

SUMMARY

NEBSA is the professional association of EBS licensees, applicants and others interested in the Educational Broadband Service. NEBSA has long been an active participant in WT Docket No. 03-66 and other proceedings affecting EBS.

NEBSA believes that it is premature to decide whether and how to license EBS channels in the Gulf of Mexico, and urges the Commission not to decide the Gulf of Mexico EBS licensing issues at this time. Given the controversy over licensing of BRS spectrum in the Gulf due to serious interference concerns, among other things, the Commission should wait for deployment of BRS facilities to take place, allowing an informed judgment whether expansion of 2.5 GHz spectrum in the Gulf is wise, or even necessary.

If the Commission decides nevertheless to license EBS channels in the Gulf of Mexico, they must be treated as any other EBS white space, to be licensed to qualified educational applicants pursuant to the process the Commission decides upon in this proceeding. EBS spectrum should not under any circumstances be removed from the educational reserve, licensed to entities that are not qualified under FCC rules for EBS, or used for purposes inconsistent with the EBS rules.

As for the licensing of white space, following the resolution of outstanding EBS licensing issues and finalization of the EBS license database, which must be done before white space can reliably be identified, the Commission should maximize existing licensees' Geographic Service Areas (GSAs) in such a way that, for each EBS channel in each BTA in which at least one licensed station on that channel already has a GSA that covers any portion of the BTA, the white space in that BTA on that channel is

incorporated into such GSA(s). There will still be over 200 white space licenses still available for application by eligible prospective licensees, but such licenses will all be readily identifiable and available on a BTA-wide basis.

Following the GSA maximization process, for the remaining white space licenses, the Commission should accept applications by qualified EBS applicants for new EBS stations, on a channel group by channel group, BTA by BTA basis. Any acceptable “singleton” applications should be granted, and in the event of mutually exclusive applications, applicants should be given ample opportunity to settle their conflicting applications. Any remaining mutual exclusivities would have to be resolved by auctions, as required by the Communications Act.

The auction process should be as simple as possible, conducted in a manner that acknowledges the unique circumstances applicable to EBS applications. This may require departures in some respects from the competitive bidding rules typically used in auctions for commercial licenses. In particular, traditional auction concepts providing bidding credits for so-called designated entities have no proper application here.

The expanded geographic areas of maximized GSAs should not be treated as being within the scope of any prior approved secondary markets excess capacity leases, nor should Commission’s grandfathering of pre-secondary markets EBS leases extend to the expanded geographic areas of maximized GSAs. These areas should be licensed under the existing station’s call sign, while stations awarded for the remaining white space licenses should be treated as new stations. The substantial service rules should apply to these expanded areas and new stations, but in each case there should be a three year period before substantial service must be demonstrated.

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Before the

**FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 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 Secretary, FCC
Attention: The Commission

COMMENTS OF THE NATIONAL EBS ASSOCIATION

The National EBS Association (“NEBSA”)¹ submits these comments in response to the Second Further Notice of Proposed Rulemaking (“SFNPRM”) portion of the Commission’s 2008 Decision in the referenced proceeding,² which addresses two issues – whether the Commission should license EBS spectrum in the Gulf of Mexico, and how

¹ The National EBS Association was formerly known as the National ITFS Association (“NIA”).

² *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* in WT Docket No. 03-66 *et al.*, FCC 08-83 (released March 20, 2008) (“2008 Decision”).

the Commission should license remaining EBS “white space” throughout the country.³

Introduction

NEBSA, established in 1978 and formerly known as the National ITFS Association, is a non-profit, professional organization of EBS licensees, applicants and others interested in the Educational Broadband Service. NEBSA’s purposes are to gather and exchange information about EBS, to act as a conduit for those seeking information or assistance about EBS, and to represent the interests of EBS licensees and applicants. NEBSA has long been an active participant in WT Docket No. 03-66 and other proceedings affecting EBS.

As reflected below, NEBSA believes that it is premature to decide whether and how to license EBS channels in the Gulf of Mexico, and urges the Commission not to decide the Gulf of Mexico EBS licensing issues at this time.

As for the licensing of white space, following the resolution of outstanding EBS licensing issues and finalization of the EBS license database, NEBSA supports a process by which the Commission would first maximize existing licensees’ Geographic Service Areas (GSAs) for each EBS channel in each BTA in which at least one licensed EBS station on that channel already has a GSA that covers any portion of the BTA, so that the GSAs of stations on that same channel collectively expand to fully encompass all white space on that channel in that BTA. Thereafter, the Commission should accept applications by qualified EBS applicants for new EBS stations, on a channel group by channel group, BTA by BTA basis, for all remaining white space. Any acceptable

³ The deadline for comments in this proceeding was extended to September 22, 2008 by the Order of the Deputy Chief, Wireless Telecommunications Bureau, DA 08-1523 (released June 26, 2008).

“singleton” applications would be granted, and in the event of mutually exclusive applications, applicants would be given an opportunity to settle their mutual exclusivities. Any remaining mutual exclusivities would be resolved by auctions.

I. EBS LICENSING IN THE GULF OF MEXICO

The Commission asks for comment on whether it should license EBS spectrum in the Gulf of Mexico. The impetus for this question appears only to be that the American Petroleum Institute “persuasively argued” for BRS licensing in the Gulf “for operations in support of off-shore oil and gas facilities.”⁴

NEBSA believes that it is premature for the Commission to make a determination on EBS licensing in the Gulf. The decision to license BRS spectrum in the Gulf was not without controversy, particularly relating to the phenomenon of “ducting” and serious concerns about interference to land-based wireless broadband systems in areas around the Gulf. NEBSA urges that it would be prudent to wait for licensing and deployment of BRS facilities to take place in the Gulf to determine whether expansion of available spectrum in the band is wise from a technical standpoint. NEBSA also urges that the need for any given additional amount of 2.5 GHz band spectrum is speculative. API has not identified any specific educational need or purpose for using EBS channels in the Gulf, and it would again be best to wait for deployment of the BRS spectrum to see what communications needs are actually being served by BRS facilities, and whether those needs can be satisfied by spectrum the Commission has already made available.

If the Commission decides nevertheless to license EBS channels in the Gulf of Mexico, NEBSA believes that such EBS spectrum must be treated as any other EBS

⁴ 2008 Decision at ¶ 180.

white space, to be licensed to qualified educational applicants pursuant to whatever process the Commission decides upon in this proceeding. NEBSA would oppose any suggestion that EBS spectrum should be removed from the educational reserve, licensed to entities that are not qualified under Section 27.1201, or used for purposes inconsistent with those set forth in Section 27.1203.

II. WHITE SPACE LICENSING

A. Public Policy Goals for White Space Licensing

Issues relating to licensing of EBS white space raise complex questions of public policy. NEBSA has diligently reviewed legal and practical issues associated with EBS white space licensing, and it has systematically considered each possible licensing approach it could envision for the spectrum. It has also participated in regular and extensive discussions with parties having a stake in this proceeding, including NEBSA's members, other EBS licensees, counsel and organizations representing EBS interests, including the Catholic Television Network ("CTN"), educators and representatives of wireless broadband commercial operators, including the Wireless Communications Association International ("WCA"). NEBSA's goal has been to develop a consensus on white space licensing that would be supported by its constituents, educators in general, and wireless broadband commercial operators. These efforts have been pursued by all parties in utmost good faith. However, finding common ground on all questions has been exceptionally challenging, and a full consensus has not yet been achieved. In these comments, NEBSA therefore sets forth its own proposal for white space licensing, recognizing that other parties may have somewhat different approaches on one issue or another.

