

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

In the Matter of	)	
	)	
Amendment of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands	)	WT Docket No. 03-66 RM-10586
	)	
Part 1 of the Commission's Rules - Further Competitive Bidding Procedures	)	WT Docket No. 03-67
	)	
Amendment of Parts 21 and 74 of the Commission's Rules With Regard to Licensing in the Multipoint Distribution Service and in the Instructional Television Fixed Service for the Gulf of Mexico	)	WT Docket No. 02-68 RM-9718
	)	

To: The Commission

**COMMENTS OF  
INDIANA HIGHER EDUCATION TELECOMMUNICATION SYSTEM**

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### **Summary of Comments**

In its Comments, the Indiana Higher Education Telecommunication System (“IHETS”), which helps manage Educational Broadband Service (“EBS”) stations throughout Indiana, on behalf of Ball State University, Indiana University, Vincennes University, Purdue University, and the University of Southern Indiana, proposes a detailed plan by which the Commission can fairly, efficiently and effectively assign available EBS spectrum in response to the “additional demand for EBS spectrum.” If adopted, the Geographic Service Areas (“GSAs”) of existing EBS stations would be automatically “maximized” so that EBS services could be immediately extended to new areas of the country, particularly rural and underserved areas where access to educational and wireless broadband services is most needed.

As a necessary first step to identify EBS “white spaces,” the Commission should act on pending late-filed renewal applications and requests for extension of time to construct facilities. The unresolved nature of these cases, in which the fate of approximately 200 licenses is at stake, means that the boundaries of existing GSAs cannot be finally established and the location of white spaces likewise remains unsettled.

Once the Commission’s records are updated to show the “active” EBS licenses, the Commission should automatically maximize existing GSAs so that the borders are extended in all directions until the boundary meets the first of either the Basic Trading Area (“BTA”) border or the expanded border of a co-channel licensee. This process has been successfully employed in the cellular, BRS/EBS and DTV services, and the Commission’s authority to modify licenses by rulemaking – even where the result would

limit future application for unassigned spectrum – has been upheld by the District of Columbia Circuit Court.

Under IHETS’ proposal, a licensee could choose to include the new portion of the GSA under its existing call sign or accept a new station license upon application to the Commission (and have ten years to demonstrate substantial service for the new license). IHETS also proposes that licensees would have the opportunity to modify the new GSA borders to address situations where, for instance, the new border bisects a major market or where licensees determine a better way to meet their respective objectives. Thus, in each BTA covered by a portion of any GSA, all EBS white space would be instantaneously licensed to existing co-channel licensees, who have had no opportunity for 13 years to modify facilities to meet changing educational needs and in response to technological advancements.

Maximizing GSAs promotes important public interest benefits, such as:

- Expediting educational and wireless broadband services to new areas of the country;
- Rationalizing commercial markets by eliminating small and irregularly shaped areas that would be difficult to serve;
- Harmonizing the service areas of BRS and EBS channels so that more channels can serve the same area;
- Enabling operators to more efficiently serve more areas by minimizing the additional seams between GSAs that would be created if new licensed areas were added between GSAs;
- Mitigating the negative effects of competitive bidding; and
- Promoting economic development.

For areas where unassigned EBS spectrum remains following the maximization process, the Commission would conduct a single-round, sealed-bid auction. Bidders

would file applications according to channel group on a BTA basis, with applicants limited to bidding on one channel group in a given BTA. Qualified short-form applicants would have the opportunity to enter into full-market settlements prior to the auction. The Commission would conduct single-round auctions for those channel groups where the applicants did not achieve settlements.

For the compelling public interest reasons explained in its Comments, IHETS urges the Commission to “maximize” EBS GSAs and adopt the corresponding rule changes prior to auctioning unassigned spectrum.

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To: The Commission

**COMMENTS OF  
INDIANA HIGHER EDUCATION TELECOMMUNICATION SYSTEM**

The Indiana Higher Education Telecommunication System (“IHETS”), by counsel, submits these Comments in the above-captioned proceeding proposing a fair, efficient and effective plan for the Commission to authorize use of available Educational Broadband Service (“EBS”) spectrum.<sup>1</sup> By permitting existing EBS licensees – who have had no opportunity to propose major modifications to their facilities for 13 years – to maximize their Geographic

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<sup>1</sup> *In the Matter of Amendment of Parts 1, 21, 73, 74 and 101 of the Commission’s Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands*, Third Order on Reconsideration and Sixth Memorandum Opinion and Order and Fourth Memorandum Opinion and Order and Second Further Notice of Proposed Rulemaking and Declaratory Ruling, 23 FCC Rcd 5992 (“FNPRM”).

