The White Space Database Administrator Group ("WSDBA"), consisting of Comsearch, a CommScope Company, Frequency Finder, Inc., Google Inc., LS telcom AG, Microsoft Corporation, Neustar, Inc., Spectrum Bridge, Inc., and Telcordia Technologies, Inc. has concerns about the recent FCC Report and Order on the Part 15 rules regarding a channel clearing time of 20 minutes. An excerpt of this new requirement follows, with emphasis in red.

> 273. *Discussion.* Based on a careful analysis of the concerns raised by both white space device and wireless microphone proponents, **we are persuaded that requiring all white space devices to re-check a database for a list of available channels every twenty minutes would unnecessarily burden the database administrators and the white space device users and is not necessary to accomplish our objectives**. We already have in place a procedure whereby licensed wireless microphone users can register with a database and reserve channels for their use well in advance of their intended date of operation. We expect licensed microphone users to continue to use this process so that they are ensured of having access to the spectrum they need for planned events. The issue that needs to be addressed is making channels available for licensed wireless microphone use for events that cannot be anticipated, such as late-breaking news events, within minutes or hours of when they occur. Today, broadcaster and others covering such events can rely on having access to the two vacant television channels above and below channel 37, which they can use without having to contact a database to register their use. When these two vacant channels are no longer available for their exclusive use, they will have to contact a database and request channels for immediate use. We conclude that for these occasions, **we will require that database administrators "push" information to white space devices in the area where the licensed wireless microphones will be used, notifying them of changes in channel availability, rather than require all white space devices to re-check a database every twenty minutes**. This approach balances the needs of both white space device and wireless microphone proponents. It satisfies the objective of our proposal to make spectrum available for licensed wireless microphone use for late-breaking events, but it does not burden all white space users with unnecessary frequent database re-checking in meeting this objective.

The discussion acknowledges that it doesn't make sense to have all devices poll every 20 minutes to accommodate a use-case – emergency news gathering – that arises infrequently and in very localized areas.

However, the rule, in mandating "push" mistakes the reality of IT deployment. It's not possible to really "push" data to specific devices at a specific location at a specific time (due to firewalls, NAT, VPN, and other barriers to inbound traffic). Thus the only way to emulate a "push" is to have all devices poll the database (or heartbeat) ("pull") all the time no matter where they are.

Thus the rule adopted by the Commission **would** cause significant burden on the database administrators and white space devices, with many potential real-world costs (e.g., battery consumption, bandwidth, access charges, NAT or proxy traversal, serving resources, etc.) – the very burdens the Commission sought to avoid. The WSDBA members have discussed this issue internally, and have identified a potential solution.

An alternate proposal would be to identify one channel (or more) which would be distinctly identified as fast poll channels to devices, so that only those devices using a designated fast poll channel would have to poll the databases every 20 minutes. The fast poll channel(s) would be identified algorithmically, something akin to the current rule for above and below channel 37, so that all of the databases consistently offer the same fast-poll channels. This would require only a modest change in manufacturer's devices, and could of course be adjusted with the daily channel request. This approach would also allow devices to avoid fast poll channels if devices need to conserve battery power or do not require access to such channels to offer service.

We stand ready to discuss any further possibilities for successful resolution.