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# **CRS Report for Congress**

Public, Educational, and Governmental (PEG) Access Cable Television Channels: Issues for Congress

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## Public, Educational, and Governmental (PEG) Access Cable Television Channels: Issues for Congress

#### Summary

Public, educational, and governmental (PEG) access channels are those cable television channels that are set aside for use by the general public, by local schools, colleges, and universities, and by elements of local government. PEG access channels are not mandated by federal law. But the Cable Communications Policy Act of 1984 amended the Communications Act to explicitly allow cable franchising authorities to require cable operators to set aside channel capacity for PEG use and to provide adequate facilities or financial support for those channels. These PEG provisions have been a primary vehicle for fostering the long-standing U.S. media policy goal of localism on cable systems.

Several recent developments appear to be affecting the amount and placement of channel capacity set aside for PEG use, the amount of financial support from cable providers for those PEG channels, and the technical quality of the PEG channels. In particular:

- In the past few years approximately 20 states have passed laws allowing cable systems to obtain state-wide franchises. There now is growing controversy about the extent to which, as a result of these laws, the PEG requirements that had been negotiated by local authorities are being legally or illegally abrogated.
- The FCC recently adopted rules that may limit the amount of PEG financial support that local franchising authorities can require of cable providers.
- AT&T has introduced its U-verse service, which provides multichannel video service using Internet Protocol (IP) technology. This service makes PEG channels available to subscribers in a fashion that some local jurisdictions and PEG programmers claim is inferior and discriminatory. AT&T responds that it is inappropriate to require it to deploy its IP network inefficiently in order to meet requirements developed for traditional cable architecture.
- As traditional cable providers are migrating from the analog transmission of PEG programming to digital transmission in order to conserve bandwidth for new high-definition and video-on-demand services, some subscribers are no longer able to receive the PEG programming or must obtain set-top boxes to receive that programming.
- The new state-wide franchising laws and recent FCC rules also are affecting the requirements for and funding of institutional networks that many local franchising authorities historically have required cable companies to construct or operate for educational or governmental use.

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## Public, Educational, and Governmental (PEG) Access Cable Television Channels: Issues for Congress

#### Introduction

Public, educational, and governmental (PEG) access channels are those cable television channels that are set aside for use by the general public, by local schools, colleges, and universities, and by elements of local government. PEG access channels are not mandated by federal law. But the Cable Communications Policy Act of 1984 amended the Communications Act to explicitly allow cable franchising authorities to require cable operators to set aside channel capacity for PEG use and to provide adequate facilities or financial support for those channels.<sup>1</sup> These PEG provisions have been a primary vehicle for fostering the long-standing U.S. media policy goal of localism on cable systems.<sup>2</sup>

The Alliance for Community Media (ACM), a national membership organization that represents approximately 3,000 PEG access centers across the nation, estimates that PEG channels are used by 1.2 million volunteers and 250,000 community organizations, and that local PEG programmers produce 20,000 hours of new programs per week.<sup>3</sup> Since many small jurisdictions do not join ACM, there may be as many as 5,000 PEG channels in the United States.<sup>4</sup> Although these estimates are provided by PEG advocates and may be inflated, there is no question that PEG channels provide a very substantial amount of local programming. In contrast, there are only 354 public broadcast television stations. The audiences for virtually all PEG channels are quite small, however, relative to public broadcast television station audiences.

Section 602(10) of the Communications Act defines "franchising authority" to mean any governmental entity empowered by federal, state, or local law to grant a

<sup>&</sup>lt;sup>1</sup> 47 U.S.C. §§ 531 and 541.

<sup>&</sup>lt;sup>2</sup> Title VI of the Communications Act addresses Cable Communications. The first section of that title identifies six purposes of the title; one of these is to "establish franchise procedures and standards ... which assure that cable systems are responsive to the needs and interests of the local community" (47 U.S.C. § 521(2)).

<sup>&</sup>lt;sup>3</sup> See "Statement for National Communications Policy to the Platform Committees of the Democratic & Republican National Committee," Alliance for Community Media, July 2008, available at [http://www.ourchannels.org].

<sup>&</sup>lt;sup>4</sup> See Bunnie Riedel, "The Bottom Line," at [http://riedelcommunications.blogspot.com/], posted on July 28, 2008.

franchise.<sup>5</sup> Until recently, the vast majority of franchising authorities were local governmental jurisdictions. Many of these local authorities, in both large and small jurisdictions, included PEG access requirements in their cable franchise agreements. In the past few years, however, approximately 20 states have passed laws allowing cable systems to obtain state-wide franchises. There now is growing controversy about the extent to which, as a result of these laws, the PEG requirements that had been negotiated by local authorities are being legally or illegally abrogated.

