

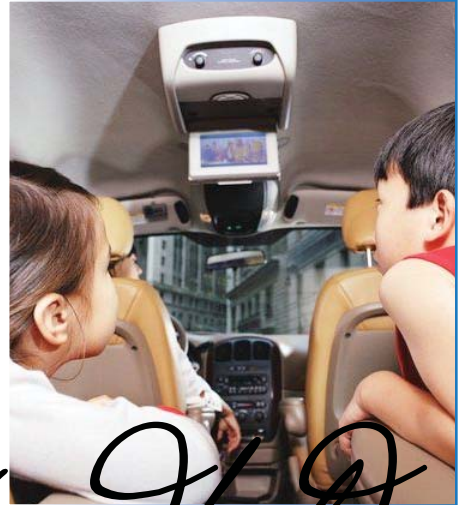
# the standard

Advanced  
Television  
Systems  
Committee  
Inc.

News from ATSC, Volume Eight, Issue Two, June 2007

## ATSC and the Evolution of

# Mobile / Handheld



Mobile communication is rapidly becoming commonplace at work, school, and play. Handheld devices are changing the way we are informed, and the way we are entertained – we are no longer tied to the desktop or home television set in order to obtain data. From handheld devices like PDAs, smartphones, and laptops to the television displays available in millions of automobiles on the market today, consumers are demanding portable television content. In doing so, they bring to attention the urgent need for a common standardization.

The ATSC-M/H Standard will facilitate broadcasters' use of their DTV broadcast channels to provide new services directly to small hand-held receivers, laptop computers and vehicles moving at a high rate of speed. The standard will be backwards compatible, allowing operation of existing ATSC services in the same RF channel without an adverse impact on existing receiving equipment.

Mark Richer, President of the ATSC, explains, "A major priority of our recently created strategic plan is the development of a standard for mobile and handheld services. We want to encourage participation in our standards

development process, and we welcome technical proposals for consideration by our Technology & Standards Group (TSG)."

A new ATSC Specialist Group, TSG/S4, has been formed and charged with developing the ATSC-M/H standard for mobile and handheld services using backward-compatible enhancements to the ATSC DTV emission. Mark Aitken of Sinclair Broadcasting Group was appointed by TSG chair Bill Miller to chair TSG/S4; and Dan Borowicz of ION Media has agreed to serve as Vice Chair of the new group. Mr. Aitken believes that this is a great opportunity for broadcasters and equipment manufacturers, "I am very excited about the prospects of a broadcaster based mobile and handheld service. I believe that it is critical that we complete the work on ATSC-M/H as soon as possible because an industry standard is one of the critical elements necessary for broadcasters to launch a successful business."

The TSG issued a Request for Proposals (RFP) for ATSC-M/H on May 21, 2007 with the goal of identifying potential specifications to be used for ATSC-M/H. The RFP states that the new standard will specify the physical

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## Mobile/Handheld... (continued from Page 1)

layer (modulation and FEC), transport, signaling and announcement (including EPG) optimized for mobile and handheld services, and other parameters as necessary for carriage of video, audio, and data essence and metadata. It also identifies a number of other areas that might be specified such as data broadcasting, interactive and conditional access. Although TSG will consider proposals for specific elements of the standard, respondents to the RFP are encouraged to propose complete system solutions. Respondents to the RFP may propose an evolutionary approach to the development of the standard (i.e. ATSC-M/H 1.0, ATSC-M/H 2.0 etc.). Respondents that take that approach have been asked to provide a roadmap

indicating the features and functions that will become available with each version of the standard.

As of publication, proposals have been received from Coding Technologies, Coherent Logix, Inc., DTS, Inc., LG Electronics and Harris Corporation, Mobile DTV Alliance, Micronas Semiconductor, Inc., Nokia, Inc., Samsung Electronics Co., Ltd. and Rohde & Schwarz, Inc, Thomson, Inc, and QUALCOMM Incorporated.

