

Subcommittee Update:

Interference Prevention, Detection, and Resolution (IPDR)

CSMAC Meeting

January 28, 2020

NTIA IPDR Question

- How could the NTIA's and the FCC's equipment authorization rules be modified to require that all transmitters use a unique identifier?
- What are the barriers to doing so?

Preliminary Recommendations

- The administrative path for modifying the FCC's and NTIA's equipment authorization rules to require that transmitters have a unique identifier – whether band-by-band or more broadly – appears to be straightforward.
- There are likely specific bands and use cases where a unique identifier may be a viable and effective regulatory tool.
- The challenges with implementing any such a requirement on a ubiquitous basis would be complex and multifaceted.
- The Subcommittee recommends approaching the question of unique identifiers through a band-by-band or use case approach rather than some broader mandate in the equipment authorization rules.

Key Questions: Unique Identifiers & Use Cases

- What is a unique identifier?
 - An identifier distinctive to a device, class of devices, or type of transmission; primarily used as a helpful tool in interference resolution
- What lessons can be learned where identifiers have been employed?
 - Identify key characteristics for success across use cases
 - Examine cases where transmit identifiers were either adopted or rejected (e.g., 800 MHz and 900 MHz bands; wireless mics; 60 GHz band; TV White Spaces; Private Land Mobile Radio (or other Part 90 use cases); Broadband Video Uplinks; U-NII; and the mmW bands)
- Are there alternative paths to accomplishing the policy goals with fewer barriers?
 - E.g. industry consensus and standardization mechanisms for voluntary identifiers, other technical solutions to identifying harmful interference, etc.

Potential Barriers to Unique Identifiers

- Standards development and technology changes
- Device capabilities
 - Software/firmware, battery-powered devices, signal/sensing capabilities, and backward compatibility concerns
- Privacy, cybersecurity, data security, and national security concerns
- Impact on investment and innovation

Next Steps

- Engage with broader engineering community to collect further perspectives on potential use cases where unique identifiers would be a viable and effective regulatory tool
- Finalize recommendations and draft subcommittee report