
APPROVED Minutes
Advanced Television Systems Committee, Inc.
Board of Directors Meeting
Tribune, 435 N. Michigan Avenue, Chicago, IL
June 27, 2002

1. Call to Order; Determination of Quorum; Approval of Agenda

Jay Adrick, substituting as Chair for Phil Livingston, called the meeting to order at 10:05 AM at the Tribune Tower in Chicago, IL. The attendees and phone participants introduced themselves. The Attendance List is (**Attachment 1**). A quorum was determined and the agenda (**Attachment 2**) was approved.

2. Opening Comments

Mr. Adrick welcomed the attendees and apologized for Phil Livingston's absence.

3. Consideration of the Draft Minutes of May 14, 2002

The Board approved the draft Minutes of the Board meeting on May 14, 2002.

4. Report of the President

a) Membership Report

Mr. Richer presented the membership report (**Attachment 3**), noting a more positive trend as new members outnumber resignations for the past six weeks. Mr. Richer mentioned that a few members who had resigned had recently expressed interest in reinstating their membership. Mr. Richer thanked those Board members who had brought some influence to bear on these organizations. Mr. Richer described the new "individual observer" member category and its benefits, especially to active consultants.

b) Status of Letter Ballots

Mr. Richer reported the status of letter ballots (**Attachment 4**). It was noted that Amendment 1 to A/90 is now available on the ATSC website and that Amendment 1 to A/53B and the PSIP Guidelines Recommended Practice would soon be available also.

c) Financial Report

Mr. Richer gave the financial report for 2002 as of the end of May (**Attachment 5**). Mr. Richer pointed out the dramatic decrease in interest rates compared to last year, and mentioned that this presents yet another challenge in adhering to the budget.

d) Annual Meeting Review

Mr. Richer reported that the Annual Meeting had been a great success, and that he had received very positive feedback from speakers and attendees regarding the high quality of the proceedings. Of particular note were the positive remarks from Eddie Fritts (NAB), Robert Sachs (NCTA), and David Donovan, (MSTV) regarding the activities of the ATSC. Mr. Richer thanked the meeting sponsors and the Board members who had assisted in lining up the excellent speakers and panelists.

e) Implementation of Website, Email Reflector, & Conference Bridge Access Policy

Mr. Richer noted that the new policy has received very few complaints. Jerry Whitaker will be purging the current reflector lists during the first few weeks of July. The implementation of the new phone bridge is waiting on the installation of an ISDN line that will support it. Mr. Richer pointed out that a benefit of the phone bridge is that members would no longer pay a per-minute fee to a conference service. However, participants will have to pay their own long distance charges. Mr. Richer also brought to the attention of the Board the recent posting to the website of the extensive DTV FAQ created by Jerry

Whitaker and the IS, and invited ATSC members to link to this valuable resource from their own company websites.

f) Other

Mr. Richer reported that the DASE meetings that had taken place in Seoul in late May had been eminently worthwhile, and that the South Koreans have a great deal of enthusiasm for DASE and its applications. The DASE trials surrounding the World Cup games were a very exciting project for all involved and a great success for ATSC. He congratulated the World Cup Trial participants (KBS, MBC, SBS, ETRI, LG Electronics, Samsung, Daewoo, AirCode & Alticast)

Mr. Richer introduced an idea to offer sponsorships for upcoming editions of the ATSC newsletter in order to make the newsletter self-supporting. Mr. Adrick encouraged the ATSC staff to pursue this idea.

He also mentioned that ATSC and CDTV would collaborate in sponsoring a seminar in Toronto on October 15 – 17, and that ATSC would also sponsor the Tech Retreat taking place next February in a location to be decided. Board members were thus warned that Mr. Richer would be seeking speakers and sponsors for both events.

5. Budget and Finance Committee

Lynn Claudy, chair of the Budget and Finance Committee, reported that IEEE has formally requested that their dues be assessed at \$1,500, the level of universities and government agencies. The Budget and Finance Committee is considering an additional dues category for “professional societies”.

6. Nominating Committee

Jay Adrick, chair of the Nominating Committee, reported that he had three non-Board individuals interested in serving on the Nominating Committee. Lynn Claudy (NAB) moved to accept them (Wendy Aylsworth, Warner Bros., Ed Barrett, Sony, and Louis Libin, WOW DTV) without further discussion. This motion was seconded and approved. Mr. Adrick expressed his hope that the formation of the policy by which to nominate new Board members for the places that will fall vacant at the end of this year will be in place by mid September.

