

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of: )  
 )  
Authorizing Permissive Use of the “Next ) GN Docket No. 16-142  
Generation” Broadcast Television Standard )  
 )

**COMMENTS OF AMERICA’S PUBLIC TELEVISION STATIONS,  
THE AWARD ALLIANCE, THE CONSUMER TECHNOLOGY ASSOCIATION AND  
THE NATIONAL ASSOCIATION OF BROADCASTERS**

May 9, 2017

## TABLE OF CONTENTS

<b>I.</b>	<b>INTRODUCTION AND SUMMARY.....</b>	<b>1</b>
<b>II.</b>	<b>THE COMMISSION SHOULD PROMPTLY AUTHORIZE VOLUNTARY USE OF THE NEXT GEN TV STANDARD.....</b>	<b>3</b>
<b>III.</b>	<b>THE COMMISSION SHOULD CREATE FLEXIBLE RULES FOR LOCAL SIMULCASTING ARRANGEMENTS.....</b>	<b>5</b>
<b>A.</b>	<b>The Commission Should Allow Broadcasters to Determine the Content Transmitted Pursuant to Local Simulcasting Arrangements .....</b>	<b>5</b>
<b>B.</b>	<b>The Commission Should Allow Market Forces to Determine Coverage and Signal Quality Issues .....</b>	<b>7</b>
<b>C.</b>	<b>The Commission Should Allow Broadcasters to Use Vacant In-Band Channels to Facilitate Next Gen Deployment.....</b>	<b>10</b>
<b>D.</b>	<b>The Commission Should Consider an Alternative to its Proposals for the Regulatory Treatment of Simulcasting Arrangements .....</b>	<b>11</b>
<b>IV.</b>	<b>MVPD CARRIAGE OBLIGATIONS SHOULD NOT CHANGE DURING DEPLOYMENT.....</b>	<b>16</b>
<b>V.</b>	<b>APPROVAL OF THE NEXT GEN STANDARD WILL NOT CHANGE BROADCASTERS' PUBLIC INTEREST OBLIGATIONS.....</b>	<b>18</b>
<b>VI.</b>	<b>THE COMMISSION'S INTERFERENCE PROTECTION RULES SHOULD PROVIDE AS MUCH FLEXIBILITY AS POSSIBLE.....</b>	<b>20</b>
<b>VII.</b>	<b>THE COMMISSION SHOULD ALLOW THE TRANSITION TO UNFOLD ON A VOLUNTARY, MARKET-DRIVEN BASIS.....</b>	<b>21</b>
<b>A.</b>	<b>The Commission Should Not Adopt a Next Gen Tuner Mandate.....</b>	<b>22</b>
<b>B.</b>	<b>The Commission Should Not Prescribe Specific Consumer Education Mandates .....</b>	<b>23</b>
<b>C.</b>	<b>Next Gen Deployment Will Not Affect Repacking.....</b>	<b>23</b>
<b>VIII.</b>	<b>CONCLUSION .....</b>	<b>24</b>

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of: )  
 )  
Authorizing Permissive Use of the “Next ) GN Docket No. 16-142  
Generation” Broadcast Television Standard )  
 )

**COMMENTS OF AMERICA’S PUBLIC TELEVISION STATIONS,  
THE AWARD ALLIANCE, THE CONSUMER TECHNOLOGY ASSOCIATION  
AND THE NATIONAL ASSOCIATION OF BROADCASTERS**

**I. INTRODUCTION AND SUMMARY**

The Commission has a unique opportunity in this proceeding to allow market forces to bolster innovation, enhance competition and expand service offerings available for free to consumers. By approving voluntary use of the Next Generation TV (Next Gen) transmission standard, the Commission will allow broadcasters to offer exciting and innovative services, including visually stunning pictures, more immersive audio, superior reception, enhanced public safety capabilities and other features. The Commission can do all of this without allocating additional spectrum in new bands, without government subsidies and without regulatory mandates. By giving broadcasters permission to offer significantly improved service using the same 6 MHz channels they use today, the Commission will allow the industry to revolutionize the viewing experience.

In this proceeding, the Commission’s goal should be to provide broadcasters with as much flexibility as possible, consistent with their public interest obligations. The Commission should allow the market, not regulatory dictates, to determine whether or not Next Gen is successful.

In this case, only limited changes to the Commission’s rules are required to permit broadcasters to make the investments in their facilities necessary to deploy Next Gen TV. Accordingly, the Commission should adopt only those rule changes that are necessary to permit broadcasters to move forward with deployment, and allow consumers to determine how that deployment unfolds. This means, first, that the Commission should incorporate in its rules only the bootstrap layer of the transmission standard, which is necessary to regulate the interference environment. Further, while broadcasters have proposed to protect viewers by entering local simulcasting arrangements, flexibility in the Commission’s rules is necessary to afford broadcasters the opportunity to provide new and compelling services with Next Gen to best serve their viewers. Similarly, rather than imposing mandates, the Commission should allow the consumer electronics industry to respond to market conditions and introduce Next Gen-compatible equipment as consumers demand it.

