It is a privilege for me to introduce this issue of COMMLAW CONSPECTUS—a scholarly publication that, over many years, has produced communications-related articles, comments and other writings of real merit. The articles in this issue of COMMLAW CONSPECTUS address shifting regulatory paradigms, the proper role of government and challenges of standard-setting in the converged communications environment. I expect that the treatment of these topics furthers the journal's developing legacy of fine legal scholarship, and I extend my congratulations to the editors and faculty advisors for their continuing efforts.

Over the last three decades, this nation has witnessed a remarkable technological revolution in the communications field, one that has dramatically changed the way in which American citizens live, work and enjoy themselves. One such advance—which today is only in its infancy—is digital television (“DTV”). But, without doubt, this technical transformation of our electronic media is destined to produce a more flexible and more valuable platform for a variety of transmission industries, as well as a much more diverse viewing experience for the viewing public.

The U.S. DTV experience is not a lengthy one. It started back in 1987 when the FCC became aware that both Japan and Western Europe had been engaged for some years in advanced television research and development. To jump-start our national effort in this area, then Commission Chairman Dennis Patrick decided to appoint a broadly based industry Advisory Committee (one that I chaired during its nine-year lifespan). The Committee’s mandate was to assist the FCC in establishing a new national broadcast transmission standard—a standard that would be adaptable to other video media like cable and direct broadcast satellite (“DBS”). The existing “NTSC” analog norm was established way back in 1941 and colorized in 1954.

The Advisory Committee decided to initiate an international competition to select the advanced TV system that could best serve as the basis of the new standard. Initially, some twenty-three different proposals were submitted, each of which employed analog transmission as in today’s conventional television. Along the way, some of the more substantial participants decided to switch to a digital format, which under objective and exhaustive Committee testing, proved to be superior to analog. At our urging, these entities subsequently combined their individual proposals into a single “best of the best” digital system.

After further testing and adjustment, this so-called “Grand Alliance” system was recommended by the Advisory Committee and largely adopted by the FCC as the basis of a new national DTV standard. Without question, the Grand Alliance system represents world-leading technology and the greatest advance in video since the advent of color.

With the digital standard and accompanying service rules in place, the FCC then mandated a very rapid build-out schedule for the broadcasting industry under which some 62% of the nation’s households are now served by DTV signals (with the remainder to be deployed by May of 2002 for commercial broadcasters and 2003 for non-commercial licensees). Similarly, DBS already employs digital transmission and the cable industry is engaging in a nationwide rollout of digital set-top boxes and modems. Moreover, the computer industry is planning to add digital video capabilities to PCs. Thus, the U.S. video landscape increasingly will be digital.

Three major obstacles, however, remain in the
U.S. DTV transition—all of them, in some way, related. First, the cost of digital equipment must be brought within reach of the average consumer's pocketbook. Fortunately, set prices have begun to decline, and if the marketplace experience of other electronic devices (like VCRs and CDs) is any guide, this process will continue and accelerate as the public becomes more and more aware of DTV and the diverse offerings that it can provide. Those services, incidentally, include the following: high-definition television ("HDTV"), with dramatically clearer sound and pictures; multicasting, with resolution comparable to today's television; and a multitude of data offerings, including (very importantly) interactivity with the internet. And, happily, these alternatives do not need to be either/or choices for viewers. The capacity and flexibility of our digital television system is such that consumers can have it all—with the ability to shift dynamically, in different dayparts, between the various services available.

The primary problem in achieving continued receiver price reductions is the relative lack of digital programs now available—and, conversely, DTV programming will not be produced in abundance until low-cost sets are available. Again, there is some good news with regard to this "chicken and egg" problem. The major networks (both broadcast and cable) have begun to increase their production of digital material—with CBS, PBS and HBO, among others, leading the way. Such efforts are being facilitated by funding from major set manufacturers and also by the fact that filmed programming—the great universe of Hollywood movies and also most of TV's prime-time offerings—is shot in 35 mm cinematography, the equivalent of HDTV.

