SAFECOM Guidance Frequently Asked Questions: Understanding P25 Standards and Compliance

This document summarizes the compliance requirements for Project 25 (P25) compliance standards outlined in the *SAFECOM Guidance on Emergency Communications Grants (SAFECOM Guidance)*. Grantees and applicants funding emergency communications projects using federal funds should reference this frequently asked questions document to understand P25 compliance and find resources when needed. For the purpose of this document, the terms "I" and "my" refer to the grantee or applicant of an agency seeking federal funds for emergency communications projects.

Project 25

Q1. What are P25 standards?

P25 is a suite of standards and specifications which enable interoperability among digital two-way land mobile radio (LMR) communications products provided by multiple manufacturers to support the mission critical public safety requirements. These standards provide a number of technical specifications for emergency communications equipment designed to ensure that equipment is interoperable, regardless of manufacturer. The P25 suite of standards, referenced as TIA-102 standards, is published by the Telecommunications Industry Association (TIA),[1] a recognized American National Standards Institute standards development organization. The P25 Steering Committee periodically publishes a list of "Approved Project 25 Suite of Standards" that includes the most recent documents, including revisions.

Q2. What is the P25 Compliance Assessment Program (CAP)?

The P25 CAP is a formal, independent process administered by the Department of Homeland Security (DHS) Office for Interoperability and Compatibility (OIC), to ensure communications equipment offered by the supplier is compliant with the applicable published standards and the test results are reflected in publicly published documents. Through this third party testing process by independent labs, the P25 CAP 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. Compliance test results are provided with official summary test reports and suppliers' declaration of compliance, which are available at https://www.dhs.gov/science-and-technology/p25-cap.

Q3. What does P25 compliance mean?

Compliance with the P25 suite of standards may differ by each federal agency. To maximize opportunities to improve interoperability across investments, grantees are highly encouraged to ensure that digital voice systems and equipment purchased with federal grant funds comply with the P25 suite of standards, unless otherwise noted in a program's grant guidance.[2] P25 compliance

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[1] The published standards approved by the P25 Steering Committee are available to employees of government agencies at no cost by completing the TIA online request form for government agencies at: http://www.tiaonline.org/all-standards/p25-downloads-application.

[2] Grantees should read a program's grant guidance carefully to ensure compliance with standards, allowable cost, documentation, reporting, and audit requirements.

helps to ensure federal grant funds are used to purchase interoperable solutions for state, local, tribal, and territorial first responders.

Q4. Why is purchasing P25 compliant equipment and systems so important to the public safety community?

Following the tragic events from 9/11, legislation was passed to improve the interoperability of public safety communications systems and equipment. Congress mandated that new or upgraded equipment must be interoperable and meet certain interoperability standards. As a result, the Federal Government supported the purchase of P25 compliant LMR equipment through grants and policy, to ensure public safety systems can interoperate, regardless of manufacturer.

Purchasing P25 equipment ensures that digital LMR systems will be compatible with other, most importantly contiguous, P25 systems. Additionally, standards-based systems enable interoperable communications between emergency responders from various agencies, jurisdictions, and levels of government in the event they need to communicate during day-to-day incidents, large-scale emergencies, and disaster responses. Additionally, P25 standards provide a broader resource of competitive vendors providing more flexibility in purchasing equipment.

P25 Compliance for DHS Grantees

Q5. DHS/FEMA requires its grantees to comply with the SAFECOM Guidance. As a DHS grantee, am I also required to comply with P25 standards?

Yes, DHS/FEMA grantees are required to comply with P25 standards when purchasing LMR equipment. This requirement and other conditions specific to DHS/FEMA grantees are outlined in Appendix D of the *SAFECOM Guidance*. For additional information, reference the *[DHS Authorized Equipment List](#)* to determine allowable equipment types for individual grant programs. If the proposal includes any non-compliant P25 LMR equipment, DHS/FEMA grantees must apply for prior approval.

P25 Purchases Using Federally-Funded Grants

Q6. When applying for a federally-funded emergency communications project, how do I demonstrate that purchases are P25 compliant?

To ensure equipment and systems are compliant with the P25 suite of standards, grantees are strongly encouraged to:

- Review the technical specifications detailed in the P25 Technology Interest Group's (PTIG) *Capabilities Guide*[3] to determine which standards are applicable to the proposed purchase and project.
- Include all applicable P25 standards and expectations for interoperability in any Statement of Work or bid for communications procurements funded through federal grants.
- Ensure all P25 eligible equipment, features, and capabilities selected are P25 compliant, to include new equipment and upgrades. When federal grant funds are used to purchase P25 LMR equipment and systems that contain non-standard features or capabilities[4], when a comparable

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[3] The PTIG *Capabilities Guide* can be found on the PTIG website. To register, visit: http://www.project25.org/.