7. Membership Committee

Jay Adrick, chair of the Membership Committee, reported that the next meeting of this group would be on July 19, 2002 at 1 PM Eastern and that the immediate task is to create a target list for recruiting new members. Former members as well as non-members who have been included on the ATSC reflectors are among those who will be approached.

8. Report of the Technology Group

Jerry Whitaker reported on the status of T3 activities (**Attachment 6**).

9. Report of the Implementation Subcommittee

Mr. Allison reported on the status of IS activities (**Attachment 7**).

10. Report of the Applications Subcommittee

Ira Goldstone, Tribune, said that the AS had met the previous day. He announced that Ed Caleca had stepped down from his position as co-chair, and asked if anyone was interested in taking up the position. He further mentioned that the subcommittee has codified the document describing the optimal DTV receiver and that it will soon become available to members. Mr. Goldstone reported that it was the general feeling of the group that this work be undertaken by “baby steps” toward more sophisticated receivers and the ultimate goal of expanded functionality.

11. DASE

Mr. Richer informed the Board that the Korean consortium responsible for the DASE trials during the World Cup have also indicated an interest in conducting a trial in the United States. Any party interested in being a part of these efforts may contact Mark Richer.

a) OpenTV Patent Statement

The patent statement received from OpenTV was put before the Board and after a brief discussion a motion was made to accept the letter as it stands. This motion was seconded and approved.

b) Conformance and Test Suite Custodian

Mr. Richer presented a document outlining his vision of the ATSC DASE Conformance process. Mr. Richer reported that he has asked Sun to draft an agreement for ATSC, CEA or a third party to act as custodian for the test suites, and that he was waiting on a response from them. Some discussion ensued of which organization, ATSC, CEA or a third party, could best perform these functions. Mr. Richer reported that he has discussed the issue with Ralph Justus, CEA. Mr. Justus agreed to provide feedback regarding CEA's interest in taking on this activity. Mr. Barrett suggested that the Board consider the revenue generating possibilities if ATSC were to act as test custodian. Art Allison, NAB suggested that the Board consider whether conformance testing for content was also necessary and Mr. Plummer suggested that conformance of the emitted stream may be an issue. Mr. Tawil suggested that if conformance and certification apply to content, emission and consumer products, perhaps ATSC should act as test custodian. Mr. Richer said that he would look into these issues.

c) OCAP Interoperability Meeting

Mr. Richer reported on the positive and productive meeting ATSC had held with representatives from CableLabs the previous day. The list of attendees is **Attachment 8**. Mr. Richer promised to distribute his notes on the proceedings to the Board members. The session was primarily used to outline potential business scenarios and discuss how the handling of such situations should best be approached. The action items that developed from the discussion are focused on promoting harmonization between the DASE and OCAP specifications. A follow up meeting with CableLabs is tentatively scheduled for July 31- August 1, in Mountainview, CA.

12. ATTC Liaison Report

Paul DeGonia gave the ATTC liaison report.

13. Executive Session

No Executive Session was held.

14. Other Business

A brief overview of ATSC Forum activities was outlined by Wayne Luplow and Mark Richer. The Forum's current focus is on the CITEL meetings to be held in Brazil in mid July. The Forum's recent visit to Mexico was also mentioned. The formal declaration of that country's choice of standard is presently being delayed by the efforts to redefine Mexican telecommunication policy.

Mark Richer mentioned the recent Canadian government decision regarding the roll out of DTV. Michael McEwen of CDTV will be asked to give a briefing at the next Board meeting on the status of DTV in Canada.

15. Schedule of Board of Director Meetings

The necessity of the August 15 Board meeting and its possible logistics was discussed. A decision regarding the meeting will be made at the end of July. The schedule of Board meetings in 2003 was also briefly discussed. The idea of coupling Board meetings with meetings of other ATSC groups appeared popular. The question of whether the Annual Meeting should be held again in May or perhaps moved to another date, and possibly also coupled with another event, was also discussed. The ATSC staff will propose a meeting schedule for 2003. Following is the schedule for ATSC Board of Directors meetings in 2002:

- Aug. 15 (tentative)
- Oct. 22 (PM only) at DirecTV in LA
- Dec. 18

16. Adjournment

Mr. Adrick thanked Tribune for hosting the meeting. The meeting was adjourned at 12:45 PM.