Additionally, of course, sports attractions should prove to be a natural focus for the clarity of high-definition television (and, indeed, for the wider screen size offered by DTV receivers). In this regard, ABC offered its Monday Night Football and the Super Bowl programming in HDTV last year; and CBS did likewise with the U.S. Tennis Open, the Master's Golf Tournament and college basketball's "Final Four." Hopefully, this kind of fare also will increase in the near future.

The final transition hurdle relates to the fact that important standards issues—like cable compatibility, receiver labeling, interactive services interconnection, broadcast modulation and copy protection—have remained unsettled for an extended period of time despite repeated industry promises and government indications that they would be resolved. However, several months ago, an agreement between the cable and consumer electronics industries appears to have paved the way for the development of cable-compatible DTV sets. The labeling problem also seems headed for private sector concurrence in the immediate future. Additionally, the FCC recently has begun to exercise much needed leadership in this area by starting public proceedings directed to several of the unsolved issues. Further testing (by both government and industry) is now being conducted to insure the U.S. digital system's suitability for indoor and portable reception.

One additional DTV issue should be discussed: what regulatory requirements will the FCC impose on various video providers in the future? Historically, broadcasting has been regulated under a rigorous "public interest" model (based on so-called "spectrum scarcity"), telephone as a "common carrier" (with a requirement to serve all at reasonable rates), cable and DBS somewhere in between, and computers not at all. Yet, the reality is that all of these operators may be competing someday in the digital video future.

The current administration seems intent on examining new requirements on broadcasting in a DTV context—the theory being that, given the grant of a second channel to broadcasters for the provision of digital television, more public service responsibilities should be expected of the industry. A presidentially appointed commission has issued an aggressive set of recommendations in this regard, on which the FCC recently has sought public comment.

My own view, however, is that the government should move with considerable caution in mandating such additional public interest requirements. After all, we are dealing with a new technology and service that still must find its appropriate place in the communications marketplace. Moreover, I do not believe that additional public interest obligations should be considered as a *quid pro quo* for the award of broadcast DTV spectrum. While it is true that licensees will receive a second channel (and potentially more valuable 6 MHz) in which to provide digital service, the frequencies now used for analog TV will have to be returned to the public at the conclusion of
the transition. Thus, broadcasters will end up with a single channel as now.

Further, DTV is by no means a "windfall" for the industry. Licensees will have to endure considerable expense in equipping and operating two stations—analogue and digital—over a lengthy transition period, without any assurance of increased audience or advertising revenue. The imposition of new and burdensome regulatory requirements at this time may stifle experimentation and slow the entire implementation of over-the-air digital technology.

The digital transition to date, admittedly, has been slow and uncertain due in large measure to the obstacles and issues that I have discussed. Hopefully, all of these uncertainties can be disposed of in the near future so that the public can have confidence that the standard will not be materially changed, that the digital equipment they purchase will not be quickly rendered obsolete and that there will be something of real interest to watch on their new DTV sets. My hope and expectation is that the digital scene in this country will look a lot different (and more positive) by the end of next year.

In this respect, it is important to remember that technological transitions (and DTV represents the first significant retooling of our television industry since it was introduced over a half century ago) take time, especially those that entail widespread purchases of expensive consumer equipment. But, if the promise of digital television is to be realized, both the government and the affected industries must maintain their respective determination to get the job done and not be deterred by the skeptics and naysayers that abound (many of whom have moved from one criticism of DTV to another, but always with the effect of impeding the overall transition).

In the final analysis, too much time, effort and money has been expended—and too much viewer benefit is involved—to turn back now when the digital goal-line is clearly in sight. In short, it is profoundly in the public interest to make certain that all the exciting services that this new technology can offer are fully realized. Thus, my advice concerning DTV is simply this: stay the course!