

As a layman and concerned citizen that has been watching the evolution of the video market for several years now, I have learned much about the state of the marketplace and of the government regulation thereof. Watching from afar over the course of the past year, I have been guardedly pleased at the efforts of the committee to update our communications laws for the twenty-first century. I fully support the committee's stated goal to rationalize and simplify our communications law by doing away with arbitrary regulatory "silos" and establishing a consistent regulatory regime that treats services performing equivalent functions equivalently, thus encouraging innovation and the best use of technology. I only hope that this goal is not a façade and a cover for giving more power to moneyed interests at the expense of the consumer and smaller, less politically-connected businesses.

The topic of the present white paper relates to a subject I have been particularly interested in over the past year or more, the present state and future potential of the video marketplace and whether or not current government policies, whether those of Congress or the FCC, are having an adverse effect on its evolution. As such, much of what I have to say will relate to this topic, but I will also touch on issues raised by the previous white papers as well as the broader issue of how to achieve the present effort's stated goals. What is the best way to create a robust, flexible communications act that can accommodate whatever shape technology takes in the future, encouraging innovation that can exploit that technology to the fullest while protecting the consumer?

### **A Framework for Understanding the Communications Landscape**

Currently, the areas that communications regulation has overseen can broadly be broken down into the following areas:<sup>1</sup>

- *Television*, used broadly to refer to the one-way transmission of video and audio content.
- *Radio*, similar to television, used broadly to refer to the one-way transmission of audio only.
- *Internet*, the two-way transmission of general data, usually with the consumer sending a request and receiving data back from the content provider.
- *Phone*, a two-way real-time audio conversation, in theory possibly involving video as well.

The means by which these different forms of telecommunications are delivered can in turn be broken down into the following categories, with their generally most popular uses from a consumer-centered perspective:

- *Wireless* transmission, which makes use of the public spectrum to transmit information over a given area, and which has the advantage of not being tied down to a particular location and requiring a relatively small investment to cover a relatively broad area. This latter property allowed it to be capitalized upon by TV and radio from their beginnings; the wireless spectrum's colonization by the two-way media, Internet and phone, is comparatively recent.
- *Wired* transmission, which requires a larger upfront cost but can reach individual homes in a more targeted fashion and can make use of as much spectrum as it can, without competing for a limited swath of the public spectrum. Phone service was the first medium to make use of wired

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<sup>1</sup> Based on, e.g., House Committee on Energy and Commerce, "Modernizing the Communications Act", 8 Jan 2014, retrieved from <http://energycommerce.house.gov/sites/republicans.energycommerce.house.gov/files/analysis/CommActUpdate/20140108WhitePaper.pdf>, p2.

transmission, with Internet and television joining it at different points in the twentieth century; although Internet piggybacked on the phone lines for most consumers in its early days, it was not until the late nineties that the three would all use the *same* lines as TV providers diversified into Internet and phone “triple play” services. Radio has not benefitted much from wired transmission; the closest it has come has been audio services offered as part of a TV package.

- *Satellite* transmission, involving satellites high above the Earth. Satellite transmission involves a very high (though not disruptive) upfront cost but a very low cost of reaching individual customers due to the extremely wide swath a single satellite can cover. This has allowed satellites to play a key role in allowing people to communicate in near-real time across the globe. However, in general the large distance between the Earth and the satellite makes it impractical for use for the two-way communications methods of Internet and phone, despite some forays into the Internet space. However, television and radio services are thriving on satellite and effectively competing with wired and wireless providers.

One striking thing that becomes apparent about this list is that the great unification of the various methods of communication the Internet has impelled in recent decades was preceded, and perhaps set up, by the unification of the means by which those communications were delivered. For much of the twentieth century, broadly speaking, television and radio were delivered over the airwaves while the phone service was delivered over wires. Starting as early as the seventies, though, wired delivery of television became increasingly popular as the Internet started to leak into small pockets of wider society and cell phone infrastructure began being built, while consumer-fronted satellite services also began starting in the eighties, so that by the time the Internet began competing for the *uses* of television, radio, and phone service, the *means* by which all of them were delivered were not totally different.

Given these unifications, is it still necessary for communications law to distinguish between these various methods of communication, and if so what purpose do such distinctions serve? Certainly the great expansion of the Internet into areas once undreamed of has blurred the lines between it and the other methods of communication considerably, and some may wonder if it may ultimately absorb the other categories entirely. Certainly phone service may appear to simply be a more specific form of the two-way communication carried out by the Internet; the main distinction would appear to be that phone service is a communication between two equals, but even then it has always travelled between numerous intermediaries. Moreover, the redundancy of dedicated phone service seems to have already been recognized by the industry and government alike, as both parties have long been talking about an “IP transition” that, to the layman at least, amounts to moving phone service to the same system as the Internet. Television and radio have more entrenched interests that, especially in the case of television, are being dragged into Internet-based delivery kicking and screaming, but even those efforts would seem to demonstrate that in theory, the Internet could deliver all the video and audio content currently being delivered via TV and radio and then some.

