



700 MHz Narrowband Interoperability Testing Update

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April 11, 2018
Baltimore, Maryland

Topics

★ ★ ★ PUBLIC SAFETY AND HOMELAND SECURITY BUREAU ★ ★ ★

- ❑ Background
- ❑ 47 CFR Secs. 2.1033(c)(20) and 90.548(c) – Interoperability Testing
- ❑ 47 CFR Sec. 90.548(d) – Minimum Features
- ❑ Questions

- The Commission's rules require that 700 MHz narrowband mobile and portable equipment be capable of operating on the 700 MHz narrowband interoperability channels and must conform to the P25 standard when operating on those channels.
- Prior to 2005, "no independent testing program existed to verify that radios represented by equipment vendors to be P25-compliant in fact meet all of the P25 requirements."
- Instead, "individual vendors self-certified their equipment using their own internal testing criteria, resulting in instances where equipment that was ostensibly P25-compliant was not interoperable across vendors."
- In 2005 Congress appropriated funds for the creation of an independent assessment program to test compliance of all P25 equipment.
- In 2008, the Department of Homeland Security's (DHS) Office for Interoperability and Compatibility (OIC) and the National Institute of Standards and Technology (NIST), in partnership with industry and the emergency response community, launched the P25 Compliance Assessment Program (P25 CAP) and in 2010 issued the first Compliance Assessment Bulletins.

- In 2016 and 2018, the Commission revised Secs. 2.1033(c)(20) and 90.548(c) of the rules:

Before equipment operating under part 90 of this chapter and capable of operating on the 700 MHz interoperability channels (See § 90.531(b)(1) of this chapter) may be marketed or sold, the manufacturer thereof shall have a Compliance Assessment Program Supplier's Declaration of Compliance and Summary Test Report or, alternatively, a document detailing how the manufacturer determined that its equipment complies with § 90.548 of this chapter and that the equipment is interoperable across vendors. Submission of a 700 MHz narrowband radio for certification will constitute a representation by the manufacturer that the radio will be shown, by testing, to be interoperable across vendors before it is marketed or sold.

In the event that field experience reveals that a transceiver is not interoperable, the Commission may require the manufacturer thereof to provide evidence of compliance with this § 90.548.

- In addition to the 2016 rule changes, the Commission sought comment on defining certain baseline interoperability features for P25 radios operating in the conventional mode on the 700 MHz interoperability channels. Specifically, the Commission sought comment on 15 baseline interoperability features that the P25 CAP Advisory Panel recommended.
- Given that the Commission sought comment on these 15 features, the Commission delayed the effective date of Sections 2.1033(c)(20) and 90.548(c) pending the outcome of the rulemaking.
- In 2017, the P25 CAP Advisory Panel issued a Compliance Assessment Bulletin specifying 7 Minimum Required Features.

- The Commission adopted Section 90.548(d), which include seven features that reference well-established TIA test cases as well as test cases called out for in the 2017 Minimum Features CAB. Going forward, the Commission tasked the Public Safety and Homeland Security Bureau to update 90.548(d) when appropriate.
 - The Commission clarified that manufacturers that opt to forgo P25 CAP testing in favor of equivalent testing would still be required to test equipment against commercially available equipment consistent with the “rule of three.”
 - The FCC will announce the effective date of Sections 2.1033(c)(20), 90.548(c) and 90.548(d).
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QUESTIONS?

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