Prompt Commission approval of the voluntary use of the Next Gen standard will spur investment and innovation, ensure continued American leadership in the broadcast sphere and provide consumers with compelling new viewing experiences. Petitioners<sup>1</sup>

---

<sup>1</sup> Petitioner America’s Public Television Stations (“APTS”) is a nonprofit membership organization that represents the overwhelming majority of public television stations nationwide. APTS fosters strong and financially sound noncommercial television and works to ensure member stations’ commitment and capacity to perform essential public service missions in education, public safety and civic leadership for the American people.

Petitioner the Advanced Warning and Response Network Alliance (“AWARN Alliance”) is comprised of media and technology companies dedicated to leveraging the capabilities of next-generation digital TV broadcasting to deliver reliable, geographically-targeted rich media alerts anywhere, anytime, provide vital information to accelerate recovery after a disaster, and enhance first responder communications in emergencies.

Petitioner the Consumer Technology Association (“CTA”) is the technology trade association representing the \$285 billion U.S. consumer electronics industry, with more

commend the Commission for moving forward with a Notice of Proposed Rulemaking to authorize Next Gen deployment.<sup>2</sup> We appreciate the Commission’s willingness to consider flexible rules for Next Gen implementation, including consideration of allowing use of vacant in-band channels to facilitate deployment. We urge the Commission to expeditiously approve use of this standard, setting the stage for the future of television.

## **II. THE COMMISSION SHOULD PROMPTLY AUTHORIZE VOLUNTARY USE OF THE NEXT GEN TV STANDARD**

Next Gen TV offers compelling public interest benefits, including stunning video and more immersive audio, as well as the opportunity for revolutionary features that will significantly enhance the viewing experience. It also offers the potential to enhance public safety, improve mobile reception of broadcast over-the-air signals, provide new datacasting opportunities and expand programming opportunities for underserved communities. Because it builds on the Internet Protocol format, Next Gen TV will allow for ubiquitous content availability. In short, Next Generation TV lays out a path for maintaining American leadership in the broadcast industry.

Consistent with the approach that the Commission should seek to provide broadcasters with as much flexibility as possible in deploying Next Gen facilities,

---

than 2,000 members. CTA engages in legislative and regulatory advocacy, market research, technical training and education, industry promotion, standards development and the fostering of business and strategic relationships.

Petitioner National Association of Broadcasters (“NAB”) is the nonprofit trade association that advocates on behalf of free local radio and television stations and broadcast networks before Congress, the Federal Communications Commission and other federal agencies, and the courts.

<sup>2</sup> *Authorizing Permissive Use of the “Next Generation” Broadcast Television Standard*, Notice of Proposed Rulemaking, GN Docket No. 16-142, FCC 17-13 (Feb. 24, 2017) (NPRM).

Petitioners recommend that the Commission adopt only the System Discovery and Signaling architecture (ATSC Standard A/321) into its rules.<sup>3</sup> Petitioners urge the Commission to do no more than necessary to regulate the interference environment in this regard.

A/321 is the so-called “bootstrap” of the Next Gen TV standard. It provides a universal entry point into a broadcast waveform, signaling a receiver as to the nature of the data which are about to follow, and allowing the receiver to choose what it wants to see. The receiver then receives and processes only data that are relevant to that receiver, and does not waste resources processing data that is of no use to that device or application. By approving and adopting A/321, the FCC will have done all it needs to allow broadcasters and TV manufacturers to deliver compelling new content and services to consumers using Next Gen TV.

One of the hallmarks of the Next Gen standard is its flexibility, including its ability to be provide enhanced mobile reception and datacasting opportunities. The Commission should not limit the potential for growth using this flexible technology. Adopting additional components of the standard into the FCC’s rules potentially forces broadcasters to come back to the Commission to request permission to use updated versions of these components as the standard evolves. By adopting the A/321 component of the standard, on the other hand, the Commission will have fulfilled its spectrum management responsibilities while also setting the stage for future innovation.

---

<sup>3</sup> NPRM at ¶ 7.

### **III. THE COMMISSION SHOULD CREATE FLEXIBLE RULES FOR LOCAL SIMULCASTING ARRANGEMENTS**

Because the Next Gen standard is not backwards compatible with the current television standard, petitioners have proposed that broadcasters interested in deploying Next Gen facilities partner with other broadcasters to allow viewers to continue to receive over-the-air signals. While simulcasting will play a critical role in a successful rollout of the new standard, the Commission should afford broadcasters as much flexibility as possible in tailoring local simulcasting arrangements to best suit their viewers.

