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

In the Matter of	)	
	)	
Amendment of Parts 1, 21, 73, 74 and 101 of	)	WT Docket No. 03-66
the Commission's Rules to Facilitate the	)	RM-10586
Provision of Fixed and Mobile Broadband	)	
Access, Educational and Other Advanced	)	
Services in the 2150-2162 and 2500-2690	)	
MHz Bands	)	
	)	WT Docket No. 03-67
Part 1 of the Commission's Rules – Further	)	
Competitive Bidding Procedures	)	
	)	MM Docket No. 97-217
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	)	
	)	WT Docket No. 02-68
Amendment of Parts 21 and 74	)	RM-9718
of the Commission's Rules With Regard to	)	
Licensing in the Multipoint	)	
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Instructional Television Fixed Service for the	)	
Gulf of Mexico		

Comments of American Association of School Administrators (AASA), Association of Educational Service Agencies (AESA), Association of School Business Officials International (ASBO), Consortium for School Networking (CoSN), International Society for Technology in Education (ISTE), National Association of State Boards of Education (NASBE), (National Education Association (NEA), National Association of Independent Schools (NAIS), National Rural Education Association (NREA), Organizations Concerned about Rural Education (OCRE), and Rural Schools and Community Trust

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Summary

The purpose of the Educational Broadband Service (EBS), and its predecessor, the Instructional Television Fixed Service (ITFS) has always been to promote education, and education should be at the center of this proceeding. According to the most recent Census Bureau estimates, there were 54 million K-12 students in the United States in 2006 and another 20.4 million college and graduate school students. The Schools believe the question to be answered here is: what is in the best interest of these 74.4 million students.

EBS/ITFS has had several different incarnations in its 45-year existence. Today's wireless broadband service, EBS, is a far cry from the original point-to-point, closed circuit service called ITFS. And, whereas ITFS was intended for the transmission of instructional programs to students in classrooms, EBS is generally leased to commercial enterprises that serve the public. The Schools feel that the focus should return to education.

The best thing for students in the United States is to award future EBS licenses to entities that represent all eligible and interested institutions within a service area. This approach will not only help education but it will also expedite deployment of wireless broadband. Moreover, embracing this objective will go a long way in resolving the remaining issues that have been raised.

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Rural Education Association (NREA), Organizations Concerned about Rural Education (OCRE), and Rural Schools and Community Trust (hereinafter referred to collectively as "The Schools") by counsel submit these comments in response to the Further Notice of Proposed Rulemaking. 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 Report and Order and Further Notice of Proposed Rulemaking*, WT Docket No. 03-66, RM-10586 (March 20, 2008) ("Third Report and Order").

The parties to these comments represent a broad spectrum of the educational community, particularly grades K through 12. According to the most recent Census Bureau estimates, there were 54 million K-12 students in the United States in 2006 and another 20.4 million college and graduate school students.[1]

Founded in 1865, AASA is a non-profit professional association for more than 13,000 local school system leaders. AASA's mission is to support and develop effective school system leaders who are dedicated to the highest quality public education for all children. AESA is a professional organization serving 553 ESAs in 45 states. The mission of AESA is to support and strengthen regional educational service agencies. ASBO is the professional association representing the financial leaders in school districts who run the budget, ensure the proper environment for learning by managing the transportation, nutrition, facility maintenance, and technology systems among others, as well as search for additional sources of revenue to support the district's mission. CoSN is the country's premier voice in education technology leadership, serving K-12 technology leaders who, through their strategic use of technology, improve

[1] S1401. School Enrollment, 2006 American Community Survey, U.S. Census Bureau. http://factfinder.census.gov/servlet/STTable?_bm=y&-qr_name=ACS_2006_EST_G00_S1401&-ds_name=ACS_2006_EST_G00_&-state=st&-_lang=en