Requirements in franchise agreements to provide PEG access channels impose two types of costs on cable systems — the direct costs of providing facilities and/or financial support to PEG programmers and the opportunity costs of allocating channels to noncommercial PEG entities when those channels could generate revenues if put to commercial use. Cable systems therefore have the incentive to minimize the amount of their system capacity allocated to PEG channels and the level of outlays they must make in support of PEG channels.

Cable service providers subject to the PEG provisions in the Communications Act include traditional cable operators, such as Comcast and Time Warner, as well as landline telecommunications firms that have recently entered the multichannel video programming distribution (MVPD) market, such as AT&T and Verizon. These telecommunications firms, like traditional cable operators, use the public rights of way. In some states, AT&T has asserted that its video service is not a cable service and should not be subject to cable franchise agreements. In July 2007, however, a federal judge ruled in a Connecticut case that AT&T's service is, in fact, a cable service, subject to cable regulation.<sup>6</sup> AT&T is appealing that decision.<sup>7</sup>

PEG access channel requirements do not apply to direct broadcast satellite (DBS) systems. Although DBS providers compete with cable operators in the MVPD market, DBS is a satellite service, not a cable service, does not require the use of public rights of way, and is not subject to cable franchising requirements. By federal law, if a satellite operator chooses to offer its subscribers local broadcast television station signals in a local market it must provide the signals of all full power broadcast stations in that market, but it need not offer PEG channels, which are cable channels, not broadcast channels.<sup>8</sup>

<sup>&</sup>lt;sup>5</sup> 47 U.S.C. 522(10).

<sup>&</sup>lt;sup>6</sup> See, for example, Yinka Adegoke and Ritsuko Ando, "Court rules U.S. cable laws apply to AT&T's U-verse," *Reuters*, July 26, 2007, available at [http://www.reuters.com/ articlePrint?articleId=USN2646103620070726], viewed on August 21, 2008.

<sup>&</sup>lt;sup>7</sup> See "State Telecom Activities," Communications Daily, August 12, 2008, which reports that AT&T has filed a petition with the United States Court of Appeals for the Second Circuit seeking to overturn a Connecticut federal judge's July 2008 ruling to not vacate a 2007 decision defining AT&T's U-verse video service as cable television.

<sup>&</sup>lt;sup>8</sup> There likely would be a number of technological and cost challenges associated with providing the PEG channels over DBS. For example, in many cases there are many jurisdiction-specific PEG channels in a single local market and the bandwidth needed to uplink and downlink all those channels likely would tax the capacity of satellite systems.

### Key PEG-Related Provisions in the Communications Act

There are four key sections in the Communications Act relating to PEG access channels.

Section 611, which is entitled "Cable Channels for Public, Educational, or Governmental Use," allows a franchising authority to:

- establish requirements in a franchise with respect to the designation or use of channel capacity for PEG use (but only to the extent provided in this section);<sup>9</sup>
- require that channel capacity be designated for PEG use and to establish rules and procedures for the use of the channel capacity so designated;<sup>10</sup> and
- enforce any requirement in any franchise regarding the providing or use of such channel capacity. Such enforcement includes the authority to enforce any provisions of the franchise for services, facilities, or equipment proposed by the cable operator which relate to PEG use of channel capacity, whether or not required by the franchising authority.<sup>11</sup>

Section 621, entitled "General Franchise Requirements," includes the instruction that, in awarding a franchise, the franchising authority may require adequate assurance that the cable operator will provide adequate PEG access channel capacity, facilities, or financial support.<sup>12</sup>

Section 622, entitled "Franchise Fees," sets a cap on the franchise fee that a franchising authority may charge at 5% of the cable operator's gross revenues,<sup>13</sup> but explicitly states that the term "franchise fee" does not include (1) in the case of any franchise already in effect, payments that are required to be made by the cable operator during the terms of such franchise for, or in support of the use of, PEG access facilities, or (2) in the case of any franchise granted subsequently, capital costs that are required by the franchise to be incurred by the cable operator for PEG access channels.<sup>14</sup> Thus, franchise authorities may impose these PEG costs on a cable provider over and above the 5% franchise fee limit.

Section 623(b), entitled "Establishment of Basic Service Tier Rate Regulations," includes the instruction that each cable operator provide its subscribers a separately

<sup>&</sup>lt;sup>9</sup> Section 611(a), 47 U.S.C. § 531(a).

<sup>&</sup>lt;sup>10</sup> Section 611(b), 47 U.S.C. § 531(b).

<sup>&</sup>lt;sup>11</sup> Section 611(c), 47 U.S.C. § 531(c).