In this effort, NEBSA has been guided by certain principles or goals, which it believes the Commission should try to achieve in the white space licensing process. These six (6) goals (not necessarily in order of importance) are to:

First Goal. Put in place an efficient licensing process so that white space can be licensed, and wireless broadband facilities deployed, as soon as possible. The interests of both educators and the general public are advanced by facilitating the rollout of wireless broadband services across the country. A process that takes years and years to be implemented or that contains complexities resulting in uncertainties that delay final resolution of licensing issues is not in the public interest, or in the interest of educators. Thus, the process should be as simple as possible, and it should be based on concepts for which there is ample Commission precedent.

Second Goal. Recognize the legitimate interest of all qualified educational entities to apply for, negotiate settlements with, and if necessary go to auction for ultimately available white space, on a non-preferential basis. The process should assist them in identifying white space application opportunities. Any process that requires educators to hire engineers to make channel by channel studies in BTA after BTA to identify what white spaces are available, and the potential population within such white spaces, would be massively wasteful of educational resources, because as many as 9,860 such BTA/GSA/white space studies (493 BTAs x 20 possible channels to be studied), each costing potentially hundreds or thousands of dollars, would be required to identify all white spaces across the country, and this expense could be duplicated by many potential applicants each undertaking their own studies.

Third Goal. Have all new licenses cover, to the greatest degree possible, contiguous and viable geographic areas that can actually support the deployment of

wireless broadband systems. The FCC does educators no favor by issuing licenses for haphazard bits and pieces of left-over geographic areas on one channel or another in any given BTA, if that license leaves the educator with nothing that can actually be effectively used because of the small size and disconnectedness of the licensed area, limitations of height-benchmarking to adjacent licensed GSAs, and related technical and practical concerns.

Fourth Goal. Reduce the likelihood that the process will result in a vast flood of applications by entities, many or most of whom, in the final analysis, (i) will be at risk for being taken advantage of by application mills and speculators, (ii) will not actually be able to participate meaningfully in the inevitable auctions because of legal or resource constraints, and/or (iii) will not likely be able to engage in effective management of their spectrum. The public interest would not be served by the sort of application mill-generated land-rush of applications that has characterized past filing opportunities in the 2.5 GHz band and other bands. The interests of educators are also not served if the process results in vast numbers of schools and nonprofit organizations being recruited by unscrupulous promoters who, in exchange for a fee (which may include both cash and tying up excess capacity for later brokering), encourage and assist them (and typically numerous other competitors) to apply while misleading them with false expectations concerning the value of particular licenses, failing to disclose that licenses will ultimately probably be awarded only by the applicant willing and able to pay more than all other applicants, and leaving them to discover later that they have no realistic hope of competing for the applied for licenses in an auction process.

Fifth Goal. Minimize, to the greatest degree possible, the instances where the FCC actually has to use auctions to determine which among multiple applicants will

obtain a license. NEBSA understands that, under current law, mutually exclusive EBS applications will have to be resolved by auction. NEBSA nevertheless believes that auctions, however implemented, are not an appropriate spectrum allocation tool for an educational service and are not likely to result in spectrum coming into the hands of those that can best use it. Among other considerations, sound public policy should not require educators to expend their limited resources to pay for this spectrum. NEBSA is informed that many educators -- particularly local, accredited schools that used to be favored in the EBS licensing process -- will not be able to participate in auctions because of either legal restrictions or the lack of financial resources that can be paid to the government for spectrum, and the likely result of an auction process in many if not most cases will be the awarding of a license to whichever entity is backed by a commercial wireless broadband operator that is seeking to deploy in the white space area.⁵

Sixth Goal. Recognize the legitimate interest of existing EBS licensees to expand their coverage areas to better encompass their natural areas of interest. Many existing licensees have waited for many years for such an opportunity, and expanding GSAs actually assists them and their operator partners to fully utilize the GSAs they currently have.

Based on these considerations, NEBSA has evaluated the various options for licensing EBS white space, and has concluded that the approach described in subsection

⁵ NEBSA has received anecdotal information suggesting that many entities that would be eligible to hold EBS licenses would not be able to participate in an auction process. NEBSA looks forward to reviewing comments from educators and nonprofits on this issue. However, the North Carolina Association of Community College Presidents, which represents community colleges holding numerous EBS licenses in North Carolina, has already filed comments in this proceeding stating that “public educational institutions generally lack authority to enter into such auctions, and in most cases do not have the financial resources and expertise required to participate in such auctions.” Letter from North Carolina Association of Community College Presidents filed in WT Docket No. 03-66 (August 8, 2008).

II. D. of these comments, below, best serves the public interest and the legitimate needs and concerns of both incumbent EBS licensees and prospective new applicants.

B. Cleanup of Outstanding Licensing Issues

Regardless of the process the Commission determines to use to license EBS white space, that process cannot be undertaken effectively if there is uncertainty regarding what space is indeed “white space” with respect to any given channel in any particular location. Because EBS white space is whatever is left over after existing licensed service areas are considered, it’s impossible to determine what white space exists until there is a defined, final universe of existing licenses.

Thus, the first step in any white space licensing process has to be the resolution of outstanding EBS licensing issues. These issues include a number of applications for EBS license renewal that were filed late (many of which were opposed by one or more parties, and some of which were not), and a number of applications by parties with unexpired licenses or timely filed but not yet granted renewal applications that are seeking waiver of old construction deadlines or off-air rules. There may be other unresolved licensing issues as well.

NEBSA believes that the groundwork for resolution of disputed late-filed renewal cases was laid when the Commission issued its Declaratory Ruling on late-filed renewal applications in the 2008 Decision, deciding in effect that GSAs will be limited for certain licenses for which late-filed renewal applications are granted, in order to protect licensees who had not suffered licensing lapses.⁶ The industry settlement that underlies the Declaratory Ruling contemplated that it would enable the Commission to move forward on the disputed cases, and NEBSA urges the Commission now to proceed to do so.

If the Commission begins in earnest now to resolve the late-filed renewal cases and the cases involving waivers of old construction deadline and off-air rule issues as exist at this time, it could well have a definitive and final database of EBS licenses by the time that it has concluded this rule making.

C. Options for White Space Licensing

NEBSA has given full consideration to a number of options for licensing white space, including: (1) an open application process by eligible applicants for all existing white spaces, followed by auctions for applications that are mutually exclusive (which NEBSA would anticipate would occur in most if not all application opportunities), (2) an application process that is restricted as to eligibility so as to try to limit the number of mutually exclusive applications, again followed by auction as required, (3) licensing to state-wide government entities that would allocate white spaces in their states, (4) licensing to a single nationwide entity that would hold a national license, lease excess capacity, and allocate benefits (including wireless service) to local educators, and (5) GSA maximization processes for existing licensees, followed by an application and selection process for remaining white space. NEBSA's comments on these options follow.

Option 1: Applications by any eligible applicants for all currently existing white spaces.

The first option considered by NEBSA is simply to invite applications from all eligible applicants for any and all white space currently existing. NEBSA anticipates that the available licenses would be made available on a channel group by channel group and BTA by BTA basis (recognizing that in some cases the available white space in a given

⁶ 2008 Decision at ¶ 179.

BTA may differ among channels in a given channel group).⁷ Thus, there could be as many as 2,465 application opportunities (493 BTAs x 5 channel groups), although the precise number may be less if there are BTAs where the existing GSAs of incumbent licensees completely cover the BTA on all channels in any given group. If there are mutually exclusive applications, which would be anticipated in all or almost all cases, and settlements were not made, the ultimate licensee would have to be determined through the auction process.

