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SERIES E: OVERALL NETWORK OPERATION,  
TELEPHONE SERVICE, SERVICE OPERATION AND  
HUMAN FACTORS

International operation – Numbering plan of the  
international telephone service

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**Guidelines to select Emergency Number for  
public telecommunications networks**

Recommendation ITU-T E.161.1



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## **Recommendation ITU-T E.161.1**

### **Guidelines to select Emergency Number for public telecommunications networks**

#### **Summary**

The purpose of Recommendation ITU-T E.161.1 is to provide guidance to help Member States who are in the process of selecting a single emergency number for the first time, or selecting a secondary alternative emergency number for public telecommunications networks.

#### **Source**

Recommendation ITU-T E.161.1 was approved on 23 September 2008 by ITU-T Study Group 2 (2005-2008) under the WTSA Resolution 1 procedure.

## FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications, information and communication technologies (ICTs). The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of ITU. ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSA Resolution 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

## NOTE

In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

Compliance with this Recommendation is voluntary. However, the Recommendation may contain certain mandatory provisions (to ensure e.g., interoperability or applicability) and compliance with the Recommendation is achieved when all of these mandatory provisions are met. The words "shall" or some other obligatory language such as "must" and the negative equivalents are used to express requirements. The use of such words does not suggest that compliance with the Recommendation is required of any party.

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As of the date of approval of this Recommendation, ITU had not received notice of intellectual property, protected by patents, which may be required to implement this Recommendation. However, implementers are cautioned that this may not represent the latest information and are therefore strongly urged to consult the TSB patent database at <http://www.itu.int/ITU-T/ipr/>.

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# Recommendation ITU-T E.161.1

## Guidelines to select Emergency Number for public telecommunications networks

### 1 Scope

This Recommendation is intended for use by Member States who are in the process of selecting:

- a) a single emergency number for the first time
- b) a secondary alternative emergency number.

Either emergency number will be made available to users and subscribers, and therefore the mapping of these numbers to technology requirements is considered out of scope of this Recommendation.

In the long run, this Recommendation will contribute to globally harmonized emergency numbers.

### 2 References

None.

### 3 Definitions

#### 3.1 Terms defined elsewhere

This Recommendation uses the following terms defined elsewhere:

**3.1.1 emergency call** [b-ITU-T Q-Sup.47]: A call requesting emergency services. A caller is given a fast and easy means of giving information about an emergency situation to the appropriate emergency organization (e.g., fire department, police, ambulance). Emergency calls will be routed to the emergency services in accordance with national regulations.

**3.1.2 country** [b-ITU-T E.164-Sup.3]: A specific country, a group of countries in an integrated numbering plan or a specific geographical area.

**3.1.3 universal subscriber identity module (USIM)** [b-3GPP TR 21.905]: An application residing on the UICC used for accessing services provided by mobile networks, which the application is able to register on with the appropriate security.

#### 3.2 Terms defined in this Recommendation

This Recommendation defines the following terms:

**3.2.1 emergency number:** A non-E.164 number allocated in the national numbering plan to enable emergency calls. Normally, the emergency number is a short code.

**3.2.2 short code:** String of digits in the national numbering plan, as defined by the national Numbering Plan Administrator which can be used as a complete dialling sequence on public networks to access a specific type of service/network. The short code is referred to as a non-E.164 number, and its length is normally shorter than a subscriber number.

#### **4 Abbreviations and acronyms**

This Recommendation uses the following abbreviations and acronyms:

GSM	Global System for Mobile communications
IM	IP Multimedia
ISIM	IM Services Identity Module
ME	Mobile Equipment
PLMN	Public Land Mobile Network
SIM	Universal Subscriber Identity Module
UICC	Universal Integrated Circuit Card
UMTS	Universal Mobile Telecommunications System
USIM	Universal Subscriber Identity Module

#### **5 Single initial Emergency Number**

A Member State that is planning to introduce an emergency number could use either 112 or 911, in adherence with applicable regulations concerning emergency numbers (e.g., the usage of 112 for EU Member States [b-EU 91/396/ECC]).

#### **6 Selection of a second alternative Emergency Number**

A Member State that is planning to introduce a second alternative emergency number could use either 112 or 911, or both, which should be routed to the existing emergency number. A second alternative emergency number facilitates, for example, emergency calling by travellers visiting the country.

#### **7 Emergency Numbers for mobile networks**

This clause give examples of how emergency numbers are used in terminals and identity module cards (e.g., SIM) for different kinds of mobile networks (PLMNs).

##### **7.1 PLMNs based on GSM/UMTS system**

For mobile equipment (ME) based on the GSM/UMTS system, there is a built-in recognition of the emergency numbers 112 and 911. If the SIM/USIM/ISIM card is not present in the ME, then, in addition to 112 and 911, the following national numbers will act in a similar way as national emergency numbers: 000, 08, 110, 999, 118 and 119 [b-3GPP TS 22.101]. It will be left to the Member State to decide whether the public telecommunications network accept emergency calls without the SIM/USIM/ISIM.



## Bibliography

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- [b-EU 91/396/ECC] EU Decision 91/396/EEC, *Council Decision of 29 July 1991 on the introduction of a single European emergency call number*. <<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31991D0396:EN:HTML>>
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