

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Amendment of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands)	WT Docket No. 03-66 RM-10586
)	
Part 1 of the Commission's Rules – Further Competitive Bidding Procedures)	WT Docket No. 03-67
)	
Amendment of Parts 21 and 74 to Enable Multipoint Distribution Service and the Instructional Television Fixed Service Amendment of Parts 21 and 74 to Engage in Fixed Two-Way Transmissions)	MM Docket No. 97-217
)	
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
)	

**COMMENTS OF
PROFESSOR GERALD R. FAULHABER**

Professor Gerald R. Faulhaber, of the University of Pennsylvania, submits these comments to the Federal Communications Commission on the above-captioned dockets and to the comments, *inter alia*, of the Catholic Television Networks and the National ITFS Association, comments filed September 8, 2003, reply comments filed October 23, 2003, and an *ex parte* letter filed May 4, 2004.

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Dated: June 1, 2004

¹ "Spectrum Management: Property Rights, Markets, And The Commons," with David Farber, in L. Cranor and S. Wildman, eds., *Rethinking Rights and Regulations: Institutional Responses to New Communication Technologies*, MIT Press, Cambridge, MA: 2003. Also published as **スペクトラム管理** —財産権、市場、commons— GLOCOM Review 8:1 (73-2), 2003; also published as Working Paper 02-12, AEI-Brookings Joint Center, at <http://www.aei.brookings.org/publications/index.php?tab=author&authorid=258>.

INTRODUCTION

The Federal Communications Commission's Notice of Proposed Rulemaking (NPRM) on Instructional Television Fixed Service (ITFS) requested comments on modifying the eligibility requirements for licensees of spectrum in the 2500-2690 MHz band. Currently, ITFS licensees are limited to educational institutions; the FCC suggested permitting any entity to hold an ITFS license, in keeping with its recent policy direction of eliminating regulatory restrictions on spectrum use unless there is a direct and compelling public interest in such restrictions. A number of incumbents have opposed lifting the requirement that licensees be educational institutions, and put forward arguments that allege to show that the requirement is in the public interest. One such set of filings is that of the Catholic Television Network and the National ITFS Association; other filings make similar arguments.

The basis of the objections appears to be that if commercial interests, such as broadband Internet access providers, are permitted to be licensees, then educational institutions will lose "control" of the spectrum and its uses will ineluctably migrate to commercial uses and away from educational uses, which would defeat the public interest rationale for ITFS in promoting education. Once short-sighted educators let the spectrum slip away to commercial interests, so their argument goes, it can never be recovered for education. As they state in their letter to Chairman Powell,² "Thus, open eligibility would result in a *de facto* reallocation of ITFS from educational to commercial control."

It is the purpose of this note to demonstrate that these perceived threats are groundless. Educational institutions will surely have access to spectrum that they need for educational purposes. I also demonstrate that it is highly unlikely that the price of buying or selling licenses will change at all should commercial entities be permitted to hold licenses. Therefore, there is no reason to fear that either spectrum will not be available for educational purposes or that it would only be available at prices far higher than in today's (educator only) market. The only feature that would change is that educational institutions would not be forced to lease to commercial firms or sell to another educational institution in order to monetize their asset; under the FCC proposal, they could sell to anyone.

ITFS SPECTRUM IS ALREADY COMMERCIALIZED

As discussed in the NPRM, ITFS licensees have been permitted to lease "spare" spectrum to commercial interests for over a decade, under increasingly relaxed regulation. While some institutions do use one-to-many broadcast TV for instructional purposes, other technologies such as coaxial cable and the Internet provide newer and more convenient technologies for educational purposes. As the demand for actual educational uses of the ITFS band declined, the FCC permitted licensees a great deal of flexibility in their disposition of this spectrum, including unlimited leasing to any party and the ability to sell or buy bandwidth (subject to FCC approval). The only residual restriction related to the original educational mandate was that 5% of the bandwidth had to be used for educational purposes, a definition that includes administrative use of licensed bands.

