



June 3, 2016

Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W.  
Washington, D.C. 20554

Re: Media Bureau Seeks Comment on Joint Petition for Rulemaking of America's Public Television Stations, the AWARN Alliance, the Consumer Technology Association, and the National Association of Broadcasters Seeking To Authorize Permissive Use of the "Next Generation TV" Broadcast Television Standard, GN Docket No. 16-142; Notice of Ex Parte Communication

Dear Ms. Dortch:

On June 1, 2016, Lonna Thompson and Bobby Desmond of America's Public Television Stations, John Lawson of the AWARN Alliance, Julie Kearney of the Consumer Technology Association, and Alison Neplokh, Bob Weller, Bruce Franca and the undersigned of the National Association of Broadcasters met with FCC staff from the Media Bureau, Office of Engineering and Technology, Incentive Auction Task Force, and Office of General Counsel. A complete list of meeting attendees is set forth below. During this meeting the parties discussed the attached presentation regarding their recent joint petition asking the Commission to approve broadcasters' voluntary use of the Next Generation TV broadcast standard.<sup>1</sup>

Next Generation TV has the potential to dramatically enhance the viewing experience, providing stunning pictures and immersive audio, robust signaling, expanded diverse programming opportunities, enhanced emergency alerting capability and innovative new service offerings. This future is neither distant nor theoretical. Prototype ATSC 3.0 consumer receivers have already been demonstrated publicly, and ATSC 3.0 compatible broadcast transmission equipment is already available.<sup>2</sup> Meanwhile, the Korean broadcasting industry

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<sup>1</sup> America's Public Television Stations, AWARN Alliance, Consumer Technology Association, National Association of Broadcasters Joint Petition for Rulemaking, GN Docket No. 16-142 (April 13, 2016) (Petition).

<sup>2</sup> Comments of GatesAir Inc. at 2, GN Docket No. 16-142 (May 26, 2016) ("ATSC 3.0 is not a theoretical standard decades from realization. As the world's leading supplier of broadcast transmission equipment, GatesAir can attest that the technology required to implement Next

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is rapidly moving forward with ATSC 3.0 to have advanced service available for the 2018 Winter Olympics.

Petitioners appreciate the speed with which the Commission is proceeding in this matter, including the Commission's release of a Public Notice seeking comment on the petition less than two weeks after the petition was filed.<sup>3</sup> Expeditious Commission action can help ensure continued U.S. leadership in television broadcasting, and deliver new and exciting benefits to American viewers.

### **A Voluntary, Market-Based Transition**

Petitioners seek a voluntary transition to the Next Generation TV standard, one that will be driven by market forces rather than government mandates. As broadcasters move to begin transmitting using the Next Generation standard, they will create demand for consumer equipment that will allow viewers to enjoy the superior viewing experience and enhanced services that Next Generation TV will allow. This market-based approach means there will not be a single unified timeframe for the transition.

Because broadcasters propose to lead the transition by partnering with other stations to simulcast their signals in both formats, viewers will continue to receive free, over-the-air signals in the current standard. Broadcasters have every incentive to maintain the highest quality signal to their viewers during the transition, and are committed to working cooperatively to ensure the process is as seamless as reasonably possible for viewers.

### **Carriage Issues**

Because broadcasters will maintain over-the-air transmissions using the current DTV standard, MVPDs that receive broadcast content via these over-the-air transmissions will continue to do so. Just as simulcasting will protect viewers, so too will it ensure that MVPDs continue to receive broadcast programming. The approval of a new transmission standard need not impose new burdens on MVPDs. To clarify this point, petitioners recently submitted

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Generation TV is already being developed. Broadcasters today are able to order from GatesAir transmission equipment that is ATSC 3.0-compatible with a mere software upgrade.”)

<sup>3</sup> *Media Bureau Seeks Comment on Joint Petition for Rulemaking of America's Public Television Stations, the AWARN Alliance, the Consumer Technology Association, and the National Association of Broadcasters Seeking to Authorize Permissive Use of the "Next Generation TV" Broadcast Television Standard*, Public Notice, GN Docket No. 16-142, DA 16-451 (April 26, 2016).

amended proposed rules to making plain that their proposal will not obligate MVPDs to carry Next Generation signals.<sup>4</sup>

Of course, if Next Generation TV offers a compelling viewing experience that consumers demand, MVPDs may choose to negotiate with broadcasters to carry content featuring higher resolutions, higher frame rates, high dynamic range with wide color gamut, a more immersive audio experience and other exciting new features. But that decision is left in the MVPDs' hands. Next Generation TV should be a win-win-win for viewers, broadcasters and MVPDs, and a voluntary, market-driven transition will help ensure that MVPDs do not face undue burdens in the transition.