#### **A. The Commission Should Allow Broadcasters to Determine the Content Transmitted Pursuant to Local Simulcasting Arrangements**

The NPRM seeks comment on whether simulcasting using ATSC 1.0 should be defined as transmitting a stream with the identical content a station broadcasts using next Gen.<sup>4</sup> The Commission should refrain from adopting such requirements and, indeed, should not define simulcasting arrangements with respect to content at all. Without additional spectrum in which to conduct this transition, broadcasters will be forced to make difficult tradeoffs in attempting to balance the competing objectives of providing compelling content and services to drive consumer adoption of Next Gen and providing continuing service to viewers who are not yet ready to receive Next Gen signals. The Commission should resist the urge to substitute its judgment for individual broadcasters who serve local communities.

As a general matter, in considering what, if any, rules are appropriate regarding local simulcasting arrangements, the Commission should favor market forces over

---

<sup>4</sup> NPRM at ¶ 11.

government dictates. Broadcasters are in the business of serving viewers. If a broadcaster fails to transmit content that viewers want to watch, ratings will decline and the station's bottom line will suffer. The Commission would be best served by relying on broadcasters' business incentives to serve their viewers rather than increased and unnecessary regulation.

Moreover, Commission rules requiring broadcasters to transmit specific streams of programming would be unprecedented and would set the Commission on a slippery slope towards content regulation. Just as the Commission has no authority to dictate which of a station's multicast streams should constitute its primary stream for carriage purposes, the Commission should not substitute its judgment for that of local broadcasters.

Finally, Commission requirements with respect to the content transmitted under simulcasting arrangements could complicate the deployment of Next Gen TV. There may be markets where, for example, several broadcasters cooperate to deploy Next Gen beginning with a single station transmitting signals using ATSC 3.0. It is possible that these stations may choose to transmit one or more streams on the Next Gen facility that highlight the advantages of Next Gen to encourage consumer adoption. For example, broadcasters might choose to use the Next Gen station to highlight ultra-high definition or the benefits of high dynamic range or other features using content that might be less appealing to viewers if transmitted using ATSC 1.0.

The Commission should avoid these complications entirely by allowing broadcasters to define the terms of their simulcasting arrangements in terms of the content provided. Stations transmitting using the Next Gen standard should simply be



required to provide one free over-the-air programming stream, just as the rules presently require, using the ATSC 1.0 standard.

**B. The Commission Should Allow Market Forces to Determine Coverage and Signal Quality Issues**

The NPRM asks whether broadcasters should be “permitted to simulcast in a lower format than that in which they transmit today.”<sup>5</sup> Broadcasters have every incentive to continue to provide the highest quality video possible to consumers, in both the Next Gen and ATSC 1.0 transmissions. Thus, imposing this kind of requirement unnecessarily restrains broadcasters from achieving an appropriate balance of content diversity, video quality, and innovation for consumers. Further petitioners note that the Commission has already addressed this matter from a policy standpoint in the context of channel sharing.

First, the Commission’s existing rules require only that a broadcaster provide a single, over-the-air standard definition stream for free.<sup>6</sup> Thus, under the current rules, a broadcaster that is transmitting in higher than standard definition is already “permitted” to broadcast in a lower definition format than the one it uses today. Perplexingly, then, the NPRM appears to contemplate imposing a higher regulatory burden on stations that choose to invest in their facilities to provide a superior service to viewers. Raising regulatory hurdles in this proceeding will discourage investment and innovation. The Commission’s role should be to encourage advancements that will benefit consumers, not create obstacles. Accordingly, the Commission should not raise additional regulatory hurdles by heightening broadcasters’ existing obligations.

---

<sup>5</sup> NPRM at ¶ 24.

<sup>6</sup> 47 C.F.R. § 73.624(b).

Second, petitioners respectfully submit that the Commission has already resolved, as a policy matter, the question of whether higher formatting requirements should be imposed on multicasting arrangements. In its first channel sharing order, the Commission noted that some commenters had raised the concern that permitting channel sharing might, in some cases, prevent both channel sharing partners from continuing to transmit in HD. The Commission correctly dispensed with this objection, noting that, because channel sharing was voluntary, stations would enter into channel sharing arrangements only if it was consistent with their business plans and their determination of how to best serve their viewers.<sup>7</sup> The conclusion should be the same in this case. The rationale the Commission offered in its channel sharing order remains just as valid for multicasting arrangements.

Importantly, broadcasters have every market incentive to continue to transmit with the same quality they offer today. Indeed, mock negotiations regarding Next Gen deployment suggest that stations place a high priority on continuing to transmit the highest quality signal and preserving multicast streams.<sup>8</sup> Further, compression technologies continue to advance, providing broadcasters with greater ability to maintain programming and quality in simulcasting arrangements.

The deployment of Next Gen TV will proceed on a strictly voluntary basis, without government subsidies or mandates. In some markets, depending on the number of potential simulcasting partners available, this may pose challenges. We urge the

---

<sup>7</sup> *Innovation in the Broadcast Television Bands: Allocations, Channel Sharing and Improvements to VHF*, Report and Order, 27 FCC Rcd 4616, ¶ 14 (2012).