teaching and learning. ISTE is the premier membership association for educators and education leaders engaged in improving teaching and learning by advancing the effective use of technology in PK-12 and teacher education. ISTE represents more than 85,000 education professionals worldwide. NASBE exists to serve and strengthen state boards of education in their pursuit of high levels of academic achievement for all students by strengthening state leadership in educational policymaking, promoting excellence in education of all students, advocating equality of access to educational opportunity, and assuming continued citizen support for public education. NAIS is the national voice of independent education. It offers standards, targeted resources, and networking opportunities for our 1,300 member schools. NEA believes every child in America, regardless of family income or place of residence, deserves a quality education. In pursuing its mission, NEA has determined that it will focus the energy and resources of its 3.2 million members on improving the quality of teaching, increasing student achievement and making schools safer, better places to learn. NREA is the oldest established national organization of its kind in the United States. NREA works to be the leading national organization providing services which enhance educational opportunities for rural schools and their communities. OCRE is a coalition of more than two dozen education, farm, rural, technology and utility organizations. The OCRE coalition is dedicated to the improvement of public education and economic development in rural America. Rural Schools and Community Trust is a national nonprofit organization addressing the crucial relationship between good schools and thriving communities. Its mission is to help rural schools and communities get better together. Working in some of the poorest, most challenging places, the Rural Trust involves young people in learning linked to their communities, improves the quality of teaching

and school leadership, and advocates in a variety of ways for appropriate state educational policies, including the key issue of equitable and adequate funding for rural schools.

1. Education is the raison d'etre of EBS.

As its very name suggests, EBS was intended for educational purposes. But EBS is only the most recent manifestation of how the ether has been used to serve education. The idea itself is almost as old as radio – and older than the Federal Communications Commission. In PBS, Behind the Screen (1997), Laurence Jarvik described pioneering efforts in radio education:

> The University of Wisconsin's radio station, WHA, considered the country's first educational broadcaster, officially went on the air in 1919, though it had actually started in 1917 as experimental station 9XM. The station's purpose was "to share with the people of the state the advantages of learning on the campus." After ten years, WHA came to specialize in three kinds of programs typical of educational broadcasting at that time: agricultural information for farmers (The Farm Program); domestic science for housewives (The Homemakers' Hour); and University of Wisconsin Extension talks for students. In 1931, the university established the "Wisconsin School of the Air," and two years later it began its "College of the Air" broadcasts, offering courses for credit. In 1921, Brigham Young University became the country's second educational broadcaster, its radio license granted to "the Latter Day Saints University." It brought instructional programming similar to the Wisconsin prototype to listeners in Utah.

Id. at 5.

In 1962, Congress gave the FCC a specific mandate to help educational institutions in the guise of the Educational Television Act of 1962. The Act's principal purpose was to fund the educational broadcasting system. However, Congress was generally concerned that the American educational system might be failing and that communications could help. The public was still smarting from the fact that the Soviet Union beat the United States into space with the launch of the Sputnik satellite in 1957. This gave rise to the notion that there was an "education gap" favoring the Soviets

Instructional broadcasts seemed one way to close this gap. The NBC television network, for example, briefly experimented with "Continental Classroom." Professor Harvey White of

the University of California taught a for-credit course in physics.[2] Students in the Eastern Time Zone got up at 6:30 a.m. to attend class on television. Since the show was broadcast live, students farther west had to start even earlier.

Congress was interested in classroom uses of the medium. The Senate Report on the Educational Television Act found: "Current research and experimentation on a local and regional basis has only scratched the educational surface in revealing the unlimited potential that exists in the field of television as an educational tool." Senate Report No. 67, 1962 U.S. Code Congressional and Administrative News 1614, 1615. Dr. Charles H. Boehm, superintendent of public instruction in Pennsylvania, testified:

> Educational television offers vast possibilities for the solution of many of our most serious education problems.... High school and college diplomas are given and have, for several years, been given to students who have completed television courses. Only through educational television can courses given by the Nation's best teachers reach ambitious students in small communities, in the remote and sparsely populated areas of the country. *Ibid*.

The Report saw the same future for instructional uses of television as earlier visionaries had seen for radio:

> The greatest minds of our time can share their knowledge with pupils all over the country and eventually all over the world. Their skill, their knowledge, and their experience can be brought to the small schools located thousands of miles away through the medium of television. *Id.* at 1616.

Indeed, the Report continued: "There exists today an educational gap that is as far reaching in its implication as any so-called gap that might confront our country. In this instance, in the opinion of your committee, a good way, and surely a quick way, of closing the gap is through television." *Id.* at 1619.

[2] See, Verne A. Stadtman, The Centennial Record of the University of California (1967).

