Achieving interoperability, which is the ability of equipment or groups to operate in conjunction with one another, has long been a challenge in the emergency response arena. And yet, it's critically important that responders communicate with each other regardless of the make or model of their communications equipment. The Project 25 Compliance Assessment Program (P25 CAP) is a key component to achieve interoperability among different suppliers' products. The P25 CAP works with first responders at all levels and disciplines, industry and industry organizations to ensure the program addresses interoperability requirements. The congressionally mandated P25 CAP provides responders with confidence that the communications equipment they use has been tested against the appropriate P25 standards and determined interoperable, regardless of manufacturer.

Terms, such as P25 Compliant, P25 CAP Compliant and P25 Compliant with the Statement of Requirements (P25 SoR), are often used by manufacturers and may appear in advertisements and documentation that may be confusing and misleading. Users may assume P25 capable and P25 Compliant mean the same thing. Unfortunately, they would be wrong. Only communications equipment documentation that is submitted to the Department of Homeland Security (DHS) Science and Technology Directorate (S&T) showing the vendor equipment has been tested at a DHS S&T recognized laboratory in accordance with DHS S&T documented test procedures, satisfying the testing requirements and approved by DHS S&T, is considered "P25 CAP Compliant." Below are descriptions of common P25 terminology along with the entities involved:

1. **P25 SoR**: The P25 SoR is approved by the P25 Steering Committee. While it is the basis for P25 standards development, not all items contained in the P25 SoR have accompanying standards. Therefore, just because equipment may be marketed and sold as a P25 radio or a P25 radio network, it does not mean it meets all the requirements called out in the P25 SoR.

2. **P25 Standard**: TIA-102 Standards are developed by the Telecommunications Industry Association (TIA), an American National Standards Institute-accredited standards development organization. These Standards may be adopted by the P25 Steering Committee for inclusion into the P25 Standard. The P25 Steering Committee is free to adopt any standard as "P25" from any standards development organization.

3. **P25 Standard Test**: The TIA-TR8 Engineering Committee develops standardized, published testing procedures, which are then adopted for P25 CAP Compliance testing. These testing procedure documents are known as Recommended Compliance Assessment Tests (RCATs). It

should be noted that not all features defined by P25 Standards have standardized testing procedures. Testing against the standards may be done outside the P25 CAP Compliance Program, but cannot be used to determine P25 CAP Compliance.

4. **P25 CAP**: P25 CAP is managed by DHS S&T. This is a collaborative program with manufacturers, laboratories and accreditation bodies. P25 CAP Compliance Assessment Bulletins (CABs) define which test cases are included for P25 CAP testing. DHS S&T develops and publishes CABs using TIA 102 documentation as a basis. DHS S&T recognizes specific laboratories to conduct P25 CAP testing, which must be independently accredited. It should be noted that not all features defined by P25 Standards are tested.

More on the P25 CAP Process

As part of the program, manufacturers test their equipment at a recognized and ISO 17025 accredited P25 CAP laboratory that rigorously tests the equipment to the test cases within the P25 CAP CABs. Once the equipment passes, a Summary Test Report (STR) and a Suppliers' Declaration of Compliance (SDOC) document is submitted to DHS S&T for approval and posting to its website. DHS S&T reviews the documentation and, once approved, makes them available on its website along with a full list of P25 CAP Approved (i.e., Grant-Eligible) Equipment. It is this list, and only this list, which is referenced by several federal grant programs, like those through the Federal Emergency Management Agency, as allowable equipment for purchase using federal grant funds.

When you're looking for equipment that's independently tested for compliance with the P25 Standard, DHS S&T recommends the P25 CAP Approved Equipment list be your go-to source of reference.

Recent Program Updates

P25 CAP currently covers an array of Land Mobile Radio (LMR) equipment types in terms of testing parameters. P25 CAP is in the process of expanding testing to include Inter RF Sub System Interface (ISSI) and Console Sub System Interface (CSSI). DHS S&T seeks to develop partnerships with public safety agencies and ISSI/CSSI vendors for pilot testing during the fall of 2018 and spring of 2019. Interested parties should email P25CAP@hq.dhs.gov.

Participating P25 CAP Manufacturers

Airbus, BK Technologies, Codan, EFJohnson, Harris, ICOM, JVCKENWOOD, Motorola Solutions, PowerTrunk/Sepura, Radio Activity, RCA, Tait, Unication