## Remarks by Commissioner James H. Quello

## Before the

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New broadcasting technologies are emerging constantly these days, giving rise to challenging new public policy questions. As engineers, you are in the forefront of these changes: you are creating them and adapting them to use in the broadcast and telecommunications environment.

These new technologies are transforming the capabilities of both television and radio broadcasting. With digital compression a 6 MHz television channel can be made to accommodate several video channels or many more nonvideo channels. Thus, the Grand Alliance advanced television system has the capacity to support not only the delivery of HDTV, but additionally an almost limitless mix of other services.

In this new digital world, flexibility of unthought-of magnitude is possible, and along with it the potential for broadcasters to provide a diverse array of services to the broadcast public.

Nor is this potential limited solely to digital broadcasting technology. Data broadcasting, using existing radio and TV signals as the transmission media, is becoming a technical reality. High-speed subcarriers in FM radio service will allow data rates of tens of kilobits per second to be achieved. New data broadcasting technologies for television can deliver about half a megabit per second, piggybacked on an NTSC television signal. These technologies are ready today and the Commission looks forward to considering the results produced by the industry standards committees that are studying these techniques.

These new broadcast technologies raises a difficult question that the Commission must answer: if broadcast spectrum, including the new 6 MHz HDTV channel, can potentially be used to offer a number of broadcast and nonbroadcast services, what should the Commission's regulatory response be?

There are really only three basic options: lead, follow, or get out of the way. But believe it or not, the right answer is probably a combination of all three: lead, follow, AND get out of the way.



Let me explain. The Commission needs to "lead," in my judgment, by setting in place whatever rules are necessary to allow broadcasters to utilize the full potential of their spectrum in a fair and reasonable manner. To me this means allowing broadcasters to use their existing spectrum flexibly to offer whatever mix of broadcast and nonbroadcast services they believe best responds to marketplace demands. In my view, the same approach should apply to use of the 6 MHz of HDTV spectrum during the transitional period during which HDTV will be introduced.

There are only two limits I would place on this flexibility. The first applies to flexible use of both existing and new broadcast channels: that is, to the extent broadcast channels are being used to offer for-pay, subscription-based services, I think it both reasonable and consistent with the federal scheme of spectrum auctions to require that broadcasters pay a fair value for that use. This "fair value" need not mean that broadcasters bid at auction for their spectrum, but rather that the fair value be set by the value of spectrum that has been auctioned for similar use. And by "fair value" I do not mean that broadcasters should be required to broadcast certain types or amounts of programs, or give up free air time for political broadcasts, or be made to offer up any other content-based quid pro quo on the altar of Commission regulation. Let me be quite clear: I consider this program content type of "social compact" a First Amendment time bomb: if we tried to adopt a scheme like this, it would be blown up in court. Government should not attempt such extractions, and broadcasters should not accede to them.

The second limit would be that the extra 6 MHz for HDTV be used during the transitional period in a manner not inconsistent with the development of HDTV. My principal goal in this regard is to assure that the intensity of consumer demand for various services - be they extra channels of NTSC broadcasting, or nonbroadcast services, or subscription services, or HDTV - can be tested in the market. In the final analysis consumer demand, not government regulation and not even technological development per se, will determine what services broadcasters will offer on broadcast spectrum. This is as it should be. Federal policy should allow consumers the ability to be exposed to different service possibilities so that their preferences can be registered.

Once the FCC has taken the "lead" in this way, it should proceed to the next step, which is "follow." In matters like this, nothing regulates better than the marketplace. We should allow broadcaster experiments in offering the different services to proceed apace, and follow their results. In doing this we will come to the ultimate regulatory step, "get out of the way." In my view the Commission should validate to the greatest extent possible the results of broadcasters' marketplace experiments in offering new services, whatever mix of services it is that broadcasters' audiences prefer.

Is that a new regulatory model for broadcasting? You bet it is. But I believe an approach like this is necessary if we are to make sure that broadcasting plays the part we know it can in forging the Information Superhighway. There is much talk these days about convergence and about the National Information Infrastructure. All too often the industries mentioned in this regard are the telephone, cable, and wireless telecommunications industries. But our broadcasting system is the best in the world, free to the public and very much a part of this emerging infrastructure. Those who peer fondly through the mist to glimpse the outlines of this new information infrastructure would do well to remember that over-the-air broadcasting has singular attributes not likely to be easily replicated by any other medium. First of all, broadcasting provides nearly universal service: 99% of U.S. households have a radio, and 98% have a TV set. Second, broadcasting is mobile: it can be received wherever the customer is rather than the customer having to be where their service terminates. And third, broadcasting is an efficient medium: there is no need to build a costly and time-consuming infrastructure of fiber, coaxial or copper cable, or install a whole new transmission system as in PCS. These advantages of the over-the-air medium are so obvious that they are too often taken for granted. But when you step back and look at the information superhighway of the future, it's very obvious to me that broadcasting has a strong participatory role to play and a very bright future.

And everyone should realize that engineers with their technological expertise are the prime inventors and developers of advance telecommunications technology. It is a proud profession. It will be engineers, not sales or programming executives, who will lead the way in bringing to the public the mind-boggling advance possibilities of the convergence of computers, television, telephones and cable.

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