Thus, commercial interests are very active in this market as lessees, and apparently most of the ITFS spectrum is currently being used by commercial firms. We have no doubt that the educational licensees are astute enough to charge a full market price for their commercial leases,

² Letter to Chairman Michael Powell, May 12, 2004, WT 03-66 Written Ex Parte Presentation, from Catholic Television Network and National ITFS Association.

capturing the full commercial value in that price, and do not enter into contractual relationships not in their own interest.

VOLUNTARY SPECTRUM SALES ARE NOT A “MYTH”

Commenters claim that spectrum sales would not be voluntary, because commercial interests would demand that educational licensees would sell...or else, and that licensees would be forced to comply. Not so; bargaining is never one-sided, and there is no reason to suspect it would be in this case. In fact, it is more likely that corporations would prefer leases to ownership for tax purposes. But in any case, there are likely to be enough commercial firms in the market so that licensees should be able to reach a fair bargaining outcome. There is no evidence whatsoever that educational licensees would simply “roll over” for commercial interests.

INCUMBENT LICENSEES WOULD BE TEMPTED TO SELL QUICKLY AND LOSE ACCESS TO SPECTRUM FOREVER

Commenters claim that since educational institutions are under budget pressure, they would sell their spectrum to commercial firms even though it was not in their long-term interest. Then once the spectrum is gone, it can never be recovered.

This argument sounds like a bad 19th century novel in which the earnest but dim-witted yeoman sells his birthright for a mess of potage, then suffers for the rest of his life for his foolishness. Do the commenters think so little of the business acumen and intelligence of their members that they don't trust them to look after their own interests? Are ITFS licensees so dim-witted that the FCC (and the commenters) must protect them from themselves? Moreover, licensees in fact can sell their licenses today, to other educational institutions. And yet I am not aware that silly trades are the norm in this market; quite the contrary.

And what are we to make of the assertion that once sold, spectrum can never be recovered? Perhaps it is unlikely that a seller could buy back the exact frequency band he sold, but it is very likely that other suitable spectrum would be available for sale or lease. Of course, this may require an equipment upgrade, but then mistakes are sometimes costly to correct; costly, but by no means impossible. Under the current regime, there is a market for ITFS licenses, and under the proposed open regime, there will be a much thicker market for licenses, and there is no reason to believe that buyers will not be able to satisfy their needs for spectrum in this market.

WOULD EDUCATORS LOSE THEIR “PLACE AT THE TABLE” IN DISCUSSIONS OF NEW TECHNOLOGY?

As new technologies of any sort are developed, the developers do well to consult closely with the paying customers. In fact, paying customers who themselves have paying customers, such as wholesalers and lessors (such as ITFS licensees) do well to consult with *their* customers to help them in discussing new technologies. To the extent that educational institutions are the final paying customers, then market forces will ensure that they do indeed have a place at the table. If they are lessors/wholesalers, then their place at the table exists solely to pass on the needs of their paying customers to technology developers, a role which seems of secondary importance. In brief, educational institutions will keep their place at the table to the extent that they are the final paying customers; i.e., for actual educational uses. They may or may not lose their place at the table as intermediaries for their commercial lessees if they sell rather than lease. But their role as intermediaries has little to do with their educational mission, and is of no interest here.

IS OWNERSHIP THE ONLY WAY TO ASSURE “CONTROL”?

Commenters place great store on the control that owners exercise, claiming that they can only fulfill their educational mission if they maintain this ownership control. And yet in their initial comments (pp. 14-15), commenters note proudly that commercial lessees can do virtually whatever they want in the bands they lease from ITFS licensees, even having right of first refusal at lease termination. But if licensees have turned over so much control to lessees, how can they claim ownership is necessary for control? And if in the future educational institutions lease ITFS spectrum from a commercial owner, why would they not be able to negotiate similar terms when they are on the other side of the contract? On close inspection, the necessity of ownership to maintaining control simply doesn't hold up. For those institutions who continue to feel that ownership has such immense (though unquantifiable) value, their strategy under open licensing is clear: don't sell.

THE PRICE OF A LICENSE IS UNLIKELY TO CHANGE AT ALL UNDER OPEN LICENSING

But perhaps the fears of the commenters are that entry into the license sale market will drive up the price of licenses, “pricing them out of the market.” While the commenters never state this as such, it appears to lie behind their stated fears of being driven out of the market (which otherwise make no sense), should this band become commercialized. But in fact, ITFS spectrum already is commercialized, as noted above, but in the form of leases. The only issue, to which we now turn, is permitting commercial interests to buy spectrum licenses in addition to leasing them.