The RFP is available online at [www.atsc.org](http://www.atsc.org). Preliminary responses, including an overview of the proposal, are due on June 21, 2007, and detailed descriptions of the proposal are due on July 6, 2007. ■

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## Non-Real-Time Update



On May 4, 2007; a New Work Item Proposal on Non-Real Time (NRT) Services was submitted by the Planning Committee (PC) to the ATSC Board of Directors for review. The ATSC Board approved the project during their meeting on May 18, 2007; and the work has exploded out of the starting gate.

As envisioned in the ATSC Strategic Plan, the increasing desire for “everything-on-demand” has changed customer expectations in the media industry. Non-Real Time capabilities cover a wide spectrum - some are similar to “traditional” television; such as clip services (news, sports, weather) and long form content (push VOD movies), personalized TV channels) – while others are relatively new to the broadcast space (music distribution, games, interactive applications, reference material). Some NRT enabled services may be totally invisible to the viewer (such as in-receiver targeted ad insertion). These new services can enable new business models that benefit the broadcaster.

The Planning Committee developed a comprehensive set of usage scenarios and requirements which formed the basis for NWIP and the work to develop the NRT Standard is now underway in the Specialist Group on Data Broadcasting (TSG/S13) chaired by Michael Dolan. Rich Chernock of Triveni Digital is chairing the adhoc, group overseeing the overall NRT activity.

Dr. Chernock believes that “NRT services will be an important element for broadcasters. TV viewers have become accustomed to getting content when they want - we’re really in an “on demand” world now. With the ability to pull nearly anything from the internet and the spread of PVRs and cable VOD, conventional linear programming (traditional broadcast) loses some of its appeal. NRT provides another tool for the broadcaster to retain viewership. Also, persistent storage is becoming commonplace in receivers. Having hard disk storage available provides a parking place for content that can be pushed ahead of use to allow viewer consumption whenever desired.”

The group also projects that NRT will transform TV advertising, bringing the ad targeting and personalization capabilities of the internet to broadcasters, delivering more relevant and interesting ads to consumers, and creating opportunities for new receiver sales. This applies to traditional linear programming, as well as stored content.

“NRT will allow broadcasters to deliver a rich, internet like experience to the TV (or laptop-PC), creating a virtual on-demand experience,” says ATSC Board Chairman Glenn Reitmeier. “The ability to wirelessly deliver high quality video clips creates an opportunity for new services and new products that deliver this experience to the consumer.” ■

# Standard

## The 2007 ATSC Annual Meeting

### *ATSC: The Next Generation*

On the morning of May 17th, Glenn Reitmeier, Chairman, ATSC Board of Directors, kicked off the 2007 ATSC Annual Meeting. The meeting was held at the Arlington, VA Pentagon City Ritz-Carlton, and over 130 attendees took part in the very successful day-long program.

The keynote speaker was Mr. Andy Waldeck, VP at Innosight.

Mr Waldeck's entertaining presentation, "Mastering Disruptive Change", was followed by five expert panels, whose topics included: "Broadcasting: Wireless Before Wireless Was Cool; Parts I and II"; "What, Where, and When the Consumer Wants the Content"; "Interactive: Lessons from the ATSC ACAP Demo and Field Trial Project;" and "Bits are Bucks." This year's meeting also included a guest lunch speaker, Mr. David Donovan of MSTV.

This years' moderators, panel participants, and speakers included: Glenn Reitmeier, NBC-U and Chairman, ATSC Board of Directors; Mark Richer, President of ATSC; Andy Waldeck, Innosight ; Jay Adrick, Harris; Brandon Burgess, Ion Media; Kent Walker, MediaFlo; Del Parks, Sinclair; Kari Lehtinen, Modeo; Yiyan Wu, CRC; Graham Jones, NAB; John Godfrey, Samsung/ Rohde & Schwarz; Wayne Luplow, Zenith-LG/Harris; Rick Citta, Micronas; David Donovan, MSTV; Rich Chernock, Triveni Digital; Mark Daniels; Jim Kutzner, PBS; Robert Plummer, DirecTV; Jerry Whitaker, ATSC; Jeff Bonin, Alticast; Kevin Lingley, Sysmedia; Lewis Zager, PBS; Patrick Griffis, Microsoft; Matthew Goldman, Tandberg; Andy Bater, Tribune; John Mailhot, Harris; and Pat Waddell, Harmonic.