Service Areas (“GSAs”) prior to Commission acceptance of new applications for EBS white spaces, the Commission can fairly and readily achieve its goals of meeting “additional demand for EBS spectrum”<sup>2</sup> resulting from the new technical rules and band plan and “ensur[ing] that licenses are disseminated among a wide variety of applicants.”<sup>3</sup> For white spaces that remain following the GSA maximization process, IHETS believes that the Commission should establish a settlement period following acceptance of short-form applications to allow applicants to resolve application conflicts without the need for auctions, in recognition of the Commission’s observation “that many educators otherwise eligible for EBS licenses may not be able to participate in competitive bidding for licenses.”<sup>4</sup>

### **Background**

IHETS was formed in 1967 pursuant to the Indiana Higher Education Telecommunications Act. State law authorizes the trustees of the Indiana state universities “to jointly arrange...for the use of a multipurpose, multimedia, closed circuit, statewide telecommunications system...to interconnect the...campuses of the universities, and centers of medical education and service.”<sup>5</sup> IHETS’ mission is to advance the education, research and public service activities of its member institutions and affiliates by offering and coordinating technology and e-learning services. IHETS also provides a vital forum for interaction, collaboration and sharing among its members and affiliates. In 1999, IHETS expanded to include representation from K-12 schools, public libraries, state government and public broadcasting.

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<sup>2</sup> *Id.* at 6060-6061.

<sup>3</sup> *Id.* at 6064.

<sup>4</sup> *Id.* at 6063.

<sup>5</sup> *See* Ind. Code § 21-28-5-2 (2007).

IHETS institutions – including Ball State University, Indiana University, Vincennes University, Purdue University, and the University of Southern Indiana – hold 33 EBS licenses statewide. Licensed communities include Fort Wayne, Richmond, Vincennes, Kokomo, Lafayette, Anderson, Bloomington, Versailles, Terre Haute, Madison, South Bend, Evansville, New Albany, Indianapolis, Columbus, Rochester and Plainville. The majority of these EBS stations are subject to leases with commercial operators.

### **Discussion**

In the *FNPRM*, the Commission seeks comment “on all available options for granting geographic area licenses without providing for mutually exclusive applications,” and asks commenters to “provide a detailed description of how their proposed option would work, describe what they believe the proper geographic area and channel blocks should be for proposed licenses, and explain why they believe their proposed licensing scheme would allow vacant EBS spectrum to be rapidly placed into use by EBS-eligible licensees and meet the educational, spectrum policy, and broadband goals underlying EBS.”<sup>6</sup> The process described below achieves these objectives in a manner that is consistent with precedent and promotes important public interest objectives.

#### **I. THE COMMISSION SHOULD EXPEDITIOUSLY ACT TO CREATE A COMPLETE AND ACCURATE EBS DATABASE.**

As an essential first step in the process to assign EBS white space, the Commission must determine the universe of unassigned EBS spectrum. Without such certainty, licensees will not know the final boundaries of their respective GSAs and the Commission will be unable to establish where EBS spectrum is available for future licensing.

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<sup>6</sup> *FNPRM* at 6066.

To this end, the Commission should take action on all pending cases involving late-filed EBS renewal applications and requests for extension of time to construct EBS facilities. At present, nearly 140 EBS renewal applications have been opposed by third parties and await Commission disposition. Challengers have argued that the licenses should not be reinstated and, if they are reinstated, their GSAs are not entitled to “split the football” with nearby co-channel stations.<sup>7</sup> This controversy has persisted since January 10, 2005, when the Commission converted the protected service areas (“PSAs”) of all EBS licenses then “in existence” to GSAs, creating “considerable confusion” over the GSA boundaries for numerous EBS licensees.<sup>8</sup> In order to determine where available EBS spectrum is located, the Commission should resolve these cases before assigning available EBS spectrum.<sup>9</sup>

Similarly, for a variety of reasons, licensees of approximately 70 EBS stations have filed requests for extension of time to complete construction of facilities that remain pending before the Commission. If granted, the GSAs of these facilities would be confirmed and fixed, and if denied, licenses would be cancelled and new white space would result. Although it is believed that these requests are largely unopposed, the pending nature of these unresolved cases creates further uncertainty about what is white space and what is not.

Once the pending renewal and extension proceedings are resolved, the Commission should note as “terminated” in the Universal Licensing System (“ULS”) all EBS stations where

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<sup>7</sup> *Id.* at 6056-57.

<sup>8</sup> *Id.* at 6057. The Commission expressly concluded that the pending late-filed renewal applications would be resolved “on a case-by-case basis based on all pertinent circumstances.” *Id.* Subsequently, by letter dated May 27, 2008, Sprint Nextel Corporation requested approval of the withdrawal of its petition for reconsideration in *Forty-One Late-Filed Applications for Renewal of Educational Broadband Service Stations*, 22 FCC Rcd 879 (WTB 2007) (“*Forty-One Renewals*”). The Commission has not acted on this request or any of the other cases involving late-filed EBS renewal applications filed after the release of *Forty-One Renewals*.

<sup>9</sup> Notably, however, the Commission stated that “[i]n the future, absent agency error or other unique circumstances, applicants seeking to reinstate their licenses *nunc pro tunc* who receive a waiver will not be allowed to split the football with licensees whose licenses were active on January 10, 2005 and on the date the applicant’s late-filed renewal applications is granted.” *FNPRM* at 6059.

the renewal application or extension request was not granted.<sup>10</sup> All remaining “active” licenses would be subject to the GSA maximization process that is at the crux of IHETS’ proposal.