Congress wasn't just thinking about broadcasting educational programming to the home, which was funded by the legislation; it wanted television sets in schools. John L. Burns, president of television set manufacturer RCA, testified:

> At Hagerstown, Md., four teachers now provide music and art lessons that would have required 34 teachers before television. In Dade County, Fla., the use of cafeterias and auditoriums for large TV classes has permitted 30 percent more pupils to use each school building, saving $3 million in capital construction costs alone. *Ibid*.

Congress even seemed to like what Montpelier, Indiana, had in mind, an airplane circling 23,000 feet above the town broadcasting educational programs to schools. *Id*. at 1617. In short, the Senate Report accompanying the landmark 1962 educational television legislation showed a broad Congressional intent that the FCC should do something to help schools.

It was in this atmosphere that the Instructional Television Fixed Service (ITFS) was born. The Commission released its first Notice of Proposed Rulemaking for Educational Television Fixed Stations on July 25, 1962, less than three months after passage of the Educational Television Act. 27 FR 7739 (Aug. 4, 1962).[3] The FCC outlined two different educational operations:

> There is a need for a broadcast type of operation whereby educational and cultural material as well as selected types of entertainment are transmitted for the purpose of being received by the general public on conventional television receivers located in individual homes. <u>There is also a need for the transmission of instructional material to selected receiving locations for display on conventional TV receivers located in classrooms, lecture halls, industrial plants, hospitals, rehabilitation centers, and other similar places, as well as a limited number of private homes</u>. (Emphasis added) *Ibid*.

The Commission felt instructional applications would require "the use of more than one channel if courses in different subjects are to be given simultaneously." *Ibid*.

In a test of the concept and technology before release of the notice, an equipment manufacturer installed a system for the Union Free School District Number 18 in Plainedge,

[3] The word "Educational" in the name of the service would be changed to "Instructional" by the final order.

New York, to serve seven school buildings in the town. The Commission estimated the cost of such a system to be between one-fifth and one-third the cost of a broadcast station. *Ibid.*

The Notice of Proposed Rulemaking envisioned a much more expansive permissible use for these Educational Television Fixed Station – indeed one that would serve more than accredited institutions – than the one that emerged in the final rules. The Commission proposed:

> Operated as a private system rather than a broadcasting system, transmission could include subject material for supervised instruction; training material in special skills; safety programs; material designed for the rehabilitation of the aged, infirm, or mentally disturbed; clinical studies; new arts and crafts; material intended to keep professional and semi-professional people abreast of the state of the art in various fields; in-service training for teachers; instructional material for shut-ins; program material for purposes of entertainment or cultural advancement; as well as administrative traffic. *Id.* at 7740.

The Commission also contemplated that the Fixed Service might be used to relay signals from noncommercial educational broadcast stations to classrooms.

The final rules, released a year later, narrowed the scope of the service from the view in the Notice – which would have allowed ITFS stations to be used for much the same purposes as educational broadcast stations – to the more limited idea of a purely classroom service: "[T]he most important function of the new service would be to reach groups of students assembled in classrooms or other similar places for the specific purpose of using the instructional material so transmitted." Educational Television Report and Order, Docket No. 14744 ("ETV Order"), 39 F.C.C. 846 (1963), recon. denied, 39 F.C.C. 873 (1964).

The Commission observed that it was creating the new service to avoid unnecessary use of television broadcast channels for instructional purposes. It wanted to leave those available for "the transmission of cultural and educational programs designed for reception by the general public on receivers located in individual homes." *Ibid.* ITFS, in short, was created primarily to benefit traditional educational institutions, *i.e.*, schools.

Today, 45-years after ITFS was first established and despite the fact that ITFS is now EBS, educating 74.4 million students in the United States remains the *raison d'etre* of the service.

