 3: Minutes of February 13, 2002, meeting

http://www.atsc.org/sg/T3/Feb_13_2002/T3_570_t3_minutes_2_13_02.doc

Attachment 4: T3/S9 Status Report

http://www.atsc.org/sg/T3/Apr_17_2002/Documents/attachment_4_T3S9Report4_17_02.ppt

Attachment 5: Draft Amendment 2 to A/53B

http://www.atsc.org/sg/T3/Apr_17_2002/Documents/attachment_5_T3S8475_A53B_Amendment_2.pdf

Attachment 6: T3/S8-479r1, Content Identification and Labeling for ATSC Transport

http://www.atsc.org/sg/T3/Apr_17_2002/Documents/attachment_6_T3S8479r1_VISAN_Carriage_Std.doc

Attachment 7: T3/S8-462, Requirements for a Content Identification System

http://www.atsc.org/sg/T3/Apr_17_2002/Documents/attachment_7_T3S8462.doc

Attachment 8: T3-569R2, DASE 2 Requirements

http://www.atsc.org/sg/T3/Apr_17_2002/Documents/attachment_8_T3_569R2.doc

Attachment 9: T3S17-301R0, DASE-2 Development Work Assignments

http://www.atsc.org/sg/T3/Apr_17_2002/Documents/attachment_9_T3S17_301R0.doc

Attachment 10: ITU-R Liaison

http://www.atsc.org/sg/T3/Apr_17_2002/Documents/attachment_10a_TEMP_049Rev1e.doc

http://www.atsc.org/sg/T3/Apr_17_2002/Documents/attachment_10b_TEMP_053E.doc

http://www.atsc.org/sg/T3/Apr_17_2002/Documents/attachment_10c_TEMP_055E.doc

http://www.atsc.org/sg/T3/Apr_17_2002/Documents/attachment_10d_098e.doc

http://www.atsc.org/sg/T3/Apr_17_2002/Documents/attachment_10e_111e.doc

http://www.atsc.org/sg/T3/Apr_17_2002/Documents/attachment_10f_113e_sans_attachment.doc

Attachment 11: T3-569R0, DASE-2 Requirements

http://www.atsc.org/sg/T3/Apr_17_2002/Documents/attachment_11_T3_569R0.doc

Attachment 12: T3-571, DASE-2 Work Plan

http://www.atsc.org/sg/T3/Apr_17_2002/Documents/attachment_12_T3571.doc

Attachment 13: T3 Doc. 560r1, Draft Amendment 1A to A/53B

http://www.atsc.org/sg/T3/Apr_17_2002/Documents/attachment_13_T3_560r1_Amd1A_to_A53B.pdf

Attachment 14: T3 Doc. 572, Ballot Comment Resolution to Amendment 1 to A/53B

http://www.atsc.org/sg/T3/Apr_17_2002/Documents/attachment_14_T3_572_Ballot_Resolution_Amd_1A_to_A53B.pdf