## **II. THE COMMISSION SHOULD MAXIMIZE GSAs FOR EXISTING EBS STATIONS.**

As the Commission acknowledges, EBS licensees have been unable to file applications for new stations or for major modification of EBS licenses for 13 years.<sup>11</sup> During this period, the EBS landscape has changed dramatically. Congress has expanded the Commission’s auction authority to include EBS, digital technology has replaced analog technology and, perhaps most significantly, the Commission has adopted a new band plan and technical rules for the 2.5 GHz band. The Commission observes that “the opportunities presented by the new technical rules and band plan create additional demand for EBS spectrum.”<sup>12</sup>

IHETS’ experience as a licensee proves the Commission’s point. IHETS’ licenses cover a large percentage of the urban areas of Indiana. As the representative of state-supported colleges and universities, IHETS is charged with promoting education throughout the state. In addition, though its mission was initially intended to support distribution of educational video programming, IHETS has embraced its role as a distributor of information services. But, since 1995 when the Commission last permitted new station and modification applications, IHETS has had no opportunity to extend its coverage into neighboring rural areas or to make other changes to allow it to take better advantage of evolving technology and the regulatory scheme in support of its expanded role.

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<sup>10</sup> IHETS appreciates that parties to these proceedings will have the right to seek reconsideration or review of the Commission’s adjudications and that, as a result of any such filings, there may be some areas that remain in dispute. That said, IHETS believes that the universe of more than 200 unresolved license proceedings will be limited to only a few cases.

<sup>11</sup> *FNPRM* at 6060-6061.

<sup>12</sup> *Id.*

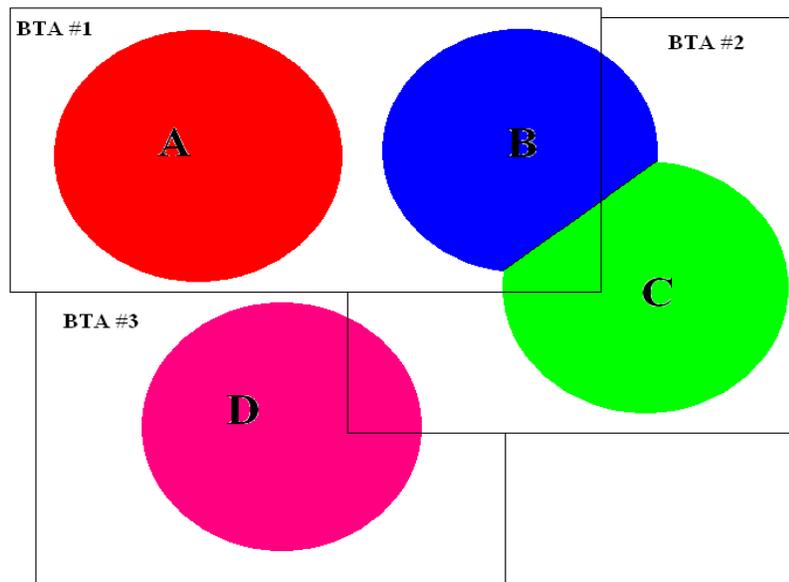
**A. The Commission Should Extend EBS GSA Boundaries to the BTA Border or the GSA Boundary of a Co-Channel Station.**

**1. The mechanics of automatic maximization.**

IHETS proposes that the Commission adopt a comprehensive plan for licensing white spaces that recognizes the benefits existing EBS licensees can offer to the public while simultaneously enabling rapid assignment of remaining EBS spectrum. As the linchpin of this proposal, the Commission would automatically and simultaneously extend the boundaries of each EBS licensee's GSA to the maximum coverage area on its authorized channels in any BTA covered by any portion of the GSA. Under this maximization plan, all EBS GSAs would, on a date certain, expand in all directions until the boundary meets the first of either the BTA border or the expanded GSA of a co-channel EBS station. Licensees would have a choice to accept the expanded GSA under their existing call sign, receive a new call sign for the expanded area or reject the expanded GSA and retain its existing boundaries. The result is that, in each BTA covered by a portion of any GSA, all unassigned EBS spectrum would be immediately licensed to existing co-channel licensees that desire the additional area so that they can meet the compelling need for expeditious deployment of educational and wireless broadband services.

The figures below depict GSAs for an EBS channel under the current rules (Figure 1) and under the plan IHETS is proposing (Figure 2).

