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February 21, 2014

Attn: Dr. Rashmi Doshi
Chief, Laboratory Division
Office of Engineering and Technology
Federal Communications Commission
7435 Oakland Mills Rd.
Columbia, MD 21046

Re: Comments of the Telecommunications Industry Association on Draft Knowledge Database Publication 594280 (Guidance on Software or Network Configuration of Non-SDR Devices to Ensure Compliance)

Dear Dr. Doshi:

The Telecommunications Industry Association\(^1\) ("TIA") hereby submits input to the Federal Communications Commission’s ("FCC") Office of Engineering and Technology on draft Laboratory Division ("OET Labs") on its draft Knowledge Database ("KDB") Publication 594280, titled Guidance on Software or Network Configuration of Non-SDR Devices to Ensure Compliance ("Draft KDB 594280").\(^2\)

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\(^1\) TIA is a trade association based in the Washington, DC area which represents the global information and communications technology ("ICT") manufacturer, vendor, and supplier community through policy advocacy and standards development. TIA is also accredited by the American National Standards Institute (ANSI) as a standards developer for the telecommunications sector. From a policy perspective, TIA’s Technical Regulatory Policy Committee ("TRPC") serves as a consensus manufacturer partner with the FCC, telecommunications certification bodies ("TCBs") and other stakeholders towards streamlining and clarifying the mechanisms of equipment certification processes and procedures. See https://www.tiaonline.org/policy.

\(^2\) See Office of Engineering and Tech., FCC, Draft Laboratory Division Publications Report, Guidance on Software or Network Configuration of Non-SDR Devices to Ensure Compliance, Publication
First, TIA notes that it fully endorses the input submitted by the Wi-Fi Alliance in this matter.

Second, TIA wishes to submit the following additional specific input on Draft KDB 594280:

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<th>Issue, Proposed Change, and Rationale</th>
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<tr>
<td>Section 4(c) [pgs. 6-7]</td>
<td>Client Device Operations Control, CMRS Subscriber Devices</td>
<td>TIA recommends that the OET Labs restructure the wording in 4(c) to allow Mobile Country Code (“MCC”)/Mobile Network Code (“MNC”) codes, as controlled by ITU-T Recommendation E.212,(^3) to define Commercial Mobile Radio Service (“CMRS”) device operating parameters/ restrictions, providing device manufactures explain functionality of the device in the operational description. Current GSM, UMTS, and LTE CMRS devices do not transmit until the device receiver has identified a compatible network. In the case where a device manufacture defines different operational modes for different country codes, that device will operate as intended for the network’s respective MCC. In this situation, the default operation is “no transmission” until the device configures for the proper MCC/MNC.</td>
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<td>Section 4(c) [pgs. 6-7]</td>
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<td>With respect to a failure mode, the OET Labs should clarify that “no transmission” is an acceptable failure mode in that the device will not transmit unless there is a MCC associated with the network. Restricting transmission in the absence of a MCC code is a reasonable failure mode with little device design impact so please confirm this is acceptable or if additional extra measures are required and allow time for industry to respond before adding criteria for a failsafe mechanism.</td>
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<td>TIA recommends that the OET Labs remove the requirement for a CMRS device to check MCC/MCN conditions every hour or when a connection is initiated. TIA is not aware of what the OET Labs have concern about with respect to this requirement. Once a device is connected to a network which is broadcasting a MCC code, the device will not change its configuration until it connects onto a new network with a different MCC code. Periodically checking adds additional complication to devices’ software to address an unclear requirement. The OET Labs should add clarity to the concern if this requirement is to remain, and then allow additional response time from industry to understand the requirement and provide additional feedback as needed.</td>
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<td>TIA recommends that the OET Labs remove the requirement for test reports to show “proper device operation with the use of MCC and MNC and under fail-safe operational modes,” and instead allow equipment manufacture declarations. There is no standardized method to test or evaluate compliance to demonstrate functionality to a TCB or the OET Labs. For example, it is not clear whether test procedure would consist of showing that a device won’t register/transmit on one invalid MCC, or instead would require the lab/manufacture to validate on every possible MCC/MNC for every band/mode supported by the device. This unclear and open-ended test requirement is better addressed by declaration by the OEM, based on analysis of the implementation.</td>
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<td>Client Device Operations Control, CMRS Subscriber Devices</td>
<td>TIA recommends that the OET Labs exclude emergency 911 (“E911”) activities from the scope of this KDB. If a device is used to initiate an E911 call, it is expected that the device will use any available radio to place an emergency call.</td>
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</table>
We respectfully request that OET Labs consider the above comments in its finalization of this KDB. Please contact us using the below information if we can be of more assistance.

Respectfully submitted,

TELECOMMUNICATIONS INDUSTRY ASSOCIATION

By:  /s/ Brian Scarpelli

Brian Scarpelli
Senior Manager, Government Affairs

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