<sup>8</sup> Letter from Gerard J. Waldron to Marlene H. Dortch at 4-5, GN Docket No. 16-142 (Dec. 14, 2016).

Commission to allow deployments to proceed, while imposing as few additional regulatory conditions as possible. While broadcasters are highly motivated to make the deployment of Next Gen TV as seamless as possible for viewers, the Commission should not further complicate this process by imposing heightened regulatory requirements on those broadcasters that choose to move forward.

For the same reasons, the Commission need not define simulcasting arrangements in terms of coverage. Broadcasters are in the business of serving viewers, not losing them. They have strong market incentives to continue to reach their viewers while rolling out Next Gen TV. Stations that do not preserve service coverage or quality will suffer financially due to lost viewership and thus advertising revenue.<sup>9</sup> The Commission should rely on these market incentives rather than restrict broadcasters' options for rolling out new technology by imposing specific requirements with respect to coverage area.<sup>10</sup> Indeed, imposing such requirements would only stymie Next Gen deployment, particularly in markets where there are a limited number of simulcasting partners. Such requirements, while well-intentioned, could inadvertently have the effect of leaving smaller or rural markets behind while Next Gen deployments move forward in larger markets.

Similarly, the Commission should leave simulcasting arrangements to the market, allowing broadcasters to define these arrangements and deploy Next Gen TV on the schedule consumers dictate. The NPRM asks whether the Commission should look more

---

<sup>9</sup> NPRM at ¶ 24.

<sup>10</sup> *Id.* at ¶ 23.

favorably on certain types of simulcasting arrangements, such as deployment plans covering an entire market.<sup>11</sup> It is unnecessary for the Commission to adopt such a preference, encourage certain types of arrangements or, for that matter, to review or approve simulcasting arrangements at all. Ultimately, market forces will prove far more effective in preserving coverage and quality than government regulations. We urge the Commission to rely on these market forces and allow broadcasters to continue to compete with service providers not subject to similar regulations and restrictions.

**C. The Commission Should Allow Broadcasters to Use Vacant In-Band Channels to Facilitate Next Gen Deployment**

Throughout this proceeding, petitioners have emphasized that they are not seeking additional spectrum in other bands to enable the deployment of Next Gen TV.

Broadcasters will seek to deploy Next Gen TV in a spectrum footprint that will be 84 MHz smaller following the successful close of the broadcast television spectrum incentive auction.

Attempting to deploy a new transmission technology without additional spectrum resources poses unique challenges. This is particularly so given that individual broadcasters do not have a nationwide footprint that would allow them to attempt to re-farm existing spectrum while maintaining service. Combined with the conclusion of the incentive auction, which will result in a smaller broadcast television band, this poses the central challenge for a successful Next Gen deployment. Unlike the DTV transition, for example, broadcasters will not all have additional channels available to ensure a seamless cutover.

---

<sup>11</sup> NPRM at ¶ 25.

As described above, broadcasters are highly incented to minimize viewer disruption while rolling out Next Gen TV. They are committed to working together to ensure that simulcasting arrangements allow viewers to continue to receive the free, over-the-air news and entertainment they rely on today. Nevertheless, allowing broadcasters to use vacant in-band channels, subject to FCC approval and for the duration of the transition, could further help reduce viewer disruption. Such action would encourage innovation and help protect viewers while also maximizing the efficient use of scarce spectrum resources.

**D. The Commission Should Consider an Alternative to its Proposals for the Regulatory Treatment of Simulcasting Arrangements**

The NPRM sets forth two alternative proposals for the regulatory treatment of simulcasting arrangements: a separate license for simulcasting streams; and a multicast approach. Under the first approach, broadcasters entering into simulcasting arrangements would follow the rules set forth in the FCC's channel sharing rules. For example, if stations A and B sought to partner to deploy Next Gen, station A would receive a separate license reflecting its transmission on station B's facilities, and station B would receive a separate license reflecting its transmission on station A's facilities.

This approach offers some benefits for both broadcasters and the Commission, primarily in the form of regulatory certainty. This approach provides clarity that non-commercial broadcasters operating on reserved channels could partner with commercial entities in simulcasting arrangements consistent with the requirements of Section 399B of the Communications Act. Just as the Commission reasoned with respect to channel sharing arrangements, a non-commercial station operating on a reserved channel could comply with Section 399B while partnering with a commercial station because the non-

commercial station would not be transmitting any commercial advertising on the non-commercial portion of its channel.<sup>12</sup> A licensed approach would also provide clarity with respect to carriage obligations.<sup>13</sup> From the Commission's perspective, a separate licensing approach would provide the FCC with clear authority to enforce its rules against the originator of programming, rather than the station that happened to be transmitting that programming through a simulcasting arrangement. It would also allow the Commission to maintain awareness of the pace and progress of Next Gen deployments and assist consumers during those deployments.

