

**David L. Donovan**  
President, MSTV  
at the  
**Annual Meeting of the**  
**Advanced Television Systems Committee**  
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Mark, thank you for the kind introduction and the opportunity to address you this afternoon. Through the years MSTV and ATSC have enjoyed a close working relationship. Together we have achieved much success. It goes without saying that ATSC is critically important to over-the-air digital television in the United States. We are happy to be part of the process.

For the past several years industry pundits, including MSTV, have agonized over the digital transition. Today there is no question that the off-air portion of the digital transition is moving forward. There are more than 784 digital television stations on the air. In terms of reach, 97% of US Television households in 184 television markets receive at least one off-air digital signal. Indeed, 72% of all US television households are located in markets with access to five or more digital television signals. In the parlance of the 60's - it's here -- it's happening -- it's now!

But of course it's not the 60's, it's the 21<sup>st</sup> Century, and the inexorable deployment of off-air digital television is reshaping the landscape - giving rise to new relationships and complexities.

For some time, MSTV has been soliciting ideas from professional video companies, consumer electronics manufacturers and broadcasters. Our fundamental inquiry has been this -- in a world of rapidly changing markets, is there a mechanism to foster and accelerate the growth of new over-the-air digital technology? The issue becomes very complex because broadcasting is and will remain a system based on an open architecture. And, unlike the days of General Sarnoff, no single entity can influence program production, transmission and consumer electronics.

In today's highly fragmented and differentiated video market, coordination becomes far more complex. We believe the solution is the creation of a Broadcast Lab.

The Broadcast Lab is not designed to replace ATSC. It is not intended to be a standard setting organization. To the contrary it is intended to assist ATSC as it moves forward to improve the standard. Also, it is not simply a "contract lab." Its vision is much more.

The Broadcast Lab presents an opportunity to create new working relationships. It is borne out of the idea that as an open system, there is a need for technical coordination between the over-the-air television industry, consumer electronics, professional video, chip

makers and other electronics industries. As digital technology unfolds rapidly before our very eyes, it becomes imperative that we develop a forum to facilitate the rapid deployment of this technology.

All of us in this room will benefit significantly from the creation of an entity that will address highly complex over-the-air technical issues in a timely fashion. Broadcasters can no longer afford the ad hoc approach to technology that characterizes the status quo. Delay and missed opportunities are our common enemy.

The Broadcast Lab is modeled after the highly successful Cable Lab and is borne out of our experience with the Model Station project. The basics are as follows:

- Separate non-stock 501(c)(6) Corporation. A Board of Directors with a Technical Advisory Committee.
- The Board of Directors would be CEO status or “decision makers” in corporations. Not run by trade associations. This is a business-to-business approach.
- Technical Advisory Committee to be made up of CTO’s and Engineers.
- Funding: \$5 million a year with 60% coming from the broadcast industry and 40% from the consumer electronics, professional video, LSC and other electronics industries. The Board of Directors would be structured to reflect the investment made by the respective industries.
- Three year commitment. Such a commitment is critically important to hire top quality staff.
- Location: Outside of Washington.

The pro-competitive advantages of creating a Broadcast Lab will not only benefit our respective industries, but more importantly it will benefit the American public.

Since we last spoke, the most significant event has been the financial support received from the NAB. The NAB Board of Directors has approved up to \$2 million per year over a three-year period in support of the lab. MSTV and its member stations are prepared to move forward with \$1 million per year over this same period. In short, this represents up to a \$9 million investment over the next three years.

I believe this represents a significant milestone in the creation of the lab. It demonstrates a firm commitment on the part of the broadcast industry to accelerate technological development to the over-the-air digital broadcast system.

It is no secret that in order for the project to move forward, we would like to secure 40% of the funding (\$2 million per year) from the consumer electronics, professional video,

LSC's and other industries that have a stake in over-the-air television broadcasting.

Over the past year, we have spent a considerable amount of time meeting with other industry stakeholders. From the consumer electronics side, one thought permeated the discussions - risk reduction in the creation and development of new off-air features and technologies. The last thing CE companies want is to build features into sets for services that broadcasters do not provide. A perfectly understandable position. Conversely, broadcasters' business decisions are in large measure a direct function of the features that are included in receiving devices. Lack of certainty makes it difficult on both sides of the equation.

The point here is that the coordination necessary to develop such services necessitates a systematic dialogue regarding technology in order to make these plans a reality. The Broadcast Lab serves such a function – reducing the risk of failure, delay and unnecessary costs on both industries. One of the most difficult tasks has been to arrive at a common set of research priorities.

The consumer electronics companies have expressed interest in exploring a variety of topics including, in-home networking, evolution from MPEG 2 to MPEG 4 compression schemes, interactivity, data broadcasting, and OCAP/DASE harmonization. Broadcasters have their own priorities including, improvements in off-air reception, antenna improvements, cable compatibility, single frequency networks, PSIP competence and techniques for more efficient bit stream management.

The same is true for issues pertaining to professional video issues. In this regard our experience managing the Model Stations is illustrative. The Model Station created bitstreams to help verify conformance to the various elements of the ATSC standard. It identified implementation and interface issues by building pilot systems and working with prototype equipment. The “plugfests” and “demonstrations” sponsored by the Model Station were extremely important in helping to ensure equipment compatibility.

Finally, the FCC's recent proposals to permit “unlicensed” devices in the broadcast band raise a number of potentially significant technical issues. In this regard we share your concerns regarding the potential for interference with existing consumer equipment.

No doubt each and every company in this room would have its own set of research priorities. The fundamental purpose of the Broadcast Lab, is to focus on those projects that enhance the vitality and competitiveness of the free, over-the-air television service. In our view this can be accomplished only in a forum that provides for the systematic cross-industry discussion of over-the-air broadcast technology.

I am sometimes asked whether it is worth attempting to accelerate technological development of the over-the-air digital television system. Skeptics have argued that with cable and satellite systems, there is no need to focus on off-air reception. We disagree in the strongest possible terms. Before the digital transition is complete broadcasters will

have spent close to \$4.5 billion for the basic digital pass through and between \$10 -16 billion dollars to fully convert a digital facility, including local production costs. In New York alone, the stations are spending hundreds of millions of dollars ensuring their off-air future with a new broadcast tower to replace the World Trade Center. The lesson of New York is profound – off air reception is very, very important. Moreover, nearly 30 percent of the television sets in the United States are not connected to cable or satellite, which is a sizable market in its own right. Finally, broadcasters are tired of bearing the expense of operating both an analog and digital. Time is of the essence. There is no question that the government covets our spectrum and will demand its return.

We believe there is a strong and vibrant off-air market. I find it ironic that government policy makers become excited about the possibility of new “wireless” video alternatives. (You see this in descriptions of new video services that may be offered in returned channels 52-69.) Today, over-the-air terrestrial digital broadcasting is perhaps the most advanced digital service on the planet. While satellites complain about lack of capacity and cable systems refrain from carrying many local HDTV signals, local over the air television is providing five or more digital signals with HDTV content to 72% of US Television Households.

We are the ultimate “wireless” video system. However, our ability to fully develop and exploit this technology will require an open and cooperative relationship with other stakeholders.

Over the next few weeks, we will be contacting each of you individually to obtain your support. I invite you to join us as we commence this journey. We all face the same digital future, and we believe that Broadcast Labs will provide the forum for helping to chart this path for the benefit of our industries and the American consumer.