



**Emergency Communications (EMTEL);
Basis of requirements for communication of individuals
with authorities/organizations in case of distress
(Emergency call handling)**

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650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C
Association à but non lucratif enregistrée à la
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Foreword

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

The present document is the first of a set of deliverables covering the communication needs of individuals and authorities in emergency situations, as identified below:

- **ETSI TR 102 180: "Emergency Communications (EMTEL); Basis of requirements for communication of individuals with authorities/organizations in case of distress (Emergency call handling)";**
- ETSI TS 102 181 [i.20]: "Emergency Communications (EMTEL); Requirements for communication between authorities/organizations during emergencies";
- ETSI TS 102 182 [i.21]: "Emergency Communications (EMTEL); Requirements for communications from authorities/organizations to individuals, groups or the general public during emergencies";
- ETSI TR 102 410 [i.22]: "Emergency Communications (EMTEL); Basis of requirements for communications between individuals and authorities whilst emergencies are in progress".

Modal verbs terminology

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Introduction

The provision of Emergency Telecommunications is one of the most important duties of a public authority towards individuals present on its territory. Individuals, Authorities and Emergency response teams therefore have a need for dedicated, high quality communication systems operating at all times.

In the past this area of communications has been developed, provided and organized by the national telecommunications operators and the national safety and security agencies/organizations. In today's deregulated and liberalized telecommunications market, operators of public telephone networks have the obligation to provide this type of communication under their regulation on a European and national basis.

At European Union level, a common emergency call number (112) is applied. In certain countries it may co-exist with former numbering codes maintained by the national authorities and dedicated to more specific usages or needs. The proposals of the present document are primarily focussed towards the deployment of a consistent service based on the 112 number; it is a matter of national decision and initiative to apply them for the other numbers in use for emergency calling.

The present document should be read as a contribution to the harmonization of the use of E112 by the emergency and disaster response agencies. Based on inputs from all parties in the Emergency Service User Community involved in providing such services, and after due adoption, the requirements expressed should be distributed to the relevant ETSI Technical Bodies, who are requested to take this material into account when amending existing, or drafting new, deliverables for services and systems to support Emergency Communications. However, the present document can also be made available to other organizations and mainly at European Commission level as a contribution to their work, as the case may apply.

The present document catalogues the requirements on Emergency Call Handling as seen by the Emergency Service User Community. Clause 4 sets out the requirements on the emergency call service itself, including: service provision, end-user expectations and related requirements, terminal equipment, the call originating network, interconnection between networks, the functionality on the PSAP (Public Safety Answering Point), functionality on involved and transit networks, and network management requirements. Clause 5 outlines the benefits of a European-wide interface between operators and Public Safety Answering Points. Clause 6 lists the special requirements when making emergency calls by disabled, elderly and young users. Clause 7 refers to the need for special requirements for emergency calls in a foreign language. Where clause 8 quotes the data protection provisions in the case of an Emergency situation and clause 9 refers to the need for future considerations in further networks still to be defined. Clause 4 is the main clause describing the basic working of the service and its components, with a catalogue of the types of access to be considered and their special networking considerations.

NOTE: A specific mention may be made about the processing of the location information to be sent with the emergency call as the Directive 2009/136/EC [i.27] and the Directive 2009/140/EC [i.26] have significant changes from the Directive 2002/21/EC [i.3] and the Recommendation C(2003)2657 [i.2] of 25/07/2003.

Additionally, the emergence and development of alternative offers based on technologies such as VoIP (Voice over Internet Protocol) is creating critical situation linked to the definition of the service offered. There is a need to consolidate the comprehensive provision of the emergency call (including short numbering, adequate origin-dependent routing, no charge and transmission additional information) as a reference requirement in the planning of future systems.

Consideration is also given to the use of SMS, in conjunction with an emergency call, and the emerging applications which combine different technologies (e.g. Multimedia Message Services or GPS).

1 Scope

The present document gives an overview of the requirements for communication from individuals to authorities and organizations in all types of emergencies. It collects operational and organizational requirements as a basis for a common 112 service, including location information (E112). Although many of the requirements collected from network operators, service providers (e.g. emergency response organizations) and users relate to national public policies and regulation, there are a number of service and technical aspects which are better dealt with on the European level to ensure harmonized access and services over Europe and effectiveness by user increased awareness by using standardized solutions.

The essence of an emergency call is to establish a direct and real time means of conversation between the calling party and an officer, in a Public Safety Answering Point, in charge of bringing assistance or organizing response. However, the scope of the present document also encompasses various types of services that can bring an added value to this basic scenario or add new scenarios, such as transmission of data to extend the information made available to the PSAP's agent or to facilitate access of people suffering disabilities or impairments.

The present document also collects already established requirements for EMTEL and gives guidance on how to find the standardization work published or ongoing. The present document also identifies the areas needing particular attention from the experts and refers to identified documents in preparation in SDOs (Standard Development Organizations).

The present document outlines the basis for technical, operational, organizational or regulatory requirements.

The present document is primarily applicable to ETSI technical bodies for the defining of services and specifying technical solutions.

Requirements for emergency calls of a private nature (e.g. vehicle/road assistance) and directed to an emergency service provider not being an emergency service provider recognized by a government are not covered by the present document.

It is anticipated that the present document will be maintained, by taking in line with developments at regulatory level and more specifically within the CoCom (Communication Committee for the Electronic Communications Directives) at the European Commission (EC) level.

2 References

2.1 Normative references

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