

Thank you, Mr. Chairman, for the opportunity to appear before your Committee today to discuss the transition to digital television. My name is Ben Tucker. I am the Executive Vice President for Broadcast Operations for Fisher Broadcasting, Inc. I also am the National Association of Broadcasters (NAB) Television Board Chairman. I'm pleased to represent the broadcasting industry at this hearing.

Fisher Broadcasting, Inc. owns twelve television stations, the majority of which are licensed in the upper northwest states. We currently have two DTV stations on the air – KATU in Portland, OR and KOMO in Seattle, WA. DTV equipment is on order for the rest of our stations. I would like to highlight the fact that KOMO in Seattle currently provides local HDTV newscasts. As you can see, Fisher Broadcasting, Inc. is committed to making the DTV transition as quickly as possible. This commitment is the same for the entire broadcast industry.

### ***Broadcasters Commitment to DTV***

#### Stations on the air

As of February 26, 2001, 182 DTV stations are on the air in 62 markets reaching 67.18% of all TV households across the nation.<sup>1</sup> Seventy-one of these stations – almost 40 percent – currently on the air are ahead of their required build-out schedule. These 182 DTV stations have met – or surpassed – the aggressive

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<sup>1</sup> A list of stations currently on the air is attached as Exhibit A.

build-out schedule set by the FCC in order to meet the Congressional target date of 2006 to complete the digital transition.

## Programming

The obvious advantage of DTV is the crisper pictures and enhanced viewing experience. Stations will be able to offer many more choices to consumers. Consumers will be the driving force behind the programming offered by DTV stations.

DTV stations are required to provide at least one free, over-the-air channel. This could come in the form of one high definition TV (HDTV) channel, or several streams of standard definition TV (SDTV) signals. Stations also could choose to offer some HDTV programming and some SDTV programming depending on the time of day and consumer demands. DTV stations are allowed to offer ancillary or supplemental services.<sup>2</sup>

The television networks currently offer hundreds of hours of HDTV programming. For example, CBS offers almost 1,000 hours per year, including nearly all prime time programming and major sporting events. ABC provides *NYPD Blue* and Disney films in HDTV. Locally, several stations – including Fisher Broadcasting's KOMO – provide local HDTV newscasts and a consortium of commercial stations exchange locally produced HDTV programs.

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<sup>2</sup> Stations must pay a 5% fee on any profits earned from subscription services.

We are far ahead in the programming offerings in the DTV transition from those offered when the television industry transitioned to color. In the first year of color television back in the 1950s, only 68 hours were offered to viewers. With over 1,000 hours of HDTV programming this year, we are far outpacing the color TV rollout. That's good news because as the transition moves forward, we can only expect content providers will produce more and more programming in HDTV.

Even though there is consistent progress regarding programming and the number of DTV stations currently on the air, the transition still needs help with some major issues that threaten to throw the transition off the tracks.

### ***Broadcasters Call for Action***

There are only 14 months left before the May 2002 deadline for all commercial stations to have a digital signal on the air. They face numerous obstacles from a regulatory standpoint, including the same build out hurdles the existing 182 DTV stations faced.

What we have learned in the last few years is that we cannot accomplish this monumental task on our own. The transition to DTV is the biggest step for the television industry since the advent of color TV and represents a multi-million dollar expense for each individual station. Additionally, during the transition, each broadcast station will be operating essentially two stations, without any guarantee

of additional revenue. Broadcasters are committed to this transition to bring DTV service to the American public. However, at this point, the DTV transition appears to be faltering due to several remaining issues that have yet to be resolved by all of the parties involved in this transition.

There are several entities that serve vital roles in this transition in addition to the broadcasting industry. In order for the transition to be successful, all parties must be willing do their part to get the job done.

The first party, the Federal Communications Commission (FCC), is charged with overseeing the implementation of DTV service to the American public. While the FCC has accomplished a great deal regarding the transition – including assigning an additional 1600 new DTV channel allotments – it has taken a hands off approach with some of the remaining critical issues such as digital must carry, DTV/cable interoperability, and DTV set standards. It is time for the FCC to take a leadership role in this transition and help focus all parties on getting the remaining pieces put in place so the goal of DTV can be realized as quickly as possible.