Attachments

- Attachment 1: Attendance list
- Attachment 2: Draft agenda
- Attachment 3: ATSC Membership report
- Attachment 4: Letter Ballot report
- Attachment 5: Financial report
- Attachment 6: T3 Report
- Attachment 7: IS Report
- Attachment 8: OCAP Interoperability Meeting attendees

**ATSC Board of Directors Meeting
Attendance List
June 27, 2002**

Board Members Present

Jay Adrick, Harris
Ed Caleca, PBS*
Lynn Claudy, NAB
Joseph Flaherty, CBS*
Ira Goldstone, Tribune
Wayne Luplow, Zenith
Sam Narasimhan, Motorola
Robert Plummer, DirectTV
Glenn Reitmeier, IEEE*
Brian Smith, Philips
Victor Tawil, MSTV

Board Members Absent

Wendell Bailey, NBC
Bill Check, NCTA
Tom Hankinson, ABC
Ralph Justus, CEA
Phil Livingston, Panasonic
Michael McEwen, CDTV
Peter Symes, SMPTE

ATSC Members and Guests

ATSC President	Mark Richer
ATSC Director of Operations	Tara Healy
ATSC Technical Director	Jerry Whitaker
ATSC IS Chairman	Art Allison
ATTC	Paul Degonia
Former T3/S8 Chair	Bernard Lechner
Cox Broadcasting	Sterling Davis
Mitsubishi	James Fang
Samsung	C.B. Patel
Sharp	Craig Tanner
Sony	Ed Barrett

**Revised Draft Agenda
Advanced Television Systems Committee, Inc.
Board of Directors Meeting
Tribune, 435 N. Michigan Avenue, Chicago, IL
June 27, 2002 from 10:00 AM to 3:00 PM**

1. Call to Order; Determination of Quorum; Approval of Agenda
2. Opening Comments (J. Adrick)
3. Consideration of Draft Minutes of May 14, 2002 Meeting
4. Report of the President (M. Richer)
 - a. Membership Report
 - b. Status of Letter Ballots
 - c. Financial Report
 - d. Annual Meeting Review
 - e. Implementation of Website, Email Reflector & Conference Bridge Access Policy
 - f. Other
5. Budget & Finance Committee (L. Claudy)
6. Nominating Committee (J. Adrick)
7. Membership Committee (J. Adrick)
8. T3 Report (J. Whitaker)
9. IS Report (A. Allison)
10. AS Report (E. Caleca / I. Goldstone)
11. DASE (M. Richer)
 - a. OpenTV Patent Statement
 - b. Conformance and Test Suite Custodian
 - c. OCAP Interoperability Meeting
12. ATTC Liaison Report (P. DeGonia)
13. Executive Session
14. Other Business
15. Schedule of Future Board Meetings
 - a. 2002: Aug. 15 in DC; Oct. 22 (PM) in LA; Dec. 18 in DC.
 - b. 2003 Meetings Discussion
16. Adjournment

ATSC Membership Report

June 27, 2002

New Member:

MetaTV
Michael Dolan
Stradis, Inc.
TTA

Resignations:

DTVIA

Total Members:

May 14, 2002	145
June 27, 2002	148

Letter Ballot Description	Vote	Comments
ATSC Ballots:		
Data Broadcast A/90 Amendment 1	22 yes; 1 no; 0 abs; 117 nv	Approved May 14, 2002
Editorial Privilege	20 yes; 2 no; 1 abs; 117 nv	
DTV Standard A/53B Amendment 1	22 yes; 1 no; 0 abs; 117 nv	Approved May 23, 2002
Editorial Privilege	22 yes; 1 no; 0 abs; 117 nv	
PSIP Guidelines - Recommended Practice	23 yes; 0 no; 2 abs; 115 nv	Approved June 25, 2002
Editorial Privilege	24 yes; 0 no; 1 abs; 115 nv	
T3 Ballots:		
ARM (re-ballot)		comment review
PSIP A/65A Amendment 2		comment review
PSIP A/65A Amendment 1		comment review