Before we are too quick to dismiss the one-way forms of communication as outdated and redundant with the Internet, however, we should take a closer look at the inner workings of these different methods of communication to determine what the difference is between one-way and two-way communication and whether that difference might give one form some virtues over the other. With one-way transmission, a source sends out a signal that can be received by anyone with the proper equipment; a television or radio station can be received by anyone within range of the signal, a cable system sends its channels out to everyone connected to its headend, and customers simply tune in to

the channel they want. A two-way communication begins with the consumer sending a request for some data, which is then sent through the network to the server containing the data, which sends the data back through the network to the consumer. With the Internet at least, each of these connections are treated individually, and because of the asymmetry between the consumer and the server with the data to be delivered, it is quite possible, even likely, for the same content to be delivered to multiple consumers with their own dedicated connections. Whereas with one approach a server, and all the intermediate steps in the network, must send the same content multiple times over, once for each person that wants it, in the other approach the content needs to be only sent out once for as many people as can receive the signal to receive it.

This is especially apparent and important when it comes to video content, which is much more bandwidth-intensive than other types of content to the point of dominating Web traffic and discussions of net neutrality despite amounting to a pale shadow of the demand represented by traditional linear television. Were linear television to completely go away, because of the Internet supposedly rendering it obsolete, it is easy to envision a scenario where the Internet effectively becomes a conduit for the delivery of video, with any other purposes it's used for effectively a side benefit even if they might be more popular in terms of number of people using them. If the ideal of net neutrality is still desirable, it would be exceedingly difficult to plausibly maintain at this point.

What does this mean for the means by which the content is delivered? Satellite transmission is probably practically the sole domain of one-way communication from a consumer-oriented perspective, but Congress has historically been reticent to rely too much on satellites to deliver content to consumers, partly out of worries about forcing too many people to put satellite dishes on their homes. From a practical perspective, satellite television is generally considered not an option for people living in apartments. (Satellite radio seems more consumer-friendly in both of these categories.)

That leaves wired and wireless delivery. As mentioned earlier, wired transmission is able to utilize whatever capacity lies in the wires being used to transmit the content, while wireless transmission is restricted to specific bands of the public spectrum (and possibly by the transmission medium). Several different wireless Internet providers compete for public spectrum with each other and with TV and radio broadcasters, but even if all the spectrum used by wireless providers, Wi-Fi and similar technologies, and broadcasters were consolidated into a single set of wireless Internet spectrum, the size of that spectrum would be limited by other uses that wired providers would not have to deal with. As such, wireless providers will always be more restricted in the bandwidth and capacity they can deliver compared to wired Internet providers. On the other hand, wired services are severely restricted in the sorts of devices they can reach without using wireless services like Wi-Fi as an intermediary. These two factors suggest that one-way services that can reduce the video and other high-bandwidth load on wireless Internet providers are especially important compared to similar services on wired connections.

Indeed, wireless Internet providers seem to already recognize the importance of supplementing their services with one-way networks; both AT&T and Verizon have instituted plans to begin rolling out networks variously called "LTE-Broadcast" or "LTE-Multicast" sometime this year, working similarly to broadcast television stations, that can deliver content to devices in just this sort of fashion.<sup>2</sup> Existing

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<sup>2</sup> Allevan, Monica, "Unlike Verizon, AT&T takes its LTE Broadcast trial inside stadium", [FierceWirelessTech](http://www.fiercewireless.com/tech/story/unlike-verizon-att-takes-its-lte-broadcast-trial-inside-stadium/2015-01-09), 9 Jan 2015, retrieved from <http://www.fiercewireless.com/tech/story/unlike-verizon-att-takes-its-lte-broadcast-trial-inside-stadium/2015-01-09>.

actual broadcast television stations are currently not doing a good job of delivering content to any devices that are not a traditional fixed television set, due to oversights in the ATSC standard used for the digital transition completed by 2008 (when the iPhone was barely a year old), but this may not be a theoretical constraint; an addendum to the ATSC standard, ATSC M/H, has allowed for the transmission of content to mobile devices for several years now (provided the presence of an antenna dongle), and a proposed large-scale overhaul of the ATSC standard, ATSC 3.0, proposes to make transmission to mobile devices even easier.<sup>3</sup> (Delivery of radio directly to mobile devices has begun to see some promise with the advent of the NextRadio app.)<sup>4</sup>

The bigger problem seems to be that the broadcast television industry has become dominated by companies that have little interest in making it easier for people to receive their content over the air, due to their interests in cable networks and their broadcast entities' reliance on retransmission consent payments from cable operators. This is despite, or perhaps because of, the boom of widespread interest in "cord-cutting" in recent years. It is apparent that government regulation in this area is decidedly not technologically neutral and has resulted in an unfree market that has depressed investment in broadcast television, a situation that should be kept in mind not only as the government rewrites communications law, but as it proposes to auction off broadcast television spectrum to wireless Internet providers who may ultimately desire the spectrum in large part to provide sufficient bandwidth for the large-scale delivery of video.<sup>5</sup> Many consider the spectrum currently being used by broadcast television to be wasted, but while it could be allocated more efficiently, Congress and the commission should take steps to ensure broadcasters have every incentive and ability to utilize the full potential of broadcast spectrum so that heading into the incentive auctions, it can be valued fairly for its use as broadcast spectrum compared to any other uses it could be used for.

