



Consumer Federation of America

**A CONSUMER-FRIENDLY INDUSTRIAL POLICY
FOR THE TRANSITION TO DIGITAL TV**

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**Submitted to
Subcommittee on Telecommunications and the Internet
House Energy and Commerce Committee**

September 25, 2002

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THE TRANSITION TO DIGITAL TV IS AN IMPORTANT CONSUMER GOAL

The transition from analog to digital television holds great promise for consumers. This value is more than pretty television pictures and enhanced sound but also includes expanding sources of information and interactivity. Enhanced digital services promise new applications for the disabled as well as services that will raise the level of civic and political discourse.

The digital transition is stymied by a number of issues including a lack of digital programming, cost barriers, lack of consumer awareness of the transition, disputes over technological standards and a lack of cable interoperability. In a misguided effort to speed the transition, the FCC recently issued a rule mandating that all televisions contain a digital tuner by 2007. At the same time, the FCC initiated a proceeding to consider whether to adopt a “broadcast flag” standard designed to limit consumers’ ability to make copies of digital-broadcast television. The House Commerce Committee quickly followed with draft legislation calling for adoption of a broadcast flag, an end to analog television compatibility and increased cable interoperability.

The main thrust of the Committee draft and the FCC rulemakings – mandating the tuner and the assault on consumer fair use rights – is an anti-consumer policy that will do little to speed the transition to digital TV. By raising costs and reducing functionality, they are much more likely to slow the transition down and leave the new digital media far less innovative and consumer-friendly than they could be. A decade of analysis of the new digital media by the Consumer Federation of America has shown that policies that expand consumer

choice with increased options, enhance consumer control, and encourage consumer use speed adoption and stimulate innovation.¹

Policymakers must not forget that the television is among the most ubiquitous consumer durables in our society. Virtually every household has at least one. On average, Americans spend an immense amount of time watching TV. Policy mistakes that harm consumers directly, like making the TV more expensive or less useful will be very visible to and resisted by the public. Policy mistakes that indirectly harm the public, like restricting the functionality of digital media or discouraging innovation, may not be as evident, but they will not go unnoticed.

Frustration with the slow speed of the digital transmission is understandable, but that does not justify hammering consumers. Congress and the FCC should carefully assess the root causes of the lagging transition and adopt responsible, consumer-friendly solutions. The proposals on the table in the Energy and Commerce Committee and at the FCC will not solve the problem.

THE TRANSITION TO DIGITAL TV IS FALTERING BECAUSE THE BROADCAST AND CABLE INDUSTRIES HAVE FAILED TO LIVE UP TO THEIR OBLIGATIONS.

When Congress first confronted the problem of phasing out analog TV sets and replacing them with digital TVs, it recognized that a precipitous change could impose substantial harm on the public. On some day in the future, the analog TV sets in people's

¹ Cooper, Mark, *Expanding the Information Age for the 1990s: A Pragmatic Consumer Analysis*, (Consumer Federation of America and American Association of Retired Persons, January 1990), *Developing the Information Age in the 1990s: A Pragmatic Consumer View* (Consumer Federation of America, June 8, 1992), *A Consumer Road Map to the Information Superhighway: Finding the Pot of Gold at the End of the Road and Avoiding the Potholes Along the Way* (Consumer Federation of America, January 26, 1994), *A Consumer Perspective On Economic, Social And Public Policy Issues In The Transition To Digital Television: Report Of The Consumer Federation Of America To People For Better TV* (Consumer Federation of America, October 29, 1999).

homes would have to go dark because all signals would be digital. While Congress wanted the transition to take place by 2006, to minimize the impact it also included a market penetration target for digital TVs of 85 percent. If digital TVs had not reached the 85 percent figure, the FCC could extend the deadline for turning the analog lights out. At least in that way no more than 15 percent of the TVs still in consumer's homes would be rendered obsolete.

The logic of the plan was to have programmers and distributors offer ever increasing amounts of programming, which would give consumers incentives to buy digital TVs and replace their analog sets as they aged or broke.² The broadcasters were given a gift of spectrum, which was valued as high as \$70 billion. Cable operators, who still largely operate as monopolies, were told to create open set top box standards that will ensure that digital cable systems will be compatible with a variety of digital receivers and devices, thereby enhancing competition and keeping down costs to consumers.

Neither the broadcasters nor the cable industry lived up to their part of the bargain. Broadcasters have repeatedly missed their deadlines for rolling out programming and insist on having complete control over taping of digital content before they make much more of it available. Cable operators have dragged their feet on compatibility and competition. Since there is little digital programming out there, consumers have been slow to buy digital sets. Under these circumstances, the 85 percent penetration figure is far off in the distance.