The advantage of this option, of course, is that it opens current white space opportunities to all eligible parties on an entirely non-discriminatory basis. There is the prospect that new educational entities, including in some cases entities that have been looking to apply for some time now, can be brought into the EBS licensing process, while at the same time incumbent EBS licensees could try to expand their channels or coverage. All this would occur without the FCC having to pick “winners” and “losers” – the license would ultimately be awarded to the party willing to pay the most for it, presumably because that party is best in the position of managing the spectrum and deploying service.

⁷ At earlier stages in this proceeding, NEBSA (then NIA), together with the Catholic Television Network, filed comments and reply comments supporting that EBS white space should be licensed on a BTA by BTA, channel group by channel group basis, but with LBS/UBS channels being treated separately from MBS channels. Joint Comments of the Catholic Television Network and the National ITFS Association in WT Docket No. 03-66 (filed January 10, 2005), at 11-13; Joint Reply Comments of the Catholic Television Network and the National ITFS Association in WT Docket No. 03-66 (filed February 8, 2005), at 10-11. NEBSA’s assumption at that time was that many EBS licensees seeking to continue video operations might only want to seek the MBS channel in any given place, and other EBS licensees contemplating only wireless broadband operations might only want to seek LBS/UBS channels, and it would be preferable to allow prospective applicants to bid separately on these band segments, without having to “pay for” band segments they might not want to use. There was substantial support in the record for that approach, and for applying on a BTA by BTA basis. NEBSA now draws on several additional years’ experience to suggest that licensees and prospective applicants will prefer to continue to seek licenses for all four channels where available, and there is no need to separate LBS/UBS from MBS channels when creating white space application opportunities. If the Commission were to separate LBS/UBS from MBS channels, the number of application opportunities, and thus situations requiring resolution by auction, would unnecessarily double.

NEBSA believes, however, that Option 1 would be an enormous mistake. There are big problems that will make the reality of the process not live up to its promise.

First, the task of identifying white space and evaluating its potential value would be difficult and expensive for the typical educator. As noted, there could be as many as 2,465 available licenses, but each channel of each group has to be analyzed separately to determine white space, so that nearly 10,000 studies would be needed to identify white space nationwide (20 channels x 493 BTAs). Each such study would require an engineer to determine from FCC databases and rules the GSAs of nearby existing licenses on that channel and superimpose them on a BTA map, then identify the areas of “white space” on that channel in that BTA, and then determine the population and/or households in those areas. In NEBSA’s experience, the cost of a single GSA study from a consulting engineer has tended to run in the hundreds of dollars, and thus if an educator wants to evaluate the available white space options around its location, the 20 necessary studies for even one BTA could easily cost thousands of dollars. Presumably, because of the competitive nature of the process, each prospective applicant would need to run its own studies, multiplying the overall cost to education in general.

It will turn out that white space on many channels in many BTAs will be non-contiguous bits and pieces of spectrum that lie between the existing GSAs of incumbent licensees. These areas will also often be in areas that are outside the major population centers of the BTA. They will often be difficult, if not impossible, to be effectively used because of their small size and disconnectedness, limitations of height-benchmarking to adjacent licensed GSAs, and related technical and practical concerns.

Option 1 will also encourage, and inevitably result in, a flood of applications. NEBSA believes it likely, based on past experience in this and other frequency bands,

and quite likely the inflated expectations among educators that arise from sensational media reports on particular lease deals,⁸ that many applications will be filed for each available license. All but one of these applications in each case will be filed by a entity who will end up being disappointed with the process and the result, because only one will receive the license -- probably either the one with the deepest pockets or, more likely, the one backed by the largest wireless broadband provider.

Even worse, NEBSA fears that application mills or other speculators will once again become active in the band, generating vast numbers of applications. As noted above, the interests of educators are not served if the process results in schools and nonprofit organizations being taken advantage of by unscrupulous promoters who, in exchange for a fee (which may include the right to broker a lease of excess capacity), encourage and assist them (and typically numerous other competitors) to apply while misleading them with false expectations concerning the value of particular licenses, failing to disclose that licenses will ultimately be awarded by auction to the applicant willing and able to pay more than all other applicants, and leaving applicants to discover later that they have no realistic hope of obtaining licenses in an auction process.

Finally, Option 1 will result in considerable delay in licensing of all white space and, more importantly, making spectrum available for deployment. Under the best of circumstances, one can expect that rules could be adopted, reconsidered, finalized and go into effect no earlier than the end of 2009 or some time in 2010. Then, the process leading up to the actual application process will take some months. If the process

⁸ See, for example, "FAU Set for \$173 Million Windfall as it Leases Unused Broadband Spectrum," *Palm Beach Post*, September 9, 2008, available at http://www.palmbeachpost.com/search/content/local_news/epaper/2008/09/09/a1b_fau_lease_0910.html. NEBSA is aware of the interest generated in educational circles when such stories, albeit rare, and perhaps even not fully accurate, are published.

proceeds in an orderly manner with the filing of applications, initial FCC evaluation and acceptance of applications and identification of mutual exclusivities, a period for settlements, then the actual conducting of nearly 2500 auctions, then the process for petitions to deny, it is easy to envision that licenses will not be finally issued until well into 2011 at the earliest. Having this process apply to all white space, nationwide, is a serious impediment to the roll-out of wireless broadband services.

Thus, in NEBSA's view, while an open process for all educators and all white space *sounds* like a good idea, Option 1 is in fact not a good match for the goals of this process – although it does support the interest of all potential eligible applicants to file applications for all possible white spaces, the result is not an efficient and speedy licensing process, it does not result in viable white space licenses, it does not minimize abuse of the process or of prospective applicants by the unscrupulous, and it relies heavily on the use of auctions to determine which applicant will prevail.

Option 2: Restricted application process for all currently available white spaces.

A variation on the theme of a fully open application process for all currently available white space is an approach under which the FCC would restrict who can initially file for these licenses, with the expectation that more “worthy” applicants are likely to end up being licensed, and that so many fewer applications will be filed that auctions will not be required to resolve many mutual exclusivities. There are many sorts of restrictions that might be employed, but as an example, the FCC could state that, for an initial EBS application round at least, the only acceptable applicants would be those that

are accredited educational institutions located in the white space for which the application is being submitted.

The advantages of Option 2 are that all white space is again subject to application, the process is still open to all qualifying applicants, those qualifying are arguably (at least) more deserving of being licensed than others who may not now apply, and that fewer applications for each license will be filed, facilitating licensing without auctions.

Unfortunately, NEBSA does not believe that Option 2 successfully solves the problems that are inherent in Option 1. It would still be necessary for prospective applicants to identify white space – in fact this step might end up being more difficult because it could turn out that, after spending thousands of dollars on engineering studies, a prospective applicant learns that no white space exists where it is located. There would be no change in the nature of the available white space -- it would still often be disconnected bits and pieces of geography that cannot be viably used. Even with limitations on who can apply, a flood of applications could still result, because there could be multiple public school districts, private and parochial schools, at least one community college, and possibly other higher education institutions even in relatively small geographic areas. Mutually exclusive applications would still have to be resolved by auctions even though local accredited institutions may be entities least able to participate in an auction. Finally, the process still results in no white space being brought on line for years to come.

