

Project 25 Compliance Assessment Program



Homeland Security

Science and Technology

FORMAL COMPLIANCE TESTING FOR COMMUNICATIONS INTEROPERABILITY

To successfully respond to both day-to-day and large-scale incidents, first responders must be able to communicate with each other regardless of their agency's choice of radio equipment manufacturer. However, communications equipment manufacturers often use different approaches to implement systems and that can result in incompatible products. The U.S. Department of Homeland Security Science and Technology Directorate (S&T) established the P25 Compliance Assessment Program (P25 CAP) to help address this challenge.

Project 25 (P25) is a suite of standards that enables interoperability among digital two-way land mobile radio communications products developed for public safety professionals. P25 CAP is a formal, independent process for ensuring communications equipment declared by the supplier actually is P25-compliant and tested against the standards with publicly published results. Through this open-standards testing process, P25 CAP provides responders with confidence that the communications equipment they use will be interoperable, regardless of manufacturer. Specifically, this voluntary program provides public safety agencies with evidence that the communications equipment they purchase is tested against and complies with the P25 standards for performance, conformance, and interoperability. The varying P25 labels can be confusing, and S&T's [guide](#) on P25 terminology explains the program and how the terms apply.

Compliance assessment testing concludes with the submission of a Summary Test Report (STR), made available through P25CAP@hq.dhs.gov, and an official Supplier's Declaration of Compliance (SDOC), which is published on P25 CAP's [Approved \(Grant-Eligible\) Equipment page](#). It is this list, and only this list, which is referenced by several federal grant programs, including the Federal Emergency Management Agency, as equipment eligible to be purchased.

INFORMING PROCUREMENT DECISIONS

By arming first responders with the necessary information they need to make informed procurement decisions, P25 CAP advances interoperability. In addition, P25 CAP helps to ensure federal grant funds are used to purchase interoperable

solutions by encouraging the purchase of P25 CAP-compliant equipment in federal grant guidance. Ultimately, this promotes interoperability and reduces waste and poor investments in untested equipment. S&T's program policies are communicated through Compliance Assessment Bulletins (CABs).

P25 CAP PARTNERSHIPS

S&T selected three internationally recognized laboratory accreditation bodies to review and accredit participating P25 CAP laboratories. Once accredited, the laboratory can test land mobile radio equipment for P25 CAP compliance.

The Association of Public-Safety Communications Officials supports P25 CAP's efforts as a primary partner, lending technical expertise to develop processes that enhance compliance, as well as confirming the accuracy of all manufacturer STRs and SDOCs submitted. The SAFECOM CAP Task Force (CAPTF) provides the views of active local, state, tribal, territorial and federal government users of portable, handheld, mobile vehicle-mounted radios and infrastructure, including repeaters, consoles, and gateways.

ISSI/CSSI INTEROPERABILITY AND CONFORMANCE TESTING

The program's Approved (Grant-Eligible) Equipment page currently lists equipment that successfully passed P25 CAP's baseline Common Air Interface (CAI) testing requirements. P25 CAP has recently expanded the program beyond CAI to include Inter-Radio Frequency Sub-System Interface and Console Sub-System Interface (ISSI/CSSI) Interoperability and Conformance testing requirements.

After making them available for a public comment period, S&T publishes CABs that detail testing requirements. For example, 2019 CABs enable accreditation bodies to accredit laboratories for ISSI/CSSI Interoperability and Conformance testing. Laboratories are currently accredited and available to test manufacturers' ISSI and CSSI equipment to P25 CAP's standards. A list of all P25 CAP accredited laboratories and their scopes of testing recognition are available on the [Recognized Labs](#) page.

All CABs, supporting test case documents, and program updates on testing are available at [P25 CAP's webpage](#).