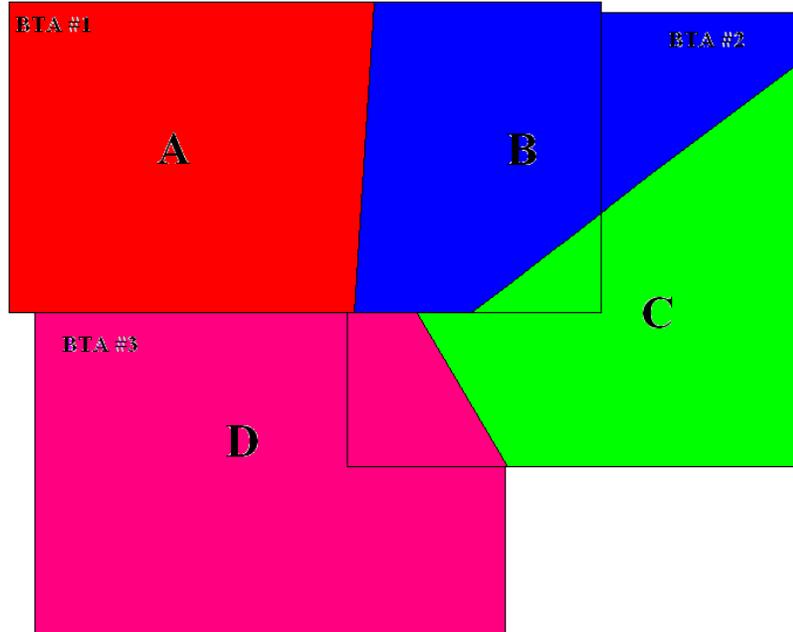
**Figure 1: GSAs Under Existing Rules**



In Figure 1, the current GSA A is entirely within BTA #1, GSAs B and C “split the football” and cover portions of both BTA #1 and BTA #2, and GSA D covers portions of both BTA #2 and BTA #3. Small, irregularly shaped white spaces lie within the BTAs.

Under the maximization plan (Figure 2), the GSAs expand to cover the white spaces in each BTA, with borders determined by simultaneously extending the GSA borders in all directions until they meet either the BTA border or the expanded border of another co-channel EBS station.

**Figure 2: GSAs Under Rules Proposed By IHETS**



In Figure 2, GSA A and GSA B would expand by creating a new GSA border between the existing GSAs and giving the licensees for GSAs A and B the co-channel spectrum within BTA #1 on their side of this border. This new border is perpendicular to an invisible line connecting their center points, and it crosses the midpoint of that line. Because GSA B and GSA C already share a boundary (under the “football splitting” methodology) and both lie within BTA #1 and BTA #2, the maximized GSAs are created by extending each end of the existing line until it reaches the nearest BTA border. As the only GSA that covers a portion of BTA #3, GSA D would encompass that entire BTA; because it also extends into BTA #2, GSA D also expands toward GSA C, with the border between them formed by a line that is perpendicular to the invisible line connecting their GSA center points and crosses the midpoint of that line.

## 2. Consensual modification of GSA boundaries.

In some cases, the automatic expansion of GSAs might result in suboptimal market areas because, for instance, the new GSA boundary bisects a major market or does not create a common geographic market with a critical mass of spectrum. To account for these situations, once the GSAs are maximized, the Commission should afford licensees a 90-day period to mutually agree to different GSAs within the BTA. All consenting and affected licensees would file modification applications with the Commission providing the geographic coordinates of their expanded and modified GSA and a map depicting the GSAs in the BTA.<sup>13</sup> Licensees electing to not accept the expanded area also would file an application on FCC Form 601 stating that they desire to retain their existing GSA boundaries; the unassigned spectrum would not be made available to other existing EBS licensees in the BTA, but would be subject to future application as described below.

Licensees also would have the choice of either including the expanded GSA area under their existing call signs, or accepting a new call sign for that area. Those licensees that desire a separate call sign would, on the consensual GSA modification date, file an application for a new station on FCC Form 601.<sup>14</sup>

Once the automatic maximization plan is implemented and the deadline for filing settlement modifications and new station applications has passed, all white spaces on a given channel in a BTA will be authorized to an existing licensee or licensees that have a portion of their GSA within that particular BTA, in a manner that enables viable service across a large, contiguous area.

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<sup>13</sup> See 47 C.F.R. § 27.15. IHETS notes that Schedule B to FCC Form 601 permits licensees to partition geographic area markets. Consequently, it would not appear to be difficult for the Commission to modify this schedule so that it could be submitted by EBS licensees desiring to modify their expanded GSAs.

<sup>14</sup> Necessarily, there would be no mutual exclusivity, so the competitive bidding procedures of Section 309(j) of the Communications Act of 1934, as amended, would not apply.

### 3. The process for licensing remaining unserved areas.

In those BTAs where white spaces remain following the process described above, the Commission should implement auction procedures. Auctions should be conducted according to BTAs. For reasons stated in the record,<sup>15</sup> other geographic units such as statewide or national white space licenses are not suitable in a service that has been built around the BTAs that were established in 1996 before the BRS auction.

For BTAs where the expanded GSAs do not cover all unserved areas on all channels, the Commission should follow procedures it uses for the auction of broadcast licenses.<sup>16</sup> The Commission would release a public notice establishing a deadline for the acceptance of short-form applications (FCC Form 175). IHETS proposes that applications be filed on a BTA basis according to channel groups, with each applicant limited to applying for a single channel group in a given BTA. For example, an applicant would specify the A-Group channels in the Indianapolis, Indiana BTA, and that application would qualify the applicant to bid on all white space spectrum on those channels in that BTA.<sup>17</sup> The Commission would then release a public notice announcing qualified applicants and establishing a 90-day deadline by which those applicants could jointly propose to settle the applications “to dismiss their proposals, enter into settlement agreements or otherwise resolve their mutual exclusivities by means of engineering solutions.”<sup>18</sup> During the settlement window, the anti-collusion rules would be suspended to permit applicants to discuss possible settlement agreements or technical solutions, such as forming a consortium composed of the qualified applicants, splitting geographical areas, dividing

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<sup>15</sup> *FNPRM* at 6065-66.