ATSC, Inc.
2002 Financial Report as of 5-31-02

	2002 Budget	Jan 1 - May 31 Actual
REVENUE		
Membership Dues	\$ 925,000	\$ 885,351
Seminar Revenue	\$ 64,800	\$ 33,214
Interest Income	\$ 22,000	\$ 3,994
Meeting Sponsorships	\$ 3,000	\$ 4,000
TOTAL REVENUE	<u>\$ 1,014,800</u>	<u>\$ 926,558</u>
EXPENSE		
Program Services:		
Seminars	\$ 60,420	\$ 15,322
ATTC Dues	\$ 50,000	\$ 50,000
Seed Funding for "ATSC Forum"	\$ 100,000	\$ 108,000
Total Program Services:	<u>\$ 210,420</u>	<u>\$ 173,322</u>
Management & General:		
Salaries & Benefits	\$ 622,766	\$ 254,783
Professional Fees	\$ 36,960	\$ 7,935
Travel & Business	\$ 48,950	\$ 21,813
Rent	\$ 47,765	\$ 18,890
Telephone & Internet	\$ 27,502	\$ 9,548
Duplication & Printing	\$ 14,200	\$ 8,193
Office Supplies & Equipment	\$ 12,600	\$ 1,454
Insurance	\$ 13,125	\$ 3,867
Postage & Shipping	\$ 3,600	\$ 647
Newsletter	\$ 26,800	\$ 6,471
Meetings	\$ 19,100	\$ 1,056
Other	\$ 5,400	\$ 4,284
Total Management & General:	<u>\$ 878,768</u>	<u>\$ 338,942</u>
GRAND TOTAL EXPENSES	<u><u>\$ 1,089,188</u></u>	<u>\$ 512,264</u>
ESTIMATED NET INCOME	<u><u>(\$74,388)</u></u>	

Report to the Board of Directors Status Report: Technology Group on Distribution

The last meeting of the ATSC Technology Group on Distribution was held on Tuesday, June 25 in Chicago. This report summarizes the actions taken at that meeting.

1) General Items

- Work is underway to revise A/54, the Guide to the Digital Television Standard. Work on the document has been parceled out to several specialist groups, including T3/S8, T3/S9, and T3/S10, with the goal of having a document ready for ballot before the end of this year.
- All appropriate specialist groups are working on the standardization and implementation issues relating to the robust mode system proposals currently being considered in T3/S9, as directed by the Board at its February meeting.
- An ad hoc group is being formed to address standards architecture issues and to report back to T3 at the August 14 meeting with recommendations for moving forward.

2) T3/S8, Transport

- Comment resolution work on Amendment 2 to A/53B has been completed and the document will be sent to a ballot of T3.
- Comment resolution work on Amendment 1A to A/65A (Directed Channel Change) has been completed and the document will be sent to a ballot of the full membership.
- Comment resolution work on Amendment 2 to A/65A has been completed and a revised document, which includes certain additional changes (tighter system time tolerance, usage of caption service descriptor, and clarification of cable descriptor usage), has been approved for a ballot of the full membership.
- The draft Content Identification and Labeling standard has been approved for a ballot of T3. Mr. Richer will send a letter to ISO encouraging the organization to complete their related work.

3) T3/S9, Transmission

- Laboratory testing of the NxtWave/Zenith and Philips systems has been completed by VETC. A specialist sub-group led by Robert Seidel (CBS) is analyzing the test data and plans to issue a report to T3/S9 by July 17, 2002. Also, Broadcom has stated its intention to supply equipment for testing.
- The VSB Enhancement Testing Consortium (VETC) will not complete its work by the end of July as previously planned. The organization will provide an estimated completion date after certain outstanding equipment issues are resolved.

4) T3/S13, Data Broadcast

- Art Allison, as ATSC liaison to SCTE, has been asked to establish and chair an ad hoc group involving—among others—the chairs of T3/S8, T3/S13, and T3/S14A, for the purpose of coordinating work with SCTE on aggregated tables, and to report back at the next T3 meeting on progress made.

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- T3 has authorized a new work item for T3/S13 to develop and draft a revision to A/90 (A/90A) that addresses the issues identified as requiring attention since A/90 was first published.

5) T3/S14A, Satellite

- A draft satellite broadcast standard is expected to be ready for consideration prior to the August 14 T3 meeting.

6) T3/S16, Transactional Services

- T3/S16 is working to develop a standard that specifies protocols to enable interactive television applications using the combination of broadcast download channels and an interactive two-way channel.

7) T3/S17 DTV Software Application Environment

- T3/S17 held its most recent meeting on May 21–22 in Seoul, Korea. This venue provided an opportunity for a number of Korean broadcasters, equipment manufacturers, service providers, and government parties to participate more actively in work on DASE
- Another first for DASE was recorded with the World Cup broadcasts from Seoul this month. The DASE Candidate Standard was used to provide interactive DTV services during the 2002 FIFA Korea Japan World Cup, with support from various Korean broadcasters, professional equipment and consumer electronics manufacturers, and federal agencies.
- At the request of T3/S17, the Candidate Standard status for the DASE-1 suite of documents has been extended by T3 until October 31, 2002. The specialist group expects to present a final document to T3 at the August meeting for approval of a ballot of the full membership.
- T3/S17 developed and submitted to T3 documents describing the DASE-2 requirements, work plan, prioritization, and schedule. Following considerable discussion, T3 voted to direct T3/S17 to revise the requirements document to follow more precisely a guiding document previously approved by T3.

