

# HDTV — WHY WE APPROACH IT DIFFERENTLY IN THE UNITED STATES

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## **Abstract**

*The Europeans and Japanese seem to have a very orderly process in place to establish technical standards for HDTV programming and broadcasting. They rapidly decide what the standard will be, then they try to make it happen. In contrast, our process in the United States looks like a bar room brawl. We do not know, today, what our technical standards will be. We are focusing on terrestrial broadcasting, they are assuming satellite broadcasting. We rely heavily on the private sector, they have strong government involvement. Why do we approach it differently in the United States? Which process is better?*

Why do we approach HDTV differently in the United States? The Europeans and Japanese seem to have a very orderly process in place to establish HDTV standards. They already know what their standards will be. The Europeans are planning to use HDMAC and the Japanese are planning to use MUSE. They decided very early in their process what the standards were going to be. All that was left was to implement it.

In contrast, our process must look like a bar room brawl to them. Today, I can not tell you what our standards will be. Why is their process so clear and ours so unclear? Is this a bar room brawl? Let's look at some other aspects first.

I believe there are several reasons why we approach the problem in a different way. But, I also believe that our process is better — for us anyway.

I would like to focus first on how we are different, how our needs are different, and how our needs are more demanding.

First — Spectrum. In Europe and Japan, early decisions were made to get the needed spectrum by using satellite broadcasting. That is not an acceptable solution to us. There are some 1,400 terrestrial broadcasters in the United States. Not only are they a very powerful force in our private sector but they also provide a local public information service which is very important to our citizens. What are we going to say to them? "Shut up and go away!" "Forget about your businesses!" "Better luck next time!" What else could we say?

Second — Money. We approach broadcasting on a clear business basis. If it is not a viable business, we do not have a government which will step in and pay for it. We will have a DBS service when, and if, somebody believes they can make it a viable business venture. Our government is not going to pay for it. Nor is our government going to pay for

the research and development to develop a new broadcasting system. We look to our private sector. We look to our private sector both to do the broadcasting and to develop the broadcasting system.

Third — Bandwidth. We want to have HDTV using our current channel scheme, 6 MHz per channel. Satellite channels have about four times the bandwidth of our terrestrial channels. That makes our job much more difficult. Also, a terrestrial channel is a much more hostile environment for a signal than is a satellite channel.

Fourth — Public Process. Whoever wants to be involved in what we are doing in the United States can be involved. Meetings of the FCC Advisory Committee on Advanced Television Service are public. They are announced in advance. Anybody can go to these meetings. Anybody who is in the meeting can speak in the meeting. Sometimes there are disagreements. Sometimes it almost seems a shouting match is going to break out. But sometimes there are also agreements. The effect of this, I believe, is that we end up making decisions that have very wide support.

Let's look at where the process has taken us.

In 1986 there were five proposed broadcasting systems that were being discussed in the United States. Two of them were satellite systems, two were augmentation systems, and one was a simulcast system which would have required a channel bandwidth of at least 9 MHz thus not fitting into our 6 MHz channel scheme.

One year later there were ten systems. We picked up two more satellite systems, one more augmentation system, and two NTSC receiver compatible systems.

In 1989 there were 21 systems. We had three analog 6 MHz simulcast proposals, five augmentation proposals, and ten NTSC receiver compatible systems.

You can imagine that there were lots of discussions going on. The FCC Advisory Committee was going full blast. Lots of meetings — too many for lots of people.

But, consensus was forming. The way we do things is we ask for people to put their best ideas forward and then we offer criticism. Some of the ideas are good. And, it is clear they are good. Some of the ideas are not good. They tend to disappear.

One year later, 1990, we had only six systems on the table for terrestrial broadcasting. None of them were augmentation systems. Not one. Four of them, two-thirds, were simulcast systems. Analog simulcast systems. Notice that one of the things that happened in this process is that the augmentation systems simply disappeared. There was a clear movement in the direction of simulcast systems.

Then along came another better idea. Digital.

Today there are still six proposals for terrestrial broadcasting. But, it is a slightly different set of six proposals. Five of them are simulcast. Four of those five are digital.

I ask you now, is this a bar room brawl? Maybe so, but I'll tell you one thing for certain. We are going to end up with the best possible system from this process. We have focused on our needs and desires and we have put our best experts on it. And, we are going to have the best system because of that.