2. EBS has the additional mission of furthering national broadband policy.

In 2004, the Commission converted the Instructional Television Fixed Service to the Educational Broadband Service in order for the spectrum to be used for an anticipated, national, wireless broadband system. 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 and Further Notice of Proposed Rulemaking*, WT Docket No. 03-66, 19 FCC Rcd 14165 (2004). In further proceedings in 2006, the Commission explained how it envisioned the dual policies of education and wireless broadband came together:

> We facilitate the development of wireless broadband systems in this band that could offer consumers another choice for broadband access – competing in price and features with existing landline offerings, reaching areas not currently served by landline networks, and offering consumers portability or mobility. In addition, we facilitate use of this band by educational institutions, thereby improving the ability of educators to serve America's students through wireless technology. Accordingly, through these actions, we make further progress towards our goal of providing all Americans with universal, affordable access to broadband technology. 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 Memorandum Opinion and Order and Second Report and Order*, WT Docket No. 03-66, 21 FCC Rcd 5606 (2006) (*R&O*). ("Second Report and Order").

Therefore, the aim of this Further Notice of Proposed Rulemaking is to develop a scheme for licensing the remainder of the EBS spectrum in a way that will both maximize the benefit to education while at the same time expediting deployment of a national, wireless broadband network.

3. Because the nature of ITFS/EBS has changed, a new approach to licensing is required.

As originally conceived, ITFS was a point-to-point service. For example, a school district was licensed to send a narrow microwave beam with instructional television signals between a central transmitter and outlying schools. Only the receiving dishes were protected. Thus, different schools in the same geographic area could be licensed. Because of this, the likelihood of competing, mutually exclusive applications was reduced. Theoretically, all schools might have licenses, and all schools might benefit.

The notion of protected service areas came later. The reason for the change was that the FCC concluded ITFS was underutilized. There was excess capacity, which might be used by commercial, wireless cable operators for the purpose of competing with conventional, wired cable systems. But wireless cable was a point-to-multipoint technology and needed protected service areas. Hence, ITFS licenses for the first time became exclusive over relatively large service areas, and only one license could be issued for a community. *Instructional TV Fixed Service*, 94 F.C.C. 2d 1203 (1983).

Although this decision resulted in a flood of applications, most eligible institutions still didn't apply. Their reasons surely varied. They may not have been aware of the potential. They may not have had the resources to apply. Or, they may not have thought it was worthwhile. Whatever the reasons, it is clear that some institutions applied and got licenses while the majority did not.

These procedures were only in place for twelve years. In 1995, the Commission stopped accepting new applications. This decision gave rise to the instant proceeding, which is to decide how to award licenses in those areas for which no one became interested until late in the game. The important fact to bear in mind is that the Commission policy of giving ITFS licensees large,

exclusive, protected service areas only prevailed for 12 of its 45 years of existence. The original and more general policy has been to allow all eligible entities to participate.

Changes in technology and the concomitant conversion of this service from video to broadband have changed things and have created new demand for licenses in unserved areas. If future licenses are issued under the old rules, competing applications may well be filed for almost every available license. Schools, colleges, and other eligible institutions will be fighting with each other over the right to hold a license and get the lease revenue that such a license may generate. Such an unseemly prospect was never imagined when ITFS was created in 1963, and it is not one to be readily embraced today.

4. Frequency auctions do not help education.

The Notice of Proposed Rulemaking asked whether future EBS licenses should be awarded by auction pursuant to the Balanced Budget Act of 1997 (Budget Act) 47 U.S.C. §309(j). Clearly, the answer is no. There are at least three reasons for this.

First, the very notion that the Commission would require schools to compete against each other for licenses and would give the U.S. Treasury funds that are earmarked for education is so appalling that little needs to be said against it. Imagine school superintendents being asked by parents why their schools can't afford new textbooks. Are superintendents to answer that the money, taxpayer money, was spent at an FCC auction? The superintendents might as well say they spent the money at the track. Furthermore, relying on auctions could raise significant inequities between school districts in different states. Many school districts may not have the legal authority to commit funds under an auction process – for example, in states that follow the Dillon Rule, a local entity typically has only the powers expressly granted to it by the state.

Unless state procurement statutes expressly authorize participation in an auction process, a school district may not be able to get the benefit of an EBS license.

Second, taking money away from schools in an auction doesn't carry out the 46-year old Congressional mandate and the 45-year old Commission policy to use this spectrum for the good of education. Since the early days of radio, pecuniary interests have been set aside when it came to using communications technology to help students. Now hardly seems the time to reverse this policy and auction off the educational spectrum in order to reduce the national debt. And, what sense does it make for schools to give money to the U.S. Treasury in an auction when the Treasury may simply return the money to schools through grants? Better to cut out the middleman. Absent clear evidence to the contrary, it should not be assumed that Congress intended this result when it passed the Budget Act.