The video market is instructive as to what has made the current structure of the Communications Act irrelevant. Internet-based video providers have greatly disrupted the video market and all of its providers. The average consumer does not care much whether they get their video via a broadcast antenna, a cable provider, a satellite provider, a fiber-optic line, or the Internet, other than that the last four all have the capacity to provide much more video than has historically been possible via an antenna, and the last one has more potential than the others. The FCC and the law correctly treats the middle three options equivalently as "multichannel video programming distributors", but its pending proposal to grant the same MVPD status to online providers highlights the weakness of the approach it must currently take. The FCC is effectively proposing to regulate a certain subset of online service, not even the entire set of services that provide video online, based on the type of content it purports to offer, under a regulatory structure that mostly developed when the entire notion of online video was unheard of. The video market is one place where it is most obvious to the consumer what the state of

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<sup>3</sup> Jessell, Harry A., "ATSC 3.0: Lead, Follow Or Get Out Of The Way", [TVNewsCheck](http://www.tvnewscheck.com/article/80837/atsc-30-lead-follow-or-get-out-of-the-way), 14 Nov 2014, retrieved from <http://www.tvnewscheck.com/article/80837/atsc-30-lead-follow-or-get-out-of-the-way>.

<sup>4</sup> House Committee on Energy and Commerce, "Competition Policy and the Role of the Federal Communications Commission", 19 May 2014, retrieved from <http://energycommerce.house.gov/sites/republicans.energycommerce.house.gov/files/analysis/CommActUpdate/20140519WhitePaper-Competition.pdf>, p2.

<sup>5</sup> See Wick, Morgan, "The Other Threat to Net Neutrality", [MorganWick.com](http://www.morganwick.com), 13 Nov 2014, retrieved from <http://www.morganwick.com/2014/11/the-other-threat-to-net-neutrality/>.

the marketplace is, but it is also highly impractical to regulate. Specific technologies are the easiest to regulate but are also the place where regulation is perhaps the most useless.

As such, the best approach is probably to regulate *all* of communications equivalently, along principles designed to maximize innovation and investment across all the various specific applications such communications could be used for. Distinguishing between one-way and two-way communications is of only limited merit, because the latter in some situations can fill the same role as the former, possibly without the consumer even being aware of the difference. Distinguishing between wireless, wired, and satellite forms of communication is more practical and relevant, but even then many of the same principles will apply to each.

Because the areas a modern Communications Act needs to distinguish between are so broad, the best approach should be to maintain a light regulatory touch, but to allow the FCC broad leeway to regulate the market to promote innovation and investment in young markets and competition and fair market practices in mature ones, ideally without the need for a formal forbearance process. What has become apparent is that the distinction between “telecommunications” and “information” services, as described by the first white paper, was always a distinction between these two regulatory approaches, and as such their names were never perfectly descriptive nor was the distinction ever much better than a kludge to attempt to ensure the proper level of regulation.<sup>6</sup> Communications law should be descriptive rather than prescriptive, laying out certain principles that apply across various means of communication, and leaving it to the commission to define which areas to apply which regulations to. In many cases, provisions developed for specific media can and should be broadened and adapted to become available to whatever media the commission wishes to apply them to; in others, particularly restrictions on the content and monetization possibilities of broadcast television stations, they may need to be discarded entirely.

However, giving the commission too much power means taking care to insulate it from regulatory capture to the greatest extent possible, which may mean overhauling its structure to make sure no specific industry can exert too much influence on the composition or decisions of the commission, a problem that may already be apparent in the relationship between commissioners and the cable industry lobby. Objective measures of the level of competition and development that can help determine the level and nature of regulation to be imposed regardless of the composition of the commission may be useful, but only if the FCC can be prevented from defining markets in such a way that the regulatory options available or not available to them happen to be those that help or hurt the incumbent interests it may be beholden to.

### **The Challenges Facing the Video Market**

We can now move on to how all of this affects the video market more specifically, which will also touch on issues raised in previous white papers. The present white paper omits some important elements of the evolution of the present state of the video marketplace, and as a result misrepresents some of the challenges facing it today.

The Cable Act of 1992, which established most of the regulations that currently govern the relationships between MVPDs and content providers, was passed at a time when most cable systems did not have

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<sup>6</sup> “Modernizing the Communications Act”, op. cit.

much more than 70 channels. Direct-broadcast satellite did not have such a restriction, but it was in its infancy. As such, the scarcity of space on cable lineups governed how many different services could be active and thriving, and the must-carry and PEG regulations further constricted the amount of space cable providers could work with. The Telecommunications Act of 1996 was enacted when DBS was more mature and cable operators had high hopes for the potential of digital cable, which opened up the possibility of hundreds of channels, but that was itself in its infancy and Congress changed little of the rules regarding access to programming laid out in the Cable Act of 1992.

