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## **SUMMARY**

TIA fully supports the Commission's continued goal of maximizing efficient use of our nation's finite spectrum resource in all bands, including the UHF and VHF frequency bands that are currently used by broadcast television service (the "U/V Bands"). Making new sources of spectrum available for mobile broadband use is critical to addressing America's exploding demand for wireless broadband services, spurring further investment in mobile broadband, and ensuring that America keeps pace with other leading countries in the global wireless revolution.

For this reason, TIA strongly supports the National Broadband Plan's goal of repurposing up to 120 MHz of spectrum from the U/V Bands for new wireless broadband uses through voluntary incentive auctions, and we appreciate the FCC's initiation of this proceeding to lay the foundation for implementing this goal. As the FCC recognizes, we must act now in order to avoid the impending spectrum crunch and enable American consumers and businesses to continue to compete effectively in our global economy.<sup>2</sup>

Towards providing the most incentives to current licensees to allow for fluidity in much-needed changes to spectrum allocations, TIA supports Congress granting the Commission the authority needed to conduct voluntary incentive auctions. Voluntary incentive auctions can decrease overhead for broadcasters, providing new business opportunities via increased capital, and incentivize the most efficient use of spectrum. The proposed steps in the NPRM are not only

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<sup>2</sup> As the Commission states: "It is essential to our nation's economic future that the demand for a robust mobile broadband infrastructure is met." NPRM at ¶ 11.

critical to spectrum efficiencies, but also to creating a framework that will allow for voluntary incentive auctions to thrive once authority is granted.

As part of this framework, TIA fully supports the Commission's proposal to add new allocations for fixed and mobile services in the U/V Bands to be co-primary with the existing broadcast allocation in the bands. In doing so, we support the Commission's intent to provide for an orderly transition of a portion of the U/V Bands to flexible use and ensure that future licensees – both wireless broadband and TV broadcast – enjoy sufficient protection from interference.

Further, TIA agrees that, to free up spectrum for mobile broadband and to provide broadcasters opportunities to reduce costs, broadcasters should be allowed the opportunity to share 6 MHz channels. In the context of channel sharing arrangements, TIA urges that, to the extent the Commission uses case-by-case analyses when determining whether loss of broadcast service is in the public interest, the Commission takes into consideration the enormous benefits to the public of increased availability of spectrum for mobile broadband.

## **DISCUSSION**

### **I. TIA SUPPORTS COMMISSION EFFORTS TO SPUR INNOVATION IN THE BROADCAST BANDS THROUGH MECHANISMS INCLUDING VOLUNTARY INCENTIVE AUCTIONS, AND URGES THE COMMISSION TO ACT SWIFTLY IN THESE EFFORTS.**

TIA fully supports the Commission's continued efforts to increase the amount of spectrum available for wireless broadband and believes that repurposing U/V Bands spectrum is vital to meeting the surging demand for new mobile broadband services, devices, and applications.

These steps are essential to meeting the goals of the National Broadband Plan (NBP)<sup>3</sup> and the

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<sup>3</sup> Omnibus Broadband Initiative, Federal Communications Commission, *Connecting America: The National Broadband Plan* (March 2010) at 88 (Recommendation 5.8.5).

President's National Wireless Initiative<sup>4</sup> to repurpose 300 MHz of spectrum in five years and 500 MHz of spectrum in ten years for mobile broadband.

To meet this goal, TIA is urging Congress this year to grant the Commission flexible authority to conduct voluntary incentive auctions in the U/V Bands and other bands, as the Commission deems appropriate to advance the public interest.<sup>5</sup> By enabling market-based mechanisms to fuel the most efficient use of spectrum through voluntary incentive auctions, the Commission will free up more spectrum to satisfy the exploding demand for mobile broadband use, as identified in the National Broadband Plan, by the Commission,<sup>6</sup> and in market research.<sup>7</sup>

Therefore, TIA is pleased with the commencement of this proceeding and urges the Commission to thoughtfully and expeditiously resolve the issues raised to provide regulatory certainty for all stakeholders involved and take the necessary preliminary steps to start to develop the framework that will enable repurposing of up to 120 MHz of the U/V Bands to the extent possible prior to legislation. We recognize that the Commission can only do so much prior to the enactment of voluntary incentive auction legislation, and therefore TIA is encouraging Congress to enact

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<sup>4</sup> Press Release, The White House, *President Obama Details Plan to Win the Future through Expanded Wireless Access* (February 10, 2011) available at <http://www.whitehouse.gov/the-press-office/2011/02/10/president-obama-details-plan-win-future-through-expanded-wireless-access>.

