

# Tech-Notes

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*Our purpose, mission statement, this current edition, archived editions and other relative information is posted on our website. We've had over 17,825 different visitors since we started the website on July 1st, 2000.*

*Thanks to our regulars and welcome to the new folks.  
This is YOUR forum!*

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## Reader Comments

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From: Phil Livingston LivingstonP@panasonic.com

I wanted to say thanks for the kind words about people at ATSC you've actually spoken to. I think I was the guy standing when the music stopped, but I'm going to try to do what's right. If we do stupid stuff, it deserves to be reported.

Phil

**(Editors Note:** *Phil Livingston is the Chairman of the Advanced Television Systems Committee or ATSC.)*

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**Editor s Note:** *We have put a simulation of the various types of TV formats from analog to digital on the front page of our web site. Please*

*pay it a visit and let us know what you think.*

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Subject: **NAB 2002 and a Taste of NAB**

By: Larry Bloomfield

The Tech-Notes Road Show, A Taste of NAB, is nearly finalized. We'd like to thank Acrodyne Industries Inc, Pixel Instruments, Dorrrough Electronics, Clark Wire & Cable, Sundance Digital, Kathrein Inc., Scala Division and Panasonic Broadcast & Professional Video for stepping up to bat to help us make this a meaningful and successful effort. We will only accept one or two more sponsors.

We're still looking for Local Partners who care enough to find a place and invite the folks in their area to see a Taste of NAB. If you are interested in when we'll be visiting your neck-of-the-woods or possibly participating, go to the Tech-Notes website: [www.Tech-Notes.TV](http://www.Tech-Notes.TV). Just below the Tech-Notes animated logo, it says to click here for the Tech-Notes Road Show A Taste of NAB and the rest is academic. Please support our sponsors. Visit their websites and see what they have to offer. We'll be reporting on them and our local partners as the Road Show progresses from the field.

I'm not sure if we will be putting out another Tech-Note before NAB2002. If you are one of the few lucky ones who will be going to NAB2002, look us up at the Pixel Instruments booth #20744 on the second level of the Las Vegas Convention Center expansion. If you'd like to see exactly, there is a map on the Pixel Instruments website: [www.Pixelinstgruments.TV](http://www.Pixelinstgruments.TV)

Jim Mendrala will also be at NAB2002, but not in any one place. If you contact me, I can direct you to him. My Cell phone is (541) 999-1863 and I'll have it with me.

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Subject: **Digital Cinema Summit**

By: Fred Lawrence

Hollywood faces a variety of challenges in its transition to digital. With this in mind, the Society of Motion Picture and Television Engineers (SMPTE) and Digital Cinema magazine are launching the Digital Cinema Summit at NAB 2002. The Digital Cinema Summit will address issues that include SMPTE standards, mastering, compression, conditional access (encryption), transport, audio, theatre systems, projection, business and regulatory issues and worldwide standards. The Summit will offer two days of sessions designed to provide content creators and motion picture professionals from producers and directors to hands-on production professionals with information that focuses on the motion picture industry's transition to new digital technologies.

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*(Editors Note: The following are responses to several questions we recently asked Livingston. His candid responses are shared below.)*

Subject: **The ATSC From the Inside**  
From: Phil Livingston, Chairman, ATSC

ATSC Background:

In the past, the Advanced Television Systems Committee (ATSC) had two objectives or missions: the on-going work of DTV standardization and the promotion of the ATSC Standard in the Americas and beyond. Both of these may seem unusual since many people assume the standards work is done (after all we're transmitting DTV using ATSC 8-VSB) and others wonder why would we want to influence the rest of the world.

To address the first part, let me say that while many think the ATSC standardization process is finished, the inherent nature of digital technology fosters new applications and the need for new technical standards. Our continuing work in data broadcasting and the work needed to answer the dynamics of implementation are good examples. One only has to look at a body like SMPTE or SCTE to

realize that technical standardization is an on-going process.

The answer to the second is that we would of course like to have neighbors like Canada and Mexico utilize the same system, as well as to respond to the desire of manufacturers for mass markets with common systems.