Cable operators, for example, have an important role in the transition. Nearly 70% of all homes receive over-the-air broadcast signals through cable providers. This means that cable operators hold an important key in the transition – access to viewers. A successful transition, after all, depends on consumers being able to see a broadcaster's digital product. Cable carriage of all over-the-air DTV

channels and innovative digital services will create more demands for digital programming, resulting in consumers buying digital sets and converters at a faster pace, which helps drive the transition along.

Finally, consumers need the proper equipment to experience the benefits of DTV. This means that new DTV sets or set top converters must first be manufactured and second, made available to the public. Consumers must be assured that the new digital products will work with cable set top boxes and that the equipment can receive and decode DTV signals. Thus, manufacturers must work with cable companies to ensure that DTV sets are interoperable with digital cable boxes. Manufacturers must ensure that more DTV sets will include DTV tuners so consumers can receive the over-the-air signals.

The FCC has been relying on the marketplace to settle the remaining issues. We have learned that the marketplace is not driving the transition fast enough – placing the target date in jeopardy. We need resolution of the digital must carry, DTV/cable interoperability, and DTV set reception issues or the transition will continue to falter and stall. I welcome the opportunity to outline these issues for you.

### ***DTV Transmission Standard***

Before discussing the other issues mentioned above, I would like to take the opportunity to dismiss any questions regarding the broadcasting industry's commitment to the FCC-approved DTV transmission standard, 8-VSB.

In the summer of 1999, concerns were raised among some in the broadcasting industry regarding the 8-VSB standard and its performance in urban markets and for mobile applications. Some believed that another transmission standard – COFDM – was more appropriate. When the issue was raised, most of the other entities involved in the transition accused the broadcasters of using it as a stalling tactic and questioned our commitment to DTV. We rose to this challenge and immediately took steps to resolve the issue.

In 2000, the broadcasting industry conducted a parallel investigation of VSB improvements and COFDM performance. This joint initiative included the National Association of Broadcasters (NAB) and Maximum Service Television (MSTV), with funding from the four networks (PBS in-kind), group broadcasters, and NAB.

Investigation of VSB included independent evaluations of second generation products and test performance in the field and improvements to the 8-VSB standard for possible modification of the standard to accommodate new applications. The project investigated the COFDM standard to test the performance of COFDM for existing and new services.

Upon completion of the testing in 2000, results were reported to the NAB and MSTV Boards of Directors in January 2001. After reviewing the results, both Boards passed a joint resolution that stated there is insufficient evidence to add COFDM as a DTV standard and thus it reaffirmed the commitment to the VSB standard.<sup>3</sup> Soon thereafter, the FCC affirmed the 8-VSB modulation system as the U.S. DTV transmission standard.

While virtually all of the broadcasting industry is now united behind the 8-VSB standard, DTV set reception must be improved. Broadcasters and, we hope, our manufacturer brethren are committed to seeing this happen post haste. Additionally, we are committed in helping to resolve the rest of the hurdles on this track to the DTV finish line.

### ***DTV Must Carry***

Digital must carry is the most important issue still facing the DTV transition. At this point, not many consumers can receive the currently available DTV signals via cable because cable, generally, will not talk to broadcasters about carriage of DTV signals. Must carry of digital signals during the transition will help fuel the demand for digital programming, and will entice consumers to buy digital sets. Why should the 70% of Americans who are cable subscribers join the DTV

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<sup>3</sup> A copy of the Joint Resolution is attached as Exhibit B.

transition by purchasing an expensive DTV set if they cannot easily get DTV broadcasts that are in their market?

The Communications Act of 1934, as amended by the Cable Act of 1992, mandates carriage of both analog and DTV signals.<sup>4</sup> The FCC is required to ensure the carriage of digital television signals;<sup>5</sup> however, it has so far failed to comply with this mandate. The FCC issued a *Notice of Proposed Rulemaking* for digital must carry in July 1998.<sup>6</sup> Nearly two and a half years later, it issued a “partial” decision.<sup>7</sup> There, the FCC (1) refused to require dual must carry of both analog and DTV signals; (2) asked for more information on channel capacity from cable operators; and (3) established that content to be carried after the transition is only one programming stream plus program related content.<sup>8</sup>

This partial decision does not solve the problems of the DTV transition – it only exacerbates them. Carriage of DTV signals during the transition is essential for a successful and timely conversion. Without must carry, completing the transition even close to 2006 is impossible. The Congressional Budget Office recognized this in 1999 when it stated:

“The availability of digital programming on cable systems is a necessary, though not sufficient, condition for a timely transition. Without it, reaching

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<sup>4</sup> Communications Act of 1934, § 614(a).