<sup>16</sup> *See, e.g.*, Public Notice, “Auction of LPTV and TV Translator Digital Companion Channels Scheduled for November 5, 2008,” DA 08-460, rel. July 17, 2008 (“*LPTV Auction Notice*”). In 2000, as the Commission acknowledges, the Commission afforded applicants for mutually exclusive EBS licenses a period to settle their applications. *See FNPRM* at 6061-6062.

<sup>17</sup> Of course, if the expanded GSAs of Channels A1 and A2 encompassed the entire Indianapolis BTA, the applicant would have the opportunity to bid only on the white space for Channels A3 and A4.

<sup>18</sup> *LPTV Auction Notice* at 4.

the channels or time-sharing.<sup>19</sup> Applicants also could agree to dismiss their applications for consideration not exceeding their legitimate and prudent expenses, consistent with Commission rules in other services.<sup>20</sup> Where a qualified application is not mutually exclusive, there would be no need for an auction and the Commission would simply grant the application.

For the limited number of BTAs where mutually exclusive short-form applications remain following GSA maximization and the settlement period, the Commission would apply its anti-collusion rules and conduct a single-round, sealed-bid auction among those applications. To promote new entry and to “ensure that licenses are disseminated among a wide variety of applicants,”<sup>21</sup> a short-form applicant would be limited to filing for and bidding on one available channel group in a given BTA. On a deadline set by the Commission, qualified applicants would place a single bid for each desired white space license. In each instance, the Commission would select the highest bid and report the identity of the high bidder and the amount of the bid by public notice released soon after the bid submission deadline.

This design has been successfully deployed in Phase II cellular auctions for unserved areas involving a small number of applicants, and is favored “because the informational advantages of a simultaneous multiple-round auction are not necessary here.”<sup>22</sup> Here, applicants for EBS white space likely will be interested only in specific areas pertinent to their respective educational missions – IHETS would be unlikely to bid on BTAs in any other state and would not gain any informational advantages from simultaneous multiple-round bidding. Importantly, in a single-round auction, educators would be able to obtain authority to bid to a certain level

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<sup>19</sup> *Id.* at 5.

<sup>20</sup> *See, e.g.*, 47 C.F.R. § 73.3525(a).

<sup>21</sup> *FNPRM* at 6064.

<sup>22</sup> Public Notice, “Closed Auction of Licenses for Cellular Unserved Service Areas Scheduled for June 17, 2008,” DA 08-543 (2008), at 2-3. *See also* Public Notice, “Closed Auction of Licenses for Cellular Unserved Service Areas Scheduled for June 17, 2008,” DA 08-926 (Apr. 25, 2008), at 27.

without having the burden of seeking additional authority multiple times throughout the course of a multiple-round auction if an increase in the bid was desired. Moreover, in a single-round, sealed-bid auction, licensing is swift and service could be deployed more rapidly than if the Commission conducted weeks-long multiple round auctions.

**B. Commission Precedent Establishes the Commission’s Authority to Adopt IHETS’ Proposal.**

The Commission has authority to modify licenses to expand licensed service areas. In circumstances strikingly similar to those here, the Commission in 1992 amended its cellular rules to change the method for calculating the Cellular Geographic Service Areas (“CGSA”) of cellular systems and by rule modified the authorizations of existing licensees to enlarge CGSA boundaries.<sup>23</sup> The rule change effectively increased the distance to the new service area boundary by 31% and expanded the area that cellular licensees could serve within the build-out period. Although this decision shrunk the areas to be made available for future licensing, the Commission concluded that refining the CGSA calculation methodology presented a “more realistic method for determining CGSAs”<sup>24</sup> and advanced important public interest benefits.<sup>25</sup> In so doing, the Commission favored the ability of existing licensees to serve expanded areas over the potential for new licensees to do so following a licensing process, citing increased economic benefits and reduced administrative burdens.

The new rules for calculating CGSA boundaries were unsuccessfully challenged by a committee of prospective applicants for cellular unserved areas, which claimed that the Commission acted in an “arbitrary and capricious” manner by shrinking the size of unserved

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<sup>23</sup> See *In the Matter of Amendment of Part 22 of the Commission’s Rules to Provide for the Filing and Processing of Applications of Unserved Areas in the Cellular Service and to Modify Other Cellular Rules*, 7 FCC Rcd 2449 (1992) (“*Cellular Unserved Areas Order*”).

<sup>24</sup> *Id.* at 2452.

<sup>25</sup> See Part II.C., *infra*.

areas and exceeded its authority by modifying existing licenses in a rulemaking proceeding rather than by adjudication.<sup>26</sup> In upholding the Commission’s decision, the District of Columbia Circuit Court acknowledged that changing the definition of the geographic boundary would limit future applications for unserved areas, but nevertheless found the rule change to be a reasonable exercise of the Commission’s policy functions following proper notice and an opportunity for public comment.<sup>27</sup> The Court further found that:

the Commission did not choose among contenders for a particular license in this rulemaking, but rather revised the technical specifications for all cellular licensees. In particular, the Commission adopted a new methodology that would more accurately reflect the areas where existing cellular systems provided reliable cellular service as well those areas that remain unserved.