However, these are rather divergent tasks, so in November of last year (2001) the Advanced Television Systems Committee (ATSC) announced the creation of a new affiliated organization named the ATSC Forum to promote digital television and the adoption of the ATSC DTV Standard. Concurrently the ATSC membership began a process to approve incorporation as the Advanced Television Systems Committee, Inc., including replacement of the Executive Committee with a Board of Directors consisting of employees or officers of ATSC member organizations. Former ATSC Chairman Robert Graves now heads the ATSC Forum, and Mark Richer, previously ATSC Executive Director, now serves as President of ATSC, Inc. In January the Board of Directors elected Phil Livingston of Panasonic Broadcast to be voluntary, part-time Chairman for 2002. Lynn Claudy, NAB Senior Vice President, Science and Technology, and Jay Adrick, Harris Vice President, Strategic Business Development were elected to serve as Vice Chairmen from among the members of the newly constituted Board of Directors. As has been said elsewhere, this approach strengthens two major aspects of the ATSC's mission by further increasing the focus on standards activities within the ATSC itself and by creating an affiliated organization for international education activities and standards advocacy.

When asked how a manufacturing guy got elected chairman, I'd say I feel like a broadcaster since I got my First Phone in 1961 to work as a radio station chief engineer, and I've been involved in the work of ATSC since 1987. I'd also add it's an honor and privilege. I see my role as working with the Board of Directors and President, Mark Richer, to expand the role of ATSC as a forum to discuss and hopefully resolve issues among industry segments. It may not be well known, but the ATSC has a wonderfully diverse membership

comprised of the broadcast, cable, satellite, motion picture, computer, consumer electronics, and semiconductor industries.

Some people have asked if the ATSC will be different, and I think the answer is yes, but not because of anything I might do, but because the division into the ATSC Inc. and the ATSC Forum will focus our energies, our modest resources, and our constituents enthusiasm according to our different missions. As a membership based organization we need to demonstrate our value and relevance to both present and prospective members to assure that we remain useful and productive.

The other question I hear is Has ATSC lost its clout? My answer is that we have work to do and a role to play for which we are the most appropriate forum. While the ATSC continues to have a strong, diverse membership, the current economic environment has caused loyal participants to make tough decisions and we've lost some valuable members. I wish that were not the situation and we'll have to work to find more ways to earn their ATSC participation.

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**Subject: FCC Chairman Cajoled Cablers on HDTV Transition**  
Source: Cable World

It's not certain whether the board members of the National Cable Telecommunications Association were prepared for what hit them at their monthly meeting on Feb. 5. But after Federal Communications Commission Chairman Michael Powell finished addressing the group, whose responses ranged from "excited" to "stunned," several board members knew what they had to do. The headlines chronicling new HDTV commitments and Internet service deals have made business headlines in the intervening weeks.

In exclusive interviews with Cable World, industry and government sources, most of whom would not speak for attribution, described how Powell warned the NCTA's board members that if they failed to get out front in the digital TV transition, they could pay the consequences on

Capitol Hill and on their balance sheets. "He was very articulate, very energized. And very forceful," said one participant. Powell told board members that Congress may not be particularly interested in dual must-carry issues, digital HD signal pass-through or the intrigue among set-top-box manufacturers, but it expects to take in some \$60 billion from the auction of the analog spectrum that broadcasters are supposed to return to the government, and it wants its money. Those who are seen as "holding up" or as "obstacles" to the digital transition will pay the price. And as Congress continues to be swamped with complaints about cable rate increases and service complaints from voters, it would not be in the cable industry's interests to be tagged an obstructionist.

Michael Willner, CEO of Insight Communications and chairman of the NCTA board, did not agree with the assessment of others who spoke to Cable World regarding the gravity of Powell's demeanor. "I don't believe that people needed their minds changed, and I don't think he believed that, either," said Willner. "I think it was just a fresh exchange of thoughts about digital convergence and what role the cable industry is playing with that." He added that the cable industry attitude to HDTV is being driven "strictly from a business point of view. We're going to want to and will provide some level of HDTV service for consumers who want it."

In his remarks, according to several witnesses, Powell noted that the atmosphere in the U.S. had greatly changed since Sept. 11. Though Americans had, in recent years, voted against "big government," Powell said he suspected the pendulum was swinging back. Americans are now more open to government intervention, he said. This meant that he didn't know whether the government would "stay off cable's back anymore."

There was an immediate opportunity to seize leadership in some telecom issues, and with HDTV, it was a "win-win" situation and was the "politically intelligent" move, Powell said. However, if cable didn't move soon, he warned, the industry could face real problems. "He didn't say `reregulation,'" an attendee explained, "but we knew that

was what he meant."

