

$Office \ for \ Interoperability \ and \ Compatibility$

Project 25 Compliance Assessment Bulletin

Project 25 Compliance Assessment Program

Testing Requirements

P25-CAB-TEST_REQ

November 2023

Notice of Disclaimer and Limitation of Liability

The Project 25 (P25) Compliance Assessment Program (CAP) provides equipment purchasers with demonstrated evidence of a product's compliance with a select group of requirements within the suite of P25 standards. The test procedures used to validate these requirements are also part of the P25 suite of standards. Although successful tests will demonstrate P25 compliance for the specific requirements tested, the conclusions drawn from these tests do not apply to every environment or individual user's needs. P25 CAP-mandated tests only demonstrate product compliance with the test procedures listed in the Supplier's Declaration of Compliance and, therefore, only attest to a product's compliance with specific requirements within the P25 Standard.

The equipment supplier's authorized representative signatory to the Supplier's Declaration of Compliance (SDOC) bear full responsibility for the content, completeness and accuracy of the SDOC. The U.S. Department of Homeland Security shall bear no responsibility for incomplete or inaccurate statements within SDOC or Summary Test Report (STR) documents.

Revision History

Version	Date	Description
Draft	6/20/2014	Revised dates and made minor editorial changes. Changed www.rkb.org to firstresponder.gov/P25CAP.
Draft (For PC)	3/3/2015	Final release version for public comment (PC) approved on March 3, 2015. Posted for PC on March 19, 2015.
Draft 2 (For PC)	6/30/2015	Incorporates public comment-resolution candidates. Posted again for PC the week of June 30, 2015.
2016 Release	8/17/2016	Addresses March and July 2015 public comments. Posted for general use on August 17, 2016.
Draft (For PC)	11/8/2021	Revised CAP policy guidelines and made minor editorial changes. Released for Public Comment on November 8, 2021
2023 Release	11/3/2023	Addresses December 2021 public comments. Posted for general use on November 3, 2023

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1 Introduction

The Department of Homeland Security (DHS) Science and Technology Directorate (S&T) Office for Interoperability and Compatibility (OIC) Project 25 Compliance Assessment Program (P25 CAP) is a voluntary program that allows P25 equipment suppliers to formally demonstrate their products' compliance with a select group of requirements within the suite of P25 standards. The purpose of the program is to provide emergency response agencies with evidence that the communications equipment they are purchasing meet P25 standards for performance, conformance, and interoperability.

The program requires test laboratories to demonstrate their competence through a rigorous and objective assessment process. Such a process promotes the user community's confidence in, and acceptance of, test results from DHS-recognized laboratories. All equipment suppliers that participate in the P25 CAP must use DHS-recognized laboratories to conduct performance, conformance, and interoperability tests on their products. P25 equipment suppliers will release Summary Test Report (STR) and Supplier's Declaration of Compliance (SDOC) documents based on the Detailed Test Report (DTR) from the DHS-recognized laboratory that performed the product testing. This documentation will serve to increase the public's confidence in the performance, conformance, and interoperability of P25 equipment.

Performance, conformance, and interoperability issues are likely to occur in all communications technologies and especially in ones like P25 with protocols that constantly adapt to changing user requirements. Such problems should be resolved within the P25 CAP and, notably, before product launch and deployment. Further, the declaration of compliance-related documents developed by program participants will provide useful technical information about the equipment.

1.1 Scope

Federal Grant Guidance states that DHS/FEMA grant recipients must ensure all grant-funded equipment complies with applicable technical standards listed in the SAFECOM Guidance, Appendix B, unless otherwise noted in a program's grant guidance. Recipients should document all purchases and evidence of compliance with standards-based requirements. For P25, the evidence should show that the equipment has been tested based on all applicable, published P25 CAP Compliance Assessment Bulletins (CAB) covering performance, conformance, and interoperability. The DHS S&T Approved Grant-Eligible Equipment website (https://www.dhs.gov/science-and-technology/approved-grant-eligible-equipment) provides SDOCs for the equipment listed. The associated STRs are available upon email request to P25CAP@hq.dhs.gov. These documents provide the required evidence of compliance with the grant guidance.

This CAB provides guidance on testing to establish and retain P25 CAP equipment compliance including referencing required retesting intervals and requirements for testing to the most current CABs.

1.2 Effective Date

This Compliance Assessment Bulletin becomes effective on **December 1, 2023**.

1.3 Normative References

- [1] SAFECOM Guidance on Emergency Communications Grants.¹
- [2] P25-CAB-CAI_TEST_REQ, Common Air Interface Baseline Testing Requirements.²
- [3] P25-CAP ISSI-CSSI Conf Test REQ CAB, ISSI/CSSI Conformance Testing Requirements²
- [4] P25-CAB-ISSI-CSSI_INTEROPERABILITY_TEST_REQ, Baseline Inter-RF Sub-System Interface and Console Sub-System Interface Interoperability Testing Requirements.²
- [5] P25-CAB-SDOC_REQ, Supplier's Declaration of Compliance Requirements.²
- [6] P25-CAB-STR REQ, Summary Test Report Requirements.²
- [7] P25-CAB-LAB_BASE_REQ, Project 25 Compliance Assessment Program Baseline Laboratory Requirements.²
- [8] P25-CAB-LAB_EQP_REQ, Project 25 Compliance Assessment Program Laboratory Equipment Requirements.²

1.4 Informative References

None.