However, a separate licensing approach does have some drawbacks. Requiring stations to separately license multicast streams on other stations' facilities would involve significant additional administrative burdens and costs. It also runs the risk of requiring the Commission to consider competing applications for these new licenses – which will unduly and unnecessarily complicate and delay Next Gen deployments. Further, MVPDs could find that the issuance of hundreds of additional broadcast licenses creates risks of expanded must carry obligations, regardless of assurances the Commission might offer. Finally, this approach would make it difficult for stations to make changes to simulcasting arrangements as the transition progresses particularly if more than two stations enter into a simulcasting arrangement with the intention of increasing the capacity devoted to Next Gen as consumer adoption increases.

---

<sup>12</sup> *Enhancing the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions*, Report and Order, 29 FCC Rcd 6567, ¶ 703 (2014) (Incentive Auction R&O).

<sup>13</sup> NPRM at ¶ 20.

A multicasting approach, on the other hand, would be the result of private agreements between individual stations. Under this approach, if stations A and B wished to deploy Next Gen, they would simply agree by contract that station A would carry B's programming as a multicast stream and station B would reciprocate for station A. This approach has the benefit of minimizing administrative burdens and costs, while also providing broadcasters with maximum flexibility.

Petitioners believe that certain of the concerns the NPRM articulates with respect to the multicasting approach are overstated. It is not clear why the Commission necessarily needs to separately license simulcasting arrangements to preserve the opportunity for non-commercial stations to participate in Next Gen deployments with commercial stations. As described above, in the context of the incentive auction, the Commission concluded that non-commercial stations could enter channel sharing arrangements with commercial stations on reserved channels while maintaining their non-commercial status. The Commission reasoned that the non-commercial station would continue to operate on a non-commercial basis on their portion of a reserved channel.<sup>14</sup> As a practical matter, channel sharing is simply multicasting. If a station can maintain its non-commercial status by operating on a non-commercial basis on a portion of a reserved channel as part of a channels sharing arrangement, there is no obvious reason why it could not do so as part of a multicasting arrangement.

Further, the NPRM asserts that under a multicast approach, the legal basis for carriage of a multicast stream is unclear.<sup>15</sup> However, under the Petitioners' proposal,

---

<sup>14</sup> Incentive Auction R&O at ¶ 703.

<sup>15</sup> NPRM at ¶ 20.

carriage rights associated with Next Gen TV deployment are straightforward. A simulcasting partner transmitting using ATSC 3.0 would maintain its must carry rights, but MVPDs could satisfy their carriage obligations by carrying the 1.0 stream simulcast on another station. For example, consider stations A and B, both of which have elected must carry status, partnering to deploy Next Gen TV. Station A, operating as the ATSC 1.0 facility, maintains its must carry rights, and is entitled to carriage of its primary stream transmitted from its own facilities. Station B, operating as the ATSC 3.0 facility, maintains its must carry rights, and is entitled to carriage of its primary stream, but MVPDs may satisfy this carriage obligation by carrying the ATSC 1.0 stream transmitted over station A's facilities.

The Commission's rules permit must-carry stations to use alternative means of delivery of their signals.<sup>16</sup> In this case, the alternative means would be a simulcast stream, rather than a fiber feed or another mechanism. The Commission has previously determined that must carry rights may be effectuated through transmission on other facilities.<sup>17</sup> Thus, the basis for carriage is straightforward and MVPD obligations would remain unchanged.

---

<sup>16</sup> *Implementation of the Cable Television Consumer Protection and Competition Act of 1992 Broadcast Signal Carriage Issues*, Report and Order, 8 FCC Rcd 2965, ¶ 104 (1993) (“However, we disagree with Armstrong and other commenters who assert that a television station's use of microwave or other means (such as a translator) to deliver a signal to the headend cannot be considered a method to provide a good quality signal to the headend. We view such methods to be no different than a television station providing improved equipment to ensure that a cable system operator receives a good quality signal for retransmission to its subscribers.”)

<sup>17</sup> *See, e.g., Jovon Broad. Corp. v. RCN Corp.*, Memorandum Opinion and Order, 18 FCC Rcd 8145, ¶ 9 (MB 2003) (broadcaster use of digital transmitter to deliver a good quality signal to a cable headend was analogous to using a fiber feed or other delivery mechanism.)



Nevertheless, to the extent the Commission sees drawbacks in treating, as a regulatory matter, simulcasting as simply private multicasting arrangements, the Commission should not adopt its separate licensing approach. Rather, the Commission should seek to combine the regulatory certainty of separate licensing with the flexibility of multicasting by allowing stations to include simulcasting arrangements under their existing licenses.

