
Reply Comment by Greenwood Telecommunications Consultants LLC

In the Matter of

Office of Engineering and Technology Recommendations by Technical Advisory Committee (TAC)

ET-17-340

I. Assessment of Comments

Assessing the level of concurrence of Comments, there is clearly consensus for moving toward industry-led spectrum policy, and there is developing consensus for the TAC's Nine Principles. There is interest forming in applying principled rules within industry-led multi-stakeholder forums, which set rules within band regions within which band-sensitive propagation effects and legacy service based rules likely met earlier era requirements well. There were understandable expressions of caution, such as avoiding "one-size-does-not-fit-all" application of TAC Principles. These and other cautions imply concerted expert solutions that through professional judgment could develop mutually satisfactory radio compatibility rules.

To some, there is fear of the open-ended, the unmoored that is not rooted in explicit rules prior to repurposing or sharing. Allowing industry-led forms of consensus is a matter of delegation which for some undermines the role of centralized control within traditional expert agency concepts. That's wanting. The nine FCC TAC principles were undoubtedly formed through broad experiences by a consensus process, and were clearly within the expert agency's multiple year purview. The expert agency also likely reasons it cannot balance all technical and logistical deployment requirements at once and that the industries most affected are in the best position to create and enforce mutually durable rules. With Commission oversight, robust multi-stakeholder forums are in a better position to assess elevated risk, and testable interference scenarios for deployed, new or next generation radio assets. These forums are often in the best position to consider new ways to create compatibility through joint action.

GPS is a good example, it has a broad range of receivers including those that must be certified for Safety of Life. Risk assessment for these receivers demands a multi-element risk profile, exceeding the example TAC offers. Due to that category of interference stringency, dense deployment demands there

be bi-lateral design awareness that raises both transmitter and receiver mitigation performance. SoL GPS receivers have explicit, sophisticated compatibility masks to eliminate susceptibility to all licensed services across adjacent bands. Other receivers apparently assume there will be perpetual quietude in adjacent bands and demand that remain despite international and US spectrum realities.

Commenters mention there are sizeable installed bases which is based on trusted precedents or explicit rule-based certainty to continue interference protection. Fielded receivers may not be designed for unplanned, or even planned but under-served adjacent transmissions. Accelerating unplanned upgrade requires a significant economic decision to arrange satisfactory mutual compatibility. Several Comments reflect these factors.

II. Role of Multi-Stakeholder Forum in Developing Successful Re-Purposing and Shared Spectrum Rules

Industry-led or multi-stakeholder forum (MSF) guidance and governance were mentioned by several Commenters, and among other comments were not expressly opposed. This governance arrangement is more likely to discover the better spectrum sharing and re-purposing options and could reasonably test durable multi-service compatibility outcomes long before they reach the field un-tested or un-verified.

The role of the expert agency in a MSF setting likely raises best practices, transparency, balanced and diligent participation and sets conditions for acceptable transition. The Commission as an expert agency is well informed on the principles and can design each band-specific MSF to reveal primary interference concerns before re-purposing or sharing. We believe the consistency of Comments regarding MSF in this proceeding will serve the Commission well.

Respectfully submitted,

A handwritten signature in cursive script that reads "Richard Lee".

Richard Lee
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