

1. **PURPOSE**

- 1.1. This document describes the requirements and specifications for the installation of Emergency Responder Radio Coverage Distributed Antenna Systems.

2. **GENERAL**

2.1 **DEFINITIONS**

ERRCS – Emergency Responder Radio Coverage System. The passive and active components comprising a functioning system to amplify and repeat radio communications between First Responders inside of a structure and the base station radios at the respective agencies / departments.

DAS – Distributed Antenna System. The passive and active components within a structure to distribute radio frequencies to the required locations at the required power levels.

Donor Site – The location where the Emergency Responder radio signal is received and transmitted from the structure(s). This includes the active and passive components required to receive Radio Frequencies and convert them to an optical signal that can be distributed via the Fiber Distribution System.

Fiber Distribution System – The optical fiber connecting a donor site to the DAS in a structure.

ROU – Remote Optical Unit. The active component within a structure that receives the signal from the Donor Site, via the Fiber Distribution System, and converts the optical signal back to Radio Frequencies.

OEU – Optical Expansion Units. An active part of the Fiber Distribution System, located in a secure UIT facility that allows connections for multiple ROU's back to the Donor Site.

SVRIA – Silicon Valley Regional Interoperability Authority.

SUFMO – Stanford University Fire Marshall's Office

SUIT – Stanford University Information Technologies

ITSFE – Information Technology Services Facility Engineering

3. **RESPONSIBILITIES**

3.1 New Buildings and/or Major Building Renovation Projects:

- An SUIT-ITSFE representative will work with the building client(s) to determine the requirements for ERRCS systems. Please see attachment #1 and/or attachment #2, depending on jurisdiction, for overall scope of system requirements.

4. **IMPLEMENTATION PROCEDURES (New Buildings and/or Major Building Renovation Projects):**

4.1 New Buildings and/or Major Building Renovation Projects:

- The preferred SUIT solution is based on the SOLiD family of DAS products, with the Donor Site located remotely and the Radio Signal distributed via the Fiber Distribution System to a Remote Optical Unit located inside the new/remodeled

structure. A SUIT representative will review the requirements for the system prior to the registration of the project with the SVRIA.

- Any proposed modifications to the Donor Site equipment, Optical Expansion Units, or other existing University equipment must be submitted and reviewed by an SUIT ITSFE, in consultation with SUFMO if deemed appropriate by UIT.
- The SUIT ITSFE group reserves the right to modify or amend these guidelines at any time. The designated UIT ITSFE representative will verify the requirements on a project-by-project basis in order to comply with the AHJ's current best practices, guidelines and requirements, as determined by The University.

5 ATTACHMENTS

1 – City of Palo Alto Section 510 – Emergency Responder Radio Coverage Systems

2 – County of Santa Clara Standard Details and Specifications - ERRCS