Under this proposal, a station entering into a simulcasting arrangement with another station would file a letter informing the Commission that it was entering a simulcasting arrangement with another station. For example, station A would file a letter informing the FCC that its ATSC 1.0 transmission would be transmitted from station B, and that station B's ATSC 3.0 transmission would originate from station A. The Commission would reflect this in a note on each station's existing license, so that station A's license would cover both its Next Gen signal on station A and its ATSC 1.0 signal on station B, while station B's license would cover both its ATSC 1.0 signal on station B as well as its Next Gen signal on station A. This is consistent with Commission practice. FCC licenses regularly include notes that explain, define or limit a station's operating authority.

This approach would provide broadcasters with significant flexibility, as they would simply notify the FCC of their arrangements. There would be no need for Commission review or approval of these arrangements, as both stations would continue to transmit on already-authorized, licensed facilities. Non-commercial stations would clearly be able to partner with commercial stations in Next Gen deployments, because the commercial station's content would be separately licensed and excluded from the non-

commercial station's license. Both MVPDs and broadcasters would have clarity regarding carriage obligations, as broadcasters would continue to have a single license and continue to designate their primary stream for must-carry purposes. The Commission would have clear enforcement authority over the originator of programming violating any FCC rules, as well as a ready means to monitor the progress of Next Gen deployments in individual markets and across the country. Both the Commission and broadcasters would avoid the complexity of addressing the separate regulatory fees, separate renewals and the potential for competing applications.

Petitioners greatly appreciate the thoughtfulness of the discussion of these issues in the NPRM. We suggest that the Commission can authorize simulcasting arrangements under its multicasting approach without difficulty. However, if the Commission determines that a multicasting approach lacks regulatory certainty, it should adopt the alternative approach described here.

#### **IV. MVPD CARRIAGE OBLIGATIONS SHOULD NOT CHANGE DURING DEPLOYMENT**

The record of this proceeding reflects agreement among Petitioners, broadcasters and MVPDs that MVPD carriage obligations should remain unchanged during the deployment of Next Gen TV. Broadcast stations electing must carry rights will maintain those rights during the Next Gen deployment only for their ATSC 1.0 signals. For those stations electing retransmission consent, carriage issues will be resolved by marketplace negotiations between broadcasters and MVPDs wishing to resell those broadcasters' programming.

With respect to must carry status, as described above, Petitioners have proposed a framework under which stations transmitting using the Next Gen standard would

preserve their must carry rights, but MVPDs could satisfy those must carry obligations by carrying the stations' ATSC 1.0 simulcast streams. The ATSC 1.0 simulcast would function as an alternative delivery mechanism, conceptually indistinguishable from delivery over fiber optic cables, microwave feeds or broadcast signals from other transmitters, which the Commission has previously approved.<sup>18</sup> Alternatively, under the alternate regulatory approach described above, a must carry station's license would include both its transmission from its own facility and its transmission from its simulcasting partner's facility, and the station would continue to designate one stream as its primary stream entitled to mandatory carriage. Next Gen deployment thus should impose no new must carry obligations on MVPDs.

Given that the Next Gen deployment will be voluntary and market-driven, proceeding at a different pace in different markets according to the preferences of consumers, Petitioners agree that it is premature for the Commission to consider questions surrounding mandatory carriage of Next Gen signals.<sup>19</sup> Issues surrounding mandatory carriage of Next Gen signals are best left to a subsequent proceeding once broadcasters, MVPDs and the Commission itself have had an opportunity to observe the progress of the Next Gen transition.

Because carriage of Next Gen signals will not be mandatory, issues related to retransmission consent negotiations are simply irrelevant in this proceeding. The NPRM asks whether broadcasters can use the retransmission consent process to "compel"

---

<sup>18</sup> *Id.*

<sup>19</sup> NPRM at ¶ 36.

MVPDs to carry Next Gen signals.<sup>20</sup> Broadcasters cannot “compel” MVPDs to accept contract terms those MVPDs deem unprofitable. If MVPDs find retransmission consent negotiations with a particular broadcaster unpalatable, they can elect not to agree to the broadcaster’s requests and not to carry the station. The FCC should not place a regulatory thumb on the scale of these private negotiations in advance of any actual marketplace developments by adopting rules that shield MVPDs from the market. Similarly, because MVPDs are not compelled to carry Next Gen content, questions surrounding royalties for patents associated with the Next Gen standard are wholly irrelevant. We urge the Commission not to attempt to fix a marketplace that not only is not broken, but has not even had an opportunity to develop.

**V. APPROVAL OF THE NEXT GEN STANDARD WILL NOT CHANGE BROADCASTERS’ PUBLIC INTEREST OBLIGATIONS**

The Commission has before it the opportunity to unleash investment and innovation by the broadcast industry to improve a free, over-the-air service. Petitioners have asked the Commission to approve the voluntary use of an upgraded technology that has the potential to dramatically enhance service for viewers. We support the Commission’s conclusion that there is no need to, and no basis for, re-examining broadcasters’ public service obligations as part of this proceeding.<sup>21</sup>

Accordingly, petitioners seek no changes to the Commission’s existing rules regarding public interest obligations. The same public service obligations that apply to stations transmitting using the current standard will also apply to stations transmitting

---

<sup>20</sup> *Id.* at ¶ 40.

