NTIA Response to CSMAC Recommendations
Unlicensed Subcommittee
July 24, 2012

Recommendation	Report Page	NTIA Response	NTIA Explanation
1. NTIA should put in place requirements, and work with the FCC on parallel measures, that reduce reliance on post-hoc regulatory enforcement of interference by turning to technology-based solutions for "connected devices." NTIA, in coordination with the FCC, should proactively educate policymakers concerning the secondary status of unlicensed devices in shared bands and the obligation of consumers and manufacturers to accept interference.		Agree	NTIA agrees that better use of technology-based solutions for unlicensed devices needs to be considered. This solution may not be appropriate for all unlicensed devices, but should at least be considered with the introduction of any new devices, e.g., UNII. NTIIA will work with the FCC in future implementation of unlicensed devices to determine what technologies may be implemented to minimize reliance on post-hoc regulatory enforcement of interference. NTIA agrees that educating policy makers would be helpful. In future briefings, when appropriate, NTIA will emphasize the rules concerning unlicensed devices. NTIA will include these issues on the agenda in a future OSM/OET meeting.
2. NTIA, in coordination with the FCC, should require that in all new unlicensed bands, or in shared Federal bands designated for unlicensed access, that devices should be "connected devices," which are required periodically to "call home" to: (1) Renew the authorization to operate in the band (2) Obtain a firmware update, to be remotely disabled in a particular frequency, and/or (3) Receive direction to move to another frequency band when necessary.		Agree	NTIA agrees that unlicensed devices may be able to be "connected devices" where appropriate. In future rulemakings for unlicensed devices, NTIA will consider the possibilities of the use of "connected devices". NTIA will include this issue on the agenda in a future OSM/OET meeting.

3. In cases when non-compliant devices do not operate within the rules to prevent interference, or when "avoidance through technology" measures fail, NTIA should consider recommending that the FCC strengthen enforcement measures to provide stronger deterrents, so that interference mitigation may be addressed more proactively than reactively.		Agree	NTIA will continue to press the FCC to strengthen enforcement measures to provide stronger deterrents. NTIA will include this issue on the agenda in a future OSM/OET meeting.
4. In cases when it is not a matter of unlicensed devices intentionally operating outside of the rules, but interference still occurs, manufacturers should increase consumer education efforts about the operating parameters of Part 15. NTIA should work with the FCC and with industry to ensure that consumer awareness provides an important counterpart or "backstop" to enforcement and "avoidance through technology" efforts.		Agree	NTIA will continue to work with manufacturers, consumers, and the FCC concerning awareness of the rights of unlicensed devices as well as possible methods to minimize interference through technology-based solutions. NTIA will include this issue on the agenda in a future OSM/OET meeting.
5. NTIA, in coordination with the FCC, should further study the regulatory treatment under the current unlicensed framework for "cheap, dumb" devices. The Committee generally recommends that in the future "unconnected" devices should be restricted to legacy bands of spectrum where they are already prevalent (e.g., 900 MHz, 2.4 GHz). Policymakers should consider whether such devices should even be further restricted in the future, phasing out their access to very high-quality bands over an appropriate time period.		Agree	NTIA will initiate discussions in future OSM/OET meetings concerning possible future study of the regulatory treatment under the current unlicensed framework for "cheap, dumb" devices. NTIA does not know and the Subcommittee report did not reflect how extensive the use of these devices might be and the frequencies on this they operate. NTIA believes that in the context of a spectrum inventory, the spectrum management community would benefit from a resource that indicated what frequencies each such product/device uses. In future rulemakings on such devices, NTIA will consider where such devices should operate in the spectrum. NTIA will include this issue on the agenda in a future OSM/OET meeting.