### **Incentive Auction and Repacking**

Following the successful conclusion of the broadcast spectrum incentive auction, many broadcasters will be assigned new channels in the new, more compact television band. Both broadcasters and successful forward auction bidders have an interest in a post-auction transition that proceeds expeditiously and efficiently. Commission approval of Next Generation TV will not delay this transition or add cost.

Most transmission equipment being manufactured today is capable of being easily upgraded to permit Next Generation TV transmission. While broadcasters may have to make additional investments of their own to take advantage of the full range of Next Generation TV features, the equipment repacked broadcasters will need to move to new channel assignments will not be more expensive, nor will it take longer to install, merely because it is Next Generation TV compatible. Broadcasters do not seek a Next Generation windfall through the incentive auction process, and they are committed to working with the Commission to ensure that repacking funds are not spent to provide stations with unnecessary upgrades to which they are not entitled.

Transitioning to a new transmission standard without new spectrum and without costly government subsidies will entail challenges. But the record of this proceeding demonstrates broadcaster enthusiasm for the potential benefits of a revolutionary new television transmission standard. Petitioners, representing public and commercial broadcasters, public safety and the consumer electronics industry, urge the Commission to give broadcasters permission to innovate and usher in the future of television.

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<sup>4</sup> Letter from America's Public Television Stations, the AWARN Alliance, the Consumer Technology Association and the National Association of Broadcasters, GN Docket No. 16-142 (May 26, 2016).

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Patrick McFadden", with a long horizontal flourish extending to the right.

Patrick McFadden  
Associate General Counsel,  
Legal and Regulatory Affairs  
National Association of Broadcasters

cc: Meeting Attendees

FCC Meeting Attendees

Evan Baranoff  
Steven Broeckaert  
Michelle Carey  
Mark J. Colombo  
Hillary DeNigro  
Martin Doczkat  
Gary Epstein  
John Gabrysch  
Martha Heller  
Walter Johnston  
Ira Keltz  
Junie Khang  
Jean Kiddoo  
Julie Knapp  
David Konczal  
Bill Lake  
Kim Matthews  
Sean Mirzadegan  
Evan Morris  
Paul Murray  
Howard Symons  
John Wong  
Sean Yun



# Next Generation Television: Setting the Stage for the Future

June 1, 2016

# Background

- Next Generation TV can deliver exciting benefits
  - Enhanced viewing experience
  - New programming opportunities
  - Improved emergency alerts
- Implementation is voluntary and does not require government subsidies or a mandated transition
- Broadcasters seeking permission to innovate

## Enhanced Viewing Experience

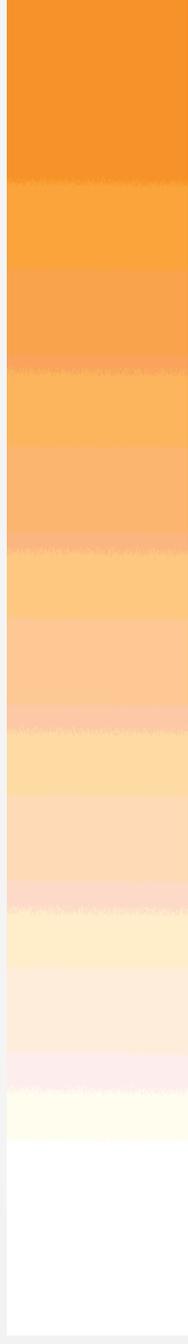
- Stunning pictures, potentially including:
  - Higher resolutions
  - High dynamic range with wide color gamut
  - Higher frame rates

# Higher Resolutions



# Wide Color Gamut

Adds more color options, so:



Becomes:



## Enhanced Audio Experience

- Augmented, more immersive audio
  - More accurate sound localization
  - Customizable sound mixes

## Enhanced RF Experience

- Innovation in RF capabilities allows for
  - Higher data rates with the same coverage area
  - More robust mobile reception
  - Ability to support multiple data rates simultaneously to enable both robust and high quality modes