<sup>5</sup> *Id.* at §614(b)(4)(B).

<sup>6</sup> *Notice of Proposed Rule Making*, CS Docket No. 98-120, July 10, 1998.

<sup>7</sup> *First Report and Order and Further Notice of Proposed Rulemaking*, CS Docket No. 98-120, January 18, 2001 [hereinafter *First Report and Order*]

<sup>8</sup> *Id.* at ¶¶ 112 & 57.

the 85 percent penetration rate needed to end analog broadcasts in a market will take much longer because whenever the transition is completed, the largest number of households will probably be receiving DTV programming from cable providers.” *Completing the Transition to Digital Television*, Congressional Budget Office Report, September 1999.

Even the FCC acknowledges cable carriage likely “is essential” to the DTV transition.<sup>9</sup> The question then remains – why does the FCC fail to take adequate steps to assure carriage on cable systems in order to facilitate the DTV transition?

Even after the transition is over, the FCC’s decision on must carry substantially cuts off consumers from realizing all the benefits of DTV. The FCC indicates it will require carriage of only one channel of each DTV broadcaster and other material “related” to that channel.<sup>10</sup> However, this completely dismisses the desirable choices broadcasters may offer to consumers by providing several SDTV signals (*i.e.*, multicasting). If a DTV station offers several free – but different – over-the-air programming choices, it should not be forced to choose which is the “main” program channel to be carried on the cable systems. Consumers should be offered all free broadcast programming through their cable system, regardless of whether that comes in the form of one HDTV channel or several SDTV channels, or a combination of both.<sup>11</sup> The absence of digital must carry frustrates

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<sup>9</sup> See *Fourth Further Notice of Proposed Rulemaking/Third Notice of Inquiry*, MM Docket No. 87-268, 10 FCC Rcd. 10540, 10542 (1995).

<sup>10</sup> *First Report and Order* at ¶112.

<sup>11</sup> Carriage of a “multicast” channel does not take up any more space on a cable system than a single HDTV channel. The same amount of space (19.4 megabits) is required. It makes no practical sense for cable companies not to allocate – at all times – enough space for a HDTV signal, which may follow or precede a multicast signal. It simply is not a space problem for cable to carry all free DTV channels sent from the broadcaster.

Congressional intent in providing flexibility in the use of the spectrum to give consumers all the benefits of digital technology.

Finally, we have all heard the cries from the cable companies that digital must carry will force them to take existing cable channels off their systems to make room for the DTV signals. These concerns are disingenuous. The broadcasting industry is not asking for an increase in the Cable Act's caps on the number of cable channels that must be devoted to broadcast channel carriage. Further, we do not ask for carriage of digital signals on smaller cable companies until they make their own transition to upgraded facilities and digital cable.

It is clear that cable companies are dramatically increasing their capacities, and will continue to do so with digital cable systems. In fact, at the height of the DTV transition when both analog and digital broadcast channels would be carried by cable

systems,<sup>12</sup> the average analog cable system will have the capacity for approximately 130 channels.<sup>13</sup> An average digital cable system is predicted to have a capacity of 172 channels.<sup>14</sup> As a point of reference, the average capacity for cable systems in 1998 (when the FCC began its digital must carry proceeding) was 75.<sup>15</sup>

As a final “nail in the coffin” on channel capacity concerns, at a FCC Cable Bureau hearing last year, the General Counsel of AT&T unwittingly but proudly professed that “[cable] channel capacity is not only increasing exponentially, but is about to go even beyond that as it [cable] goes digital.”<sup>16</sup> He went on to say that AT&T’s belief “is that we are going to be crying for content.”<sup>17</sup> He had no answer when asked if that included digital must carry signals.<sup>18</sup>

Digital must carry is the most important, yet unresolved issue for the digital transition. The plain text of the must carry statute is clear, cable operators “shall carry the signals” of broadcast operators.<sup>19</sup> We ask that Congress take every action

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<sup>12</sup> In 2002, when all commercial broadcast stations must have a digital signal on the air, there would be an average of 12 broadcast channels carried. As the transition progresses, this number decreases back to the average of 6 broadcast channels at the end of the DTV transition. See NAB’s Reply Comments in CS Docket No. 98-120, at Exhibit F (Dec. 22, 1998).

