

# P25 Interoperability

You're counting on it... do you really have it?



Will you have interoperability with other agencies during an event?

Is your LMR system still P25CAP compliant?

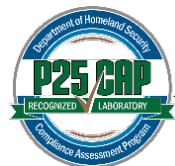
**P25 System Managers – have you experienced any of these changes in your LMR system?**

- Revised hardware, software, firmware?
- New radios added with old radios?
- New manufacturer radios added?
- New routers, cables, servers, etc.?

**We Provide:**

- Installed System Verification
- ISSI/CSSI Interoperability Field Testing
- Cyber Security Reviews & Mitigation

**Let's discuss your system and how we might assist.**



The Only DHS Recognized Independent P25 Test lab.  
Please visit our website <https://p25testing.com/> for more information.

**“Best practices” to assess P25 compliance of your radio system ...  
...and keep it current!**

- Review the status of the P25CAP test standards and program changes announced since 2021.
- Ensure your system and radios are still P25CAP compliant.
- Coordinate compliance status with neighboring jurisdictions to ensure interoperability.
- Consider using an independent P25CAP test lab to ...
  - Assess P25 and other features during equipment procurement.
  - Conduct post installation verification.
  - Ensure all features are operating as expected.
  - Evaluate all revisions to equipment hardware, software, and firmware.
  - Certify new radios added with old radios from the same equipment supplier.
  - Certify new manufacturer radios added.
  - Assess impact of new routers, cables, servers, etc.
- Conduct periodic (annual) verification.
- Check with your P25 Equipment manufacturer about how they ensure new products are compliant and their programs to keep legacy equipment up to date.
- Create a system “road map” of installed equipment and firmware/software version numbers.

**Why?**

Approximately 3,000 P25 radio systems have been installed by agencies in the last 20 years.

The P25 Compliance Assessment Program (CAP) was established in 2007.

The P25CAP test standards have been revised and expanded several times over the past 10 years.

P25 equipment manufacturers have been continuously introducing new products and features.

Changes in standards, testing, hardware, firmware, features and services may affect your interoperability.

## Compliance Testing LLC Your “Interoperability Partner”

### Before you purchase P25 Equipment –

- **P25CAP** – review P25 CAP documents and verify tests appropriate for individual use cases.
- **“Beyond P25 CAP”** – Features with no published CAB’s – Agencies may want testing features/services to P25 standards not yet included in CAB’s These features or services may be important to the agency to accomplish their mission.
- **Non P25 features** – Agencies may want testing to verify features/services/specifications not included in the Project 25 program. These features or services may be important to the agency to accomplish their mission.
- **Custom test plan** – Verify compliance to the TIA-102 standard. Create a custom test plan for the agency or their supplier to verify their compliance to the manufacturer’s features/services/specifications.

### After you purchase P25 Equipment –

- **Subscriber Unit Certification** for use on the User System – Must be compliant and registered on the DHS Website. Review Documents, test results, features, and services and compare to User Defined requirements.
- **“Beyond CAP”** – Features and services determined to be critical to mission accomplishment and/or written operation plans. Review manufacturer documents and compare to User Defined requirements.
- **FCC/ISED et al certification** test reports – Review Documents, Test Results and compare to User Defined requirements.
- Ensure **radios from varying manufacturers** can perform the basic functions in this test plan and interact correctly with the User system. Includes test cases used for informational purposes and may/may not be mandatory for acceptance.
- **Verification** – Bench test features/services in the SU and issue a detailed test report of pass/fail. Work with User to develop a test plan.
- **Acceptance** – Field test the SU on the User system to ensure the performance according to the test plan. Work with User to develop a test plan.
- **ISSI/CSSI Interoperability Field Testing”** for both End-User Systems at remote locations or... “Virtual.” CTL is Accredited by ANAB, DHS & P25CAP as a “recognized ISSI/CSSI test lab.”

### Periodically –

- **P25 Compliant** – Test the System Core to ensure it is still P25 CAP Compliant. This would be an ANAB and DHS accredited test. Issue detailed test report.
- **System Performance** – Develop a test plan to measure specified performance factors of the core site and other sites. This could include RF specs (power, alignment, spurious emissions, etc.) and/or data specs on the actual CAI and other data signals transmitted over the system.
- **Coverage** – Conduct drive tests to measure the coverage in all or sampled areas of the system.

## How Can We Get Started to Help You?

1. Schedule a Teams meeting with our engineering team.
2. We will discuss your system:
  - a. Revised hardware, software, firmware.
  - b. New radios added with old radios.
  - c. New manufacturer radios added.
  - d. New routers, cables, servers, etc.
  - e. Other changes to any components.
  - f. Planned changes to your system in next 3-5 years.
3. Identify your concerns and priorities. What is most important to you in both the long and short term.
4. Brainstorm a path forward (“next steps”).
5. Our engineering team will then use this information to develop a comprehensive “custom test plan” to meet your objectives.
6. We will present the custom test plan, and scale it to your main interests and budget needs.
7. Our team will plan all aspects of the project and oversee the execution to your complete satisfaction.
8. We will provide detailed documentation of test results and recommendations to address any issues identified.