As such, the condition of scarcity has become significantly less pressing on cable operators, and virtually all DBS and digital cable providers can offer all of the most popular channels. Moreover, the rise of the Internet as a conduit for video content has blown the condition of scarcity right out of the water, to the point that the market for traditional linear television channels on MVPDs may well be badly oversaturated, and concerns about independent programmers' ability to get onto cable lineups seems like a decidedly 90s concern. Yet the marketplace is still by and large governed by the rules laid out in 1992. Cable operators regularly engage in disputes with content providers over the subscription fees the former pays to the latter and over what channels the cable operators will carry, regardless of their popularity. Once upon a time space was the main constraint on whether or not a cable operator would carry a channel; now the main constraint is whether or not the operator and content provider can agree on a price, which the consumer is mostly ignorant of. It is worth noting that this system is completely forbidden on the Internet, where ISPs generally cannot restrict access to content and where the American people have made clear they want it to stay that way, but on linear cable television operators can decide to carry or not carry certain channels, and whether or not to carry them in HD, seemingly arbitrarily, with limited restrictions set by the Cable Act. Yet if anything, the provision of linear television content on the Internet (even that originating from broadcast stations and networks) is best characterized by an attempt to impose the structures of the linear MVPD market on the Internet, with its closed agreements between MVPDs and content providers the consumer has little control over, through authenticated "TV Everywhere" services, betraying a desperate attempt by all involved parties to maintain the current structure against the competing, more consumer-friendly structure the Internet represents.

It is certainly true that this proliferation of viewing options has reduced the average audience size for programming and as such the amount of money that can be collected from advertising, but I do not believe this is the main reason why the economics of the video industry has evolved to emphasize the prominence of subscription fees. Rather, I believe the main factor has been the penetration of pay-TV service to the vast majority of American homes. About 75% of American homes had cable TV in 1996, compared to a peak of 87% in the early part of this decade, with the vast majority of those in the remaining 13% outside demographics that appeal to advertisers.<sup>7</sup> The increased revenue from subscription fees is no longer outweighed by broadcast television's larger audience, because that audience difference is now fairly negligible. Combine broadcast stations' inability to collect the subscription fees cable networks collect with other restrictions on broadcast stations the FCC has claimed powerlessness to apply to cable networks, and it becomes clear that linear television is the original inconsistently regulated market based on outdated technological distinctions.

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<sup>7</sup> Based on TVB, "National ADS, Wired-Cable & Over-The-Air Penetration Trends", retrieved from [http://www.tvb.org/research/media\\_comparisons/4729/72512](http://www.tvb.org/research/media_comparisons/4729/72512).

That the balance has now decidedly tipped in favor of cable television is most apparent in the world of sports, a major source of precisely the sort of live programming one-way linear television is best suited for. By all accounts, ESPN now charges cable operators upwards of \$6/month per subscriber for access to its diverse collection of live sports; no other national non-premium cable network charges more than \$2 (if even \$1.50), and most of the next-most expensive cable networks also have significant sports programming. That revenue stream, which gives ESPN over half a billion dollars of revenue before it sells a single advertisement, has allowed ESPN to compete for and even win sports rights, such as the nascent College Football Playoff, that once was taken for granted to be the province of broadcast television. That broadcast still airs most of the most popular and important sports and other live events seems to be as much because of inertia, and the fear of Congressional action, as anything else.<sup>8</sup>

But the situation is even more acute when we come to local sports teams, which not only constitute the sort of live programming linear television does best, but also represent, more than anything else, the sort of locally based programming that broadcast television supposedly stands for. It's a quite potent form of it as well: midway through last year's baseball season, Maury Brown of *Forbes* magazine determined that in half of the 24 markets where at least one baseball team wasn't on a regional sports network that was having trouble getting widespread carriage, that team's games were the single most popular programming on all of television in the market to that point in the season, and every one of the 24 markets had at least one team in the top eight.<sup>9</sup> Yet local MLB, NBA, and NHL teams have become almost unheard of on broadcast television, and NFL teams only maintain a substantial broadcast presence because of the NFL's national television deals with the networks and its requirement for games on cable networks to be shown on broadcast stations in the teams' home markets.