<sup>5</sup> See, e.g., TIA Ex Parte, GN Docket No. 09-51, PS Docket No. 06-229, DA-10-592, IB Docket No. 95-91, RM No. 11592, WT Docket Nos. 07-195, 07-293, 04-356, 06-150, ET Docket No. 10-142 at 1 (filed August 23, 2010).

<sup>6</sup> See NPRM at ¶ 11.

<sup>7</sup> See Cisco, *Cisco Visual Networking Index: Global Mobile Data Traffic Forecast Update, 2010–2015* (February 1, 2011) available at [http://www.cisco.com/en/US/solutions/collateral/ns341/ns525/ns537/ns705/ns827/white\\_paper\\_c11-520862.pdf](http://www.cisco.com/en/US/solutions/collateral/ns341/ns525/ns537/ns705/ns827/white_paper_c11-520862.pdf) (Projecting that By 2015, there will be more than 5.6 billion personal devices connected to mobile networks as well as 1.5 billion machine-to-machine nodes, with the average mobile connection generation of megabytes of traffic per month expected to 17 times over.)

legislation that would require the FCC to develop an auction framework and other necessary rules within, *e.g.*, 180 days of enactment of auction authority.

As this process gets underway, current and future mobile broadband providers will be able to start to plan for new spectrum resources, while existing licensees will have the opportunity to contemplate the various options of relinquishing spectrum, increasing capital influx for operations, and/or partnering with other stations to provide service in innovative ways. Indeed, voluntary incentive auctions can provide a new mechanism for revenue for broadcasters that can serve to capitalize their current business plan or enable new business models. For example, broadcasters could use the proceeds from participating in a voluntary incentive auction to enter into a sharing agreement with an existing broadcaster, invest in new content, and reach their service area using new platforms such as mobile TV and the Internet.

## **II. THE COMMISSION HAS LEGAL AUTHORITY TO “REPACK” BROADCAST TELEVISION CHANNELS.**

It should be noted that the Commission currently has legal authority to “repack” broadcast television channels to facilitate efficient use of the broadcast spectrum. Section 301 of the Communications Act declares that one purpose of the Act is “to maintain the control of the United States over all the channels of radio transmission...”<sup>8</sup> The Supreme Court has made clear that the Commission has “comprehensive” and “expansive powers” over radio not limited to regulation of interference and technical characteristics.<sup>9</sup> Requiring channel repacking is a means of exercising “control” over television channels and “provid[ing] for their use.” The fact that Section 301 allows a licensee to “use” a channel without having the rights of “ownership” and

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<sup>8</sup> 47 CFR § 301.

<sup>9</sup> *NBC v. United States*, 319 U.S. 190, 215, 217 219 (1943).

with no rights beyond those granted by the FCC’s licensing and conditioning process demonstrates that Section 301 provides the Commission channel repacking authority.

Further, Section 303(f) of the Act gives the Commission authority to take actions necessary to prevent interference between stations, and the Commission has used this authority in several proceedings to protect incumbents from interference.<sup>10</sup> As repacking will allow the use of TV channels for fixed and mobile services without harmful interference to television broadcasting, Section 303(f) grants the Commission repacking authority.

### **III. TIA SUPPORTS THE COMMISSION ADDING CO-PRIMARY ALLOCATIONS FOR FIXED AND MOBILE BROADBAND SERVICES IN THE U/V BANDS FOR COMMERCIAL AND NON-FEDERAL USE.**

In the NPRM, the Commission proposes to “add allocations for fixed and mobile services in the U/V Bands for non-Federal use, to be co-primary with that for broadcast services.”<sup>11</sup> TIA fully supports this proposal, and agrees that such a rule change would “provide for flexible use while continuing to support the needs of the television service.”<sup>12</sup> While the NPRM co-primary proposal explicitly excludes Channel 37,<sup>13</sup> TIA urges the Commission to fully consider allowing for co-primary use within these frequencies. If sufficient exclusion zones are utilized, the critical

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<sup>10</sup> See, e.g., *Digital TV Distributed Transmission System Technologies*, MB 05-312, Report and Order, 23 FCC Rcd 16731, 16765 [¶ 65] (2008) (establishing rules for distributed digital systems and detailing interference regulations, citing 25 subsections of Section 303 of the Act as granting specific radio-related authority to the Commission). See also, e.g., *Measurement Standards for Digital Television Signals Pursuant To the Satellite Home Viewer Extension and Reauthorization Act of 2004*, ET Docket 06-94, Report and Order, 25 FCC Rcd 16471, 16487 [¶ 38] (2010) (citing among others Section 303 of the Act granting the Commission authority to set standards for measurements of radio signal strength to avoid interference).