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*The Commission’s technical changes in the definition of the CGSAs, adopted in a notice-and-comment rulemaking, are not, as petitioner argues, invalid because they will result in the modification of existing licenses and the shrinking of unserved areas.*<sup>28</sup>

As the Court made clear, the Commission has authority to expand the licensed areas of existing licensees before it licenses white spaces, even if that policy decision will ultimately reduce the areas available for future licensing.

Consistent with this holding, in 1995 the Commission similarly changed its rules to expand the PSAs of BRS stations to promote the service capabilities of operators seeking to provide competition in the multi-channel video programming distribution marketplace.<sup>29</sup> Acting on a petition for reconsideration, the Commission increased the radii of BRS PSAs from 15 miles to 35 miles, holding that “changed circumstances, including recent technological developments and the existing scope of [BRS] customer locations, warrant a change in the [BRS] protected

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<sup>26</sup> See *Committee for Effective Cellular Rules v. FCC*, 53 F.3d 1309 (D.C. Cir. 1995).

<sup>27</sup> See *id.* at 1309.

<sup>28</sup> *Id.* (emphasis added)

<sup>29</sup> *In the Matter of Amendment of Parts 21,43, 74, 78, and 94 of the Commission’s Rules Governing Use of the Frequencies in the 2.1 and 2.5 GHz Bands*, 10 FCC Rcd 7074, 7078 (1995) (“PSA Expansion Order”).

service area definition.”<sup>30</sup> Significantly, the expansion of the BRS PSA preceded by one year the auction of BRS BTAs, the white spaces assigned by the Commission. The increased size of the PSAs of existing licensees necessarily decreased the areas that would be available at the BTA auction.<sup>31</sup> Three years later, the Commission harmonized its EBS rules to those adopted for BRS, and granted all EBS licensees the same 35-mile PSA.<sup>32</sup>

In yet another example of Commission policy allowing licensees to expand their service area, on May 30, 2008, the Commission opened a window for television broadcast stations to file DTV maximization applications as part of the DTV transition process.<sup>33</sup> This followed a nearly four-year filing freeze during which broadcasters elected their final post-transition DTV channels based on a stable licensing database. There, as here, licensees were prohibited from making major modifications to their facilities for a specified time period, after which the licensee’s service area could expand under its new DTV channel assignment.

As was the case for the cellular, BRS/EBS and DTV, the modification of EBS licenses via a rulemaking proceeding to both expand licensed areas and shrink unserved areas is an appropriate exercise of Commission authority.

### **C. Automatically Expanding GSAs of Existing EBS Licensees Would Promote the Public Interest.**

The public interest also supports expanding the GSAs for existing EBS licensees prior to any licensing of white spaces. First, by automatically maximizing the GSAs of existing licensees that have had no opportunity to modify their licenses for 13 years, the Commission would

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<sup>30</sup> *Id.*

<sup>31</sup> See, e.g., *FNPRM* at 6040 (noting that BTA authorization holders may not operate in areas occupied by incumbent BRS stations).

<sup>32</sup> *In the Matter of Amendment of Parts 21 and 74 to Enable Multipoint Distribution Service and Instructional Television Fixed Service Licensees to Engage in Fixed Two-Way Transmissions*, 13 FCC Rcd 19112, 19173 (1998).

<sup>33</sup> See *Commission Lifts the Freeze on the Filing of Maximization Applications and Petitions for Digital Channel Substitutions, Effective Immediately*, DA 08-1213 (rel. May 30, 2008).

expedite provision of educational and wireless broadband services to new areas of the country, consistent with Congressional policy and Commission objectives.<sup>34</sup> The process described by IHETS can occur on the effective date of rules adopted in this proceeding, instantaneously opening up white spaces for deployment of services. Much, if not most, of the existing white space in Indiana covers underserved areas located more than 35 miles from the center point of an EBS station, so the expanded area will enable licensees to provide a first service in many rural and small communities outside of the 35-mile circular areas established 13 years ago. As the Commission observed when it expanded CGSAs in the cellular service, “[o]ur adoption of a simple, straightforward method for determining cellular system coverage will facilitate and expedite authorization of new cellular systems in areas of the country that remain unserved,” a benefit that would be replicated upon expansion of EBS GSAs.<sup>35</sup> By contrast, a competitive bidding process could take years, as the Commission updates ULS, undertakes a rulemaking