Third, and most importantly, the Budget Act only requires auctions as a way of resolving competing applications. ITFS was not conceived as a competitive service. For the first twenty years, ITFS licenses were awarded, and protected, on a point-to-point basis. It was as a practical matter unlikely that one licensee's operation would interfere with another's. Not until 1983, when it decided to allow leases and point-to-multipoint commercial uses, did the Commission begin to award licenses on an exclusive basis. The Commission should return to its original policy. Nothing requires the Commission to use auctions for future license awards if it devises procedures that obviate competing applications as it once did.

5. Future EBS licenses should be awarded through non-competitive, negotiation procedures.

Congress has not categorically demanded that competitive bidding be used for all applications. Rather, it gave the Commission the option of using other procedures if they avoid having the "mutually exclusive applications" that trigger auctions.

> If, consistent with the obligations described in paragraph (6)(E), mutually exclusive applications are accepted for any initial license or construction permit, then … the Commission shall grant the license or permit to a qualified applicant through a system of competitive bidding…. 47 U.S.C. 309(j).

Congress sketched out what such alternative procedures might be in paragraph (6)(E) by saying:

> Nothing … in the use of competitive bidding shall be construed to relieve the Commission of the obligation in the public interest to continue to use engineering solutions, negotiation, threshold qualifications, service regulations, and other means in order to avoid mutual exclusivity in application and licensing proceedings…. 47 U.S.C. 309(j)(6)(E).

The Schools, therefore, propose a scheme that will maximize the benefit to classroom education while expediting deployment of a national, wireless broadband network. It is a scheme that will comply with the Budget Act by employing a negotiation procedure for the award of future licenses.

The central idea is this. The Commission should stipulate that future licenses will be awarded to single entities that are composed of all eligible and interested entities within the license area. As a practical matter, this might mean awarding licenses to consortia, but there may be other solutions. The important thing is that the procedure should allow all eligible and interested institutions to participate in licensing and leasing and that education as a whole will benefit rather than the benefit running to some institutions to the exclusion of others.

As stated earlier, this aligns well with the original ITFS procedures that licensed on a point-to-point basis and hence contemplated that most interested schools could have ITFS licenses. The proposed procedure would do the same by allowing all interested educational institutions to participate in future license awards.

The Schools believe the resolution of most other issues may depend on whether the Commission adopts this proposal. For example, the significance of the definition of future service areas may be reduced if all eligible institutions are assured of a right to participate.

6. Because ITFS and EBS have always focused on classroom education, only educational institutions with classrooms or campuses within a service area should be eligible.

Classroom use of communications technology was the motivating purpose for creating an educational service in the first place. Just as there was no intent originally to create a service where schools would compete against each other for licenses, there was no intent for an institution to hold a license if it did not have classrooms within the service area. For an educational institution having its campus in New York, as an example, to hold a license for California, or a national license for that matter, is contrary to policy traditions.

7. If EBS licenses are awarded on a non-competitive basis, the Commission might consider multi-channel group licenses.

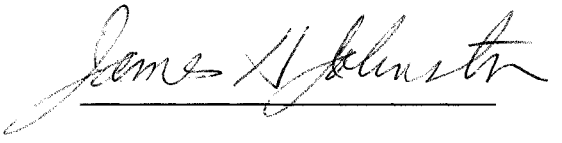
The EBS spectrum has been divided into channel groups in order to maximize the number of different educational institutions that might be licensed in a community. If all eligible and interested institutions can share the license, multiple channel groups might no longer be necessary. In addition, such a change might allow for larger and stronger consortia and thus facilitate national wireless broadband deployment by reducing the number of licenses.

8. Conclusion

The Commission has a unique opportunity in this proceeding to refocus EBS and return it to its original mission of aiding education. It can do this by eliminating exclusivity in the award of licenses and by requiring future licensees to represent all eligible and interested educational institutions in their service areas. This is what is best for students in the United States. By

taking this approach, the Commission will also assist the rapid completion of a national, wireless broadband network.

Respectfully submitted,



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