

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
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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
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Part 1 of the Commission's Rules - Further Competitive Bidding Procedures)	WT Docket No. 03-67
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Amendment of Parts 21 and 74 to Enable Multipoint Distribution Service and the Instructional Television Fixed Service to Engage in Fixed Two-Way Transmissions)	MM Docket No. 97-217
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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
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Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets)	WT Docket No. 00-230
)	

Petition for Reconsideration of The ITFS/2.5 GHz Mobile Wireless Engineering & Development Alliance, Inc. ("IMWED")

Pursuant to Section 1.429 of the Commission's rules, IMWED hereby submits this Petition for Reconsideration ("Petition") of the Commission's Report and Order in the above captioned matter ("EBS/BRS Report and Order").¹

¹ *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*, Report and Order ("R&O") and Further Notice of Proposed Rulemaking ("FNPRM"), FCC 04-135 (rel. July 29, 2004), 19 FCC Rcd 14165 (2004).

I. About IMWED.

IMWED was formed in 2003. Currently, it is composed of six organizations that are licensed to operate ITFS systems scores of communities nationwide, ranging in size from Chicago to Kona, Hawaii.² It is a non-profit organization intended to provide member licensees with technical and business assistance needed to convert their systems successfully to digital two-way mobile operation.

Specifically, IMWED's corporate purposes are: 1) to assist ITFS and other 2.5 GHz licensees in spectrum planning and technical coordination, including, without limitation, providing technical assistance and information to ITFS licensees; 2) to facilitate the successful conversion of ITFS and other 2.5 GHz band spectrum to two-way mobile digital use in a manner that fosters the long-term viability and independence of ITFS licensees; 3) to encourage the development of new technology that enables new and expanded educational uses of 2.5 GHz spectrum; and 4) to facilitate and encourage the entry of new competitors and new technology into the wireless broadband industry in the 2.5 GHz band.

IMWED members deliver a wide variety of ITFS services. For instance, North American Catholic Educational Programming Foundation produces original instructional programming in many academic subject areas, and it also grants to county and state correctional facilities reading/phonics courses to address high inmate illiteracy rates. Through its ITFS service, Instructional Telecommunications Foundation helps elementary and secondary schools to build libraries of instructional videos in wide array

² The members of IMWED are: Chicago Instructional Technology Foundation ("CITF"), Denver Area Educational Telecommunications Consortium ("DAETC"), Instructional Telecommunications Foundation ("ITF"), North American Catholic Educational Programming Foundation ("NACEPF"), Portland Regional Educational Telecommunications Corporation ("PRETC"), and Twin Cities Schools' Telecommunications Group ("TCSTG").

of school subjects. In addition to both public and private schools, DAETC provides video service to juvenile detention facilities in the Denver area, and CITF delivers video service not only to schools but also to Chicago's Children's Memorial Hospital and five community churches.

IMWED's members have experience in secondary market transactions involving excess ITFS capacity for both video and data uses. They have been parties to excess capacity agreements with subsidiaries of a variety of well-known firms, including Sprint, BellSouth, WorldCom, Nucentrix, and Clearwire.

IMWED member organizations are looking forward to expanding their educational service to include data service (including mobile data service) for students, teachers, and educational institutions.

II. The Commission's Transition-Related Rules Need to Be Revised Significantly.

A. Economic Barriers to Transitions Should Be Reduced by Basing Transitions Upon Basic Trading Areas Rather than Major Economic Areas and Requiring Newcomers to Reimburse Proponents for a Pro Rata Portion of Transition Costs.

In the EBS/BRS Report and Order, the Commission determined that EBS/BRS spectrum would be transitioned to the new bandplan by Major Economic Area ("MEA").³

MEAs are the wrong geographic unit for transitions because they are too large. For instance, MEA #20 includes the entire state of Minnesota, a portion of western Wisconsin, all of North Dakota, most of South Dakota, and a small part of Montana. MEA #33 covers almost all of Colorado, most of Wyoming, the remainder of South Dakota, and parts of Nebraska, Kansas, and New Mexico.

³ EBS/BRS Report and Order, paragraphs 72, 86.

Because MEAs are so large, they will be very expensive---needlessly expensive---to transition. Service areas for systems using 2.5 GHz spectrum usually are constructed on a local basis, whether in a small community or large city and surrounding suburbs. Thus a firm that wishes to launch two-way data service in a single town in the eastern part of South Dakota would be forced to transition scores of facilities in either MEA #20; this would entail transitioning the Minneapolis – St. Paul market, among scores of other communities as far away as Wisconsin. Similarly, if a firm were to take on the more ambitious task of launching two-way service in Denver, there is no reason why this construction should entail bandplan transitions in far-distant portions of South Dakota and New Mexico.