<sup>21</sup> *Id.* at ¶ 69.

using the Next Gen TV standard, and the Commission need not make any changes to its rules to accommodate Next Gen services.<sup>22</sup>

The NPRM seeks comment on the specific benefits and features that Next Gen service will provide.<sup>23</sup> As Petitioners have described in the record of this proceeding, adoption of the Next Gen TV standard will provide broadcasters with the capability to dramatically enhance the services they offer viewers. It will set the stage for ultra-high definition transmission, high dynamic video and a wide color gamut to provide richer, more lifelike images. It will also allow broadcasters to provide multichannel audio, allowing for enhanced sound localization and a richer, more immersive audio experience. Next Gen TV also provides the capabilities for advanced emergency alerting, including geographically-targeted, rich media and accessible localized alerts and vital recovery information for communities after a disaster. Because it allows broadcasters to do more with their existing spectrum, Next Gen may allow broadcasters to offer expanded opportunities for diverse programming. Because it integrates seamlessly with IP, Next Gen also allows broadcasters to offer interactive services and features. Finally, Next Gen will allow broadcasters to make mobile TV reception a reality, allowing consumers to watch broadcast programming on the go.

Of course, because the Next Gen standard is new, and will be deployed on a voluntary basis, it is premature to define precisely what services broadcasters will choose

---

<sup>22</sup> *Id.* at ¶ 68.

<sup>23</sup> *Id.* at ¶ 70.

to provide using Next Gen and how those services will be delivered.<sup>24</sup> We urge the Commission not to complicate this voluntary deployment by attempting to define how broadcasters may use the enhanced capabilities of this new technology. The Commission's rules allow other industries, including those against which broadcasters compete, to innovate without express permission on the assumption that market incentives will drive these industries to invest in new technology if they believe it will allow them to provide a better service to their customers. The same presumption should govern the Commission here; the most important consideration for the Commission in this proceeding is that approval of the Next Gen standard will allow broadcasters to dramatically improve the free, over-the-air service they provide to viewers.

**VI. THE COMMISSION'S INTERFERENCE PROTECTION RULES SHOULD PROVIDE AS MUCH FLEXIBILITY AS POSSIBLE**

In considering how to apply its interference protection rules to Next Gen deployment, including determining the appropriate regulatory treatment for single frequency networks, the Commission's objective should be to provide broadcasters with as much flexibility as possible.

Petitioners support the proposal to rely on OET-69 to determine the protection Next Gen signals should receive and to define the interference criteria for co- and adjacent channel interference at the same levels as specified in OET-69.<sup>25</sup> We also

---

<sup>24</sup> NPRM at ¶ 70. The NPRM also asks what features will require an Internet connection. *Id.* As a general matter, because over-the-air broadcasting itself does not allow for a return channel without additional spectrum, interactive services will require an Internet connection.

<sup>25</sup> NPRM at ¶ 46.

support the proposal to rely on the same methodology and planning factors for DTV to define the service area of a Next Gen signal.<sup>26</sup> At this time, the Commission need not consider modifications to the methodology or planning factors in OET-69 as part of this proceeding, which would only risk unnecessary delay. Rather, if the Commission or stakeholders wish to seek such modifications, it would be more appropriate to do so in a separate proceeding.

Petitioners also support the Commission's tentative conclusion that there is no current need for rules to consider interference between Next Gen and 600 MHz band services, or further testing with respect to potential interference between Next Gen transmissions and mobile services in the 600 MHz band.<sup>27</sup>

Petitioners support the Commission's proposal to authorize single frequency networks under the Commission's existing rules governing distributed transmission systems.<sup>28</sup> We also support the Commission's tentative conclusion that there is no need to require a specific synchronization standard as long as the synchronization used minimizes interference and provides adequate service.<sup>29</sup>

## **VII. THE COMMISSION SHOULD ALLOW THE TRANSITION TO UNFOLD ON A VOLUNTARY, MARKET-DRIVEN BASIS**

The deployment of Next Gen TV will proceed in a manner markedly different from the DTV transition. Broadcasters will not all have additional channels available, they will need to partner with competitors to continue to serve their viewers, the

---

<sup>26</sup> *Id.*

<sup>27</sup> *Id.* at ¶ 57.

<sup>28</sup> *Id.* at ¶ 60.

<sup>29</sup> *Id.* ¶ 62.

transition will not be subsidized with government coupons or new spectrum allocations and there not be a single nationwide cutover date. The Commission should not complicate this deployment with unnecessary regulations, however well-intended they may be.