Looking at it from the NCTA's viewpoint, Powell noted that if cable jumped out front with new HDTV rollouts, it would score some points on broadcasters, who have pretty successfully made the cable industry and the consumer-set makers the villains in the painfully slow rollout of HDTV. One attendee said Powell had been hearing the NAB ask him, "Why don't you use the bully pulpit on the cable industry?" That appears to be exactly what he was doing on Feb. 5. Besides, Powell reminded the group, strategically, rolling out digital HD service is simply good business.

Both Congress and the FCC want the analog spectrum back as close to the 2006 schedule as possible, particularly in light of the need for more spectrum for emergency and public service agencies. In addition, Powell pointed out that Congress had taken a huge step in pushing for the digital transition and played a major role in creating and implementing a business policy role with it. Congress does not want to be seen as failing here, he explained, noting that the FCC and Congress both were worried about cable's gatekeeper role with Internet service providers and suggested cable firms move more rapidly to show they were willing to allow access to their broadband.

Since his talk, Comcast and Charter (see story, page 8) have all announced new HDTV rollout plans, and Comcast has also said it would cut deals to carry unaffiliated ISPs. At Insight, Willner said, "We also will have an HDTV plan in place in the relatively short future." Though NCTA staff say some of these plans were already in the works, Powell's talk had the effect of "pushing some of our members along much quicker than we'd thought."

Powell also may have given NCTA leaders a new impetus to move reluctant members into the HDTV transition mode, say industry lobbyists.

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Subject: **ATSC Publishes IP Multicast Specifications for Data**

## **Broadcasting**

From: ATSC

### A Bridge Between the Internet and Digital Television

The Advanced Television Systems Committee (ATSC) has approved and published a new standard designed to enable next-generation applications of data broadcasting. ATSC Standard A/92 'Delivery of IP Multicast Sessions over ATSC Data Broadcast', specifies the delivery of Internet Protocol (IP) multicast sessions, the delivery of data for describing the characteristics of a session, and usage of the ATSC A/90 Data Broadcast Standard for IP multicast-based Data Broadcast Services.

Standard A/92 defines a model whereby standard IP network terminology and concepts can be applied to the transmission of IP multicast services in an ATSC transport stream. Regis Crinon, Ph.D., the principal architect of the new standard explained, "When creating, inserting, and transporting IP packets through a transport stream, rules need to be established to define what constitutes an IP network or sub-network and how services on such network can be discovered. This is critical for all implementations, as there is the strong potential for IP address conflicts without such rules. A/92 truly establishes a bridge between Internet Protocols and ATSC Protocols."

ATSC Standard A/92 defines a variety of ways for signaling an IP multicast service within the service description framework defined by the A/90 specification. Detailed usage recommendations are provided for each scenario.

"With this important ancillary specification for the ATSC Data Broadcast Standard, broadcasters and other service providers are positioned to participate in a wide range of new services to consumers," said Mark Richer, President of ATSC.

The A/92 standard, and all other technical documents, are available from the ATSC Web site at <http://www.atsc.org/standards.html>.



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Subject: **Is Betamax happening again?**

From: "Claire Marchand" [cma@iec.ch](mailto:cma@iec.ch)

Do you remember Betamax? What about a universal electrical plug and socket? Is the same happening again with DVD? Can it be avoided?

If your answers are: Yes, Would be nice, I'm not sure, Don't know? then you need the fuller answers to these questions.

VHS dominates the market and Betamax is extinct. The losers are those manufacturers who invested a great deal in developing the manufacturing capacity and those consumers who bought Betamax machines, only to see the technology become obsolete.

An international standard for a universal plug and socket exists and it was published in 1986. It is up to countries to adopt it as a national standard and require their domestic electrical industry to use it.

There are several competing standards for DVDs at present: DVD-RAM, DVD-RW and DVD+RW. Competition is a healthy thing for the market, but it is not always benign.

The next generation of DVDs, now in development, are called blue-ray discs. Are we going to see another VHS vs. Betamax slugfest in the market? Are we going to end up with competing blue-ray disc systems, like the electrical plug and socket problem we find all over the world? Or are we going to get it right this time?

For more information on this subject, visit IEC press conference at NAB 2002 in Las Vegas to find out, Monday, 8 April 2002 at 3 p.m. Booth L12839 South Hall 1 NAB 2002, Las Vegas, USA

Remember, it's already tomorrow.

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Subject: **Object-based video coding challenges MPEG**  
From: Electronic Engineering Times; CMP Media Inc

Has MPEG had its day? A Milpitas, Calif., startup will argue in the affirmative today when it announces an object-based video coding algorithm that it calls a radical departure from the block-based coding used in all MPEG standards. Scheduled for private previews in Las Vegas next week the National Association of Broadcasters' (NAB) convention, Pulsent Corp.'s technology-and a host of similar developments both inside and outside the Moving Picture Experts Group-could ignite debate as the industry looks beyond the current slate of standards for digital video compression.