² "Comments of the Consumer Federation of America," *In the Matter of Public Interest Obligations of TV Broadcast Licensees*, MM docket No. 99-360, March 27, 2000, "Reply Comments of the Consumer Federation of America," *In the Matter of Public Interest Obligations of TV Broadcast Licensees*, MM docket No. 99-360, April 25, 2000, "Statement Of Dr. Mark Cooper on Digital Television," Senate Commerce Committee, March 1, 2001.

IT MAKES NO SENSE TO FORCE CONSUMERS TO PAY MORE FOR LESS USEFUL DIGITAL TV SETS AND RECORDING DEVICES.

The solution being pushed by the broadcast and cable industries, Congressman Tauzin, Chairman of the House Energy and Commerce Committee (as embodied in draft legislation presented by the Committee staff), and the Federal Communications Commission (FCC) rewards the broadcasters and cable industries for dragging their feet and hammers the consumer. It will simply force consumers to buy digital TV sets, no matter how little programming there is, and dramatically reduce the usefulness of those sets.

Tuners

In four years, all the existing, analog TV sets will stop working; no matter how many remain in consumers' homes. The new digital sets consumers will be forced to buy will be more expensive. There is a debate about how much more expensive they will be. Today's costs are in the range of \$200 per set. The broadcasters claim that these costs will evaporate, TV set manufacturers say they will remain large. Consumer would be able to buy stand-alone tuners that can be hooked to the analog sets so they will be able to receive the digital signals, but these devices will definitely be costly.

Limited Consumer Use

The digital TV sets and recording devices will also be considerably less useful than the analog equipment consumers are forced to junk, if Congressman Tauzin and the FCC have their way. Pushed by the TV networks and Hollywood, they are insisting that the ability of the new digital equipments to record and play recorded digital material will be severely restricted.

A new technology that was supposed to empower consumers and enhance their experience has been turned on its head because of the proposed restrictions on the ability to

record digital programming for personal use. Efforts endorsed by the Committee Draft and the FCC to restrict consumer-recording rights are based on the presumption that consumers are thieves. Today, consumers have the legal right to make convenient and incidental copies of copyrighted works without obtaining the prior consent of copyright owners. These traditional “fair use” rights are at the foundation of the receipt and use of information by the public. Content protection should not encroach upon legal fair use rights and the ability of consumers to benefit from the flexibility and openness of digital technologies. The recent actions in Congress and at the FCC place these important consumer rights under attack.

Under the Committee Draft, the FCC is required to determine in advance, which copies are legal and which devices can play a legal copy. TV sets must be designed to make it impossible to copy a show and send it to a friend or relative over the Internet or make a copy to take to your weekend home. At best, consumers will have to ask program producers and distributors for permission to copy a program and/or get permission to play a copy on a specific device. More likely, consumers simply will be unable to make copies – that is the approach on which a group of companies convened by Mr. Tauzin was leaning. Some media companies are going so far as to argue that it should be illegal for consumers to copy broadcasting without recording and watching advertising.

Forcing consumers to pay more for less hardly seems to be an attractive strategy for stimulating consumer adoption of a technology.³ In fact, by regulating how consumers can

³ “Letter From Mark Cooper to William Kennard,” November 22, 2000, “Letter from Mark Cooper to William Kennard,” January 16, 2001.

use the content they legally acquire, this approach to industrial policy will slow the transition and prevent the technology from reaching its potential.⁴

MANDATING DIGITAL TUNERS WILL NOT SOLVE THE PROBLEM.

Understanding why the effort to force broadcast tuners into TV sets for the purpose of receiving over-the-air broadcast signals is an expensive hoax being foisted on the American consumer provides a useful starting point for developing a sensible, consumer friendly policy for the transition to digital TV. The lack of digital tuners in TV sets has provided a convenient excuse for broadcasters to shirk their obligations to use the spectrum they were given to provide programming. Forcing digital tuners into TV sets will do little to accelerate the transition to digital TV. Its primary impact will be to raise the price of TV sets and enrich the companies that hold patents on the digital tuner technologies. Needless to say, these are the companies that lobbied the FCC hardest to force digital tuners into TV sets.

Why won't digital tuners accelerate the transition to digital TV programming and viewing? Because most households do not use a tuner to get their TV signals over-the-air anymore. They get their TV signal from a set top box hooked to a cable wire or a satellite dish.

When the debate over digital television started in the late 1980s, about half of all households subscribed to cable TV and satellite barely existed. In other words, broadcast was still the predominant means of delivering television, so it made sense to be concerned about digital tuners to receive broadcast signals.