<sup>&</sup>lt;sup>12</sup> Section 621(a)(4)(B), 47 U.S.C. § 541(a)(4)(B).

<sup>&</sup>lt;sup>13</sup> Section 622(b), 47 U.S.C. § 542(b).

<sup>&</sup>lt;sup>14</sup> Sections 622(g)(2)(B) and (C), 47 U.S.C. § 542(g)(2) (B) and (C).

available basic service tier to which subscription is required for access to any other tier of service. That basic service tier — which is subject to price regulation by the franchising authority if the Federal Communications Commission (FCC) has not made the determination that the cable provider faces effective competition - must include any PEG access programming required by the franchise of the cable system to be provided to subscribers.<sup>15</sup>

#### **PEG-Related Policy Issues**

#### FCC Rulings Affecting PEG Funding

In two recent orders, the first released in March 2007 and the second in November 2007, the FCC adopted rules and provided guidance that set restrictions on the process and requirements that local franchising authorities (LFAs) can employ when considering franchise applications from potential new cable service providers (such as telephone companies) and incumbent cable providers.<sup>16</sup> The FCC based its actions on its authority under Section 621(a)(1) of the Communications Act,<sup>17</sup> which prohibits franchising authorities from unreasonably refusing to award competitive franchises for the provision of cable services. The stated intent of the orders was to foster the ability of competitors to gain entry into video service markets and to enhance broadband development. The FCC argued that, under the current rules, competitors attempting to enter new markets faced unreasonable regulatory obstacles. These orders have been appealed in federal court by the National Association of Telecommunications Officers and Advisors (NATOA). The FCC's first order was upheld by the Sixth United States Circuit Court of Appeals, but NATOA announced on August 11, 2008 that it had filed a petition for rehearing en banc with the Sixth Circuit.

The FCC concluded that "adequate PEG access channel capacity, facilities, and financial support" means "satisfactory or sufficient" rather than "significant" support,<sup>18</sup> and gave the LFAs the freedom to establish their own PEG requirements, "provided that the non-capital costs of such requirements are offset from the cable

<sup>&</sup>lt;sup>15</sup> Section 623(b)(7)(A)(ii), 47 U.S.C. § 543(b)(7)(A)(ii).

<sup>&</sup>lt;sup>16</sup> In the Matter of Implementation of Section 621(a)(1) of the Cable Communications Policy Act of 1984 as amended by the Cable Television Consumer Protection and Competition Act of 1992, MB Docket No. 05-311, Report and Order and Further Notice of Proposed Rulemaking, adopted December 20, 2006 and released March 5, 2007 (FCC Cable Franchising Report and Order), and In the Matter of Implementation of Section 621(a)(1)of the Cable Communications Policy Act of 1984 as amended by the Cable Television Consumer Protection and Competition Act of 1992, MB Docket No. 05-311, Second Report and Order, adopted October 31, 2007 and November 6, 2007. The orders did not address the processes and requirements of state franchising authorities.

<sup>&</sup>lt;sup>17</sup> 47 U.S.C. § 541(a)(1).

<sup>&</sup>lt;sup>18</sup> FCC Cable Franchise Report and Order at ¶ 112.

operator's franchise fee payments."<sup>19</sup> That is, any PEG-related assessment imposed on the cable operator that is not a capital cost must be subtracted from the 5% fee cap, rather than imposed over and above the 5% fee. Subsequent to issuing the orders, the FCC clarified that costs relating to PEG equipment would also be considered capital costs under the act.

PEG advocates and the two FCC commissioners who dissented to the orders argue, however, that the 1984 Cable Act permits a broader interpretation of what may be required from franchisees over and above the 5% franchise fee.<sup>20</sup> They point to legislative history, including the House report accompanying the Cable Act, which states that the franchise fee does not include "any franchise requirements for the provision of services, facilities or equipment."<sup>21</sup> They claim that the reference to "services" suggests that cable franchisees can be required to pay for non-capital PEG-related franchise requirements over and above a 5% franchise fee.

Since the act does not define capital costs or service costs, PEG programmers and LFAs claim they are left with a large degree of uncertainty about what assessments they may impose on cable franchisees over and above the franchise fee. Historically, many franchise agreements have required cable franchisees to pay for non-capital PEG-related costs, including salaries, training, travel expenses, rent, and some maintenance expenses. Going forward, cable franchisees that are required to pay a 5% franchise fee may be able to deduct these PEG costs from the franchise fees they pay LFAs.