<sup>13</sup> *Id.*

<sup>14</sup> *Id.*

<sup>15</sup> *Id.*

<sup>16</sup> AT&T/Media One Cable Services Bureau Hearing, February 4, 2000.

<sup>17</sup> *Id.*

<sup>18</sup> Similarly, the Senior Vice President, Engineering and Technology for Media One cable has been quoted saying that “This digital capability ... effectively obliterate[s] the must-carry threat.” Jim Barthold, Bandwidth Debate: Just How Much Will Be Enough (last modified Aug. 10, 1998) <http://www.mediacentrall.com/Magazines/CableWorld/News98/1998081003.html>.

<sup>19</sup> Communications Act of 1934, § 614(b)(1)(B).

necessary to ensure must carry status for all digital broadcast channels during, as well as after, the transition.

### ***DTV/Cable Interoperability***

At this point, there are not standard DTV sets on the market that have connections that will work with digital cable set top boxes.<sup>20</sup> Thus, there is no practical way for the 70% of consumers who view television via cable to get a broadcast DTV signal over cable today. Nor is there completion of the long promised built-to specs for cable ready DTV sets. Nor is there an indication that either will occur in time for the DTV transition to meet the Congressional deadlines.

There are incomplete, voluntary specifications between the consumer electronics and cable industries for DTV/Cable interoperability. Additionally, there is a remaining issue regarding copy protection for programming. All this translates into virtually no incentive for cable subscribers to purchase DTV receivers.

Agreements on these issues are both close and stalled. Quick resolution is needed to move the transition forward. This means there needs to be consumer-friendly IEEE 1394 connectors on all DTV receivers, set-top boxes and other

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<sup>20</sup> See DTV Products Chart, attached as Exhibit C.

DTV products and “cable-ready” characteristics for direct connection DTV receivers.<sup>21</sup>

For years, the broadcasting industry has been urging the FCC to mandate interoperability standards for DTV and cable products. At a minimum, it needs to secure strong manufacturer commitments for near-term provision of such products, or the transition will be further stalled. Again, Congress should take the necessary action to ensure resolution of these issues.

### ***DTV Receiver Standards***

The issue of receiver standards is important to the transition – this involves (1) mandating DTV tuners in all new TV sets sold, and (2) setting specific technical requirements regarding reception. Right now, if a consumer buys a DTV set, it is likely that the consumer will need to purchase an additional set-top box with a DTV tuner in order to receive DTV signals. Additionally, there is no guarantee that the DTV set will properly receive the over-the-air signals sent by broadcasters.

In the beginning of the DTV transition, the FCC set specific DTV transmission standards based on technical assumptions about receiver performance. The consumer electronics manufacturers have resisted any mandated receiver standards to meet the FCC’s assumptions for reception. The FCC has

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<sup>21</sup> While copy protection issues must be soon settled, 1394 licensors should not be permitted to have a blanket ban on use of this copy protection technology for particular content, i.e. free broadcast programming.

relied on the marketplace to take care of this issue and has refused to set performance levels for DTV sets. It reaffirmed its position in January 2001. However, it turns out – as broadcasters had predicted – that early receiver performance does not match the FCC’s assumptions. It is inconsistent for the FCC to expect to achieve certain DTV coverage and service goals, yet be unwilling to set performance levels for DTV sets. Why should consumers purchase DTV sets with poor reception performance?

By January 2001, there were approximately 780,000 DTV displays (with and without integrated tuners) sold to retailers. There are no breakout figures on sets with DTV tuners (integrated DTVs). At the same time, only 60,600 set top tuner boxes were sold to retailers. Thus, there is only a small fraction of the hundreds of thousands of DTV displays that are able to receive a DTV signal over-the-air. At this rate, DTV receiver sales (integrated or set top tuners) will not reach the penetration levels needed to complete the transition by the target date of 2006 set by Congress.

Broadcasters have urged the FCC to adopt All Channel Television Receiver Rules that will require that all new television receivers thirteen inches and greater in screen size be capable of receiving all frequencies allocated by the FCC to television broadcasting, including all NTSC and all DTV channels.

