



TECHNICAL REPORT

## **Emergency Communications (EMTEL); Guidelines for alert message content accessibility**

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Reference

DTR/EMTEL-00033

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Keywords

accessibility, usability

**ETSI**

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## Foreword

This Technical Report (TR) has been produced by ETSI Special Committee Emergency Communications (EMTEL).

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## Modal verbs terminology

In the present document "**should**", "**should not**", "**may**", "**need not**", "**will**", "**will not**", "**can**" and "**cannot**" are to be interpreted as described in clause 3.2 of the [ETSI Drafting Rules](#) (Verbal forms for the expression of provisions).

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## Introduction

The success of alert messages with the purpose of warning the public and individuals about potential hazards and disasters is dependent on the ability of the message recipients to:

- (i) understand that an alert message has been received; and
- (ii) to understand the contents of the alert message in order to draw the correct conclusions.

Both these abilities may be restricted by specific sensory or cognitive requirements of individual users. Individuals with sensory impairments may not become aware of a published warning message unless the message is delivered in a modality which they can receive and interpret. For a warning message to be understood by its recipients it is essential that it is presented in a way that users can interpret correctly, taking into account their specific sensory and cognitive requirements. Other factors that need to be considered are e.g. the ability of a foreign user to understand the local language.

While the design guidelines collected in the present document are expected to benefit primarily users with special sensory or cognitive requirements they are equally relevant for user in situations in which environmental factors exclude the use of specific modalities (e.g. spoken language in a very noisy environment) or in which the users are not able to interpret specific presentation of information (e.g. written alert messages while driving a vehicle).

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# 1 Scope

The present document provides user interface design guidelines applicable to alert messages which allow users with disabilities to become aware of alert messages and to access the contents of such messages. These guidelines cover the presentation of alert messages.

The contents of alert messages is not in the scope of the present document.

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## 2 References

### 2.1 Normative references

Normative references are not applicable in the present document.

### 2.2 Informative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

NOTE: While any hyperlinks included in this clause were valid at the time of publication ETSI cannot guarantee their long term validity.

The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

- [i.1] ISO 9241-12 (1998): "Ergonomic requirements for office work with visual display terminals (VDTs) -Part 12: Presentation of information".
- [i.2] ISO 9241-171 (2008): "Ergonomics of human-system interaction - Part 171: Guidance on software accessibility".
- [i.3] ISO/IEC 40500 (2012): "Information technology - W3C Web Content Accessibility Guidelines (WCAG) 2.0".
- [i.4] ETSI EG 202 116 (03-2009): "Human Factors (HF); Guidelines for ICT products and services; "Design for All"".
- [i.5] ETSI EG 203 350 (V1.1.1) (11-2016): "Human Factors (HF); Guidelines for the design of mobile ICT devices and their related applications for people with cognitive disabilities".
- [i.6] ETSI EN 301 549 (V1.1.2) (04-2015): "Accessibility requirements suitable for public procurement of ICT products and services in Europe".
- [i.7] Wireless Emergency Alerts (WEA).

NOTE: Available at <https://www.fcc.gov/consumers/guides/wireless-emergency-alerts-wea>.

- [i.8] ETSI TS 102 900 (V1.2.1) (01-2012): "Emergency Communications (EMTEL);European Public Warning System (EU-ALERT) using the Cell Broadcast Service".