And yet, if most Americans heard it described to them how ESPN and regional sports networks make their money that allows them to consistently outbid broadcast stations for such programming, they would think it to be some sort of con: every single person that subscribes to an MVPD on a package that includes those networks is paying subscriber fees to those networks, without even realizing it, even if they never watch a second of them. The result is great for sports fans, who have perhaps never had access to more sports on television (for, really, a surprisingly cheap price), but it's not so great for everyone else. Many consumer advocates have called for a la carte pricing of cable networks so that people don't have to pay for channels they don't watch.<sup>10</sup>

As the present white paper notes, retransmission consent has played a key role in allowing broadcast stations to continue to survive despite these pressures, and no wonder: it is their only hope of even attempting to make up the deficit caused by cable networks' ability to collect subscription fees, by serving as their own equivalent.<sup>11</sup> Yet it has also caused broadcasters to neglect and even disdain their own medium, fearful of the "cord-cutting" movement one might think they would be the biggest

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<sup>8</sup> Reply Comments of Morgan Wick in the matter of FCC MB Docket RM-11728 (Petition to Amend the Commission's Rules Governing Practices of Video Programming Vendors), 14 Oct 2014, pp. 2-3.

<sup>9</sup> Brown, Maury, "Through July, MLB Telecasts On Regional Sports Networks Dominate Prime Time TV [UPDATED]", *Forbes*, 5 Aug 2014, retrieved from <http://www.forbes.com/sites/maurybrown/2014/08/05/mlb-telecasts-on-regional-sports-networks-dominate-prime-time-television/>.

<sup>10</sup> See sources cited in Reply Comments of Morgan Wick in the matter of FCC MB Docket RM-11728, notes 23 and 24.

<sup>11</sup> House Committee on Energy and Commerce, "Regulation of the Market for Video Content and Distribution", 10 Dec 2014, p5.

beneficiaries of, lest broadcasters lose their retransmission consent revenue without necessarily seeing cable networks lose much in the way of ad revenue, especially if the people cutting the cord are outside of valuable advertising demographics. This is especially the case for the major networks which are owned by large media conglomerates with considerable investment in cable networks; ABC, NBC, and Fox are all owned by companies that also own a substantial number of popular cable networks and thus have little incentive to see anything happen that would substantially shake up the cable ecosystem (especially NBC, which is owned by the nation's largest cable operator). As such, broadcasters have done little to promote technologies and services that would make it easier for people to receive their over-the-air signal and have often attempted to put roadblocks in their way, to the point of being hesitant to throw their support behind the adoption of ATSC 3.0<sup>12</sup>; at the most extreme, while ultimately successfully litigating Aereo out of business, several of the most popular networks threatened to remove their signals from the free airwaves entirely if Aereo was not killed one way or another.<sup>13</sup>

As the current white paper notes, in the age of multichannel television and the Internet, broadcast licenses no longer represent a valuable platform to deliver one's message the ownership of which precludes its use by anyone else without permission of the licensee.<sup>14</sup> As such, public interest and ownership obligations no longer seem to be necessary, and today serve more as another disadvantage broadcasters face compared to their relatively unregulated cable brethren. Before we are too quick to discard them, however, we should note that under the framework laid out above, we have classified broadcast television licenses under the rubric of one-way methods of communication, a special and separate means of communication compared to the two-way method we have every reason to believe will be the norm in the future, if it is not already. Those that control the one-way methods of communication may not have an *exclusive* platform to disseminate their message, but they do control something that gives them an *advantage* at reaching a maximum of people.

As such, ownership restrictions on over-the-air television are still of paramount importance. (Incidentally, this also means that because spectrum and competition policies are intertwined, spectrum policy should continue to distinguish between one-way and two-way forms of communication, rather than use a single "flexible" license for either purpose, though a license for either category could allow the licensee to engage in any commercial activity *within* each category.) This is especially the case given the emphasis Congress has historically given to localism; wireless, over-the-air broadcasting is the only remaining form of communications that is *necessarily* local (unless one counts one-to-one phone communications). The Internet is, by its nature, national, indeed international, in scope; even a "hyperlocal" neighborhood blog can be read by someone clear on the other side of the world. As such, the local market rules are also of vital importance to some degree, but as will be seen later, are very flawed as they presently stand.

In its response to the third white paper on competition policy, the National Association of Broadcasters accurately notes that broadcasting's ability to effectively compete in the marketplace is hampered by "rules written when broadcasters were the *only* wireless service" (emphasis in original), but

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<sup>12</sup> Jessell, op. cit.

<sup>13</sup> Fixner, Andy, "News Corp. to Take Fox Off Air if Courts Back Aereo", [Bloomberg](http://www.bloomberg.com/news/2013-04-08/news-corp-says-it-will-take-fox-off-air-if-courts-ok-aereo-1-.html), 8 Apr 2013, retrieved from <http://www.bloomberg.com/news/2013-04-08/news-corp-says-it-will-take-fox-off-air-if-courts-ok-aereo-1-.html>; Musil, Steven, "CBS joins Fox in considering subscription-only model", [CNet](http://www.cnet.com/news/cbs-joins-fox-in-considering-subscription-only-model/), 9 Apr 2013, retrieved from <http://www.cnet.com/news/cbs-joins-fox-in-considering-subscription-only-model/>.