2 SAFECOM Project 25 Grant Language Excerpt

For the foreseeable future, the public safety community is following a multi-path approach to develop, establish, and maintain critical communications capabilities. To improve interoperability across investments, grant recipients are strongly encouraged to ensure digital voice systems and equipment purchased with federal grant funds are compliant with the P25 Suite of Standards, unless otherwise noted in a program's grant guidance. Recipients should ensure all new and upgraded P25 eligible equipment, features, functions, and capabilities selected for procurement are P25 compliant and interoperable. When federal grant funds are used to purchase P25 land mobile radio equipment and systems that contain non-standard features or capabilities, while a comparable P25 feature or capability is available, recipients must ensure the standards-based feature or capability is also purchased to ensure interoperability. [1]

Grant recipients should purchase P25 compliant systems and equipment that has been assessed in accordance with P25 CAP. P25 accredited standards provide many technical specifications designed to ensure equipment is interoperable regardless of manufacturer.

¹ https://cisa.gov/safecom

² See https://www.dhs.gov/science-and-technology/p25-cap for the latest document version.

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Recipients should obtain documented evidence of P25 compliance from the manufacturer that the equipment has been tested and passed all the applicable, published, normative P25 compliance assessment test procedures for performance, conformance, and interoperability as defined in the latest P25 CABs for testing requirements. If documentation for applicable equipment is not available through the P25 CAP or there is an absence of applicable testing in the P25 CAP, recipients should obtain documented evidence from the manufacturer stating that all applicable tests were conducted in accordance with the published test procedures in the P25 Suite of Standards and successfully passed. Contact the P25 CAP at P25CAP@hq.dhs.gov for additional guidance.

3 P25 CAP Recommended Best Practices

In general, the Office for Interoperability and Compatibility within DHS believes that it is a best practice for public safety agencies procuring P25 products to select equipment that has been tested and approved as evidenced by SDOC and STR documents published on the https://www.dhs.gov/science-and-technology/p25-cap website or upon request during that agency's purchasing process. The agency can make the most informed decision regarding which manufacturers are participating in the P25 CAP, the results of testing each manufacturer's products and which products to purchase.

4 P25 CAP Participation Requirements

4.1 Participating Equipment Manufacturer Requirements

Participating Equipment Manufacturers shall refresh their company and/or product data no less than once every 12 months. Any of the following actions qualify as the required information refresh:

- Submission of STR/SDOC for a new model device
- Refresh of corporate name, parent, headquarters location or home URL
- Change or update of P25 CAP point of contact information
- Notification of the release of new software, with an update to the applicable Statement of Software Commonality.
- Notification email to <u>P25CAP@hq.dhs.gov</u> starting that no changes have occurred since your last submission.

4.2 SDOC and STR Requirements

SDOC and STR documents are required to be compliant with all relevant, current CABs on the effective date. Current SDOC and STR formats may be obtained by email by contacting P25CAP@hq.dhs.gov. Before submitting P25 CAP documentation, manufacturers are encouraged to review the STR/SDOC Submission Checklist, which also may be obtained by email by contacting P25CAP@hq.dhs.gov.

5 Baseline CAI Compliance Assessment Requirements

5.1 Performance Tests

P25 Common Air Interface (CAI) devices require both SDOC and STR documents in accordance with the most current version of the P25 CAI Baseline Testing Requirements CAB [2].

5.2 Conformance Tests

No tests are defined or required at this time.

5.3 Interoperability Tests

To ensure that P25 devices listed on the DHS **Approved (Grant-Eligible) Equipment** page meet currently prescribed P25 CAP and TIA Standards (including TIA Test Case versions), P25 CAI devices will require updated SDOCs and STRs by **December 2, 2024**, at the latest, where interoperability testing accommodates the most current version of the P25 CAI Baseline Testing Requirements [2].

Effective December 2, **2024**, supporting DTR documentation for **Trunked Interoperability** STRs that is older than **FOUR** years will not be accepted, and supporting DTR documentation for **Conventional Interoperability** STRs that is older than **FIVE** years will not be accepted.

5.3.1 Interoperability Retesting Requirements

P25 Equipment Manufacturers shall retest should any of the following occur:

- Substantive changes to prescribed TIA standard or normative TIA Test Case scope or versions, as determined by DHS, triggering a requirement for retesting.
 - · Gap testing will be acceptable
- Release of a new product that is not covered by an existing Interoperability Model Class.
- Updated system or product software resulting in new products that are outside the scope and compliance of the *Statement of Software Commonality* currently on file.

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• Equipment testing interval for interoperability has expired.

Equipment that is used to meet *rule of three* testing requirements³ for Subscriber or Fixed Network Equipment must meet the Trunking (Four years) and Conventional (Five years) documentation requirement.

6 Baseline Inter-RF Sub-System Interface (ISSI) / Console Sub-System Interface (CSSI) Compliance Assessment Requirements

6.1 Performance Tests

No tests are defined or required at this time.

6.2 Conformance Tests

P25 ISSI and CSSI devices require both SDOC and STR documents in accordance with the most current version of the P25 ISSI/CSSI Conformance Testing Requirements CAB [3].

6.3 Interoperability Tests

P25 ISSI and CSSI devices require both SDOC and STR documents in accordance with the most current version of the Baseline Inter-RF Sub-System Interface and Console Sub-System Interface Interoperability Testing Requirements CAB [4].

- End -

³ The *rule of three* refers to the requirement that a piece of equipment under test shall be tested against commercially available equipment from at least three different manufacturers. See P25-CAB-CAI_TEST_REQ, Baseline Common Air Interface Testing Requirements.