Option 2 also raises at least one concern of its own – determining who gets to apply and who does not. The Commission is immediately called upon to start deciding winners and losers in a context where it is not clear who ought to be favored. While one can look back to the comparative criteria adopted by the Commission for EBS (then

ITFS) in the 1980s,⁹ which were effectively applied to resolve many disputed licensing situations throughout the 1980s and 1990s, NEBSA is not convinced that the criteria most likely to be carried over from the past – accreditation and localness – necessarily identify the best applicant today. It is not necessarily true, for example, that a small accredited private k-12 school that happens to be located in white space will be a better steward of a white space license than an experienced nonprofit licensee organization from outside the area that has successfully managed numerous educational telecommunications projects to the benefit of local schools in various other places around the country. It is also not necessarily true that an applicant entirely new to FCC processes and licensee responsibilities, which has no staff devoted to EBS activities, no experience, no technical or FCC compliance infrastructure, and no existing industry relationships, will better manage its spectrum than an incumbent EBS licensee already licensed next door, particularly if the white space can be folded into existing operations. Again, what initially seems straightforward and worthwhile is not, on examination, so clear.

For these reasons, NEBSA does not favor Option 2.

Option 3: Licensing all white spaces in each state to a public official or governmental entity in that state, which would then allocate white spaces in the state to institutional users.

In the SFNPRM, at ¶¶ 197-201, the Commission asks for comments on a proposal to award one white space license per state to a state agency designated by the Governor to be the spectrum manager for the entire state.

⁹ See *Second Report and Order* in MM Docket No. 83-523, 101 FCC 2nd 49 (1985) (adopting a point procedure to resolve ITFS mutual exclusivities, with points being awarded to applicants that are local, accredited, apply for no more than four channels in a given area of operation, and propose certain amounts of instructional video programming each week).

This process has the advantage of getting white space licensed efficiently and quickly (at least where the state government cooperates in designating the spectrum manager), and it avoids the prospect of EBS applications going to auction.

It is less clear, however, whether this approach will actually result in white space being deployed effectively. There are presumably some states with existing educational communications agencies that would naturally be designated to hold the state-wide white space license, but it is impossible to say with confidence that these designations – which are after all likely to be political decisions – would be made quickly. There may be competing state entities that would also seek responsibility for EBS white space, and in many cases it might require an act of the legislature to create or designate the appropriate entity. These are not processes that the FCC can control.

Even if a state agency can be designated quickly, it is not clear that agency will be able to move quickly in allocating spectrum to particular state educational users, or to plan for and effectuate deployment or leasing of the spectrum and allocate the benefits of the system or lease to educational users. Again, one can expect considerable political haggling over the assignment of responsibilities and prerogatives and the paying of costs and receipt of benefits associated with EBS spectrum, perhaps leading to the very sort of stalemates that the Commission was trying to avoid.

NEBSA also believes that this approach may be of questionable legality, as it appears to be delegating the Commission's exclusive spectrum allocation and licensing functions to the Governors or designated state agencies.

Finally, there has been no support for this option among NEBSA members or other potentially interested parties, even though NEBSA has a number of members who

are state educational telecommunications agencies and therefore likely potential recipients of a white space license under this proposal.

For all these reasons, NEBSA urges the Commission not to proceed with Option 3 for white space licensing.

Option 4: Licensing to single nationwide entity.

A variation on Option 3 might be to issue a single, nationwide EBS white space license to a nonprofit educational trust that is carefully structured, in a manner similar to the 700 MHz public safety license, to represent the interests of public and private educational institutions at the K-12 and higher education levels, state and local educational and public service agencies, nonprofit community-based educational service organizations, and EBS licensees and their representative associations (such as NEBSA and CTN). The trust would, among other things, arrange for deployment of licensed white space spectrum (including by arranging for leasing excess capacity) and allocate the benefits (free or discounted wireless service and funds) to local educators. The trust might ultimately develop resources and expertise to assist EBS licensees in a variety of ways (such as by funding experiments on educational uses of wireless broadband services or the development of hardware or software for educational applications).

Option 4 has the advantage of getting white space licensed efficiently and quickly, and it avoids the prospect of EBS applications going to auction. Assuming the trust could be established quickly and organized effectively, it is possible that Option 4 might also result in relatively swift excess capacity leasing of white space spectrum in areas where commercial operators are ready to deploy.

However, the notion of a national trust generated considerable concern among the EBS community. Educators believe that a trust would turn out to be very difficult to

form, structure and organize, which might in fact delay its spectrum development and benefit allocation functions. There was concern as well about creating a potentially powerful and important entity that would not be within the control of local entities to whom benefits were to flow. There also skepticism about how such an entity could and would go about allocating the benefits of its licensed EBS spectrum to local educators. All in all, this approach did not garner support among the EBS community.

Option 5: GSA maximization process for existing EBS licensees.

NEBSA also considered having the FCC undertake to expand the GSAs of existing EBS licensees to one degree or another, prior to an open white space application and selection process. One approach (Option 5A) would maximize GSAs to absorb all white space on any given channel in each BTA where there is currently at least one license providing coverage on that channel in the BTA. Another approach (Option 5B) would be to undertake a more limited expansion, such as adding 15 or 20 miles to the current 35 mile PSA radius, without regard to BTA boundaries.¹⁰

One advantage of Option 5A is immediately licensing white space and making it deployable throughout many BTAs, without having to undertake any new application and mutually exclusive selection process. Additionally, because the white space areas into

¹⁰ There is ample precedent for maximization of the coverage of existing stations prior to providing an opportunity for new applications, as the Commission has expanded coverage areas of licensed stations on other occasions, including, of course, in this very band. See *Second Order on Reconsideration* in Gen. Docket No. 90-54 and 80-113, 10 FCC Rcd. 7074 (1995) (providing for over a 400% increase in the protected service area of MDS (now BRS) stations (increasing PSA from 710 square miles to 3,848 square miles utilizing a 35 miles radius PSA circle)); this protected service area was ultimately applied to ITFS (now EBS) stations in the *Report and Order* in MM Docket No. 92-217, 13 FCC Rcd. 19 (1998) (the “*Two Way Order*”), even though ITFS stations had previously only been entitled to interference protection at individual registered receive sites. In addition, the FCC has twice provided for the filling in unserved areas within cellular CGSAs without facing competing applications, *Second Report and Order*, 2 FCC Rcd. 2306 (1987), and *First Report and Order*, 6 FCC Rcd. 6185 (1991). The FCC has also recently in connection with the digital television transition permitted existing TV stations to maximize their coverage prior to opening up any opportunity for applications for new DTV stations. See *Public Notice “Commission Lifts the Freeze on the Filing of Maximization Applications and Petitions for Channel Substitutions, Effective Immediately,”* DA 08-1213 (released May 30, 2008).

which GSAs are expanded are adjacent to existing GSA boundaries, licensing of them immediately solves height-benchmarking or other GSA boundary coordination problems that may prevent existing GSA areas to be fully served with wireless broadband up to their existing boundaries.

