

Education & Training Framework (April 2025)

Overview

This document provides a framework for ShakeAlert® Technical Partners to develop an Education & Training (E&T) Plan, which is a requirement for a Pilot Agreement to License to Operate (LtO) Technical Partner conversion. Components of an E&T Plan are described herein.

To maximize the impact of ShakeAlert-powered products and/or services, U.S. Geological Survey-licensed LtO Technical Partners (LtOs) are required to educate end-users on topics such as how the ShakeAlert System works, what protective actions to take, and what they can expect from an LtO's product and/or service. All LtOs must have an E&T Plan approved by the U.S. Geological Survey (USGS) and in place before Pilot-to-LtO conversion. Along with the Technical Performance Report, the E&T Plan will be provided as a written report and submitted to the USGS before the Pilot-to-LtO Performance Review with USGS representatives.

Per the terms of the ShakeAlert License Agreement, the proposed E&T Plan **must be implemented within six months after LtO conversion (i.e., full execution of the Pilot License Agreement [PLA] to LtO Amendment)**. If the licensee needs to change any aspect of the E&T Plan after LtO conversion, the USGS must be consulted, as changes could require an LtO Amendment. Failure to implement the E&T Plan on schedule could result in license suspension until the E&T Plan is implemented.

Education and training will always be a work in progress. The ShakeAlert Communication, Education, Outreach, and Technical Engagement (CEO&TE) team is ready to help. [Contact your assigned Technical Engagement Regional Coordinator](#) (TERC) to assist you as you develop your E&T Plan.

Definitions

TECHNICAL PARTNERS

ShakeAlert Technical Partners execute a **Pilot License Agreement (PLA)** with the USGS to research, develop, and internally test innovative ways to use earthquake data in ShakeAlert Messages for the delivery of ShakeAlert-powered products and/or services to the public and automated systems. The goal of the PLA is conversion to a **License to Operate (LtO)** status through successful completion of a **ShakeAlert Performance Review** with the USGS.

License to Operate (LtO) Technical Partners have met the terms of the **Statement of Work (SOW)** of a well-defined use case in their ShakeAlert License Agreement via a USGS-administered Performance Review. Ultimately, LtO Technical Partners are approved by the USGS to distribute or sell their ShakeAlert-powered product(s) and/or service(s).

END-USERS

End-users receive ShakeAlert-powered products and/or services from LtO Technical Partners. End-users include people who receive these products and/or services directly (e.g., to their cell phones), as well as organizations that work with an LtO Technical Partner to implement automated "machine-to-machine" actions (e.g., slowing or stopping a train or delivery of an alert through a public address system).

• Components of an Education & Training Plan

Use this checklist to ensure your Education & Training (E&T) Plan includes these components. This checklist can also serve as the structure/outline for your E&T Plan.

I. Background on Your Company and Your ShakeAlert-powered Product(s) and/or Service(s)

- Briefly describe your company or organization.
- Describe what ShakeAlert-powered product(s) and/or service(s) you will offer to end-users and how they will be delivered. *(Examples: VOIP, sirens, message boards, voice-activated fire alarm box)*
As applicable, describe any automated machine-to-machine actions. *(Examples: close/open valves, start generator, slow machinery)*

II. Education & Training Audiences

- Define your learner audiences, including end-users and/or customers. Who needs to know about your ShakeAlert-powered product(s) and/or service(s)? *(Examples: in-house technical staff, faculty and students, train operators and passengers, hospital administrators and patients, customers of retail products)*
- For each audience listed, briefly summarize their needs for information. *(Examples: technical details, protective actions)*

III. Description of Education & Training Materials

The following components should be included in your E&T materials.

E&T Materials Overview

- For each audience, provide a description and/or examples of the E&T materials you intend to deliver to end-users. *(Examples: technical training materials, end-user education, packaging, instructional materials, marketing materials, etc.)*
- Identify key messages you will use with your audiences for each ShakeAlert-powered product and/or service. *(Available resources include [ShakeAlert® Core Messaging \[Talking Points\]](#), [ShakeAlert Messaging Toolkit FAQs](#))*

Recommended Responses to ShakeAlert-powered Alerts

- As applicable, describe the protective actions you recommend for end-users who will receive alerts. *(Available resources include [Drop, Cover, and Hold On graphic](#), [ShakeAlert Protective Actions Recommendations](#))*
- As applicable, describe the recommended responses/actions to any automated actions initiated for each ShakeAlert-powered product and/or service.