#### **State Franchising Laws**

As recently as four years ago, most states left cable franchising authority entirely to local jurisdictions. About 10 states had some role in the franchising process, but many of these just reviewed locally negotiated agreements. In the past few years, a number of states — and particularly those with large populations — have passed laws establishing state-wide cable franchises; today approximately 20 states have such laws. AT&T and Verizon led the efforts to pass these laws, arguing that the need to negotiate franchise agreements with hundreds of localities in a state significantly slowed down their entry into the cable and broadband markets. All the new state laws permit new entrants to the cable market, such as AT&T and Verizon, to bypass local authorities and apply for a state-wide franchise. Many of these laws also permit an incumbent cable operator currently under a local franchise to apply for a state-wide franchise upon the expiration of the local agreement or, in some states, to get out of its local agreement even before it expires.

<sup>&</sup>lt;sup>19</sup> Ibid. at ¶ 113.

<sup>&</sup>lt;sup>20</sup> See, for example, "Dissenting Statement of Commissioner Jonathan S. Adelstein," amended to the FCC Cable Franchise Report and Order at p. 105.

<sup>&</sup>lt;sup>21</sup> H.Rept. 98-934, at p. 65.

There are great differences among the state laws.<sup>22</sup> Some of them set specific terms, conditions, and maximum or minimum requirements that are applicable for all the local jurisdictions in the state served by the franchise applicant. Others explicitly require the franchise applicant to match the requirements imposed on the incumbent cable provider in each local jurisdiction at the time the law was enacted, that is, the franchise requirements vary from local jurisdiction to local jurisdiction. Some laws, that would allow incumbent cable franchisees to apply for a state franchise upon the completion of their current local franchises, set statewide requirements that would apply to both incumbent and new franchisees when the incumbent's existing local franchise expires, but require both to follow the existing local franchise requirements in the interim. Yet others allow both incumbents and new entrants to immediately obtain state-wide franchises subject to state-wide requirements, in effect annulling some or all of the terms of the incumbent cable operators' existing local franchise agreements. As a result, the impact of these state laws on the requirements for the provision of PEG channel capacity and PEG financial and technical support varies significantly from state to state.

For example, the state franchising laws in Texas, Virginia, Indiana, California, Michigan, Florida, Nevada, Ohio, Illinois, and Wisconsin require new entrants that seek to offer service in multiple local jurisdictions in a state to match the specific PEG channel capacity requirements currently imposed on the incumbent cable providers by the local franchising authorities in each of those local jurisdictions (while setting certain minimum levels for situations in which there is no incumbent provider). In contrast, the state franchising laws in Kansas, North Carolina, South Carolina, New Jersey, Missouri, Iowa, and Georgia set state-wide maximum or minimum PEG channel capacity requirements that are unrelated to the requirements in the existing franchise agreements of incumbent cable providers.

The state franchising laws have even greater variation with respect to requirements for the state franchisee to provide PEG financial support. Some state laws (for example, Texas, Indiana, Michigan, Florida, Iowa, Georgia, and Ohio) require new entrants that seek to offer service in multiple local jurisdictions in a state to provide the same level of support as is currently imposed on the incumbent cable providers by the local franchising authorities in each of those local jurisdictions. Others (for example, Virginia, California, and Illinois) set specific state-wide minimum or maximum levels of PEG support, in terms of a percentage of revenues. Yet others (for example, Kansas, South Carolina, Missouri, and Nevada) do not require the new entrants to provide any PEG support. New Jersey does not set a specific requirement, but establishes a commitment on the part of the applicant to provide equipment and transport for PEG channels.

LFAs and PEG programmers have raised several concerns regarding the impact of these state laws, especially where they substitute state-wide requirements for local

<sup>&</sup>lt;sup>22</sup> A compilation of state cable franchise laws has been developed by TeleCommUnity, which identifies itself as "the local government telecommunications alliance." TeleCommUnity can be reached at [http:// telecommunityalliance.org]. The discussion in this memorandum of the variation in PEG requirements among state laws is based on that compilation.

requirements. There have been allegations that the new laws, as interpreted by new entrants and incumbent cable companies, have resulted in limitations on the PEG fees that localities can impose on franchisees, the elimination of free access to video equipment and television studio space previously provided to PEG programmers by franchisees, the elimination of cable company staff that had previously been provided to operate the access channels where PEG programming is produced, degradation of PEG signal quality rendering it no longer comparable to that of commercial channels, and inferior channel placement for PEG channels.<sup>23</sup> As a result, some PEG programmers and local governments claim that state-wide requirements fail to meet the needs of their local communities. They say this is of particular concern because there is wide variation among communities regarding what PEG programming should be made available and how it should be delivered.