ATSC thanks all of this years speakers, panel participants, and most especially our sponsors for this years event: Samsung, Zenith, LG Electronics, and TANDBERG Television.

Selected presentations are available for download online:

[www.atsc.org/seminars/am2007/AM2007\\_main.html](http://www.atsc.org/seminars/am2007/AM2007_main.html) ■



*Top to Bottom: 2007 ATSC Annual Meeting Cocktail Reception; Mr. Craig Todd, Dolby and Mr. Kent Walker, Media Flo; Mr. Mark Richer, ATSC; Mr. Brandon Burgess of ION Media speaks during the panel on Broadcasting: Wireless Before Wireless Was Cool.*



*Mr. David Donovan, MSTV*

## Mark Eyer receives 2007 Lechner Award

Mark Eyer was honored May 17th as this year's recipient of the Bernard Lechner Outstanding Contributor Award. The presentation was made in Arlington, Virginia at the Pentagon City Ritz-Carlton, during the Advanced Television Systems Committee (ATSC) Annual Meeting.

Mark has served as the chair of the Specialist Group on Transport (TSG/S8 & T3/S8) since April, 2002 when he filled the big shoes of the award's namesake, Bernie Lechner. In addition to Mark's outstanding chairmanship of S8, he has made numerous technical contributions and has acted as editor for many documents. Under Mark's leadership S8 has maintained and revised the PSIP Standard, developed the Content Identification and Labeling for ATSC Transport Standard (A/57A) and the Conditional Access System for Terrestrial Broadcast Standard (A/70A). In the past year Mark led S8's development of the ATSC Parameterized Services Standard (A/71).

Mark also served as chair of the Specialist Group on Video Coding (T3/S6) from August, 2001 to April, 2002. Under his guidance, S6 developed the specification for Bar Data, currently part of A/53 Part 4.

The Bernard J. Lechner Award was established in 2000 to recognize outstanding technical contributions to the ATSC. See more online at <http://www.atsc.org/lechner/award.html> ■



## CB Patel: 2007 ATSC Staff Award recipient



*CB and his notorious grin accept the 2007 ATSC Staff Award from Jerry Whitaker at the 2007 ATSC Annual Meeting luncheon, held May 17th.*

As well as the Bernard Lechner award, the ATSC is known for another annually presented commendation: The Rubber Chicken Award.

Last year, the staff asked for a short essay on member predictions for what they'd be doing on February 17, 2009. This year, the staff had another idea for the infamous rubber chicken.

C.B. Patel, engineer and consultant with Samsung, was presented the first annual newly rechristened rubber chicken award: The ATSC Staff Award. C.B. was given a certificate, along with his new friend, by Jerry Whitaker.

Why was this gentleman recognized? Anyone who is on the receiving end of Mr. Patel's emails knows.

A hearty congratulations to this year's recipient, C.B. Patel for his "Most Egregious Use of Varied Fonts and Colors in An Email" award. ■

## Profile: Mark Aitken, Sinclair Broadcasting

The recently formed ATSC Specialist Group (TSG/S4) is charged with developing a standard for mobile and handheld services. Mark Aitken, the Director of Advanced Technology with Sinclair Broadcasting Group, has been involved with ATSC for many years - most recently as the new Chairman of TSG/S4.

Mark attended the small Southwick High, graduating from a class of only 104 students. Having been accepted at Worcester Polytechnic Institute, but unable to afford tuition, Mark elected to attend Springfield Technical Community College and work to afford tuition. After his first year at STCC, he took a summer job as a mechanical design detailer for CCA Electronics - the successor to Ampex in the transmitter arena. He was teamed with one of the most experienced and skilled RF Design Engineers in the Broadcast industry - Richard Fiore. Dick Fiore became the primary mentor of Mark's professional career.