8) T3/S18, ARM

- The draft Application Reference Model Standard has been approved for a vote of the full ATSC membership.
- Mike Dolan, chair of T3/S18, reported that the specialist group has concluded its mission and purpose, and T3 subsequently voted to conclude T3/S18 by merging any remaining work into T3/S13.

The next meeting of the Technology Group on Distribution will be held on August 14, 2002 in Washington, D.C.

Respectfully submitted:

Jerry Whitaker
Secretary, T3

**ATSC ATV Implementation Subcommittee [IS]
June 2002 Report to ATSC Board of Directors**

The ATSC Implementation Subcommittee last met on Thursday, 16 May 2002, at NAB Headquarters in Washington, D.C.

The meeting featured guest speakers. First, Max Muterspaugh of Thomson CE reported on CEA-909 and antenna implications. This standard is a smart antenna interface that permits steering and control of a set-top, rooftop, or attic antenna. He reported field tests that showed promising results. Next, Sam Reishcott of Nxtwave made a presentation on implementation of control for smart antennas using the 909 standard. Nxtwave has developed and tested a prototype antenna using the EIA/CEA-909 interface.

The IS has approved a Report on Latency and Timing Issues (IS-266) which has been placed on the ATSC web page.

The RF Issues Working Group (RFGW) issued preliminary findings to the IS in two forms. The first was a tool (a spread sheet) that can be used to calculate required field strength with differing assumptions. The second was a series of assumptions for UHF, H-VHF and L-VHF with the resulting field strengths. The RFGW assumptions were vetted over a series of meeting and when used result in required field strengths without significant multipath that are 6-12 dB higher than the FCC required. They reported that use low noise amplifiers would compensate or reduce the required level for UHF and H-VHF. However for L-VHF, the predominate problem is the total sky noise, and the range of such as documented in ITU papers is large. Their conclusion was that only power increases would address the field strength shortfall for L-VHF. There was considerable discussion about this presentation. Outdoors antennas were assumed in this work. The findings assume that receiver SNR requirements are constant. The IS considers this interim work and not a final report. All IS members have been requested to review the model. From this baseline, antennas other than outdoors may be addressed. Other future work includes FCC propagation model analysis and advanced receiving strategies, such as smart antennas, diversity receiving antennas, the impact of a distributed transmission model, and an SNR vs. multipath assessment.

SEWG completed the Report on Finding on latency and timing in the DTV distribution chain; which IS members accepted as an appropriate Finding.

The Chair of the Field Interoperability Evaluation Working Group (FIEWG) is still open.

The Education and Training activity has an article on closed captioning by Gerry Field accepted for publication soon. Two others will be forthcoming, one of them on VSB enhancements. A SMPTE seminar in Toronto will feature a DTV status overview, and segments on closed captioning and VSB enhancement. A second Ennis seminar is tentatively scheduled for September in Boston addressing ATSC general activities, PSIP, or data broadcasting. A set of FAQs has been completed and has been posted on the ATSC web site. On the educational front, beginning with the next ATSC newsletter, it is intended to make at least one article educational/tutorial in nature. PSIP has already been done, and the next newsletter will feature closed captioning. ATSC has a regular slot in the SBE newsletter.

The PSIP WG has outlined an approach for intercommunication and control of DTV stations' PSIP and related data. The need for communication over an IP transport using Ethernet had unanimous support and the content needs to be in a self-describing format. A draft schema using an XML-type of command structure is being updated to reflect decisions made in the June 5 face-to-face meeting.

Attendance List
OCAP/DASE Adhoc Harmonization Meeting
Tribune, McCormick Boardroom, 435 N. Michigan Avenue, Chicago, IL
June 26, 2002 from 10:00 AM to 5:00 PM

Attendees:

Glenn Adams, XFSI
Ralph Brown, Cablelabs
Jon Courtney, Sun
Mike Dolan, Consultant
Bill Foote, Sun
Martin Freeman, Philips
Edwin Heredia, Microsoft
Jian Huang, Canal-Plus
Alan Kaplan, Panasonic
Jon Piesing, Philips
Mark Richer, ATSC
Frank Sandoval, Cablelabs
Craig Smithpeters, Nielsen