Another significant advantage to Option 5A is the rationalization of remaining white space, in that all white space remaining after the maximization process would be for specifically identifiable channels that are available BTA-wide. There would be no need for prospective applicants to hire engineers to do numerous studies to find out what white space is available in any given place. The resulting BTA-wide white spaces are also not composed of haphazard bits and pieces of non-contiguous geographic areas that NEBSA believes should be avoided, but are areas that should better provide for viability in deployment. Based on engineering studies, NEBSA believes that, following GSA maximization, 419 of the 493 BTAs will be fully licensed on all 20 EBS channels. However, 74 BTAs will have at least one white space application opportunity following the maximization process (again, with each such license being BTA-wide on the particular channel(s) at issue). Seventeen of those 74 BTAs have no coverage from any GSAs on any channels at this time, and would be available for application for all five EBS channel groups. Assuming that the remaining white space licenses are issued on a channel group by channel group, BTA by BTA basis, as NEBSA suggests, a total of 201 such white space licenses would be available for application.¹¹

¹¹ Based on current analysis of the Commission's database, details concerning channels available in particular markets following the BTA-wide maximization process are provided in Exhibit 1 to these comments. Exhibit 1 therefore contains a list of the 201 white space licenses that NEBSA believes would be available for application. NEBSA cautions that these results are subject to confirmation, and that they are subject to change if the Commission's "cleanup" of outstanding EBS licensing issues as urged by NEBSA in Section II.B of these Comments results in the renewal of licenses now shown as expired, or if existing licensed stations are deleted for any reason.

In addition, when the time comes for applying for the 201 remaining BTA-wide licenses, the application process, prospects for settlement and, if necessary, eventual auctions should be more manageable than would be the case with the nearly 2500 potential application opportunities that would exist if the FCC proceeds to accept applications for all current white space on a channel group by channel group, BTA by BTA basis. Certainly this option reduces dramatically the number of auctions that might be required.

The disadvantage of Option 5A is, of course, that it limits application opportunities for eligible educational entities. This disadvantage is reduced in significance, even for those entities who relish the opportunity to apply for EBS spectrum, because the application “opportunities” reflected in Options 1 and 2 above will largely prove to be illusory for the typical applicant, which after investing considerable effort and resources in the application process, will find that it can’t really compete for the license at auction because of legal or resource constraints, or can’t outbid an entity backed by a partner with deep pockets, or because what it manages to obtain at auction is not something that can be effectively utilized.

Option 5B also relies initially on a GSA expansion, but would limit the expansion to a certain number of additional miles that would be added to the radius used to calculate PSAs which, upon the usual splitting of PSA overlap areas, would result in slightly larger GSAs than present. NEBSA contemplates that such an expansion in radius might be in the order of 15 to 20 miles.

The major advantage of Option 5B is that, like Option 5A, it immediately licenses some amount of white space and makes it deployable without having to undertake an application and selection process. Again, because these white space areas are adjacent to

existing GSAs, their licensing immediately allows expansion of systems now in the process of deployment and helps solve height-benchmarking and other cross-border coordination issues that might prevent existing GSAs from being fully served with wireless broadband up to their current boundaries.

In addition, Option 5B absorbs less of the currently available white space than Option 5A and thus leaves more remaining white space available for application. While that will be viewed by some as an advantage, as noted in these comments, NEBSA believes that such application opportunities will often prove to be illusory. That is because Option 5B ultimately suffers from some of the same disadvantages as Options 1 and 2 -- it would still be necessary for prospective applicants to identify white space through a meticulous process involving expensive engineering studies, with uncertain results (in terms of what channels might be usable in any given place, if any). White space would still often be disconnected bits and pieces of geography that in many cases cannot be viably used. The bits and pieces will be different under Option 5B than under Options 1 and 2, because some existing small pieces will be absorbed by the limited expansion of GSAs, but that same expansion will inevitably create new bits and pieces. A flood of applications for the remaining white space areas would again be expected, and mutual exclusivities would still have to be resolved by auctions. Finally, the process results in significantly less white space being brought on line for years to come, as compared to Option 5A.

D. NEBSA Proposal – Maximize GSAs in each BTA with currently licensed stations to the BTA’s Boundaries, followed by an application process for remaining BTA-wide white spaces, a settlement opportunity and, if required, an auction

Based on these considerations, NEBSA believes that the interest of educators, and the public interest, are best served by Option 5A – expanding GSAs of existing stations on their authorized channels to the boundaries of the BTAs in which the channels are currently located, and then inviting applications for the identifiable BTA-wide licenses that remain, as specified in Exhibit 1.

NEBSA contemplates that the process would have the following steps.

Step 1 – GSA Maximization. The first step in this process would be to maximize the GSAs of existing EBS licensees on any given channel to the boundaries of BTAs that already have GSA coverage on that channel. This is accomplished, as described in more detail below, by modifying the GSA of one or more nearby incumbent EBS stations in such a manner that all white space on any given channel in any such BTA is absorbed. There would be no GSA expansion on any given channel into any BTA where there is currently no coverage on that channel from a licensed station’s GSA. There would also of course be no incursion on the currently licensed GSA of any station.

From its study of the issue, NEBSA understands that there are various ways in which the maximized GSA boundaries can be determined, and that different methods may result in somewhat different results. NEBSA has concluded, however, that the simplest process for implementing maximized GSAs, and having the maximized GSAs most rationally relate to the original coverage areas of the EBS stations, is (1) to increase the radii of each existing station’s PSA uniformly along all azimuths across the country, ignoring (for this step only) BTA boundaries, until all white space on all channels

nationwide is absorbed, then (2) to split PSA overlap areas between and among existing stations in the same manner as the football shaped PSA overlaps were divided to create the current GSAs in 2005, and then (3) to back out any expansions of any given channel GSAs into any BTAs in which those particular channels do not currently have GSA coverage). Examples of the maximization process and results are described and depicted in Exhibit 2 to these Comments.

Step 2 – Applications for Remaining White Space Licenses. Following the completion of the GSA maximization process,¹² the FCC would proceed to an application window for the remaining white space licenses. These would be the already-identified 201 BTA-wide channel group by channel group licenses specified in Exhibit 1. The FCC would give notice of its intention to accept applications, no earlier than 60 days following the public notice, by any qualified EBS applicant. Minimally, the application would need to identify the applicant, demonstrate its qualifications to hold an EBS license, and identify the license it seeks.

In order to dampen speculative filings and “gaming” of the system, NEBSA would support a limit on the number of applications that any given applicant (or party to an application) can file. At this time NEBSA believes that any applicant should be limited to one (1) application in any given BTA. An applicant would be free to apply for one license in each of the 74 BTAs with application opportunities, if it chooses to do so.

Step 3 – Processing of Applications and Settlement Opportunity. Following the receipt of applications and initial acceptability review, the FCC would issue a public

¹² It may turn out that mechanical operation of the GSA maximization process as suggested in these comments, in some cases, results in anomalies that are not deemed satisfactory by one or more licensees. Following the creation of the maximized GSAs, Section 27.15 of the Commission’s rules already allow the redrawing of GSA boundary lines with the consent of affected licensees.

notice listing acceptable applications for each available white space license. In the event there are mutually exclusive applications, the public notice would trigger a 60-day settlement period in which the applicants would be encouraged to settle their mutual exclusivities. NEBSA expects that such settlements could include splitting geographic territory among applicants, splitting channels among applicants, and making payments to induce applicants to dismiss their applications (but any such payments would not be permitted to exceed the applicant's actual documented out-of-pocket costs of applying, in order to reduce the incentive for "greenmail"). In addition, NEBSA believes that applicants for any particular license in a BTA should be able to settle with applicants for other licenses in the same BTA, and even seek as part of such a settlement a license that was not applied for in the BTA in the window.¹³ In the event that there are "singleton" applications or complete settlements eliminating mutual exclusivities, those applications would be granted by the FCC. Following the settlement period, where mutual exclusivities remain, those cases would, of legal necessity, be resolved by auctions.

Step 4 – Auctions. NEBSA contemplates that the FCC would conduct as simple an auction process as possible, which may require departures in some respects from the general competitive bidding rules set forth in Part I, Subpart Q, of the Commission's Rules. NEBSA urges the Commission to implement EBS white space auctions in a manner that acknowledges the unique circumstances applicable to EBS applicants.