**A. The Commission Should Not Adopt a Next Gen Tuner Mandate**

Adoption of a tuner mandate would be counterproductive and unnecessary. Broadcasters and the consumer electronics industry are confident the market will address the need for Next Gen-compatible devices as Next Gen deployment spreads and consumers realize the benefits of the new standard. This will be made even easier by the rollout of Next Gen transmissions and Next Gen-compatible consumer equipment in South Korea. However, it is simply too early to predict how quickly this will happen. Heavy-handed government regulation in the form of tuner mandates is wholly unnecessary and will only frustrate consumers, particularly those in markets where Next Gen is not yet available. Further, forcing consumer electronics manufacturers to include tuners consumers do not yet demand will undermine the inter-industry cooperation that has been the hallmark of the development of the new transmission standard. For these reasons, the Commission should adopt its tentative conclusion that a tuner mandate is unnecessary for the voluntary, market-driven deployment of Next Gen TV.<sup>30</sup>

For the same reasons, the Commission should not pursue any requirement that manufacturers include HDMI ports in television receivers.<sup>31</sup> Receiver manufacturers have always provided a wide range of input options, including support for many legacy

---

<sup>30</sup> NPRM at ¶ 71.

<sup>31</sup> *Id.* at ¶ 72.



interfaces. The Commission lacks authority to impose this unprecedented requirement. Further, any such requirement would be counterproductive and harmful to consumers, locking manufacturers into a needless cost associated with a specific technology regardless of marketplace developments. A better approach is to trust the consumer electronics industry to respond to the market. We urge the Commission not to complicate the Next Gen endeavor with unnecessary regulations or mandates.

**B. The Commission Should Not Prescribe Specific Consumer Education Mandates**

Similarly, the Commission need not impose specific consumer education requirements on broadcasters electing to deploy Next Gen TV.<sup>32</sup> Broadcasters' business model is based on serving viewers, and broadcasters have every market incentive to ensure that viewers understand how to find them. Indeed, as the post-incentive auction transition unfolds, both broadcasters and the Commission will have plenty of experience educating consumers with respect to the need to rescan television sets. The Commission can best help consumers by being available to help educate and assist consumers with respect to any need to rescan television sets as well as to help explain the benefits of Next Gen TV through its website and other avenues.<sup>33</sup>

**C. Next Gen Deployment Will Not Affect Repacking**

Finally, the deployment of Next Gen TV will not affect the post-auction transition of repacked television stations to new channels. Much current-generation equipment that will be deployed during repacking is already Next Gen compatible, or capable of being

---

<sup>32</sup> *Id.* at ¶¶ 73-74.

<sup>33</sup> *Id.* at ¶ 75.

easily upgraded to be Next Gen-compatible. To the extent there are any cost differences between equipment that is Next Gen-compatible and equipment that is not, broadcasters have stated that they are committed to assisting the FCC in ensuring that repacking funds are not directed to unwarranted or unnecessary upgrades.

Indeed, the deployment of Next Gen TV provides the Commission with the opportunity to allow repacking to provide real benefits to viewers in the form of enhanced service. If the Commission acts quickly to approve Next Gen TV, it can leverage repacking to clear 600 MHz spectrum while simultaneously minimizing disruption as broadcasters improve their service.

## **VIII. CONCLUSION**

Petitioners commend the Commission for moving expeditiously in this proceeding. We urge the Commission to continue to move forward, and to seek to provide broadcasters and manufacturers with as much flexibility as possible as they undertake voluntary leap forward into the future of television. Commercial and non-commercial broadcasters are eager to make the investments in their facilities necessary to dramatically enhance their ability to serve their viewers using a flexible, advanced transmission standard. The consumer electronics industry is ready to respond as deployment of this new standard drives consumer demand. All the Commission needs to do to encourage investment, unleash innovation and drive a revolutionary viewing experience is give broadcasters permission to innovate in their existing footprint.

Respectfully submitted,

**AMERICA'S PUBLIC TELEVISION STATIONS**

By:  /s/ \_\_\_\_\_  
Lonna M. Thompson  
Executive Vice President, Chief Operating  
Officer and General Counsel  
America's Public Television Stations  
2100 Crystal Drive, Suite 700  
Arlington, Virginia 22202

**NATIONAL ASSOCIATION OF BROADCASTERS**

By:  /s/ \_\_\_\_\_  
Rick Kaplan  
General Counsel and Executive Vice,  
President, Legal and Regulatory Affairs  
National Association of Broadcasters  
1771 N Street, N.W.  
Washington, D.C. 20036

May 9, 2017

**AWARN ALLIANCE**

By:  /s/ \_\_\_\_\_  
John M. Lawson  
Executive Director  
AWARN Alliance  
602 Belle View Blvd #570  
Alexandria, Virginia 22307

**CONSUMER TECHNOLOGY ASSOCIATION**

By:  /s/ \_\_\_\_\_  
Julie M. Kearney  
Vice President of Regulatory Affairs  
Consumer Technology Association  
1919 South Eads Street  
Arlington, Virginia 22202