The Alliance for Community Media performed an online survey of its members and the NATOA members from around the country in May 2008 to assess the impact of state-wide laws.<sup>24</sup> There were 204 respondents. The survey found that under state-wide franchising:

- 20% of the respondents reported decreases in funding for PEG.
- 17 communities in eight states reported loss of access to PEG facilities.
- 26% of the respondents reported a loss of or reduction in public cable drops in schools, libraries, and other public centers.
- 41% of the respondents reported a loss of or reduction to services to Institutional Networks (I-nets) that connect PEG facilities to schools and government institutions.<sup>25</sup>
- In some cases, new video providers delivered PEG channels with impaired signal quality and loss of functionality.
- Nearly 25% of the respondents reported that they lost or expect to lose PEG channels.
- Some video providers were moving PEG channels to digital-only cable tiers.
- Some respondents reported that they are now assessed carriage fees for the delivery of their PEG programming.
- Two-thirds of the respondents reported an increase in basic cable rates.

These survey results must be viewed with some caution. First, the survey was not scientifically performed; PEG programmers or local officials with grievances likely would have had a greater incentive to participate in the online survey. Second, many

<sup>&</sup>lt;sup>23</sup> See, for example, Josh Goodman, "Unscripted Ending: The Picture Gets Blurry for Public Access Television," *governing.com*, February 2008, available at [http://www.governing. com/articles/0802tv.htm], viewed on August 20, 2008.

<sup>&</sup>lt;sup>24</sup> "Assessing the Damage: Survey shows that state video franchise laws bring no rate relief while harming public benefits," results of a May 2008 online survey conducted by the Alliance for Community Media, available at [http://www.ourchannels.org/wp-content/ uploads/2008/07/harm-survey-report-final.pdf], viewed on August 22, 2008.

<sup>&</sup>lt;sup>25</sup> Issues related to I-nets are discussed in a later section of this report.

of these issues may not be entirely the result of state-wide franchising. For example, the decrease in PEG funding may at least in part be the result of the FCC's recent interpretation of the Cable Act's definition of franchise fees. Nonetheless, the results support the contention that state-wide franchising is changing the environment for PEG access channels.

#### AT&T's U-verse Service

AT&T has recently begun offering multichannel video programming distribution service using an all-Internet Protocol (IP) technology platform. It is building out an optical fiber network to neighborhood nodes and using the existing copper connections already in place from those nodes to subscribers' premises.<sup>26</sup> (Each neighborhood node serves several hundred end user customers.) This is a less capital-intensive alternative to the fiber-to-the-premises network being deployed by Verizon in its FiOS network.

Since copper has less capacity than fiber, the AT&T network does not simultaneously "broadcast" the signals of multiple video channels all the way to the customer premises, as cable companies do and as Verizon does with its FiOS network. Rather, it employs IP technology that allows the subscriber to use the set-top box to "call up" the particular video stream it desires from a centralized place where the video stream is stored — the video hub office serving the designated market area (DMA) in which the subscriber is located or, if that video stream has already been requested by a neighbor served by the same neighborhood node, that neighborhood node.

The major constraint on the AT&T U-verse network is the capacity of the copper loop. Currently, U-verse can provide at most two high-definition channels to a household simultaneously, and for many of its customers it can offer only a single high-definition channel at a time. To attain the level of audio and video signal compression needed to offer service, AT&T must encode the program signals using MPEG-4 compression methods. (MPEG-4 is an industry standard still under development.)

The content that AT&T receives from programmers is not encoded in MPEG-4 and therefore must be recoded. Each additional video stream (which appears as a "channel" to a subscriber) imposes two categories of incremental costs on AT&T the cost of additional equipment to encode the programming and the cost of additional dedicated capacity on an AT&T server at a national or DMA hub to store the video stream. For programming that is provided in a continuing, changing flow — such as the programming of a cable or broadcast channel or a PEG channel each additional video stream requires dedicated encoding equipment to recode the ongoing stream. For programming that is received once and then stored — such as the programming library used for video-on-demand (pay-per-view) "channels" there is no need for dedicated encoding equipment. Encoding equipment used for one video on demand program can be re-used for another video-on-demand program.

<sup>&</sup>lt;sup>26</sup> Details about AT&T's U-verse service are based on a meeting that CRS staff had with AT&T staff on August 11, 2008.

Thus the incremental equipment costs associated with an additional video-on-demand program selection is lower than that associated with a cable or broadcast network or PEG channel.

AT&T claims that the incremental encoding and server capacity costs associated with an ongoing video stream, such as that required for a cable or broadcast network or for a PEG channel, is approximately \$200,000. In a large metropolitan area, with many local jurisdictions, each of which currently has several PEG channels, the upfront incremental costs of offering multiple PEG channels thus could be several million dollars.