<sup>14</sup> "Regulation of the Market for Video Content and Distribution", especially p1.



misidentifies the rules in question as restrictions on ownership.<sup>15</sup> In fact, the neglect of broadcast television as a medium in its own right, as opposed to merely another sort of cable channel, may well have been aided by the ownership rules being too *loose*, especially after the legalization of duopolies in 2000 allowed fewer companies to operate in each market and thus fewer companies to operate in general, as owners of larger stations were able to buy their would-be competition. Localism has suffered as massive station groups have gobbled up as many stations as they can under current rules and run them as cheaply as possible, sacrificing investment in local programming outside of news (which often follows the same template across a station group) to signing huge groupwide syndication deals. Since the legalization of duopolies, most commercial general entertainment stations that aren't affiliates to the major, "big four" networks, stations that were once a laboratory of localism and innovation, have become supplements to sister stations that are big four affiliates and dumping grounds for syndicated programming bought by the large, national station owner, with just about any other non-PBS station withering in obscurity.<sup>16</sup> NAB's position is, in my view, an excellent example of the short-sighted perspective that has come over the broadcasting industry: NAB cares more about strengthening broadcast stations' retransmission consent leverage than their reason to exist. At best, when it comes to ownership restrictions Congress and the commission should impose similar limitations to cable networks and operators as broadcast stations are currently bound by, not loosen restrictions on broadcast stations to bring them to the level of cable entities.

Congress should prepare a set of regulations that encourages broadcast television, and one-way communications more generally, to emphasize those areas that one-way communication can do better than two-way forms such as the Internet. Congress should repeal restrictions on what sort of content broadcasters may or may not air, or conversely what content they are required to air, instead ensuring that any content that would benefit from utilizing a one-way means of communication can do so regardless of source. This includes allowing broadcasters to do whatever they want with their spectrum, whether to broadcast video, data, or whatever else. Congress should consider allowing broadcasters to restrict reception of their content to those who pay for the privilege, which does not necessarily mean doing so through a middleman such as a cable operator, ISP, or wireless provider – though this should not be done lightly if it has too much of an effect of shutting off entertainment and information options for those less well-off. And Congress should lead an effort to encourage broadcasters to adopt and embrace a standard that, in addition to making all of the above possible, can be received by *any* device, including allowing and encouraging the FCC to require the corresponding device manufacturers to include the requisite reception technology, and to ensure such a standard is in place and approved by the FCC *before* the incentive auctions currently scheduled for 2016.

Congress and the FCC should also ensure that broadcast television signals are strong enough to reach a maximum of people with a minimum of effort on the consumer's part once the auctions are complete, specifically on a device of the sort mentioned above. The commission and stakeholders may have needlessly crippled broadcast television in the aftermath of the digital transition by setting coverage

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<sup>15</sup> National Association of Broadcasters, "NAB Response to the House Committee on Energy & Commerce White Paper on Competition Policy", 13 Jun 2014, retrieved from [http://energycommerce.house.gov/sites/republicans.energycommerce.house.gov/files/analysis/CommActUpdate/WP3\\_Responses\\_43-63.pdf](http://energycommerce.house.gov/sites/republicans.energycommerce.house.gov/files/analysis/CommActUpdate/WP3_Responses_43-63.pdf).

<sup>16</sup> Reply Comments of Morgan Wick in the matter of FCC MB Docket 14-50 (2014 Quadrennial Regulatory Review), pp. 5-12.

areas based on the use of a high-powered rooftop directional antenna. Rather than merely “preserving” the crippled post-transition coverage areas in the aftermath of the incentive auction, the FCC should correct their initial mistake and ensure widespread access to free, over-the-air television to as many people as possible. Colocation of each market’s stations in a single place should be encouraged to conserve spectrum by allowing stations to be placed adjacent to each other, and to allow those that do need to use directional antennas to aim them at a single place to receive all a market’s stations.<sup>17</sup>

Re-emphasizing broadcast television’s actual ostensible medium, and utilizing the colocation scheme laid out above, should greatly simplify the local market rules if not render them irrelevant – although giving one station exclusive access to programming and making it available to everyone is superior to the model likely to take shape if linear television were dominated by the LTE-Broadcast/Multicast model, with each wireless provider showing the same programming on their own channels, just from an efficiency of spectrum standpoint. However, as it stands the local market rules give a private, nongovernmental organization, Nielsen Media Research, the power to influence public policy and market outcomes by dividing the United States into 210 “designated market areas”, each of which is assigned a certain set of stations. Nielsen wields the power to determine what areas count as their own separate market and which do not, and what market each county belongs in, based more on their primary business of selling television ratings to stations than any public-interest, governmental purpose. Nielsen tries to determine DMA boundaries based on what stations each county’s residents watch, but because what stations appear on cable lineups are partly, and what stations appear on satellite lineups are entirely, determined by the DMA boundaries, they have become self-perpetuating in this age of widespread cable penetration. More disturbingly, *what* those DMA boundaries are are not freely available, but requires purchasing the requisite maps from Nielsen, which has reportedly cracked down on non-Nielsen sites disseminating the DMA boundaries and even prevented Wikipedia from using its DMA rankings it does make freely available.<sup>18</sup> This would seem to call into question any commitment by Congress or the FCC to open government.