For more on Pulsant Corp.'s story visit:  
<http://www.eet.com/sys/news/OEG20020322S0105>

Pulsent will hardly be alone in showing improved compression algorithms at NAB. The convention will highlight advances in a host of proprietary and standards-based schemes from such entities as Apple Computer, DemoGraFX, DiVX, iVast, Microsoft Corp., On2 (formerly Duck Corp.) and RealNetworks. Like the Pulsent algorithm, many of the evolving coding technologies- including block-based H.26L, elements of which are being incorporated into a next-generation variant of MPEG-4-target broadcast-quality video at 1.5 Mbits/second or slower.

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Subject: **Project Planning and Implementation    Some Sagged Advice**

From: A contribution from one of our readers

The pulling of capital technical equipment budgets from an off-handed remark such as; "just give me a ballpark figure, and I won't hold you to it!" have lead to words many a technical managers wishes were never uttered.

What are some of the financial implications in properly managed broadcast projects?

As technical managers, whether involve building a new facility or altering an existing facility, can present opportunities to make collateral improvements that will conserve capital, enhance operations, and position the operator to gracefully ride successive waves of change.

A systematic collection and analysis of meaningful data is therefore crucial to successful project management.

Television businesses are social as well as technical systems. A comprehensive understanding of how work is done now, and how it will be done after the change, is crucial. Careful and organized questioning of all affected personnel should be performed early on in the budgeting process and a solid agreement as to the economic metrics should be done. What are the measurement methods will be used to define a successful project as technical managers can we "really" effect the outcome?

The funding of major projects in a rising tide of technical change is made more hazardous by the crosscurrents of opportunity, competition, and risk. A key for the technical manager in this setting is to develop extreme candor and understand with his or her CFO. If we think we live in a world of uncertainty, try walking in Broadcast CFO's shoes as they try to close the books at the end of the year and forecast next year's return. In the above we spoke about an "agreement as to the economic metrics" this need to appreciate how accounting views large equipment funding can be one of the most critical tools you as technical manager can have. You don't need any accounting degree, but you must nurture a deep abiding tolerance of how the financial statement is effected by your choices.

While to some of your colleagues it might seem reasonable to draw up a list of all the major hi-ticket equipment you think will be need for this new project and just starting pulling in the some numbers. After all, you could review past purchases, you could check with a sister

company who had to buy something last year or even ask a number of local equipment sales folks for a "real number". We have all seen "working systems" at NAB all we need is just something like that. It very unfortunate that many projects have an inverted view of how properly managed projects are done; "I purchased these new digital systems and have to keep these legacy systems all we need now is a working design. The idea that design follows equipment selection assumes that broadcast television systems are just "plug and play"! It would appear that uncertainty and unremitting change is, even more than in the past, now the norm ..."so just start building".

Developing a rational planning budget is exceptionally challenging effort and often will require funding for independent support outside of technical manager organization. While to spend money to plan is consider an anathema to many, nothing could farther from the truth. While technical managers in most broadcast organizations have long solid histories in managing their day-to-day operational facilities, it is not-unreasonable for them to look to tap into outside skills. Finding a planning firm who has a long history in guiding the planning, budgeting, scheduling, and design of new facilities is reasonable goal.

The following might prove practical as you sit down with your CFO. With the understanding that the very first issue you both must agree on is that you both will make sure that no financial or technological "buzz words" will be allowed to be utilize without mutually acknowledged comprehension.

- 1. How do we measure cost of ownership?
- 2. How can leasing vs. purchase of capital equipment evaluated? What are the tax implications? What are the deprecation expectations?
- 3. The real cost of 0% financing?
- 4. How can we best measure cost\benefit when it comes to competitive bids?
- 5. Can we look to a longer-term purchase cycle or must we look to get all major systems in the initial project?