AT&T therefore has chosen not to make PEG programming available to subscribers in the same fashion that it makes commercial programming available. Instead, it treats PEG content the same way it treats Internet traffic. It has created a separate platform for PEG, with a single channel, channel 99, at which subscribers can find PEG programming, just as they have one channel for Internet access. The PEG content is not encoded in MPEG-4. Rather, the subscriber goes to channel 99 and pulls down a menu that identifies each of the local jurisdictions in the subscriber's DMA and, after clicking on the desired jurisdiction, gets a menu that identifies all the PEG programs for that jurisdiction, for the subscriber to choose from. The selected program is then downloaded to the user's set top box.

PEG advocates have identified several problems with this system.<sup>27</sup> First, the subscriber experiences substantial delay — of several minutes duration — in getting to the chosen program. The program is not available in the same seamless fashion as other programming. Second, the PEG programming is not shown on AT&T's program guide; there is no way for the subscriber to know what programming is on a PEG channel without going to the channel. Third, the AT&T PEG platform cannot accommodate closed captioning. Fourth, it does not provide the capability to record the programming on a DVR. Fifth, the picture quality on the AT&T PEG platform is inferior to that on AT&T's commercial channels; PEG is transmitted at a lower resolution and the picture may stutter when displaying rapid motion, as in a sports program. Sixth, by requiring the PEG programmers to deliver their signals to a DMA-wide geographic area, rather than the local jurisdiction, those programmers may be liable for additional costs associated with the broader distribution of copyrighted materials. Some parties are expected to bring lawsuits against AT&T for not meeting its PEG responsibilities.<sup>28</sup>

AT&T responds that its IP network architecture is fundamentally different from the architectures used by the cable companies and Verizon, and that it is inappropriate to require it to deploy its network inefficiently in order to meet requirements conceived for traditional cable architecture. It argues that it meets the PEG requirements in the Cable Act. It also claims that its provision of PEG access

<sup>&</sup>lt;sup>27</sup> See, for example, Todd Spangler, "AT&T Knocked for 'Inferior' PEG Channels," *Multichannel News*, January 31, 2008, available at [http://www.multichannel.com/index. asp?layout=articlePrint&articleID=CA6527813], viewed on July 29, 2008.

<sup>&</sup>lt;sup>28</sup> See, for example, Louis Trager, "Suit Nears over AT&T PEG Channels - California Official," *Communications Daily*, March 4, 2008.

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offers subscribers three benefits: subscribers can view the PEG programming of all the local jurisdictions in their DMA, not just the programming of their specific community; channel 99 is an easy-to-remember, prime channel location; and PEG programming will be in a digital format that can easily be used for the Web, which enables communities to more easily provide the same content over the Internet.

## The Transition from Analog to Digital Cable Channels and PEG Channel Placement

Cable systems can transmit as many as six standard-definition digital signals (or one high-definition digital signal) over the same amount of bandwidth as is needed to transmit a single standard-definition analog signal. As a result, cable operators are beginning to migrate their programming from analog signal transmission to digital signal transmission in order to free up bandwidth for high-definition and video-on-demand services.

In order to receive programming transmitted digitally, subscribers must have either a digital television set (rather than an analog set) or a set-top box capable of converting digital signals to analog signals. A separate set-top box is required for each analog television set. Over time, more and more households will purchase digital television sets, motivated by the desire to receive the superior quality digital (and, especially, high-definition) signals and — in some cases — by cable providers placing the most popular programming only on a digital service tier. Recognizing the desirability of digital signals, cable operators charge more for a digital service tier than for an analog service tier, especially if they have placed some of the most popular programming only on the digital tier.

Today, many households already subscribe to digital service or have a set-top box capable of converting digital signals to analog, but many other households continue to receive analog cable service without the need for a set-top box or do not have a set-top box for each television set. For the latter, the transition to digital cable transmission will require them to replace their analog sets with digital sets or to obtain set-top boxes.

In some cases, the transition from analog to digital cable service will be affected by the terms of the existing local franchise agreements.<sup>29</sup> Most agreements require the cable provider to continue to make basic analog cable service — primarily the retransmitted local broadcast station signals and the PEG channels — available to its subscribers even if those signals have been digitized. The cable provider cannot require its subscribers to purchase a digital service tier in order to receive those broadcast and PEG channels and must make set-top boxes available if those channels have been digitized. It is less likely that an existing local franchise agreement has an analogous requirement that non-basic cable channels be made available on an analog service tier and thus it is possible — to the extent the market would allow — for a cable provider to make those non-basic channels available only as part of a digital service tier. Thus, in most localities, if a cable provider were to digitize its PEG

<sup>&</sup>lt;sup>29</sup> This discussion is based, in part, on a September 4, 2008 telephone conversation with a Comcast employee.