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<sup>34</sup> See, e.g., 47 U.S.C. §230 (b)(1) (“It is the policy of the United States -- (1) to promote the continued development of the Internet and other interactive computer services and other interactive media”); 47 U.S.C. §706(a) (“The Commission and each State commission with regulatory jurisdiction over telecommunications services shall encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans (including, in particular, elementary and secondary schools and classrooms) by utilizing, in a manner consistent with the public interest, convenience, and necessity, price cap regulation, regulatory forbearance, measures that promote competition in the local telecommunications market, or other regulating methods that remove barriers to infrastructure investment.”); *Implementation of Section 621(a)(1) of the Cable Communications Policy Act of 1984 as amended by the Cable Television Consumer Protection and Competition Act of 1992*, Report and Order and Further Notice of Proposed Rulemaking, 22 FCC Rcd 5101, 5189 (Statement by Chairman Martin: “The widespread deployment of broadband remains my top priority as Chairman and a major Commission objective. During my tenure as Chairman, the Commission has worked hard to create a regulatory environment that promotes broadband deployment.”); *Appropriate Framework for Broadband Access to the Internet over Wireline Facilities; Universal Service Obligations of Broadband Providers; Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services; 1998 Biennial Regulatory Review – Review of Computer III and ONA Safeguards and Requirements*, Notice of Proposed Rulemaking, 17 FCC Rcd 3019, 3022-3 (“In this proceeding, we are guided by the following principles and policy goals: *First*, it is the Commission’s primary policy goal to encourage the ubiquitous availability of broadband to all Americans. Indeed, Congress has explicitly charged the Commission to “encourage the deployment on a reasonable and timely basis” of broadband capabilities to “all Americans,” and gave the Commission authority to “take immediate action to accelerate deployment of such capability by removing barriers to infrastructure investment,” if necessary. In addition, Congress has expressly stated that it is the policy of United States to “promote the continued development of the Internet and other interactive computer services and other interactive media.” These “congressional policies underlying the Telecommunications Act of 1996 serve as the basis of our policymaking to ensure consumers have access to infrastructures that provide broadband capabilities.”).

<sup>35</sup> *Cellular Unserved Area Order* at 2450.

proceeding for auction rules, accepts short-form applications and, finally, conducts auctions in a large number of markets that could drag on for weeks.

Second, maximizing GSAs will rationalize commercial markets in a way that auctions for irregularly shaped areas cannot. As Figure 1 demonstrates, the white spaces are created by circular GSAs and thus are irregularly shaped. In many cases, the white spaces would be small in size and difficult to serve, especially by a licensee that is different than any of the co-channel licensees in adjacent GSAs. Existing licensees would be able to simply expand their systems into these adjacent areas, many of which may not be able to be served efficiently by a subsequent licensee, to create larger, contiguous areas that can support viable build-out. In this respect, expanding GSAs of existing licensees would create opportunities to establish new EBS systems in unserved areas.<sup>36</sup>

Third, expansion of GSAs to the BTA border will better harmonize the service areas of BRS and EBS licensees, which will allow more channel groups to have the same serviceable market. In the early days of the 2.5 GHz service, it was critical for operators to aggregate as many channels as possible at a single transmit site – most often the PSA center point – to avoid interference from non-collocated sites and expense of maintaining multiple transmit sites. In 1996, the Commission conducted its BTA auction for unserved BRS spectrum. Over time, operators have been able to consolidate the operations of incumbent BRS licensees (*i.e.*, the PSAs that existed before the BTA auction) with those of the holders of BTA authorizations to create systems that, in many cases, encompass the entire BRS spectrum in the BTA. However, this has not been the case with respect to EBS, because the Commission has not assigned EBS white spaces. As a result, the effective service areas of BRS and EBS channels, even within the same system, do not match. If IHETS' proposal is adopted, however, EBS GSAs would expand

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<sup>36</sup> *Cf. Cellular Unserved Areas Order* at 2449.

to the BTA border, which would be identical to the market border that operators have established as the relevant service area. Indeed, the Commission expanded the BRS PSA boundary from 15 to 35 miles “to more closely reflect actual service areas.”<sup>37</sup> In light of the changes that have occurred in the last 13 years, maximizing EBS GSAs will accomplish the same objective.

Fourth, operators will be better able to cover a wider area with more efficient service. If the white spaces were licensed to a separate educational entity, that licensee and its neighbors would all have to comply with the antenna benchmarking rules, making service along the borders more difficult to provide. For example, in Figure 1, the three existing licensees in BTA #1 as well as the white space licensee would need to comply with the benchmarking rules at all points along their respective border. However, under IHETS’ proposal, as Figure 2 depicts, there are fewer locations where the licensees would need to meet the antenna benchmarking rules, meaning that service would not need to be as limited in the border areas. Simply put, the more borders where height benchmarking rules apply, the more seams in coverage will result.

Fifth, in limiting the channels and areas that would be available for future assignment, the Commission can mitigate the negative consequences of auctions. One scenario would result in new entrants being foreclosed from obtaining licenses because a well-funded commercial operator could simply sponsor one applicant and acquire the vast majority of the white space.<sup>38</sup> Another scenario would result in the return of unsavory “application mills” and speculators that would take advantage of educators, extract fees with false promises, and be totally unable to manage spectrum if successful. Another scenario, discussed above, would have successful

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<sup>37</sup> *PSA Expansion Order* at 7078.

<sup>38</sup> In the recent AWS-1 auction, five incumbent wireless carriers reportedly controlled more than 78% of the total high bids for AWS-1 spectrum licenses. *See Comments of the Wireless Internet Provider Association* in Docket No. 06-150. Similarly in the recent 700 MHz auction, incumbents AT&T and Verizon accounted for approximately \$16.3 billion of the total \$19.6 billion for the auction. *See Auction of 700 MHz Band Licenses Closes*, DA 08-595 (rel. Mar. 20, 2008). New entrants were largely rebuffed in their efforts to acquire spectrum.

bidders acquire licenses that could not be efficiently deployed because of height benchmarking and other technical rules that would drive up construction costs and limit service in proximity to GSA borders.