Far from facilitating the roll-out of such systems, the need to pay for transitions over large geographic areas will erect a significant barrier to transitions to the development of advance wireless systems in the 2.5 GHz band.⁴ These barriers are heightened by the fact that the Commission’s EBS/BRS Report and Order does not provide for proponents to be partly reimbursed by later commercial users of transitioned spectrum. In the example of the entity that pays the very high cost of transitioning all of MEA #33 in order to launch service in Denver, others will be able to enjoy the fruits of this transition to compete in Denver, or to launch service with no transition costs in Cheyenne, WY, Colorado Springs, and other communities.

IMWED asks that the Commission require that transitions be carried out by Basic Trading Area (“BTA”) rather than by MEA. BTAs are smaller than MEAs, and thus more closely approximate the service areas of advanced wireless networks. Because

⁴ The inappropriateness of transitioning by MEA was pointed out by Commissioner Adelstein in his separate statement accompanying the EBS/BRS Report and Order.

BTAs are smaller, it will be more feasible for small firms and even individual licensees to fund transitions. As well, BTAs are a well-established unit in the 2.5 GHz service, as MMDS spectrum was auctioned by BTA in the 1990s.

Subject to safeguards to ensure that proponents are not able to repel competition from newcomers, we believe that later commercial users of 2.5 GHz spectrum in a given BTA be required to pay a pro-rata share of the out-of-pocket transition costs expended by the proponent.⁵

In the Further Notice of Proposed Rulemaking section of the EBS/BRS Report and Order, the Commission states:

We recognize that the ultimate success in recreating this band is... closely linked to the availability of investment dollars in support of wireless broadband services... [W]e seek common on whether there are additional actions that we can take that will compel additional investment. At the same time, we seek comment on whether that are any actions that we are taking that may hinder or provide disincentives to investment.⁶

In INWED's view, the single most constructive step the Commission can make with respect to stimulating investment in 2.5 GHz spectrum is to create proper incentives for proponents to come forward and fund transitions. The structures that the Commission has put in place through the EBS/BRS Report and Order are powerful incentives to shirk, rather than promote, transitions.

⁵ Newcomers should have to reimburse only a pro-rata share of documented out-of-pocket costs reasonably incurred and actually paid to non-affiliates to build and install the ITFS/MMDS equipment required for the transition. The expense pro-ration percentage should be a fraction, the numerator of which is the number of channels to be used by the newcomer in the market, and the denominator of which is the number of channels transitioned by the original Proponent. A five-year sunset on reimbursements should be imposed, in recognition of the limited useful life of ITFS/MMDS equipment. In the event of a dispute concerning the amount to be reimbursed, a newcomer should be allowed to launch service in the market immediately---prior to the end of any adjudication---and the losing party should be required pay the winner's litigation expenses.

⁶ EBS/BRS Report and Order, paragraph 374.

B. The Commission Must Prohibit Two-Way Digital Operations Prior to a Transition in any BTA.

Transitions are central to fostering new advanced wireless service because the current bandplan is unsuited to two-way use, given that channels are now interleaved and high power operation is permitted on all frequencies, a state of affairs that is likely to spread interference to low power operations over wide areas. Consequently, the Commission established as a high priority transitioning the entire country, setting a three-year deadline for accomplishing this goal.⁷

Ironically, the EBS/BRS Report and Order has created major disincentives to transitioning the 2.5 GHz band in a timely manner. Not only has it made it unduly expensive for proponents to transition the band, it also allows two-way services to be launched prior to market transitions. Rational economic actors now will seek *ad hoc* methods of commencing low-power operation on a small number of channels---thereby avoiding the high cost of becoming proponents---even if it means accepting or creating interference in certain parts of their service area.

The Commission needs to revise the system of incentives. On the one hand, it needs to lower proponents' cost of transitions, as described above. On the other, it cannot allow two-way operations prior to transitions.

III. Though the EBS/BRS Report and Order Maintains EBS as an Educational Service, the Commission's Rules Do Not Adequately Promote or Protect that Status.

In the EBS/BRS Report and Order, the Commission preserved EBS as an educational service and maintained the eligibility restriction that requires EBS licenses to be held only by non-profit licenses, subject to (relatively rare) exceptions set forth in the former

⁷ *Id.*, paragraph 83.