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channels, it could not simply place those channels on a digital service tier and require subscribers to purchase that tier, but it might be able to do so for non-basic channels.

Comcast announced in Michigan in 2007 that it would digitize all the PEG channels on its cable systems and move them to channels in the 900-series. It offered its customers one free set-top box per household for the first year, after which the normal \$4.20 per month leasing fees would apply; those fees would apply immediately for additional set-top boxes.<sup>30</sup> This move was characterized by Comcast as part of its overall transition from analog service to digital service and made necessary by the capacity demands created by the relatively large number of PEG channels in some Michigan communities. Similarly, Bright House Networks has shifted the PEG channels on its Florida cable systems to digital and Charter Communications announced that it would digitize its PEG channels in Wisconsin and in Reno, Nevada, and move them to channels in the 200- or 900-series.<sup>31</sup>

The city of Dearborn and Meridian Township filed a lawsuit in federal court in Detroit to block the shift, arguing that Comcast planned the change without consulting the communities, in violation of state and federal law, and that up to 400,000 subscribers statewide who could not afford to pay for a converter box would lose access to community news.<sup>32</sup> The suit also charged that the communities would lose a vital way of communicating with residents. At the same time, the city of Warren filed a Michigan state lawsuit in Macomb County Circuit Court to block the shift.<sup>33</sup> Both the federal and the state courts placed temporary restraining orders on Comcast's move.

Comcast argued that local agreements dictating where it places PEG channels were preempted by the 2006 Michigan state video franchising law, claiming the law freed it to change channel assignments for any programming on its systems without consulting with programming providers.<sup>34</sup> It claimed federal law does not apply to the channel assignments for non-broadcast cable networks, so the provisions of the state law prevail. It argued that the PEG channel shift would free low-channel capacity needed to deliver Internet services and for high-definition digital broadcast television signals. Comcast also stated that more than two-thirds of its 1.3 million

<sup>&</sup>lt;sup>30</sup> See, for example, Ted Hearn, "U.S. Judge Blocks Comcast's PEG Move," *Multichannel News*, January 15, 2008, available at [http://www.multichannel.com/index.asp?layout= articlePrint&articleID=CA 6522688], viewed on August 20, 2008.

<sup>&</sup>lt;sup>31</sup> See Linda Haugsted, "PEGs Push Back on Channel Slamming," *Multichannel News*, August 25, 2008.

<sup>&</sup>lt;sup>32</sup> See, for example, David Ashenfelter, "Comcast channel changes on hold: Court steps in amid public access concerns," *Detroit Free Press*, January 15, 2008, and Ted Hearn, "U.S. Judge Blocks Comcast's PEG Move," *Multichannel News*, January 15, 2008, available at [http://www.multichannel.com/index.asp?layout=articlePrint&articleID=CA6522688], viewed on August 20, 2008.

<sup>&</sup>lt;sup>33</sup> See Herb Kirchhoff, "U.S., Michigan Courts Block Comcast Plan to Move Public Access Channels," *Communications Daily*, January 16, 2008.

<sup>&</sup>lt;sup>34</sup> Ibid.

Michigan customers already have digital basic service, giving them access to the 900-series channels.

U.S. District Judge Victoria Roberts issued a temporary restraining order barring Comcast from moving the PEG channels from their current location or converting them to digital without the court's permission. She found that the local jurisdictions were likely to prevail on a number of their arguments. For example, the 2006 Michigan law sets no requirements on the placement of public access channels, but the 1992 federal cable law requires cable operators to provide public access channels to basic service subscribers without discrimination. The judge found that requiring analog cable customers to obtain a separate device (the set-top box) in order to view PEG channels that are part of their basic service subscription could be viewed as unreasonable discrimination. She also found that Comcast did not provide subscribers proper notice of the channel change. At the same time, Judge Roberts dismissed some of the other arguments raised by the local jurisdiction and indicated the decision to grant the injunction was a close call.<sup>35</sup>

Some critics of the Comcast plan also claim that it fails to address the needs of schools that use PEG programming for educational purposes. Many schools have a television in each classroom, and those schools would have had to rent a converter box for each classroom.

Comcast's action in Michigan prompted a January 29, 2008 oversight hearing by the House Energy and Commerce Subcommittee on Telecommunications and the Internet. At the hearing, David Cohen, executive vice president of Comcast, apologized for the way in which the matter was handled in Dearborn and pledged that his company would work with local franchising authorities, but claimed that Comcast acted within the law when moving the PEG channels to digital.<sup>36</sup> But several Representatives, including committee chairman John Dingell, voiced concerns that the quality and availability of PEG channels not be negatively affected by cable's transition from analog to digital service.

