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Intelligent transport systems — Pre-emption of ITS communication networks for disaster and emergency communication — Use case scenarios

Systèmes intelligents de transport — Préemption des réseaux de communication ITS pour les secours en cas de catastrophe et les communications d'urgence — Scénarios de cas d'utilisation

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 204, *Intelligent transport systems*.

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Introduction

This document presents use case scenarios in support of future development of standards for ad-hoc wireless network communication under disaster and emergency cases.

Under certain natural disaster situations such as earthquake, tsunami, hurricane, and snowstorms, the existing commercial telecommunication infrastructure, either wireless or wired networks, can be destroyed. In order to provide communication means for the disaster areas, some ad-hoc networks may need to be established.

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Intelligent transport systems — Pre-emption of ITS communication networks for disaster and emergency communication — Use case scenarios

1 Scope

This document provides the outcome of discussions on use case scenarios and assumed requirements for using ad-hoc wireless networks under disaster and emergency conditions including related priority, security and urgency aspects of communication requirements.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 15662, *Intelligent transport systems — Wide area communication — Protocol management information*

ISO 21210, *Intelligent transport systems — Communications access for land mobiles (CALM) — IPv6 Networking*

ISO 21217, *Intelligent transport systems — Communications access for land mobiles (CALM) — Architecture*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 15662, ISO 21210 and ISO 21217, and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— IEC Electropedia: available at http://www.electropedia.org/

— ISO Online browsing platform: available at http://www.iso.org/obp

3.1
information sender
person(s) or organization(s) that send a message for disaster use cases

Note 1 to entry: Messages may include the information for a disaster, damage area, damage level, vital and safety information, refugee camp and rescue supply.

3.2
information destination
person(s) or organization(s) to which an *information sender* (3.1) wants to provide information

3.3
information urgency level
level of allowable time to deliver the information from an *information sender* (3.1) to an information destination

3.4
information lifetime
time period during which information is effective

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