<sup>11</sup> NPRM at ¶ 16.

<sup>12</sup> *Id.* at ¶ 17.

<sup>13</sup> *Id.* at ¶ 17.

uses existing in this channel would be protected. Examining co-primary use in Channel 37 would be consistent with the Commission's goals in this item, as well as overall goals noted above to meet spectrum needs as soon as possible.

TIA notes that, in allowing for co-primary use of the U/V Bands for mobile broadband, the Commission should provide all licensees necessary protection from harmful interference. With respect to interference mitigation, the Commission proposes to allow an increase in signal-to-noise (S/N) ratio by increasing effective radiated power at the broadcaster's transmitter.<sup>14</sup> As the Commission explains, for broadcasters currently utilizing this solution under special temporary authorizations, noise from nearby consumer electronics can be mitigated while any increased interference between broadcasters can be negotiated if it occurs. TIA supports this proposal, and believes that allowing higher S/N ratio should be used to address noise reduction from consumer electronics in the VHF band to the extent that this proposal is effective.

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<sup>14</sup> *Id.* at ¶ 48.

**IV. TIA SUPPORTS THE COMMISSION’S PROPOSAL TO MAXIMIZE SPECTRUM VALUE AND EFFICIENCY BY ALLOWING FOR THE SHARING OF A 6 MHZ CHANNEL**

In the NPRM, the Commission proposes to allow television broadcasters the option of sharing one 6 MHz channel by utilizing multicasting technology, with each broadcast licensee retaining all existing rights and obligations.<sup>15</sup> TIA agrees that making such an allowance could provide strong incentives for current licensees to participate in voluntary incentive auctions, while enabling new business opportunities for broadcasters. By reducing operating costs through the channel sharing arrangements, broadcasters will have increased opportunities to enrich content and examine new delivery methods to reach a wider audience.

**V. SHOULD THE COMMISSION USE A CASE-BY-CASE APPROACH IN WEIGHING THE PUBLIC INTEREST BENEFITS THAT WILL RESULT FROM CHANNEL SHARING, IT SHOULD CONSIDER THE BENEFITS OF BROADBAND AMONG THE MITIGATING CIRCUMSTANCES**

As the Commission notes in the NPRM, loss of broadcast service is currently evaluated on a case-by-case basis to determine if such loss is in the public interest.<sup>16</sup> However, as the Commission is aware, convergence is occurring across technology and content – including critical information specific to localities that may have in the past been provided exclusively by an OTA broadcaster – now is available across a wide range of mediums. The Commission should update its analysis to account for such convergence of mediums when making a public interest determination with respect to channel sharing.

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<sup>15</sup> *Id.* at ¶ 19, 21.

<sup>16</sup> *Id.* at ¶ 26.

Specifically, should the Commission continue such a case-by-case analysis, TIA urges the Commission to consider factors beyond those related to traditional television service replacement. For example, the prevalence of local cable and satellite penetration should be considered as part of an evaluation of delivery of equivalent content in some form.<sup>17</sup> Moreover, to the extent that the Commission continues use of a case-by-case analysis when evaluating service loss, the analysis also should include the tremendous value of increased availability of wireless broadband and its critical importance to the economy, investment, innovation, job creation, healthcare, education, security, public safety, transportation, defense, and environmental priorities.

The Commission can also take technical and regulatory steps to ensure that impact of coverage loss on the public is minimized. On a technical level, as proposed in the NPRM, the Commission could allow sharing stations to deploy on-channel digital transmission systems.<sup>18</sup> From a regulatory perspective, ensuring continued must carry rights on both cable and DBS systems within an area that was previously covered by a station but has lost coverage as a result of channel sharing will help minimize the impact on viewers. These steps will provide additional incentives for broadcasters to share channels and thereby free up critical spectrum for mobile broadband use.

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<sup>17</sup> *Id.* at ¶ 28.

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