Ideally, especially if the colocation scheme suggested above is used, the FCC (or at least objective facts) should be determining the market areas Nielsen uses, not the other way around. The industry should be given the leeway to collectively determine what areas justify the expense of investment and the requisite consumption of spectrum to be considered a local market with a minimum of reliance on Nielsen, with the opportunity to change their mind later – *after* they have been given a reason to invest anywhere.

### **How This Affects Cable and Satellite Video Providers**

We established above that one-way methods of communication such as traditional linear television are especially important to distribute wirelessly because of the greater scarcity of spectrum. What does this mean for wired and satellite distribution of linear television?

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<sup>17</sup> See Baumgartner, Fred, “Guest Blog: TV’s Evolution Depends on Smart Use of Spectrum”, Broadcasting and Cable, 11 Jan 2014, retrieved from <http://www.broadcastingcable.com/blog/bc-beat/guest-blog-tv-s-evolution-depends-smart-use-spectrum/128438>; Reply Comments of Mark J. Colombo in the matter of FCC MB Docket 12-268 (Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions), retrieved from <http://apps.fcc.gov/ecfs/document/view?id=7022129689>.

<sup>18</sup> Wick, Morgan, “An Open Letter to FCC Chairman Tom Wheeler”, MorganWick.com, 17 Jan 2014, retrieved from <http://sports.morganwick.com/2014/01/an-open-letter-to-fcc-chairman-tom-wheeler/>.

The two are worth treating separately because of their disparate prospects for two-way communication. It is tempting to argue that there is no justification for wired providers to give up *any* of their bandwidth for linear television since the Internet can do the same thing (just not as well) and we should be encouraging broadcasters to make their signals as widely available as possible, which would both obviate the need for their signals to be carried on cable and possibly make it against the public interest to discourage them from doing so. Remember, though, that cable started out as “community antenna television”, delivering television signals to mountainous areas where over-the-air signals couldn’t penetrate. As such, a wired Internet provider may find it necessary to deliver the benefits of one-way communication into areas not capable of receiving the signals wirelessly by relaying them from areas that can. Of course, one technology in place now that was not in place at the dawn of cable is wireless phone service, whose greater density of transmitting sites can penetrate specifically into areas that might not have been served by a single, booming broadcast antenna, raising the possibility of linear television distributed by way of many scattered transmitter sites rather than one big one; I have little to say about the merits of this approach other than that it would likely render the concept of the local market relevant once again, though such could be determined by the free market.

If it is necessary for wired Internet providers to relay linear television signals into areas they cannot reach over-the-air, a form of the must-carry rule is probably warranted: carry one signal in a given area, carry them all. It may also be beneficial to carry additional one-way signals across the wires to reflect the likelihood of greater consumption of content over wires and at higher qualities. If this is the case, however, such should follow the distribution paradigm established for the Internet. The present white paper asks if provisions requiring cable operators to grant access to their platform such as, among others, program access rules are still warranted in the era of the Internet, and it is easy to see why given that MVPDs have lost their exclusive platform for delivering content just as much as broadcast stations have, but when cable operators become Internet providers they are effectively subject to *more* stringent rules for granting access to content, because they are required to deliver *all* content a consumer may request.<sup>19</sup> If the content available through an additional linear television channel is also available on the Internet, granting a linear channel to that content is effectively analogous to the “paid prioritization” system that has been the cause of such controversy regarding the FCC’s proposed Open Internet rules; as such either Congress or the commission would need to take steps to mitigate any resulting negative consequences. There may be reason to allow some content’s carriage on a linear channel to be exclusive to one provider or another, but any linear channels available from at least two providers in an area should be available from all, and as with broadcast stations, the consumer should have sole discretion as to whether or not (or when) to pay for it.

A major market space for satellite television has proved to be delivering service to rural areas not served by cable television. Congress and the commission has attempted for a long time to encourage the development of rural broadband by both wired and wireless providers. If it continues that no one else steps up, it may be that satellite-delivered Internet and television service is better than nothing, and in this case can be expected to follow the same rules as cable operators laid out above. It may be that satellite Internet service should be governed by its own rules given its inferior quality, but if at all possible all services for the delivery of linear television beyond picking it up directly from the air should be brought under a single set of rules.

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<sup>19</sup> “Regulation of the Market for Video Content and Distribution”, p6.