Section 74.990 of the Rules.⁸ However, maintaining EBS as a genuinely educational service requires an ecology of regulations that supports and ensures that status.

A. The Commission Should Update the Standards for Educational Service That Pertain to Two-Way Digital EBS Operation.

The EBS/BRS Report and Order maintains the Commission's prior requirement that licensees of digital EBS facilities reserve at least 5% of transmission capacity for educational purposes.⁹ However, to date the FCC has provided little guidance as to how this rubric is to be applied in practice. This silence opens the way to abuse. Could, for instance, the set-aside be met through capacity made available only in sparsely-populated geographic areas? Capacity made available only in the middle of the night? Or--- improbably, but as actually done in some existing leases---merely through providing data equipment to as few as five educational sites?

IMWED believes that the percentage minimum must apply to overall system data throughput at all times in all locations. A stronger (preferable) standard is no less than 5% of full-day measured system throughput, with data transmitted at such locations and times as the EBS licensee specifies in its discretion. We ask that upon reconsideration the Commission enunciate these principles as a guide to EBS licensees in crafting lease agreements.

B. The Commission Should Raise the Minimum Quota for Educational Content for Digital EBS Systems.

As the Commission parsed the record in the above captioned proceeding, it found that "EBS services provides critical educational services such as web-based and streaming video for instruction in adult literacy and basic skills, emergency medical and

⁸ *Id.*, paragraph 152.

⁹ *Id.*, paragraph 181.

fire services, law enforcement, and corrections,” and went on to praise a variety of instructional and educational benefits of the service.¹⁰ Yet, at the same time, the Commission acknowledged that, over the years, it has progressively reduced the educational content obligations imposed on EBS licensees.¹¹

IMWED believes that the Commission was correct in maintaining the educational character of EBS and in recognizing the role of education, both in this particular service and communications policy in general. However, we question whether a service that can be 95% commercial can legitimately be characterized as educational. As we move into a new technical and regulatory era for EBS, we believe that the minimum educational usage, as applied to data service, should be raised.

As the EBS/BRS Report and Order recognizes, this is not a new issue. Indeed, it arose in the Commission’s 1998 fixed two-way proceeding, which for the first time established standards for data uses on ITFS spectrum.¹² At that time, the Commission considered a compromise proposal reached by the National ITFS Association, the principal trade group representing ITFS licensees, and the Wireless Communications Association, an organization representing commercial spectrum interests. These two groups’ proposal revolved around the concept of recapture, by which spectrum initially devoted to commercial use can be reclaimed by an ITFS licensee and devoted to educational uses.

Though the Fixed Two-Way Order praised the joint industry compromise, which it referred to as the *Joint Statement*, the Commission rejected many of the compromise’s

¹⁰ *Id.*, paragraph 151.

¹¹ *Id.*, paragraph 150.

¹² Amendment of Parts 21 and 74 to Enable Multipoint Distribution Service and Instructional Television Fixed Service Licensees to Engage in Fixed Two-Way Transmissions, *Report and Order*, 13 FCC Rcd 19112. (“Fixed Two-Way Order.”)

key recommendations, and, instead, established a 5% minimum educational reservation for data service.¹³

Under the *Joint Statement* plan, the Commission was to establish a “floor” reservation level, as follows: initially, as little as 5% of capacity could be devoted to education, though the licensee had to retain the ability to reclaim at least a further 5% of capacity annually until such time as it used 25% of channel capacity for education.

There is much to commend in this compromise. If one fears that a licensee at first might not be able to utilize a full 25% of capacity productively, this regime avoids the inefficiency of having a significant amount of throughput remain idle. The fact that recapture can be gradual protects an operator---and its customers---from sudden swings in available capacity. Most importantly, this form of reservation insulates the public and the educational community from a licensee’s possible mistake in locking up spectrum for 15 years under a contract that designates a maximum of 5% of capacity for education, despite a growing need for more.¹⁴ While it is in the public interest for licensees and operators to have flexibility, and to enter into efficient secondary market transactions, it is not in the public interest to allow a licensee to indenture 95% of its capacity for 15 years.¹⁵

C. The Commission Should Prohibit the Inclusion of License Purchase Rights in EBS Lease Agreements.

¹³ Fixed Two-Way Order, paragraph 89.

¹⁴ There is nothing in the NIA-WCA compromise that would keep a licensee and operator from negotiating a higher educational set-aside. Rather, the preceding was to be an FCC-mandated “floor,” below which no contract could go.