In accordance with FCC rules, ITFS licenses can be bought and sold among educational institutions, presumably at a price that reflects the stream of benefits and/or profits that the spectrum license produces. For most ITFS spectrum, this value is determined by the lease price charged by the licensee to its commercial lessee. This establishes the first principle upon which my conclusions are based: *under the current regime (educational licensees only), the transaction price of an ITFS license is driven by the market lease price that the licensee can realize in the commercial (and educational) market.*

We next establish the second principle needed to support my conclusions: *under an open licensing regime (anyone can be an ITFS licensee), the transaction price of an ITFS license is driven by the market lease price that the licensee can realize in the commercial (and educational) market.*

It is now obvious that the price of a license under a restrictive regime or an open regime will be the same, as both are driven by the lease price of the underlying asset in the commercial market. Since the commercial market for leasing ITFS spectrum is fully developed today, there is no reason to expect it to change should commercial ownership become an option. The price will still be driven by the same factors that drive it today.

The reason for this apparent anomaly is that the market for ITFS spectrum is already open to commercial interests, and has been for several decades. The only restriction is that it is a lease market, not a purchase market. The FCC's proposal is to remove this last restriction, so that educational and commercial parties have a broader array of transaction mechanisms available to them. But the basics of demand and supply remain the same, with or without the restriction lifted. *If the eligibility restriction is removed, it will not change the composition of the market*

one iota^{3,4}. Demand will still be the same, lease prices will still be the same, and therefore purchase prices will still be the same. If educational institutions are not “priced out of the market” for ITFS spectrum today, they will not be priced out of the market with open eligibility.

IF RELAXING THE ELIGIBILITY REQUIREMENT DOES NOT HARM INCUMBENT LICENSEES, WHY ARE THEY OPPOSING IT?

I have shown that if the FCC opens eligibility for ITFS licenses to all, it cannot harm incumbent licensees and indeed gives them an additional market mechanism for spectrum transactions. Why would incumbents (or at least most of them) oppose open licensing? If the incumbents win with open licensing, who loses? Who would have an incentive to oppose?

There are potential losers from open licensing. They are those persons within the incumbents' organizations who manage and lease their ITFS spectrum and the attorneys who help defend their interests by, among other things, filing comments before the FCC. Should their organizations sell their spectrum, the jobs of these managers, bureaucrats and lawyers would be much reduced, perhaps eliminated. And it is this group of incumbent employees that actually writes and files comments before the FCC. No other group has such an interest in protecting their jobs by advancing specious economic arguments to the FCC on behalf of their unsuspecting organizations.⁵

CONCLUSION

The economic fears of the commenters regarding open licensing are actually “ghosts,” fears with no basis in economics. I can only speculate as to the rationale for advancing such comments, but they certainly don't represent real threats to the incumbent licensees. The proposal for open licensing in this band is in keeping with the FCC very laudable objective of ridding itself and this country of regulation without reason, and should be both lauded and adopted. Incumbent licensees appear to be opposing a very useful policy initiative by the FCC that is actually in their interest, based on a faulty understanding of the economics.

³ It is theoretically possible that a firm might prefer to carry a license on its balance sheet as an owned asset rather than as a long-term lease for some obscure accounting or tax purpose, and would choose to participate in the license market but not the lease market. It would appear this type of situation is unlikely to occur in practice; in fact, the opposite is more likely.

⁴ The FCC proposal for open licensing would eliminate for commercial licensees the requirement of at least 5% educational content, which would almost surely increase the price of spectrum, probably by a commensurate amount. However, it would increase the price for spectrum currently held by educational licensees; while open licensing would not alter the price, removal of the 5% educational requirement would.

⁵ In economics, this is referred to as the agency problem, in which an *agent* of an organization (such as an employee) has incentives and means to pursue a personal agenda that does not further and may be deleterious to the interests of its *principal* (the organization). If it is difficult for the principal to fully monitor the actions of the agent, such problems are likely to occur.