Although rules governing carriage of content on MVPDs should in fact be made stricter, as above, to match the rules in place governing the Internet, it is important to note that in the case of both one-way and two-way communication, it is the *physical* infrastructure that necessitates such rules and makes them relevant, not the *content* they happen to carry. During the 80s and 90s, including when the Cable Act was passed, the assumption was that the physical infrastructure was a necessary condition for delivering the content. The advent of over-the-top video providers is perhaps the highest expression of the fact that this is no longer the case, yet the fact that such services would need to be classified as MVPDs is a reflection of the fact that those assumptions still rule. Over-the-top providers, having no infrastructure of their own, exist *entirely* to deliver content, and by necessity they do not use actual linear television channels to do so, but rather do so over the Internet. To the extent they carry broadcast stations, they are another manifestation of broadcast's neglect of its own nominal medium; to the extent they carry cable channels, they are an attempt to break MVPDs' monopoly over certain classes of content, a monopoly that is much harder to justify now than 23 years ago. A well-written communications act, and corresponding well-thought out FCC action, should render them unnecessary and superfluous; certainly Congress and the commission should think long and hard before doubling down on rules that assumed the primacy of physical infrastructure by applying them to entities without any.

I would reconsider the purpose and necessity of the retransmission consent rules, although I do not think it is wise to simply wipe them off the books without some sort of transition period, especially to help fund the reversal of the years of neglect broadcast television has suffered as a result. When the Cable Act was passed the purpose of retransmission consent was ostensibly to compensate stations for access to their signals being used to attract customers to cable operators and, through them, to content that was in direct competition with those stations. By the time the Cable Act was passed, however, access to that additional content itself was already showing signs of eventually eclipsing access to broadcast stations as a primary reason for subscribing to cable (and had done so for over a decade), particularly in urban areas that could receive broadcast stations perfectly well, and with the advent of the cord-cutting movement and the delivery of content over the Internet, as well as cable operators' diversification into Internet and phone services, such an eclipse is well and truly completed, or at least would be if cable carriage didn't disincentivize broadcast stations from improving their signal. Ideally returning control of what content is distributed to the consumer can serve the purpose of obviating the need for a system like retransmission consent.

### **Is Competition the Answer to Net Neutrality?**

In many places in the above discussion, I indicated that the regulation of broadcast and cable television should be made to match the net neutrality principle that governs the Internet, since linear television is likely to become subordinated to the Internet as a source of content and intertwined with it as part of the larger competitive landscape for video. Some may argue that net neutrality constitutes unwarranted government interference in the marketplace and that competition and the free market should be able to prevent the negative consequences net neutrality attempts to prevent. However, the present state of the cable television and wired Internet provision landscape is decidedly *not* one of competition and the free market; although there are many cable television and Internet providers, it is quite rare that the average person has a choice of more than one, not counting providers using other media such as satellite. As such, the question becomes decidedly more complex if we prefer fostering competition to maintaining formal net neutrality rules.

Congress and the commission needs to determine whether or not wired television and Internet service represents a natural monopoly that tends to only one provider in most areas with any attempt to establish a competing service constituting unnecessary “overbuilding”, or whether it can and should support multiple providers in a given area. If the former, the commission must continue to ensure true net neutrality, and Congress should enshrine it in law; indeed, for all practical purposes this would imply that Title II as it is is not as “outdated”, and in fact is more applicable to the wired Internet landscape, than its opponents acknowledge. If the latter, that implies that in most places cable operators have engaged in anticompetitive practices to prevent the institution of competition from other wired service providers. Some of these may have to do with local franchising requirements, regulations laid out in the 1992 Cable Act, and other vestiges from the early days of cable. If the wired television and Internet service landscape can and should support competition, Congress in a revised Communications Act and the FCC through its own action should reduce the barriers to entry to competitors as much as possible.

If the wired communications delivery market is fully open to competition, it may well be that it is acceptable to allow service providers to reach their own agreements with content providers over the quality of the connection between them, and let the free market do the rest. Even then, however, the result could still be that parties with money will have an advantage over parties without, especially in high-bandwidth fields like video. As the fourth white paper implicitly acknowledges, the issue of interconnection between networks remains an important issue precisely for the purpose of fostering competition; people want to know that whatever provider they sign up for, they are connecting to the same Internet.<sup>20</sup> As such, I believe many of the principles laid out above would still apply, though I fully acknowledge that this is entirely speculative.

## **Conclusion**

The goal of a technology-neutral rewrite of the Communications Act should be to ensure a level playing field between different technologies so that each technology can do what it does best and better than any other, yet the playing field in the video marketplace is so un-level that the proposals of broadcasters, which suffer from the unbalanced playing field more than anyone else, would make things worse. There are few areas that better demonstrate the need for a technology-neutral rewrite of the Communications Act than the video marketplace, and perhaps nowhere else is a proper understanding of the issues involved more important to the success of the entire rewrite effort, yet due to the looming incentive auctions there is nowhere else where getting the issues right is so time-sensitive. Getting the video marketplace right is critical to ensuring the preservation of the ideal of net neutrality, and thus to ensuring that whatever comes out of this process works for the American consumer. I hope the committee takes the above into consideration and understands the importance of these issues to the task of shaping the communications landscape of the twenty-first century.

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<sup>20</sup> House Committee on Energy and Commerce, “Network Interconnection”, 15 Jul 2014, retrieved from <http://energycommerce.house.gov/sites/republicans.energycommerce.house.gov/files/analysis/CommActUpdate/20140715WhitePaper-Interconnection.pdf>.