[4] Within the P25 standards, services and features are categorized as mandatory or standard option (see Appendix A for list of mandatory and standard option features). To be P25 compliant, a product *must* support mandatory features, in accordance with

P25 feature or capability is available, grantees must ensure the standards-based feature or capability is included as well.

- 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 CAP Compliance Assessment Bulletins for testing requirements. If documentation for applicable equipment is not available through the P25 CAP, grantees are encouraged to obtain documented evidence from the manufacturer, as part of the proposal, stating that the applicable tests (identified in the procurement package) were conducted in accordance with the published test procedures in the P25 suite of standards.

Q7. What will the federal agency issuing grant funding use to confirm if purchases in my grant application are P25 compliant?

When reviewing grant applications, the federal agency will verify that proposed equipment purchases are P25 compliant by:

- Reviewing the *P25 Compliant Approved (Grant-Eligible) Equipment List* to confirm if the equipment to be purchased has been tested and is reflected on the list. If the item is included, it is P25 compliant.
- Referring to the *DHS Authorized Equipment List* (applicable to DHS/Federal Emergency Management Agency [FEMA] grants only).
  - Note: Some items on this list may not be applicable to the P25 standards.
- Reviewing the application package to confirm if the applicant provided a letter from the manufacturer verifying the purchase is P25 compliant.

If the purchase cannot be verified as P25 compliant using these methods, then the federal agency has the authority to request additional information, grant a waiver, or deny the purchase. As a reminder, the federal agency awarding the grant has the right to deny a waiver and one should only be considered for unique circumstances that will not impact interoperability.

Q8. What will happen if I try to purchase non-compliant P25 equipment?

While not encouraged, in the event a grantee is using federal funds to purchase equipment that does not align with P25 standards, the grantee must consult with the federal agency to determine if non-compliant P25 equipment is allowable. In some cases, written justification must be provided to the grantor.

Many agencies will not approve non-standards-based equipment unless there are compelling reasons for using other solutions. Authorizing language for most emergency communications grants strongly encourages investment in standards-based equipment. Funding requests by agencies to replace or add radio equipment to an existing non-compliant P25 system will be

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the P25 definition in the standards. Standard option features are not essential but must conform to the P25 definitions if offered by the manufacturer. All other features offered by a manufacturer are considered proprietary options. A manufacturer's proprietary option is a feature that is not a requirement but may provide an added value to the customer (e.g., status messaging). However, this feature may not be interoperable with other manufacturers' equipment.

considered if there is a clear rationale why such equipment should be purchased and written justification of how the equipment will advance interoperability and support eventual migration to interoperable systems. The written justification should also explain how that purchase will serve the needs of the applicant better than equipment or systems that meet or exceed such standards. Absent compelling reasons for using other solutions, agencies are strongly encouraged to invest in standards-based equipment.

P25 Compliance Resources

Q9. What resources should be considered when applying for emergency communications grant funding?

Grant applicants applying for emergency communications funding are strongly encouraged to work with their Statewide Interoperability Coordinator (SWIC). The SWIC should review the application prior to submission to ensure projects support the state or territory's strategy to improve interoperable emergency communications. The SWIC can also confirm the funding request aligns to the latest versions of their *Statewide Communication Interoperability Plan* and the *National Emergency Communications Plan,* as these are vital plans to improving interoperability.

Q10. Where can I find more information about P25 standards and/or compliance?

Grantees should be aware that a wide range of information is available from government and industry resources, including:

- SAFECOM and the National Council of Statewide Interoperability Coordinators' Land Mobile Radio Trio - LMR 101, LMR for Decision Makers, and LMR for Project Managers: https://www.dhs.gov/safecom/funding
- PTIG: http://www.project25.org/ (Free registration required)
- P25 Suite of Standards: http://www.project25.org/images/stories/ptig/20160128_Approved_P25_TIA_Standards_Q1-2016.pdf
- P25 CAP Information: https://www.dhs.gov/science-and-technology/p25-cap; http://www.firstresponder.gov/Pages/P25CAP.aspx?s=Saver
- P25 CAP Approved (Grant-Eligible) Equipment List: https://www.dhs.gov/science-and-technology/approved-grant-eligible-equipment
- P25 CAP Compliance Assessment Bulletins: https://www.dhs.gov/science-and-technology/p25-cap
- Best Practices for Encryption in P25 Public Safety Land Mobile Radio Systems: https://www.dhs.gov/sites/default/files/publications/20160830%20Best%20Practices%20for%20Encryption_Final%20Draft508.pdf