- 6. Can we look to spend funds on infrastructure, whose value is not initially visible at end of the first phase of the project?
- 7. Are we considering the future cost of the systems and formats? Will they show a substantially lower cost of ownership in the next 24 months? If so will continued, use of older equipment cause a major negative impact on operations? Leverage existing tools? Or can we use a mix of some new and some legacy systems?
- 8. Is it possible "rent or lease" key sub-systems to bridge the next 24 months?
- 9. Have we look at all reasonable alternative or "off-hours" revenues for are current or new systems as an offset to expenses?
- 10. Are their new equipment suppliers in the market who have useful products who might wish you're facility as "test bed" in exchange for exceptional pricing?
- 11. Will any of the new systems we are considering allow development of differentiate content giving our facility meaning and measurable advantage over our competition?
- 12. Will any of the new systems we are considering allow development of content for different channels of distribution? If so what is the project value for those channels?
- 13. How can you shield your "cost of ownership" from changes in technology?
- 14. Will any of the new systems we are considering allow development changes in our labor costs? Or, will these new systems help better manage labor costs?
- 15. What is your corporate tolerance for risk? Can you project any savings in technical equipment by lowering redundancy and fail-safe systems?
- 16. Another way to ask some of the above, Must this new facility budget be a zero-sum game?

If you haven't already read this one, I think you will enjoy it.

**SHAKE IT OFF AND STEP UP!**

This parable is told of a farmer who owned an old mule.

The mule fell into the farmer's well. The farmer heard the mule 'praying' -or- whatever mules do when they fall into wells. After carefully assessing the situation, the farmer sympathized with the mule, but decided that neither the mule nor the well was worth the trouble of saving. Instead, he called his neighbors together and told them what had happened ... and enlisted them to help haul dirt to bury the old mule in the well and put him out of his misery.

Initially, the old mule was hysterical! But as the farmer and his neighbors continued shoveling and the dirt hit his back...a thought struck him. It suddenly dawned on him that every time a shovel load of dirt landed on his back

**HE SHOULD SHAKE IT OFF AND STEP UP!**

This he did, blow after blow. "Shake it off and step up...shake it off and step up ... shake it off and step up!" He repeated to encourage himself. No matter how painful the blows, or how distressing the situation seemed the old mule fought "panic" and just kept right on

**SHAKING IT OFF AND STEPPING UP!**

It wasn't long before the old mule, battered and exhausted, STEPPED TRIUMPHANTLY OVER THE WALL OF THAT WELL! What seemed like it would bury him, actually helped him ... all because of the manner in which he handled his adversity.

**THAT'S LIFE!** If we face our problems and respond to them positively, and refuse to give in to panic, bitterness, or self-pity ... **THE ADVERSITIES THAT COME ALONG TO BURY US USUALLY HAVE WITHIN THEM THE VERY REAL POTENTIAL TO BENEFIT US!**

"Never be afraid to try something new. Remember that amateurs built the ark. And professionals built the Titanic.

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Subject: **KPBS-DT: An Aggressive High Definition Public**

**Broadcaster**

From: Carl Cripps HDTV magazine

In this web-posted article, HDTV Magazine interviews Doug Myrland, General Manager of KPBS TV/DT/FM, San Diego, and KPBS' refreshing and aggressive stance toward DT broadcasting is explained: [http://www.kpbs.org/dtv/content\\_hdtv\\_interview.htm](http://www.kpbs.org/dtv/content_hdtv_interview.htm). Pay it a visit.

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Subject: **NAB Watch - 2002 Forecasts**

From: Des Chaskelson, [SCRI International](#) , [des\\_chas@scri.com](mailto:des_chas@scri.com)

Colin Brown, president, Cinesite, Los Angeles and London tells us:  
NAB 2002 is going to be a difficult show. Luckily, Cinesite is nearly unique because we don't depend on commercials as a back-up to our film work. Those people that do are being chased for their lives by a tall, unforgiving man with a scyth. Cinesite people will be looking for fast scanning and recording initiatives, new 2-D and 3-D software products that are innovative and backed by companies big enough to make them long-term prospects, and new motion control systems. Fundamentally there are many exciting technologies coming out on the TV side, but there are too few buyers to pay back the R&D due to the severe slump in commercial production. The big frustration, the missing element, is broadband communications at an effective price -- enough bandwidth to push data around and give us resolution independence. I am not looking for a product, but a service. Given good, effective broadband communications, life would become incredibly simpler for everybody in the media business.

Many are called, but few will go. These words and the words of not just those of Cinesite's Colin Brown, echo many of the deep concerns that are being express before and probably during the up coming NAB show. Want a good look into what is happening in the industry? SCRI has a new HDTV Overview Report available for \$495 | \$295 to SCRI's Insider Report Subscribers (<http://www.scri.com/newscov.html>). Find out what is really going on. For more information and table of

contents, contact [Des Chaskelson](#).