For example, NEBSA believes that traditional auction concepts supporting the bids of so-called designated entities have no proper application in this context. The relevant language in Section 309(j)(3)(B) of the Act, dealing with designated entities, is

¹³ For example, if there were two applicants for one of two licenses available in a BTA, and no applicants for the second license, a settlement could involve one applicant agreeing to take that second license as a "singleton" applicant, leaving the other applicant as a "singleton" on the first license.

focused on business entities: “the Commission shall promote ‘economic opportunity and competition ... by avoiding excessive concentration of licenses and by disseminating licenses among a wide variety of applicants, including small businesses, rural telephone companies, and businesses owned by members of minority groups and women.” EBS eligible educational institutions, governmental agencies and non-profit educational groups are *not* “businesses” in any commonly understood use of that term.¹⁴ Nor are they *owned* by any particular individuals or groups, as opposed to the public at large, as they do not issue stock or have other indicia of ownership.

Furthermore, with respect to bidding credits used in other auction contexts to favor small businesses, and those explored in the *FNPRM* by the Commission, NEBSA can identify no particular correlation between the size of an EBS eligible entity based on annual revenues or other similar financial factors and the likelihood of successful construction and operation of applied-for EBS stations.¹⁵ If anything, the entity most likely to be successful in applying and then arranging for the construction and operation of white space EBS stations may be a licensee that currently holds a license for the same channels in a nearby area. The size or other “business” characteristics of such an entity simply is not relevant. Thus NEBSA urges that, for EBS white space auctions, the Commission decline to adopt bidding credits for small businesses and other designated entities. The auction process should be simple and straight-forward – the license goes to

¹⁴ The closest definition of “business” according to Webster’s New Collegiate Dictionary is “a commercial or sometimes industrial enterprise.” Clearly, this term does not fit educational institutions and entities.

¹⁵ Defining the “size” of an EBS qualified entity could be difficult. For a governmental entity, would size be based on the entire budget of the state, county or municipality of which the entity is a part? Would the Commission look to the budget of the EBS qualified entity? If the EBS qualified entity is an educational institution or system, would the Commission look at the budget of the entire institution, or only the campus that that would be licensed to operate an EBS station? Even if an appropriate way to identify size could be defined, how would the Commission draw the line between what is large and what is small?

the highest bidder in any given case, with the process set up and run so that bidders without specialized knowledge and dedicated auction resources can determine how much it may be willing to pay and can reasonably participate as the process unfolds.

In the event that the FCC nevertheless provides for some sort of designated entity benefits, and in enforcing the one application per BTA limit, the Commission needs to modify attribution rules that have been designed for other auctions contexts, to permit EBS applicants to apply and compete for licenses despite having prospective or actual excess capacity leasing arrangements in place with a commercial operator. For example, Section 1.2110(b)(3)(iv)(a) of the Commission's Rules defines "impermissible material relationships" that would make an applicant ineligible for certain designated entity benefits, or result in an attribution. Those "impermissible material relationships" include arrangements for the lease or resale of more than 50% of the spectrum capacity of any one of the applicant's or licensee's licenses. In order for the Commission's goals for wireless broadband deployment on the 2.5 GHz band to be effectuated, EBS licensees must continue to be able to enter into lawful secondary market leasing arrangements, and the leased spectrum must be capable of being aggregated into the local, regional and even nationwide systems that are being deployed. Crippling any EBS applicant for a white space license because of an existing or prospective EBS lease arrangement simply makes no sense in this context.¹⁶

¹⁶ NEBSA notes that, in a case involving an LMDS application by Virginia Tech Foundation, the Wireless Bureau granted a waiver of the attribution rules to permit the not-for-profit entity affiliated with a public education institution with limited discretionary funds to participate in an auction. *In the matter of Virginia Tech Foundation, Inc.*, DA 98-387 (WTB released March 4, 1998).

E. Other Considerations

1. **Old or new call signs.** Under any GSA maximization process, the Commission must decide whether the expanded areas of any given GSA should be licensed under a new station license, or under the license of the station whose GSA was expanded. NEBSA believes that the expanded areas would most rationally be incorporated into the license and call sign of the original station, rather than under a newly issued license and call sign.

Of course, stations ultimately authorized in the application/auction process noted above for the 201 white space licenses would be authorized under new call signs issued by the Commission.

2. **Effect on FCC Approval of Excess Capacity Leases.** If an existing EBS station has a *de facto* transfer lease approval in effect, expanding the service area of that station under its current call signs raises questions as to how the expansion will be treated under the FCC's procedures for approval of EBS excess capacity leases. NEBSA believes that the FCC should confirm that its approval of any prior EBS lease arrangement extends only to the limits of the GSA of the station as it existed at the time of the approval (unless some other specifically defined subset of the GSA was the leased area, in which case FCC approval is limited to that area). If the parties to the lease seek to have the FCC extend lease approval to the new, maximized portions of a station's GSA, it will be necessary for the parties to seek approval for the arrangement in the maximized areas in a new application. Presumably, this will require the EBS licensee and the lessee first to reach some understanding as to the timing of deployment, nature of

educational facilities and services, and other issues (including compensation) that relate to the maximized areas.¹⁷

3. **Substantial Service Obligations and Deadlines.** NEBSA believes that the substantial service obligations applicable to EBS stations' now-existing GSAs should remain as specified in Section 27.14(e) of the Rules, and that the May 1, 2011 deadline should continue to apply. NEBSA's expectation is that, if the FCC is able to move quickly to maximize GSAs, in many cases the expanded GSA areas might also be able to be deployed by that date. However, NEBSA also understands that resolution of licensing issues may take some time, and believes that licensees should have at least three (3) years from the grant of a maximized license to satisfy the substantial service requirements for the expanded areas of the GSA. In addition, if the nature of any given GSA expansion is such that a licensee believes the substantial service deadline in any part of the maximized GSA needs to be extended,¹⁸ the Commission would deal with such a request on an *ad hoc* basis upon a request for extension by that licensee.

Similarly, for stations that are awarded new licenses following the application process noted above, while NEBSA believes the same substantive substantial service requirements should apply, a deadline of three (3) years following the grant of an application for a new EBS license would again be appropriate, subject to the ability of a

¹⁷ Similarly, if there is a "grandfathered" pre-Secondary Markets EBS lease in effect for the maximized station, the grandfathered status of that lease should not be deemed to cover the expanded GSA areas of the station. It would be necessary for the parties either to enter into a second, updated Secondary Markets lease on the expanded area while continuing the grandfathered lease for the original GSA of the station, or negotiating a new Secondary Markets lease covering the entire maximized GSA.

¹⁸ For example, in the Western United States, where certain BTAs are huge in scope and include areas that are devoid of population or subject to other deployment challenges, and are thus simply not viable for deployment at the current time, the licenses for these areas should not be subject to cancellation on account of the substantial service requirements. Appropriate waivers should be granted.

licensee to seek an extension in appropriate extenuating circumstances (such as unresolved licensing disputes following the grant of the license).

CONCLUSION

For the foregoing reasons, NEBSA urges the FCC to defer a decision on the licensing of EBS channels in the Gulf of Mexico. NEBSA supports adoption of rules for licensing of EBS white space that would combine a GSA maximization process with an open application process for defined, BTA-wide new licenses, followed by a settlement opportunity and, if necessary, a simple auction process.