Even so, educators face other challenges that could limit their ability to participate in auctions. For instance, IHETS may be unable to obtain funding approval to pay the federal government for spectrum rights. Other entities may have legal restrictions on their ability to bid. The IHETS plan does not totally eliminate white spaces, but it would drastically reduce the areas where the Commission would need to conduct auctions and would help expedite service to the public.

Finally, as the Commission concluded when it expanded cellular CGSAs and BRS PSAs, automatic expansion of EBS GSAs would promote economic development. In the *Cellular Unserved Area Order*, the Commission found that “[c]onstruction and operation of new cellular systems spurs economic activity, by stimulating demand for cellular equipment, construction services and telecommunications services, and by increasing the productivity and efficiency of business activities of cellular mobile telephone subscribers.”<sup>39</sup> Similarly, when it modified BRS licenses to reflect an increase in the circular PSA from 15 to 35 miles, the Commission stated that:

An expansion of the [BRS] station’s protected service area will promote other public interest benefits. For example, strengthening [BRS] station’s viability will contribute to the national economy overall. . . . We believe strengthening [BRS] operators will have important secondary benefits for [EBS] licensees, and better enable them to meet their educational service objectives.<sup>40</sup>

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<sup>39</sup> *Cellular Unserved Area Order* at 2449-50. The Commission also specifically held that its new method for determining CGSAs should apply to existing systems to avoid “possible confusion, litigation and other ramifications that could result” from having two separate standards for determining CGSAs. *Id.* at 2456.

<sup>40</sup> *PSA Expansion Order* at 7078.

History confirms the accuracy of these predictions. Cellular service rapidly extended to unserved areas as the result of existing licensees obtaining rights to adjacent areas. The increase in BRS and EBS PSAs allowed operators to better compete with cable television and triggered investment in the band. Simply stated, wireless markets have contributed substantially to the economy. There is every reason to believe that similar economic success can be stimulated by the automatic expansion of EBS GSAs under IHETS' proposal.

### **III. THE COMMISSION SHOULD MAKE OTHER CHANGES TO ITS RULES TO FACILITATE EBS SERVICE.**

#### **A. The Commission Must Approve Leasing Arrangements for the Expanded GSA Area.**

Any lease of capacity for the new GSA area created through the maximization process described above would require a new application and approval by the Commission because the approved lease covered only the area within the existing 35-mile GSA. For any lease entered into on or after January 10, 2005, the EBS licensee and the lessee would file an application on FCC Form 608 seeking approval of the leasing arrangement for that area, if they so desire. The same process should apply for grandfathered EBS leases that were not previously approved by the Commission pursuant to its secondary market procedures (*i.e.*, those that pre-date January 10, 2005 and were not previously amended or extended). Like newer secondary market EBS leases, grandfathered leases only covered the PSA that existed at that time, and any lease or amendment for the new, expanded area would need to be considered under the secondary market rules as a “material change” requiring Commission approval.<sup>41</sup>

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<sup>41</sup> *Amendment of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands; Part 1 of the Commission's Rules - Further Competitive Bidding Procedures; Amendment of Parts 21 and 74 to Enable Multipoint Distribution Service and the Instructional Television Fixed Service Amendment of Parts 21 and 74 to Engage in Fixed Two-Way Transmissions; Amendment of Parts 21 and 74 of the Commission's Rules With*

**B. The Commission Should Afford EBS Licensees that Elect to Obtain a New License Additional Time to Demonstrate “Substantial Service” in the Expanded Area of their GSAs.**

The deadline for EBS licensees to demonstrate “substantial service” under Section 27.14(e) is May 1, 2011. For licensees that elect to include the expanded area within their existing call signs, to the extent the licensee is unable to meet its substantial service obligations in the expanded area by that date, IHETS proposes that the Commission extend the substantial service compliance period for that area by five years, which is roughly equivalent to the build-out period established when the Commission applied its substantial service rules to EBS in 2006. A licensee electing to receive a “new” license for the expanded area of the GSA should be subject to the same ten-year build-out period applicable to new licensees in wireless services.<sup>42</sup>

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*Regard to Licensing in the Multipoint Distribution Service and in the Instructional Television Fixed Service for the Gulf of Mexico; Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets*, Report and Order and Further Notice of Proposed Rule Making, 19 FCC Rcd 14165 (2004).

<sup>42</sup> See, e.g., 47 C.F.R. §27.23 (ten-year term for licenses in miscellaneous Wireless Communications Services); 47 C.F.R. § 27.1212 (ten-year term for EBS/BRS).

## **Conclusion**

IHETS believes that its detailed proposal to maximize GSAs presents a rare opportunity for the Commission to accelerate the provision of educational and wireless broadband services in rural and underserved areas, without the administrative burdens of extensive application processing and time-consuming auctions. IHETS urges the Commission to adopt its proposal and the other rule changes discussed above.

Respectfully submitted,

### **INDIANA HIGHER EDUCATION TELECOMMUNICATION SYSTEM**

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