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## Parting Shots

By Larry Bloomfield

### Digital TV Transition Update

If you haven't looked at your calendar, it's April 1st. To paraphrase a well known bit about what's going on: Do you know where your DTV transition is? According to the National Association of Broadcasters (NAB), who has not updated their website since March 13, 2002, there are 266 stations in 92 markets delivering digital DTV signals.

According to the FCC, as of March 6th, there are 1,462 TV stations (87%) that have been granted a DTV construction permit or license. They do not distinguish between commercial and educational stations. Educational stations have a year from today to get it together and be on the air digitally. Our most current information from the FCC says there are a total of 1690 analog stations in operation, of which there are approximately 1,288 commercial TV stations.

The FCC figures report a total of 272 stations on the air with DTV operation, of which 190 stations are on the air with licensed facilities and 82 others are on the air with special or experimental DTV authority.

As of this March 6th date, 572 commercial stations have requested an extension of today's deadline (5/1/02) to complete the construction of their DTV facilities. All remaining DTV applications have been processed and are awaiting additional information; Mexican, Canadian or other clearances; or are mutually exclusive.

If you will recall the initial push of top ten market network affiliates, of which there are 40, of these stations, 36 have constructed their licensed DTV facilities. 38 are on the air (36 with licensed facilities and



2 with STAs) WNBC-DT and WABC-DT were licensed and on the air prior to 9/11/01 but are now off the air due to the destruction of the World Trade Center. Two other stations have requested additional time to construct.

In the second push, markets 11 - 30 - network affiliates, there are 79 of these stations. 68 have constructed their licensed DTV facilities. 75 are on the air (68 with licensed facilities and 7 with STAs) and eight stations have requested additional time to construct.

Within the past week, the FCC said DTV waiver requests reach 61 percent: Including a count of applications posted by mail. 787 commercial TV stations have now asked for waivers from the agency's obligation to launch DTV operations today. That means that more than 61 percent of the nation's 1,288 commercial TV stations are citing technical, legal or financial grounds for putting DTV launches on at least temporary hold. Earlier this month, the FCC reported that 650 stations had requested the waivers. But an agency source said that figure did not include a precise count of mail-in applications.

According to a Yankee Group research, titled "Up in the Air: The Future of Broadcast Television," the transition to digital TV remains stalled.

Finger pointing is at an all time high: Broadcasters, network operators, programmers and consumer electronics manufacturers are all blaming each other for the slow market evolution. Yet sales of digital TV monitors are beginning to show gains for use in home theaters.

The Yankee Group forecasts that digital television monitors will be in 24 million US homes by the end of 2006. By our figures, this is a paltry ten percent of US households and nothing to stand up and crow about.

Echoing many of the same concerns expressed here in Tech-Notes, Adi Kishore, co-author of the report said: "Broadcasters alone cannot drive the transition. Carriage by multi-channel providers will be the key, along with an expanded slate of high-definition programming from

the networks." Direct-To-Home (DTH) satellite services have taken up some of this challenger along with a couple of cable companies in random markets. With over ten thousand cable systems serving our country, this isn't even an eyedropper of fuel for a gas-guzzling dynamotor.

Report co-author Ryan Jones added, "Without increased support from providers and content owners, the challenge of educating consumers about the value of HDTV falls disproportionately on consumer electronics retailers."

CBS has led the charge with more HDTV programming on the air than the remaining networks combined. Only a few independent producers are doing their thing in HDTV, Chuck Henry, out of Los Angeles with his Travel Café, is most likely the very first and one of the continuing few. Henry says that the myth that viewers won't watch 16x9 in analog just isn't true. He told us the local stations, KNBC-TV and KNBC-DT didn't get one complaint over the format.

The fraud that Fox is perpetrating on the viewing public isn't helping the transition. Implying that widescreen digital is anything close to the quality of high definition, 720 or 1080, is just a bunch of hogwash! To see the difference between 480, 720 and 1080, visit the Tech-Notes website at [www.Tech-Notes.TV](http://www.Tech-Notes.TV) and see the simulation; it tells a rather convincing story. Perhaps this is a stepping stone for Fox. We invite them to respond to these observations and comments.

Other conclusions from the Yankee Group report suggested that broadcasters should evaluate their proposed digital services and set deployment within the context of the services and timelines being considered by other broadcast stations in the market. Multicasting and datacasting also can add value to a station's brand even if the applications do not generate significant revenue.

As we use to say: What next coach?

What do you think about all of this?  
Let's go to press!

Later,  
Larry

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