Respectfully submitted,

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EXHIBIT 1
CHART OF BTAs WITH BTA-WIDE WHITE SPACE LICENSES
FOR APPLICATION FOLLOWING GSA MAXIMIZATION PROCESS

BTA #	BTA NAME	CHANNELS/GROUPS AVAILABLE	# CHANNELS AVAILABLE	# LICENSES AVAILABLE
2	Aberdeen, WA	A, C, D, G	16	4
11	Alpena, MI	A2, B, D, G	13	4
23	Athens, OH	G	4	1
37	Bemidji, MN	A, B, C, D, G	20	5
45	Bismarck, ND	D1, 2 and 3	3	1
48	Bluefield, WV	A, B, C, D, G	20	5
53	Bozeman, MT	C	4	1
54	Brainerd, MN	A3, C	5	2
58	Brunswick, GA	A, B, C, G	16	4
64	Butte, MT	C	4	1
70	Cedar Rapids, IA	B, G3, 4	6	2
73	Charleston, WV	D, G	8	2
82	Clarksburg-Elkins, WV	A, B, C, D, G	20	5
85	Cleveland, TN	A, C	8	2
97	Coos Bay-North Bend, OR	A, B, C, D, G	20	5
101	Dallas-Forth Worth, TX	D, G1 and 2	6	2
113	Dickinson, ND	D, G	8	2
114	Dodge City, KS	B, C, D, G	16	4
116	Dover, DE	G	4	1
119	Duluth, MN	A, B	8	2
121	Eagle Pass-Del Rio, TX	D, G	8	2
123	Eau Claire, WI	D1 and 3	2	1
132	Escanaba, MI	A, B, C, D, G	20	5
134	Eureka, CA	A	4	1
137	Fairmont, WV	A, B, C, D, G	20	5
139	Farmington, NM – Durago, CO	A, B1 and 2, C, D, G	18	5
144	Flagstaff, AZ	C	4	1
148	Fon du Lac, WI	D4	1	1
162	Gallup, NM	A, B, C, D, G	20	5
163	Garden City, KS	B	4	1
166	Grand Forks, ND	A2 and 3	2	1
168	Grand Junction, CO	B	4	1
170	Great Bend, KS	A1	1	1
188	Helena, MT	C	4	1
194	Houghton, MI	D	4	1
197	Huntington, WC – Ashland, KY	G	4	1

BTA #	BTA NAME	CHANNELS/GROUPS AVAILABLE	# CHANNELS AVAILABLE	# LICENSES AVAILABLE
200	Hutchinson, KS	A1	1	1
201	Hyannis, MA	B, C, D, G	16	4
205	Iowa City, IA	B	4	1
206	Iron Mountain, MI	A, B, C, D, G	20	5
207	Ironwood, MI	D	4	1
221	Juneau-Ketchikan, AK	A, B, C, D, G	20	5
224	Kalispell, MT	A, B, C, D, G	20	5
231	Klamath Falls, OR	A, B, C, D, G	20	5
234	LaCrosse, WI – Winona, MN	D1 and 3	2	1
253	Liberal, KS	B, C, D, G	16	4
254	Lihue, HI	B, C1, 2 and 3, D, G	15	4
258	Logan, UT	A, B, C, D, G	20	5
259	Logan, WV	A, B, C, D, G	20	5
276	Manitowoc, WI	D4	1	1
279	Marinette, WI – Menominee, MI	A, B, C, D3 and 4, G	18	5
282	Marquette, MI	D	4	1
285	Mason City, IA	C2, 3 and 4	3	1
300	Missoula, MT	C	4	1
306	Morgantown, WV	A, B, C, D, G	20	5
310	Muskegon, MI	B, D	8	2
322	Nogales, AZ	A, B	8	2
342	Parkersburg, WV – Marietta, OH	D, G	8	2
345	Petosky, MI	B, D, G	12	3
359	Portsmouth, OH	A, C, G	12	3
362	Prescott, AZ	C	4	1
369	Rapid City, SD	G	4	1
375	Riverton, WY	B, C	8	2
381	Rock Springs, WY	A, B, C, D, G	20	5
383	Rolla, MO	A, B, C, D, G	20	5
398	Salisbury, MD	G	4	1
409	Sault Ste, Marie, MI	A2, B, C, D, G	17	5
411	Scottsbluff, NE	A, D, G	12	3
420	Seirra Vista-Douglas, AZ	A, B	8	2
446	Traverse City, MI	B, D	8	2
463	Watertown, NY	C, D, G	12	3
470	West Plains, MO	A, B, C, D	16	4
471	Wheeling, WV	D, G	8	2
474	Williamson, WV-Pikeville, KY	A, B, C, D, G	20	5