- IP-based nature of standard creates new opportunities
  - Enhanced viewing experience with program-related data services
  - Integration with over-the-top video sources
  - Datacasting opportunities

## Programming Opportunities

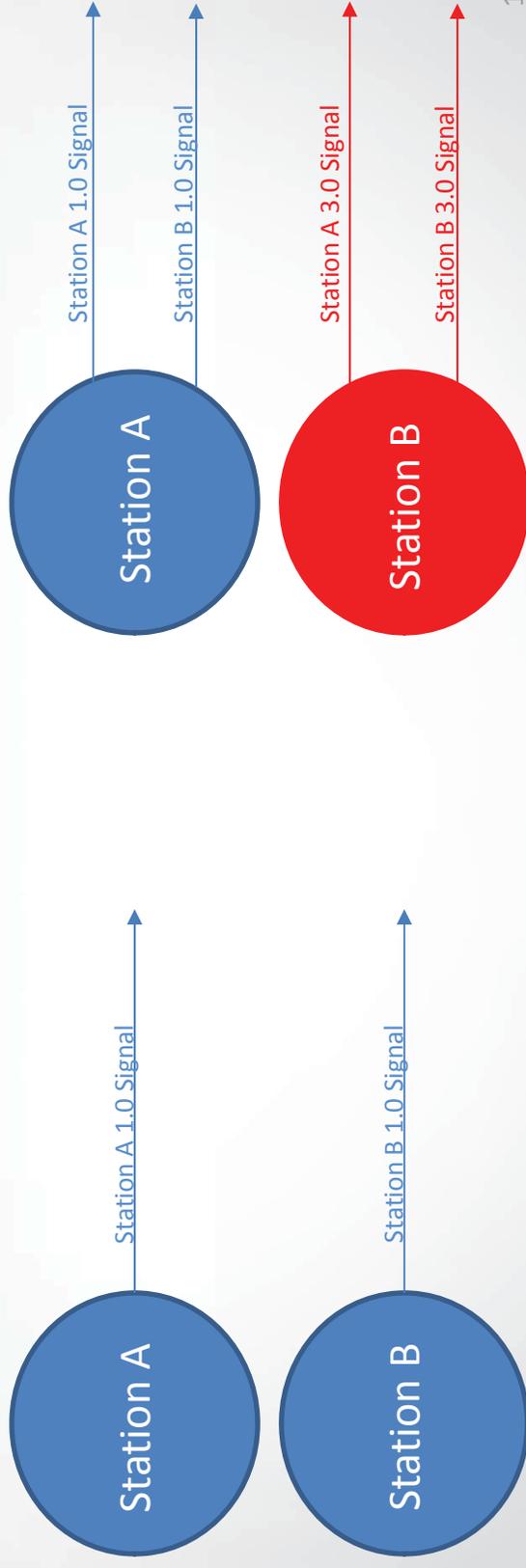
- Next Generation TV can change the game by expanding capacity for television stations
  - New multicasting possibilities
  - Creating new avenues without additional spectrum

## Enhanced Emergency Alerts

- New standard may enable life-saving advances
- Robust signaling can be used to alert consumers
- Tailored information for specific geographic areas

# Implementation

- Transition is voluntary; achieved through local simulcasting that protects viewers:



# Implementation Questions

- Any impact on auction or repacking?
  - None. Installing Next Gen-ready equipment will not require additional repacking resources
  - Change should be both time- and cost-neutral from a repacking perspective
- What are the impacts on viewers?
  - Broadcasters will continue to transmit 1.0 signals and the market will dictate pace of transition as consumers switch to Next Gen equipment
  - 1.0 requirement still in place
- Will there be enough channels?
  - Broadcasters seeking most spectrally efficient transition possible; doing more with less
  - Those choosing to deploy will arrange for simulcasting with other stations

# Implementation Questions

- Any impacts on retransmission consent?
  - Deployment of 3.0 does not increase MVPD obligations
  - Broadcasters will continue to deliver 1.0 signals over air or through alternative arrangement (e.g., fiber)
- How does Next Gen affect LPTV stations?
  - Because broadcasters are not requesting additional spectrum, little or no impact on LPTV stations
  - Transition is voluntary and would not preclude LPTV implementation
- Where do smaller broadcasters fit in?
  - Wholly voluntary transition; those unwilling to invest in Next Gen transmission equipment need not do so