It is possible that the transition of PEG channels to digital will have less impact on households once the nationwide transition to digital television occurs in 2009 and most households obtain the capability to access digital programming. But the movement of PEG channels from preferred, low-numbered, channel positions to high-numbered positions (for example, in the 200s or 900s) that are not near other channels — what PEG advocates have come to call "channel slamming" highlights the concerns that many PEG advocates have that PEG programming is being discriminated against relative to commercial programming. The cable operators respond, however, that PEG channels tend to have very low viewership and therefore should not command a prime channel location.

<sup>&</sup>lt;sup>35</sup> On August 19, 2008, there was an oral argument before Judge Roberts on a Comcast motion to dismiss the suit. The judge has not yet ruled on the motion.

<sup>&</sup>lt;sup>36</sup> See, for example, Cheryl Bolen, "Markey to Interject in FCC Re-Auction if Spectrum Does Not Meet Reserve Price," *BNA Daily Report for Executives*, January 30, 2008, and John Eggerton, "Comcast Defends Michigan PEG-Channel Capacity," *Broadcasting & Cable*, January 29, 2008.

#### Local Institutional Networks (I-nets)

An institutional network is a communications system capable of transmitting video, voice, and/or data signals over optical fiber, coaxial cable, or both, among governmental, educational, and possibly other nonresidential users.<sup>37</sup> Many local governments have required cable operators to construct and maintain, or in some fashion provide support for, an institutional network as a condition for the initial grant, transfer, or renewal of a cable franchise. Section 611(b) of the Communications Act<sup>38</sup> allows a franchising authority to require a cable franchisee to set aside channel capacity on an institutional network constructed or operated by the cable operator for educational or governmental use.

In the past, when cable systems typically were designed only to transmit television programming one way from cable operators to residential users, cable operators generally dedicated a limited number of channels to governmental and educational use or constructed stand-alone cable systems for that purpose. Today, cable systems routinely are being constructed as hybrid fiber/coaxial cable networks with sufficient capacity and two-way capabilities to accommodate I-net requirements in a single integrated system. In some recent franchise agreements, local governments have obtained a number of "dark" optical fibers in addition to, or in lieu of, channel capacity, and are furnishing the end-user electronic equipment necessary to "light" the fibers themselves — providing vast amounts of broadband capacity at low cost.

These new generation I-nets can support a broad range of uses, including high-speed Internet and intranet access; large-file uploads and downloads; program and data sharing within and among city departments and offices; geographic information system mapping (including demographic, tax, zoning, utility, right of way, legal, and other information in a single database that is searchable from any location); video conferencing; distance learning; vocational training; medical imaging; traffic control; environmental monitoring; management of water, sewer, and electric utilities; remote meter reading; video arraignments and depositions; video surveillance and security; emergency services; advanced library services and cataloguing; computer assisted design and computer assisted manufacturing; city-side or area-wide PBX-like 4-digit dialing; and direct access to long distance providers, avoiding local access charges.

NATOA reportedly has conducted a survey, to which 48 communities with I-nets responded, that found that in 56% of these communities, the cable operator built all or most of the I-net; in 13%, a telephone company built all or most of the I-net; and in 44% the local government itself built all or substantial components of the I-net.<sup>39</sup> In 44% of those communities, the cable operator owns and maintains all

<sup>&</sup>lt;sup>37</sup> The following description of institutional networks comes from a report entitled "The FAQs about Institutional Networks," prepared by the Baller Herbst Law Group, available at [http://www.baller.com/library-art-faq.html], viewed on August 25, 2008.

<sup>&</sup>lt;sup>38</sup> 47 U.S.C. § 611(b).

<sup>&</sup>lt;sup>39</sup> These percentages, reported by the Baller Herbst Law Group at [http://www.baller.com/ (continued...)

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or a portion of the I-net; in 19% a telephone company does so; and in 67% the local government owns and maintains all or a portion of the I-net. 25% of the responding communities share operations with a cable company and 19% share operations with a telephone company or electric utility.

The new state-wide franchising laws tend not to require new entrants to provide I-nets in their areas of operation if the incumbent cable company has already provided these facilities and there is no identified need to construct redundant networks. Some of these laws also would reduce or eliminate the I-net requirements in existing local franchise agreements or require the jurisdiction to pay the incremental cable network costs associated with providing the I-net.

Cable providers' I-net requirements may also have been clouded by the recent FCC orders which created ambiguity about what constitutes capital costs (and, therefore, what can be charged over and above the 5% franchise fee).

<sup>&</sup>lt;sup>39</sup> (...continued)

library-art-faq.htm], exceed 100%, suggesting either that some of the communities that responded to the survey had multiple I-nets or counted both the local government and the cable or telephone company when the task for building the I-net was shared.