TCOMM911 IN-BUILDING ERCES MIGRATION AND ACTIVATION PROCESS FOR PROPERTY OWNERS

Table of Contents

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1. **Definitions**

    - BDA – Bi-Directional Amplifier receives, amplifies, and broadcasts radio signal to and from a radio site allowing re-transmission using a DAS inside a building.

    - DAS – Distributed Antenna System are the antennas located throughout a building that connect to a BDA allowing two-way communication using an external radio network.

    - DL – Downlink is the link from the radio system to the end user.

    - ERCES - a sophisticated network of technology and infrastructure designed to enhance communication for first responders during emergencies. The system receives radio signals and retransmits them throughout the building during an emergency.

    - TCERN – Thurston County Emergency Radio Network – The new P25 digital radio network for first responders.

    - TCOMM911 – Thurston 911 Communications - The agency that owns and operates the TCERN system infrastructure and 911 emergency dispatch center.

    - TCOMM911 Radio Systems Department – The radio department is responsible for the system performance TCERN.

    - UL – Uplink is the link between the end user and the radio system.

2. **Executive Summary**

3. Thurston 911 Communications (TCOMM911) is upgrading the Thurston County Emergency Radio Network (TCERN) used by first responders in Q4 2024. All radio users on the current network will be transitioned to the new radio network (TCERN) and as a result, **all** properties with an in-building emergency radio communication enhancements system (ERCES) currently operating on the TCOMM911 Emergency Radio System need to have those systems updated. This update will allow the ERCES to operate properly on the new radio network.

    The process to update and re-activate existing ERCES and the roles and responsibilities of the key stakeholders involved are defined in this document.

    It should be noted that any costs associated with the upgrade of existing ERCES is solely the responsibility of the Property Owner.

4. **ERCES Update Process Overview**

    Refer to the detailed process flows below:

    a. TCOMM911 recommends that building owners and/or property managers for any property with an operational ERCES on the current VHF TCOMM911 radio network engage a qualified ERCES
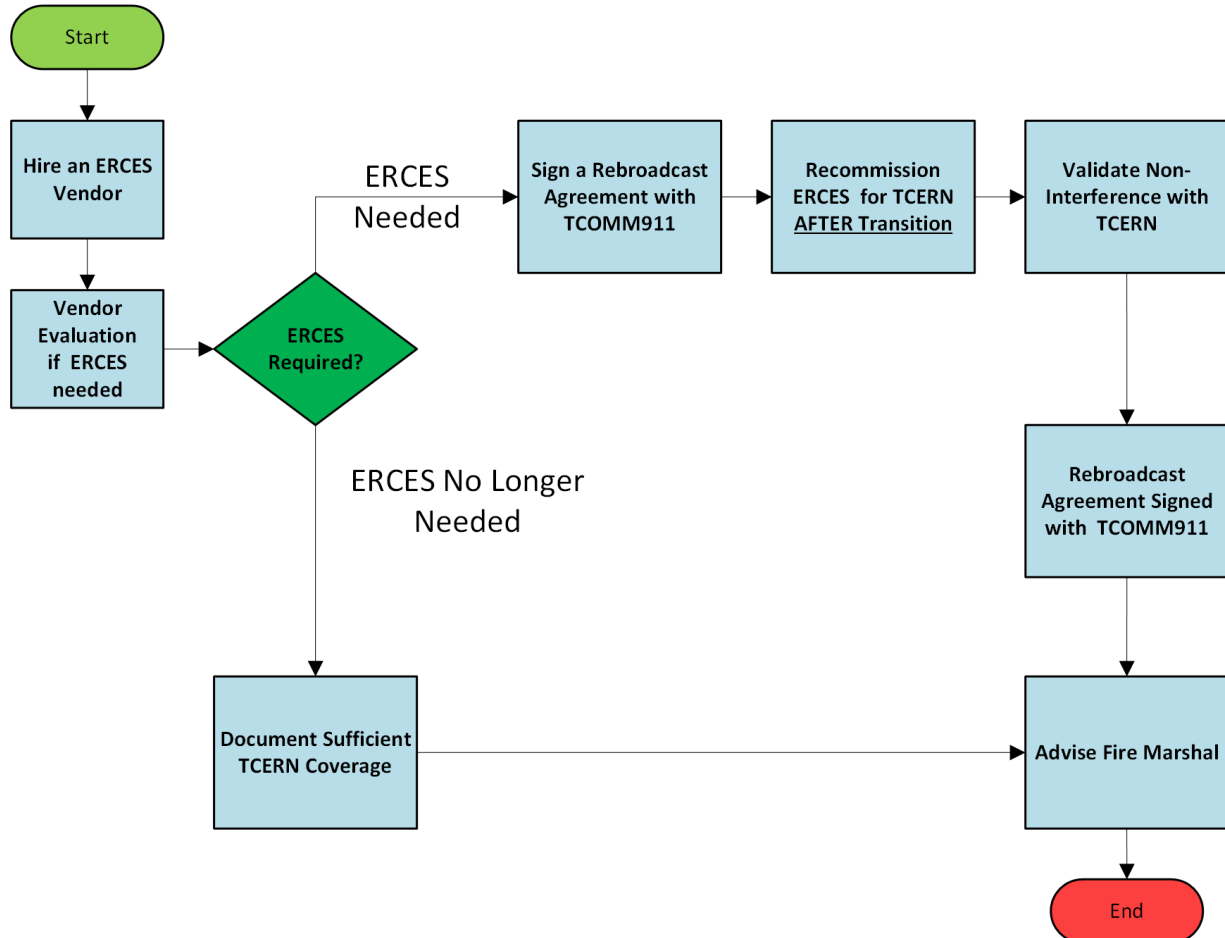
vendor to visit their property and perform testing to determine the future need for a ERCES when TCERN becomes operational.

