

Tuesday, November 29, 2011

Office of the Secretary  
Marlene H. Dortch, Secretary  
Federal Communications Commission  
445 12th Street, S.W.  
Washington, D.C. 20554

Re: ET Docket No. 04-186  
Public Testing of White Space Database Systems

The initial white space database (WSDB) test performed by Spectrum Bridge did not facilitate the ability to fully test the functionality of the database service. We recognize that Spectrum Bridge did make adjustments to their web interface and back-end business logic for registering protected entity devices. However, the overall process of submitting protection requests and validating the results could only be performed manually and in a time consuming manner. The end result was that only a very few use-cases were actually tested by individuals.

Most contemporary software development projects have the ability to make use of suites of Unit Tests. We propose that a full suite of unit tests that cover many types of use cases be developed by both the testing community and the white space database providers. We feel that applying the SAME series of test criteria against all WSDB providers' implementations is paramount to a fair and un-biased test. These test cases should be made available for public scrutiny and test cases should be accepted from the public. These test cases should provide coverage for both primary use cases and edge cases.

While the test case suite can be primarily automated, we also feel that some manual test procedures be included in order to validate manual submission, editing of submissions and removal of submissions as if by end users.

The use of test suites is a common industry practice in software development and we refer to the following well known test suites as examples:

- W3C CSS Test Suite, <http://www.w3.org/Style/CSS/Test/>
- W3C HTML Markup Test Suite, <http://www.w3.org/MarkUp/Test/>
- Oracle Application Test Suite, <http://www.oracle.com/technetwork/oem/downloads/index-084446.html>
- ecmaScript (Java Script) test suite, <http://test262.ecmascript.org/>

The original MRO&O indicated that the FCC intended for the WSDB design to be formalized by a standards body (ie, IEEE). In the absence of a formalized review process provided by such an organization, publicly available and standardized tests should be developed and applied to the WSDB validation process. At a minimum, the tests performed by the FCC's OET should be published for public scrutiny.

Respectfully,

/s/

Jason Eskew  
Project Manager, Software Developer