

15 June 2018

Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12th Street SW  
Washington, DC 20554

Re: Letter Filing - Request for Comment  
3.5 GHz SAS and ESC Applications, GN Docket No. 15-319.

Dear Ms. Dortch,

Please find attached the draft requirements developed by the Wireless Innovation Forum's Spectrum Sharing Committee Work Group 1 (CBRS Functional and Operational Requirements) enabling a CBSD to operate as a CPE under the existing part 96 rules. These requirements are being submitted to the FCC for comment. Please note that this work is incomplete and reflects contributions by member companies but is not scheduled for inclusion in a specific release at this time as it is pending affirmative support from all impacted government organizations, including the FCC. Also please note that this filing is predicated on the assumption that this work will NOT impact initial certification activities or timelines for any entity.

Pursuant to the Commission's rules, this letter is being filed in the above-referenced docket for inclusion in the public record. Please contact me should you have any questions.

Respectfully submitted,

By /s/:  
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CEO  
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Additions to Definitions in section 2.1 of WINNF-15-S-00112:

**BTS-CBSD<sup>1</sup>.** A base transceiver station CBSD that serves one or more points, which may be EUDs or CPE-CBSDs.

**CPE-CBSD.** A fixed, stationary CBSD used as customer premise equipment, the served CBSD which is a client of the BTS-CBSD, which may operate at a higher power level than an EUD, and which transmits during the same time slots as an EUD.

Proposed New Requirement:

**R1-DEV-CBSD-CBSD** [final Requirement number to be assigned] CPE CBSD Operation

1. Operation of a CPE-CBSD at a power level above EUD levels for the purpose of registration shall only be used when an out-of-band connection is unavailable and the device is unable to register within EUD power levels.
2. A CPE-CBSD shall not transmit at an EIRP higher than that allowed for its intended Category.
3. CPE CBSD operation prior to receipt of a Grant from the SAS should be at the lowest power level capable of making the connection, when power levels higher than +23 dBm/10 MHz EIRP are required.
4. Prior to receipt of a Grant, the CPE-CBSD shall only transmit for the purpose of obtaining a Grant and it shall attempt communication with a BTS-CBSD that already has a Grant for the frequency that the CPE-CBSD transmits on.
5. The channel on which the CPE-CBSD responds to the BTS-CBSD shall be the one used by, or indicated in, the BTS-CBSD transmission.
6. The rate and extent of transmissions that are part of the Over-the-Air Grant-less handshake above +23 dBm/10MHz EIRP prior to receipt of a Grant is subject to limits and should be minimized to the extent practical while providing the required capabilities. The total transmit time above +23 dBm/10MHz prior to the receipt of a Grant shall not exceed any of 1 second within any 10-second period, 10 seconds within any 5-minute period, or 20 seconds within any 1-hour period.
7. The CPE-CBSD shall request a grant with the same frequency-range parameters as, or a subset of, the frequency range parameters used by the BTS-CBSD to which the CPE-CBSD connects.
8. The CPE-CBSD shall indicate that it is a CPE-CBSD at time of registration.
9. The SAS shall, to the extent possible, maintain CPE-CBSDs on the same frequency as their associated BTS-CBSD.
10. A CPE-CBSD shall not act as a BTS-CBSD and serve EUDs or other CPE-CBSDs using the provided Grant or any other CBRS Grant.
11. A CPE-CBSD that can transmit at an EIRP level higher than +23 dBm/10 MHz as part of an Over-the-Air grant-less handshake with its serving BTS-CBSD for registration

<sup>1</sup> BTS-CBSD is used for disambiguation in context of CPE-CBSD operation. In other contexts when only EUDs connect to such a device, CBSD alone generally refers to the same function.

purposes prior to receipt of a Grant shall be professionally installed unless it meets all other requirements for non-professionally installed Category A devices.

*Informative note:*

*Batch registration with SAS via Domain Proxy (DP) is permitted before connection of a Category A or B CPE-CBSD to a Category A or B BTS-CBSD.*

*The DP can relay a Grant such that CPE-CBSD can establish connection with BTS-CBSD using the resources indicated in the Grant. Such mechanisms for relaying the Grant are outside of the scope of this Specification.*

*In the event of CPE-CBSD Grant expiration, upon notification that service needs to be restored, the Domain Proxy can request a new Grant from the SAS on CPE-CBSD's behalf and relay the Grant to the CPE-CBSD.*

Submitted for Comment Only:  
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