¹⁵ IMWED is aware that numerous parties have entered into excess capacity agreements in accordance with the rules set forth in the Fixed Two-Way Order. These agreements should be grandfathered, and the more stringent standards should be applied upon their expiration or termination.

Despite the fact that the Commission has reiterated that EBS licenses may be held only by non-profit entities,¹⁶ commercial entities are continuing their efforts to purchase EBS spectrum. As documented by the attached declaration of Kevin-John Lindsay, for-profit operators now are commonly seeking to insert provisions in EBS lease agreements that give them the right to purchase the EBS licenses, with such options conditioned upon the Commission's changing eligibility standards in the future. To the extent that commercial entities offer up-front cash as an incentive for the licensee to agree to such an unsavory proposition, this practice reinforces the purchase-like nature of the proposed transaction.

IMWED believes that it is clearly inappropriate for commercial entities to be lining up EBS purchase deals at the same time that the Commission has barred the commercial purchase of EBS spectrum. Indeed, to permit commercial entities to obtain purchase rights ensures that the eligibility question can never be resolved, in that it creates a lasting incentive to subvert the Commission's policy. Accordingly, IMWED asks the Commission, on reconsideration, to ban this practice.

D. The Commission Should Require That All EBS Capacity Leases be Filed with the FCC in Unredacted Form, or, in the Alternative, Be Made Available by EBS Licensees for Public Inspection.

The Commission maintains a number of requirements pertaining EBS leasing, including those regarding the amount of educational uses of the spectrum, the length of the lease term, etc.¹⁷ There is no means that the FCC, or the public, can ascertain that these requirements are met if the texts of the leases are not disclosed, or are disclosed only in redacted form. Accordingly, IMWED urges the Commission to require that all

¹⁶ Subject, of course, to the Section 74.990 exception.

¹⁷ See the EBS/BRS Report and Order at paragraph 181.

EBS capacity leases continue to be filed with the FCC---unredacted---or, in the alternative, made available by EBS licensees for public inspection at their principal place of business.

IV. The Commission Should Clarify that Legacy Interference Agreements, Such as Analog Frequency Offset Agreements, Do Not Apply to Low-Power Digital Operation.

During the prior era when analog video was the dominant use of 2.5 GHz spectrum, ITFS and MMDS licensees often entered into contractual agreements requiring continued offset operation. While these agreements will remain appropriate for EBS/BRS high-power mid-band channels that continue analog transmission, such agreements will block entire bandplan transitions if they are applied to low-power LBS or UBS channels. Indeed, it makes no sense to impose these agreements designed for high-site, high-power operations on low-site, low-power UBS and LBS operations. Similarly, they will impede a transition if the plan calls for digital transmission on MBS channels in a community, while licensees in a neighboring market remain analog and seek to enforce legacy offset agreements. For this reason, the Commission should clarify that such legacy agreements are enforceable only to the extent that they govern analog operations in the MBS. In other words, any party to such an agreement should be free to disregard it, without liability, in proposing and operating LBS and UBS facilities, as well as digital MBS facilities.

Respectfully submitted,

THE ITFS/2.5 GHz MOBILE WIRELESS
ENGINEERING & DEVELOPMENT ALLIANCE,
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By: /s/
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Dated: January 10, 2005

Declaration of Kevin-John Lindsay

1. I am President of the consulting firm, Harvests LLC (HLLC).
2. In our work for our clients we compile individual and collective data from EBS licensees regarding spectrum utilization and availability. The geographic scope of the analysis focuses on the top fifty U.S. Metropolitan Service Areas.
3. Though the project is still underway, over the course of numerous interviews to date with licensees in various markets, we have discovered what may be an alarming trend emerging within the EBS community. In multiple instances, during the past nine months, licensees have described receiving leasing proposals from commercial wireless carriers for excess capacity spectrum which include in their terms the right to purchase the license, assuming a change in EBS rules to permit such a sale. Perhaps as an inducement to enter into the proposed lease, the prospective lessee offered a substantial up-front cash payment.
4. I, along with members of the project team, have conducted interviews with licensees who have received and are presently considering entering into lease agreements with wireless providers that include such provisions.

I declare under penalty of perjury that the foregoing is true and correct. Executed on December 10, 2005.

Attest,

/s/
Kevin-John Lindsay

*This unsworn declaration is submitted in lieu of an affidavit pursuant to Section 1.16 of the Commission's Rules.