

**BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION**

In the Matter of)	
)	
Office of Engineering and Technology)	ET Docket No. 13-26
Releases and Seeks Comment on Updated)	
OET-69 Software)	
)	
Expanding and Economic and Innovation)	GN Docket No. 12-268
Opportunities of Spectrum Through Incentive)	
Auctions)	

**COMMENTS OF
THE BRATTLE GROUP**

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The following comments are submitted on behalf of the Brattle Group (“*Brattle*”) in response to the Public Notice released by the FCC on February 4, 2013. These comments focus on the general usability of the *TVStudy* software.

Summary

The proposed incentive auction of broadcast spectrum relies on the ability to repack broadcast stations. Consequently, a common and transparent understanding of allowable TV station repacking is essential to allowing stakeholders to test and incorporate accurate inputs into their analysis for the auction rulemaking and preparation for the ultimate auction process. The complexity and novelty of this auction, and the station repacking procedure, is widely known; however, there are measures the FCC can take to ameliorate informational grey areas and, thereby, facilitate a smooth auction process. Brattle applauds the FCC for their efforts to develop a more user-friendly interference software program in accordance to the stipulations of OET Bulletin No. 69¹ and to make that software publically available. However, Brattle urges the FCC to elucidate certain features of the program described below.

Comparison to Previous Software

OET Bulletin No. 69 published in 2004 defines the methodology “for evaluating TV coverage and interference”. However, the 2004 implementation of this methodology relies upon an archaic FORTRAN program and contains little to no documentation for multi-station interference calculations. Without a sophisticated programming background, this code is nearly impossible to use, let alone to analyze multi-station interference patterns.

¹ See, OET Bulletin No. 69, “Longley-Rice Methodology for Evaluating TV Coverage and Interference,” February 6, 2004, at http://transition.fcc.gov/Bureaus/Engineering_Technology/Documents/bulletins/oet69/oet69.pdf.

The *TVStudy* software allows users with moderate programming experience to implement a variety of station combinations and study rules, according to user needs. Moreover, study parameters that are under review by the FCC (e.g. U.S. Census Population year, terrain data, grid cell size, etc.) can easily be changed according to adopted FCC policy. Releasing this software in February was an essential step in creating a successful incentive auction.

Improvements

There are four areas the FCC could further improve its efforts to develop usable TV station repacking software. The first is increased documentation for the Windows and Linux installations that will allow a wider variety of users (including those with technical, engineering, and policy backgrounds) to implement that software. Second, ultimately, a common set of input settings for running the software² must be agreed upon. To this end, publishing the preferred set and explanations of why specific values are chosen would facilitate the process of coming to agreement on the ultimate fine tuning of the software. Third, publishing a definitive list of TV station licenses that are eligible to participate in the incentive auction or be repacked would eliminate significant uncertainty. Finally, publishing sample output files, along with the corresponding input files, would allow users of the software to confirm that they can replicate FCC interference results, building further confidence in the operation of the software.

Conclusion

The *TVStudy* program is a useful and necessary tool in determining multi-station interference patterns according to the mandates of the OET Bulletin No. 69. This software will help all parties involved in the proposed incentive auction understand the interference

² There are over 130 different variables that must be set to run the software.

calculations used by the FCC in the repacking procedure. To build on its commendable efforts at transparency in releasing the *TVStudy* program, the FCC would significantly aid the current rulemaking process and better help potential bidders prepare for the auction by improving documentation, and releasing software inputs, the stations in play, and sample outputs.