III. Description of Education & Training Materials (continued)

Product and/or Service Details Included in E&T Materials

- As applicable, provide an example or detailed description of the content information delivered to end-users. (Examples: audio alert tones, voice- or text-based messaging [e.g., “Earthquake! Earthquake! Expect shaking. Drop, Cover, and Hold On. Protect yourself now.”])
- Provide information about any limitations of each product and/or service. Communicating expectations to end-users is indispensable and a matter of safety. (Examples: geographical areas of availability, allowable automated actions, limitations of earthquake early warning in general)
- Identify [magnitude and intensity threshold](#) criteria for delivering alerts or initiating automated actions. (Examples: alerting end-users for earthquakes estimated at M4+ in areas shaking is estimated at MMI 3+, starting backup generators if M5.5+ and MMI 4+)
- Describe how you plan to deliver Post-ShakeAlert Message Follow-up Messages to end-users. If you do not plan to deliver Follow-up Messages, explain why not. (Available resources include [FAQ: ShakeAlert Warning Times, Follow-up Message Guidance](#) [available only to Technical Partners with a GitLab account])

Availability of Resources to End-Users

- Are your E&T materials available in other languages? Please list those languages (Available resources include [ShakeAlert Translated Resources](#))
- Describe any considerations for your product(s) and/or service(s) to be available to a broad range of end-users. (Available resources include [ShakeAlert Messaging Toolkits](#) and other content available on [ShakeAlert.org](#))
- Describe how you provide E&T to a broad range of audiences.

IV. Delivering Education & Training

- Describe how your ShakeAlert E&T will be delivered to end-users. Include your plans for E&T for each audience identified in Section 2. (Examples: website, video, slides, packaging, fact sheets, train-the-trainer content)
- If applicable, include instructions on how to operate the product(s) and/or service(s) or refer to an instruction manual.
- If applicable, describe who will be responsible for E&T of end-users. The ShakeAlert CEO&TE team will not be responsible for training end-users, but may offer resources and assistance.

V. Continuing Engagement

- As the technical capabilities of the ShakeAlert System evolve, so too must E&T materials and resources. Describe how you will update E&T materials and resources on your website, social media, packaging, etc. (Available resources include [ShakeAlert Messaging Toolkits](#) and other content available on [ShakeAlert.org](#))
- Please list the social media channels you will use for E&T purposes and provide your handle(s).
- (Optional) Encourage end-users to follow @USGS_ShakeAlert on X and visit usgs.gov/ShakeAlert. (Available resources include [ShakeAlert Messaging Toolkits](#) and other content available on [ShakeAlert.org](#)). ShakeAlert is exploring a presence on other/additional social media platforms.
- Describe your plans to notify end-users if your product(s) and/or service(s) becomes unavailable (e.g., service interruption or failure, etc.) or becomes unsupported at some point in the future.

VI. Measuring Success (Optional)

- Describe how you will measure the success of your E&T materials and resources. Describe how will you make improvements to your materials and resources based on interpretation of your results.

VII. Marketing Materials (Optional)

- If applicable, provide examples of marketing materials that relate to each ShakeAlert-powered product and/or service you offer.

• Submit Your E&T Plan

- Send your E&T Plan to your Technical Engagement Regional Coordinator for review. If needed, schedule a meeting to discuss feedback. Revise your E&T Plan based on feedback from them.
- Prior to your LtO Performance Review, submit your E&T Plan to the USGS for review. You may submit the Technical Performance Report as well, but these two documents are not required to be submitted at the same time.
- The USGS might provide further feedback and request revisions to your E&T Plan. If needed, meet with the USGS to discuss revisions; otherwise, submit the revised E&T Plan to the USGS.
- If the Technical Performance Report has already been approved by the USGS, schedule an LtO Performance Review.

• Contact Us

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Technical Engagement Regional Coordinators (by region)

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