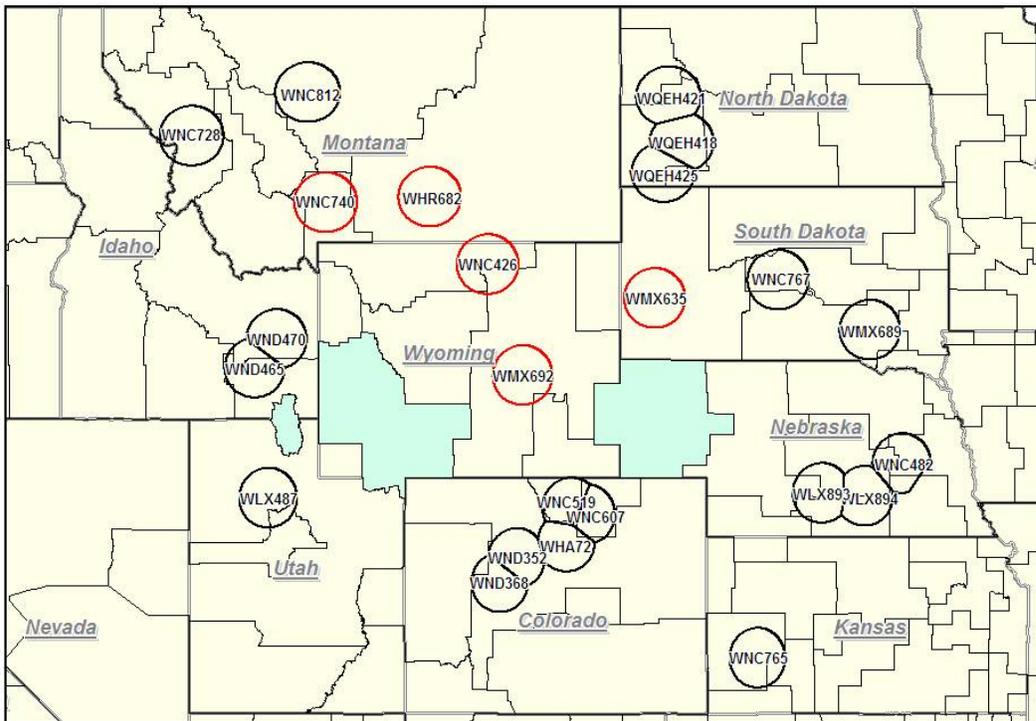
EXHIBIT 2

Examples of GSA Maximization Process and Results

Map One

Example of GSA Expansion on Channel A1 in Mountain West

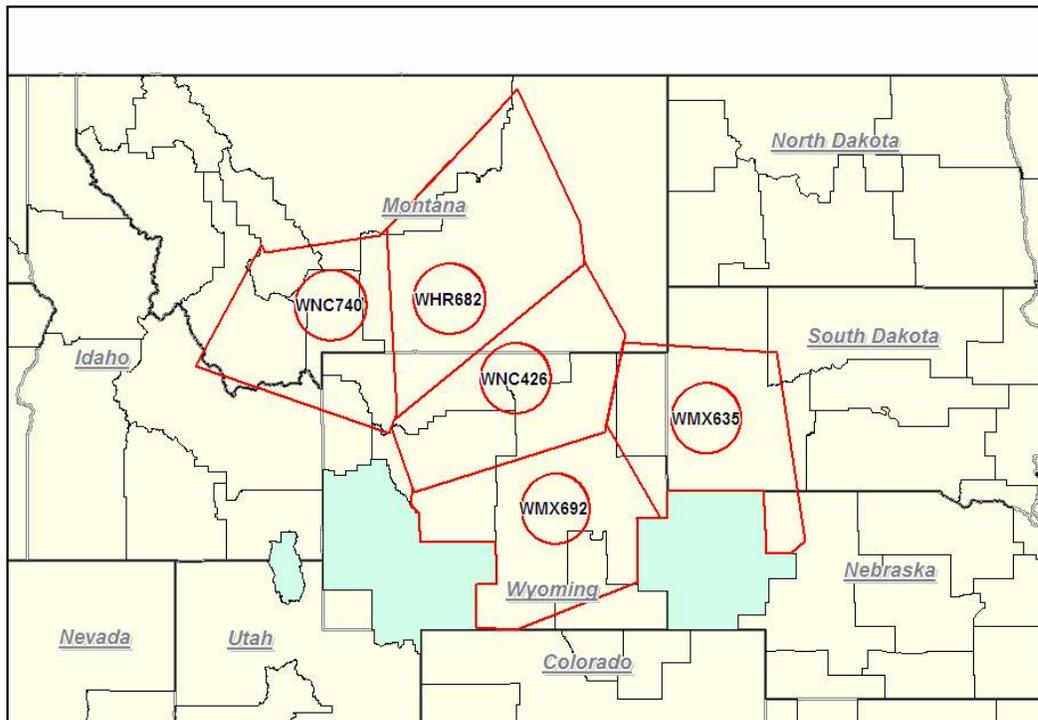
This map depicts the current 35-mile radius GSAs of five selected target stations on Channel A1 (circles shown in red) and surrounding station GSAs on Channel A1 that need to be taken into account in maximization process (shown in black). The BTAs containing no licensed GSAs on Channel A1 are shown as shaded in light blue (in this case these are the Logan UT BTA #258, the Rock Springs WY BTA #381 and the Scottsbluff, NE BTA #411). The GSA expansion will proceed outward from the center points of all GSAs shown, until all white space on A1 is absorbed. Then the shaded Logan, Rock Springs and Scottsbluff BTAs will be backed out of the expanded GSAs of all stations, so as to be available for future application BTA-wide on A1. (As shown in Exhibit 1, the entire A group would be available in each of the three BTAs.)



Map Two

Example of GSA Expansion on Channel A1 in Mountain West

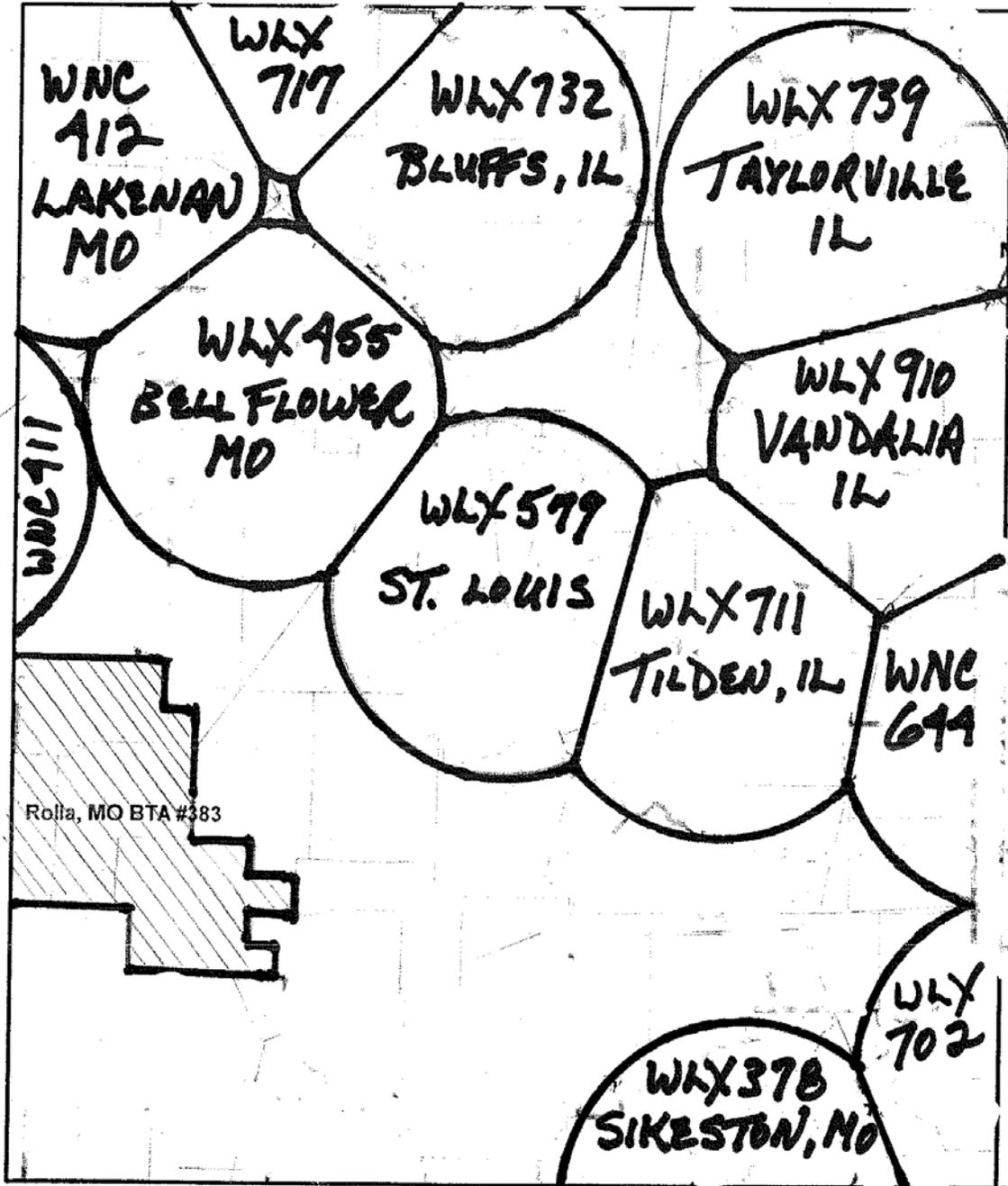
This map depicts the results of the GSA maximization process on the five target stations (again outlined in red), showing both the original GSAs and the maximized GSAs. Note that the GSAs of WMX692 and WMX635, which would otherwise have overlapped the Logan, Rock Springs and Scottsbluff BTAs (shaded in light blue), have been backed out of those BTAs. Those BTAs currently have no GSAs in them on A1, and under NEBSA's proposal they will be shielded from GSA expansion so as to be available for application BTA-wide.



Map Three

Example of GSA Expansion on Channel D1 in St. Louis Area

This map depicts the current 35-mile radius GSAs of stations on Channel D1. There is one BTA that contains no licensed GSAs on Channel D1 (the Rolla, MO BTA #383).



Map Four

Example of GSA Expansion on Channel D1 in St. Louis Area

This map depicts the results of the GSA maximization process on the target stations. The Rolla MO BTA will be shielded from GSA expansion so as to be available for application BTA-wide.

