MEETING WITH FCC OFFICE OF ENGINEERING AND TECHNOLOGY

ET Docket No 14-165

The WMTS COALITION

June 1, 2016

The Part 15 R&O

- In the Part 15 R&O, the Commission appropriately mandated a limited initial deployment of TV White Space devices using channel 37 to one or two areas. (R&O, para 221).
- This limited initial roll-out was intended to allow the Commission (jointly with the FDA) to work with interested parties "***to validate and, if needed, adjust"*** *the approach used to develop the protection distances adopted in the Part 15 R&O "so that critical WMTS systems do not experience harmful interference."*
- The details of the tests that will be used to validate the approach were left to further consideration.

Guiding Principles for Validating the FCC's approach and resulting rules

1. All tests must be conducted in a manner that ensures that patient safety is not at risk.

Guiding Principles for Validating the FCC's approach and resulting rules

2. Tests must be rigorous and scientific to determine if FCC rules will adequately protect WMTS systems with regard to the variety of conditions likely to be encountered when TVWS devices operate in close proximity to WMTS systems.

Guiding Principles for Validating the FCC's approach and resulting rules

3. To assure objectivity and validity, the tests should be conducted by an unaffiliated organization with recognized expertise (e.g., NIST, NTIA-ITS, NASCTN*) who will assist in the development of the test plan and execution of the testing.

*-National Advanced Spectrum and Communications Test Network

The Coalition's Two-Phase Approach

Phase I

1. Determine the validity of the path loss model used by the FCC
   - To protect existing WMTS systems from interference, tests can be conducted in unoccupied adjacent channels 36 or 38.

The Coalition's Two Phase Approach

Phase I

2. Based on results of path loss testing and analysis, develop appropriate adjustments to the FCC's limits.

The Coalition's Two-Phase Approach

Phase II (trial)

1. Establish an Institutional Review Board (IRB) to support Phase II testing following process per Dept. of Human Health and Services (HHS) regulations (45 CFR 46.101).
   - Applicability: Enforced by HHS Office for Human Research Protections. "Research that is conducted or supported by a federal department or agency, whether or not it is regulated as defined by 46.102, must comply with all sections of this policy."
   - IRB membership regulated by FDA (21 CFR 56.107)
     - The IRB should consist of Clinical and Wireless Subject Matter Experts independent from the affected parties.
     - IRB reviews and approves the test plan, ensures protections in place (ethical, safe).

The Coalition's Two Phase Approach

Phase II (trial)

2. Using the propagation findings from Phase I and any other adjustments to the FCC's separation distances deemed appropriate, determine the ability of those separation distances to protect WMTS systems from harmful interference from representative TVWS device signals, testing real WMTS systems on Channel 37.