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