While this is a significant step, it is not without precedent. The All Channel Receiver Act (47 U.S.C. § 303(s)) and the All Channel Television Receiver Rules,<sup>22</sup> provide the authority for such action by the FCC. These previous actions were taken to promote and develop the UHF frequencies. Congress, at that time, found that the lack of receivers capable of receiving UHF signals was the root of the problem for the faltering UHF service. It determined that “the only practical and effective means of insuring that such receivers get into the hands of the public is to enact legislation requiring that all sets manufactured are capable of receiving all of the channels allocated for television use.”<sup>23</sup> This reasoning from the UHF situation applies to the current DTV situation – but now, with even more force.

In 1962, Congress determined that the dramatic step of the *All Channel Receiver Act* was necessary, even given initially increased costs (that would diminish with mass production). Congress reasoned that the small increase in cost was greatly offset by the benefits of “unlocking” the valuable UHF channels.<sup>24</sup> The same reasoning applies to the DTV transition today.

DTV is a unique transition of the entire television system to digital technology. Even though the price to consumers for an all-channel receiver will be higher than analog-only sets, the higher costs will be a small price to pay for

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<sup>22</sup> *First Report and Order, All Channel Television Receiver Rules (All Channel Act)*, Docket No. 14760, 27 Fed. Reg. 11698 (Nov. 28, 1962).

<sup>23</sup> Senate Report No. 87-1526, 2d Sess. (1962), reprinted in 1962 U.S.C.C.A.N. Vol. 1, 1873.

<sup>24</sup> *Id.* at 1876.

“unlocking” the value of DTV channels for public benefit. Not to mention the fact that it also will release valuable NTSC channels, to be returned to the public for its benefit and use as Congress deems fit.

This bold action is necessary to re-vitalize a transition that has languished far too long. In January 2001, the FCC issued a *Further Notice of Proposed Rulemaking* regarding this issue.<sup>25</sup> However, it only proposed to require tuners in sets that are 32 inches or larger, then phase-in tuner requirements for smaller sets. While this is a first step, it is not the bold action necessary to invigorate the DTV transition in order to meet Congress’ 2006 timeframe. If necessary, Congress should take appropriate action to resolve these pending receiver issues.

### ***Other Build Out Problems***

As mentioned earlier, there are 14 months left before all commercial broadcasters must have a DTV signal on the air. There are approximately 1200 stations left to go on-air with DTV. Of the 182 DTV stations currently on the air, many faced build out problems. These same problems, and more, will exist for the rest of the stations yet to make the transition.

### **Economic Issues**

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<sup>25</sup> Report and Order and Further Notice of Proposed Rule Making, MM Docket No. 00-39, ¶¶ 103 – 112 (January 18, 2001).

It costs approximately \$8 million to \$10 million to fully convert a station to digital operation. To date, the industry has spent hundreds of millions of dollars. Just to get a digital station on the air costs roughly \$2 million. For many of the remaining stations and markets, these costs are well above the value of the existing analog station. And this, when there is no guarantee of any additional revenue from running two stations.

### Tower citing/Zoning Delays

New DTV stations require new DTV transmitting antennas. Stations must either use existing towers or build new towers. These changes often require approval from local zoning boards – which historically do not act quickly on these issues.

As part of the FCC's *Biennial Review* of the DTV transition, NAB conducted a survey of all commercial television stations asking specific questions about implementation problems. A surprising number of broadcasters (38.4% of respondents) reported that government – local and federal – was causing delays in their digital rollout.<sup>26</sup> Stations cited numerous delays with local zoning or board approvals, the Federal Aviation Administration (FAA), local and federal environmental agencies, as well as significant delays in the FCC approval process.

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<sup>26</sup> See *2000 Digital Implementation Survey*, May 2000 (attached as an Exhibit to NAB's Comments in MM Docket No. 00-39, May 17, 2000).

Once clearance is approved for any tower changes, the next hurdle for stations will be to find a tower crew to actually perform the work. There are limited numbers of tower companies with crews to do this specialized work. Further, as nearly 1200 stations place orders for the necessary DTV equipment, delivery delays from manufacturers are likely.

As you can see, merely getting a station on the air on schedule has its own difficulties, not to mention the larger regulatory issues that are threatening to hold up the DTV transition. Again, broadcasters are working towards the end, but there needs to be some help along the way from all parties involved, as previously discussed.

## ***Conclusion***

Mr. Chairman, it has been my great privilege to address this Committee on the subject of the digital television transition. I believe that broadcasters are fully committed to this transition that is poised to offer huge new benefits to the American public.

I hope that Congress will take a serious look at the issues facing the DTV transition and urge the cooperation of all parties to get the transition on a quicker pace towards completion.