⁴ Cooper, Mark, "Open Access To The Broadband Internet: Technical And Economic Discrimination In Closed, Proprietary Networks," University of Colorado Law Review, Vol. 69, Fall 2000; Cooper, Mark and Christopher Murray, "The Role Of Technology And Public Policy In Preserving An Open Broadband Internet," The Policy Implications Of End-To-End, Stanford Law School, December 1, 2000

In the past decade, however, that has changed radically. Today, almost 90 percent of all households subscribe to either cable or satellite. In fact, there are already twice as many digital TV subscribers (cable and satellite) as there are broadcast only households.⁵ They are capable of receiving digital signals, but programmers and cable operators are providing little digital content.

If the transition to digital programming viewing is to be accelerated, it will have to be promoted by accelerating the penetration of digital distribution into the bit stream through cable or satellite, not the broadcast signal.

REDUCING THE FUNCTIONALITY OF CONSUMER APPLIANCES WILL MAKE MATTERS WORSE.

Movie studios, TV broadcasters and record companies are resisting the distribution of digital products. They have decided that American consumers are thieves, who cannot be trusted to fairly use the programs that they purchase and legally bring into their homes. The Committee draft adopts this view.

Ever since VCRs and portable tape recorders became available people have been able to make a copy and use it at another time or put it in another device virtually anywhere to play it back. The principle of fair use allows consumers to use this material in this way, **unless the content owner can show that the copyright is being violated.**

Hollywood and the broadcasters want to radically alter this approach to fair use. Essentially, they want to start from the assumption that all use, after the initial viewing, is illegal and then authorize only specific uses and devices. And, they want to hard wire the ban on use into the equipment that records or plays the copyrighted material. This approach

⁵ Cooper, Mark, *The Failure of 'Intermodal Competition in Cable and Communications Markets* (Consumer Federation of America and Consumers Union, April, 2002).

completely destroys consumers legal fair use rights and drives up the cost of consumer electronics.

The technical means for accomplishing this lock-down of content is called a broadcast flag. The authorized digital content would have an encrypted or embedded flag. All display devices would be required to have a flag reader. If the flag was not there, or it is the wrong flag, the content would not play. Uncle Joe's content would not play on aunt Mary's DVD player, unless aunt Mary got permission. There are permeations and variations on this approach, but they all amount to the same thing, a complete reversal of the principle of the consumer right of fair use. The inclusion of the broadcast flag would only be the starting point. There is no doubt that content owners will insist on a "bit stream" flag as well. The fight for the consumer's fair use rights starts here.

The effort to force a flag into all digital equipment directly contradicts the original intent of Congress in managing the transition in exactly the same way the effort to impose a date certain on turning off the analog signal does. Congress' intent was to minimize consumer harm. The inclusion of the broadcast flag would essentially render obsolete tens of millions of digital devices that have been already purchased. These devices would not be able to run any new material that included the broadcast flag. They would be useless in short order.

DIGITAL TECHNOLOGY MUST EXPAND CONSUMER HORIZONS TO DRIVE ADOPTION.

Once policymakers accept the reality that it is the bit stream that must be the vehicle for accelerating the transition to digital TV, the need for an entirely different approach becomes evident. Rather than forcing hardware into the system and reducing functionality, or

even providing pretty pictures, the industry must expand consumer horizons. The solution is to enhance and enrich the consumer experience empowering consumers to participate more fully in the digital experience.⁶ That is the true promise of digital technologies. This view echoes the experience of consumers in the information age. Consumers and the economy are best served by open standards and networks that afford them maximum choice, encourage use and promote unfettered innovations by **both** consumers **and** producers.

The broadcast and video industries provide an example of this very point. A couple of decades ago, when the VCR became available, Hollywood was convinced that the ability to record programs would ruin it. If Hollywood had its way, it would have destroyed the functionality of the VCR, just as it proposes today to destroy the functionality of digital recording and display devices. Hollywood failed in its attempt and consumers have been the beneficiaries, with enhanced functionality and choice in viewing entertainment. The industry adjusted its business model and now garners a substantial part of its revenue from VCR tape sales and rentals.

New technologies that empower consumers always threaten the old business models of entrenched industries. They will lobby hard to defend their private interests at the expense of the public. If Congress gives in, consumers will suffer. In the case of digital technologies, they will suffer in three ways. Costs will rise. Industries will assert control over how content is used and enjoyed in the home. The dynamic, innovative environment of the digital media will be chilled and the technology will fall far short of its potential to transform the communications and media industries.

⁶ “Open Communications Platforms: Cornerstone of Innovation and Democratic Discourse In the Internet Age,” The Regulation of Information Platforms, University of Colorado School of Law, January 27, 2002 (to be published in Journal on Telecommunications, Technology and Intellectual Property).