b.   If test results indicate a ERCES is required, building owners and/or property managers need to work with an ERCES vendor to design and implement a ERCES that meets the technical requirements for operation on TCERN.

c.   Note that existing ERCES will not support in-building public safety communications once users are transitioned to the new system in Q4, 2024.

5.   ERCES Migration Sequence Diagram for Property Owners/Managers

Appendix A – Supplementary Information

1. **ERCES Property Prioritization**

   TCOMM911 and Thurston County Fire Marshals will work to prioritize buildings according to the table below and finalize the categorized list of ERCES properties 30 days prior to radio user transition shutdown.

Priority	Type	Example Venues
1	Critical Infrastructure	Police Stations, Jails, Trauma Centers
2	High Occupancy	Convention Centers, Sports Arenas
3	New Construction	Properties obtaining Temporary Certificate of Occupancy (TCO) for the first time
4	All Others	All Others

   TCOMM911 will coordinate with Fire Marshals and building owners of Priority 1 facilities after users are migrated to the new P25 network to facilitate recommissioning of ERCES on TCERN.

2. **TCOMM911 External Communications**

   In the lead up to the radio system transition to TCERN, the items below define the overall communication plan for property owners and managers, ERCES vendors, Fire Marshals, and TCOMM911 stakeholders:

   - Townhall meeting with Fire Marshals to agree on update requirements and strategies for ERCES post transition to the new P25 digital network.
     - If approved, communicate a pause on all new ERCES installations until the new P25 digital network is operational.
   - Distribution of the final ERCES Migration and Activation process to ERCES property owners and managers, ERCES vendors, Thurston County Fire Marshals, and TCOMM911 internal stakeholders in August 2024.
   - Provide stakeholders with self-serve access to ERCES-related policy, process, and technical information online at https://tcomm911.org/in-building-ERCES-resources/.
   - Notice of ERCES impairment sent to Fire Marshals on the day-of radio user transition.
   - Weekly notice to Fire Marshals of ERCES restored to functionality.

3. **Stakeholder Roles and Responsibilities**

   a. ERCES Property Owners

      - Direct their agents to perform necessary activities to update their ERCES as required to operate on the new TCOMM911 P25 digital radio network.

      - Sign a Rebroadcast Agreement with TCOMM911.

   b. ERCES Property Managers, Engineers

      - Contract a ERCES vendor to work on the property's behalf.

      - Facilitate access for ERCES vendor.

   c. ERCES Vendors

      - Submit testing to demonstrate properties require a ERCES upgrade.

      - Submit ERCES designs to TCOMM911 according to the TCOMM911 In-Building ERCES Design Approval Process.

      - Check in and out test radios.

      - Schedule properties for UL validation.

      - Complete and demonstrate the UL validation checklist.

   d. TCOMM911 Radio Shop

      - Validate ERCES design submissions.

      - Supervise the demonstration of the Uplink validation checklist with ERCES vendors.

      - Manage the distribution and return of test radios.

      - Schedule properties for UL validation.

      - Communicate user transition date to ERCES stakeholders.

      - Document properties in test.

      - Track and report overall progress.

      - Communicate/incorporate lessons learned.

   e. Thurston County Fire Marshals

      - Prioritize ERCES in their respective regions.

      - Receive and communicate progress of migrated ERCES to their agencies.

- Enforce code compliance, especially the compliance of emergency radio coverage post-cutover.

- Provide guidance pertaining to:

  o Necessity of permits.

  o Application of UL validation results towards annual certification.

- Assist, if required, in disabling interfering ERCES.