Mark soon went to work for COMARK Industries, Dick's RF manufacturing firm, and held several key Engineering Management positions. He left COMARK in 1978 to work for a year in the government division of M/A-COMM, but was invited back to COMARK in 1979 when Dick partnered with a young and energetic business seeker wanting to build the company into a dominating Broadcast transmission supplier and take on RCA - the business seeker was David Smith. COMARK became COMARK Communications, Inc.

While building out a newly licensed UHF TV broadcast facility in Pittsburgh, PA, I met my future (and present) wife Cathy, who was the highly effective (and charming) executive secretary for Julian Smith at WPTT (Pittsburgh), David Smith's father. David Smith eventually took over management of his father's company, and along with his family built it into the Publicly traded company of today - Sinclair Broadcast Group. Over a period

of years, COMARK grew and was eventually bought by a large multinational firm (Thomson-CSF) in 1986. "It was in this time frame that something new came to the television broadcast industry - "Advanced Television", Mark says. "Soon after, my boss and (then) President of COMARK (Nat Ostroff) said it was time to figure what this 'HDTV thing' was all about."

In 1987, Mark started to attend meetings in Washington, DC within various activities of the Advisory Committee on Advanced Television Services (ACATS), especially SS/WP-2. He held several key RF Project Managers positions throughout the ACATS process including RF Transmission Project Manager for the ATRC proponent system field tests, similar role with the ACATS Field Test Task Force in Charlotte, NC working with PBS and MSTV on the UHF system, as well as for the first Model Station Project transmitter system. Mark was a key member of the award winning 1996 Sarnoff led NIST team that developed "Digital Adaptive Pre-correction", seamless MPEG splicing, and other front running technologies.

Mark left Thales in 1999 to take a position with Sinclair. Mark says, "Just as an interesting aside: it was at COMARK that I first really got to know & work with Mark Richer, then VP of the COMARK Digital Services division...small world!"

Having been involved in many industry-changing events throughout the years, I look forward to yet another 'rebirth' within the TV Broadcast industry. I believe that is precisely the potential held in the ongoing ATSC Mobile/Handheld standardization process.

When not involved in family activities, Mark spends much of his "spare time" involved with his church, presently in the role of Building Committee Chairman and IT Manager. He's also an amateur photographer, videographer and editor and a professional web surfer. "I owe so very much to a wife who has come through the other side of difficult times by my side, and being the best part of raising two very capable and loving sons," Mark says. ■



Mark Aitken

ATSC would like to congratulate the following members for their prestigious industry awards:

**2007 "Giants of Broadcasting" Award, Library of American Broadcasters**  
**Joe Flaherty, CBS**

**2007 ATSC Bernard Lechner Award and SCTE Excellence in Standards Award for 2007**  
**Mark Eyer, Sony**



the standard



1750 K Street NW, Suite 1200, Washington DC 20006

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

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[www.atsc.org](http://www.atsc.org)

## Welcome Wagon

ATSC would like to welcome it's newest members:

**Rice University; Richland; Delphi Electronics & Safety; National Datacast, Inc.; DTVinteractive Co., Ltd; Nokia; and Dave Siracusa (Observer)**

These companies have recently become members. We eagerly anticipate their contributions to the DTV standards currently being developed in the ATSC, and we know their participation will have an immeasurable effect on the future of digital television.

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## 2008 ATSC Annual Meeting

Although it seems that the ATSC Annual Meeting just concluded, we're already starting planning for our 2008 events.

**Wednesday May 7, 2008:** PC and TSG Meetings

**Thursday May 8, 2008:** 2008 ATSC Annual Meeting

**Friday May 9, 2008:** ATSC Board Meeting (AM)

A preliminary schedule of other organization events already scheduled for 2008 has been compiled.

If you are aware of a significant industry event that the ATSC should make every effort to avoid, please contact Lindsay Shelton-Gross at [lseltongross@atsc.org](mailto:lseltongross@atsc.org)

Visit the current ATSC calendar online at <http://www.atsc.org/technicalmeetings.html>