CONSUMER FRIENDLY POLICIES WILL ACCELERATE THE TRANSITION TO DIGITAL TV.

A sensible consumer friendly policy should head in the opposite direction from that being taken by the industry, Congress and the FCC. The two industry segments that have retarded the transition must be compelled to live up to their commitments.

Digital Must Carry

By requiring cable carriage of local broadcaster signals, the 1992 Cable Act was intended to preserve local television stations with their multiplicity of programming sources. The Act encompasses the signals of local broadcasters, digital as well as analog, for as long as they are licensed to broadcast. The law makes no distinction that would exempt digital signals from its protection. Cable operators must provide carriage for the digital channels of broadcast signals they must not be allowed to act as a gatekeeper or filter. This will expand distribution in the dominant delivery mode. The FCC has incorrectly decided not to require digital must carry.

Open Set-Top Box Standards

Today, cable boxes act as mere channel flippers. In the future, digital cable boxes could let you play video games online on your television, share photos with friends and other useful applications that have not been imagined. However, in order to fully realize the high-tech cable box of the future, one that marries TV with the interactive richness of the Internet, the market for cable set top boxes must be open and competitive. The cable box should interoperate with any other device. This compatibility and interoperability will create a large market and promote innovation. Ensuring compatibility will promote a competitive market, which will enhance innovation and keep prices low.

Compatibility entails both technical and business conditions. Licensing terms and conditions can so restrict the functionality of devices allowed to interconnect that the benefits of having multiple suppliers are negated. Private parties can impose such onerous licensing terms and conditions that they undermine new functionalities and eliminate all incentive to innovate.

One of the greatest mistakes made by the FCC has been to abdicate its authority to order compatibility to a voluntary industry group. Dominated by the proprietary interests of cable operators, an open, set top standard that facilitates simple, universal “plug and play” interoperability among all digital devices has not been forthcoming. In an industry where interconnection and compatibility between content production, distribution and reception are so critical to the consumer experience, the technical standards of interoperability and their attendant licensing conditions must be subject to public oversight, not private regulation.

Protecting Consumer Fair Use Rights

A similar abdication of public responsibility has afflicted the effort to strike a balance between consumer fair use rights and content owners copyrights. A small cabal of content producers and equipment manufacturers has set out to restrict consumer use without government oversight. They want to control viewing by limiting it to a poorly defined private home network. They claim to be protecting poorly defined “highly valued content” by requiring encryption under licensing terms and conditions that they would impose at their sole discretion. The scheme will not deter serious criminal violation of copyright. Without public oversight, approximately one dozen companies would define and control the consumer digital media experience to protect their business models at the expense of the public.

Private standards subject to arbitrary licensing provisions cannot protect the public interest.⁷ To the extent public policy relies on standards to balance consumer and content owner interests, they should be subject to direct public authority. They must preserve the current level of consumer rights and seek to expand them. Restrictions should reside in the law, not hardware.⁸

Appealing Content

Broadcasters must be confronted with firm deadlines for making digital programming available. Because so many delays have been granted, the FCC will have to “recalibrate” the timing, but once it does, it should stick to the schedule.

Targeted Tuner Programs

If broadcasters believe that tuners are necessary, they should defray the costs. They have been given a treasure trove of spectrum at no cost. Rather than a costly mandate, limited programs, subsidized by broadcasters can be created to target only those low-income consumers that receive over the air broadcast signals.

Reasonable Licensing Requirements

The FCC can help to keep the costs down by requiring the technology to be licensed at a nominal fee. If the FCC is willing to mandate tuners, it certainly should not make specific companies rich and it should endeavor to keep the costs as low as possible.

⁷ Cooper, Mark, “Antitrust As Consumer Protection In The New Economy: Lessons From The Microsoft Case, Hastings Law Journal, 52: 4, April 2001.

⁸ Cooper, Mark and Christopher Murray, “The Role Of Technology And Public Policy In Preserving An Open Broadband Internet,” The Policy Implications Of End-To-End, Stanford Law School, December 1, 2000

CONCLUSION

The recent policymaking efforts by Congress and the FCC to speed the digital transition needlessly punish consumers and offer little to encourage meaningful progress. Rather than focus on anti-consumer policies like a tuner mandate and broadcast flag, Congress and the FCC can undertake policies that will create a holistic and consumer friendly solution to the stalled digital transition. We suggest that Congress and the FCC ensure carriage for digital programming, open and competitive set-top boxes, compatibility and interoperability for all distribution devices and create narrowly tailored tuner distribution programs subsidized by broadcasters. Only by developing a comprehensive solution to this to this multifaceted challenge can we ensure that consumer's interests are adequately represented.