INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

E.212

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

TELEPHONE NETWORK AND ISDN

OPERATION, NUMBERING, ROUTING AND MOBILE SERVICE

IDENTIFICATION PLAN FOR LAND MOBILE STATIONS

ITU-T Recommendation E.212

Superseded by a more recent version

(Extract from the *Blue Book*)

Superseded by a more recent version

NOTES

1   ITU-T Recommendation E.212 was published in Fascicle II.2 of the *Blue Book*. This file is an extract from the *Blue Book*. While the presentation and layout of the text might be slightly different from the *Blue Book* version, the contents of the file are identical to the *Blue Book* version and copyright conditions remain unchanged (see below).

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

Recommendation E.212

IDENTIFICATION PLAN FOR LAND MOBILE STATIONS

1 Introduction

The purpose of this Recommendation is to define a future international identification plan for land mobile stations in internationally harmonized public land mobile networks (PLMNs), and to establish the principles for allocation of international mobile station identities (IMSI) to stations in such networks.

Note – The term "mobile station", as used in this Recommendation, includes both card operated mobile stations and mobile stations which are not card operated. In a card operated station, the IMSI may be contained in the card. In stations which are not card operated, the IMSI is contained in the physical mobile station equipment.

In order to enable land mobile stations to roam among public land mobile networks located in different countries, an international identification plan is required for unique international identification of such stations. It is desirable that the allocation of international mobile station identities should be made independently of the numbering plans used for accessing mobile stations from the different public networks. This will enable Administrations to develop their own national numbering plans for land mobile stations for different services without the need for coordinating them with other countries.

Note – The word "country" in this Recommendation is also used with the meaning of geographical area.

2 Design considerations

The design considerations that form the basis for the international identification plan for land mobile stations are as follows:

2.1 Public land mobile communication services may be provided internationally.

2.2 There could be a number of public land mobile networks (PLMNs) in a country.

2.3 When a number of PLMNs exist in one country, it should not be mandatory to integrate the identification plans of the various networks.

2.4 The identification plan shall permit the identification of the country as well as the PLMN in which the mobile station is registered.

2.5 The number of digits used to identify a PLMN within a country and a specific mobile station of that PLMN is a national matter; however, see § 4.2.2.

2.6 The identification plan should provide for substantial spare capacity to accommodate future requirements.

2.7 The identification plan need not be directly related to the numbering plans in use for different services.

2.8 The identification plan should, if necessary, enable the international mobile station identity to be used for:

a) determination of the PLMN in which a foreign land mobile station is registered;

b) mobile station identification when information about a specific land mobile station is to be exchanged between PLMNs;

c) mobile station identification on the radio control path for registering a mobile station in a foreign PLMN;

d) mobile station identification for all signalling on the radio control path;

e) mobile station identification for charging and billing of foreign land mobile stations;

f) subscription management, e.g., for retrieving, providing, changing and updating subscription data for a specific mobile station.

3   **Definitions**

The following terms are related to this Recommendation:

3.1   **mobile country code (MCC)**

The part of the mobile station identification uniquely identifying the country of domicile of the mobile station.

3.2   **mobile network code (MNC)**

A digit or a combination of digits in the national part of the mobile station identification uniquely identifying the home PLMN of the mobile station.

3.3   **mobile station identification number (MSIN)**

The part of the mobile station identification following the mobile network code uniquely identifying the mobile station within a PLMN.

3.4   **national mobile station identity (NMSI)**

The mobile station identification uniquely identifying the mobile station nationally.
The NMSI consists of the MNC followed by the MSIN.

3.5   **international mobile station identity (IMSI)**
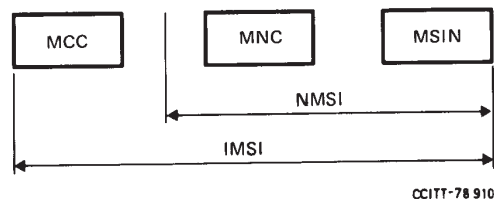
The mobile station identification uniquely identifying the mobile station internationally.

The IMSI consists of the MCC followed by the NMSI.

3.6   A comprehensive list of terms related to land mobile systems is given in Recommendation Q.70.

4   **Identification plan principles**

4.1   *Structure of the mobile station identity*

According to the definitions given in § 3, the international mobile station identity is structured as given in Figure 1/E.212.

MCC	Mobile country code
MNC	Mobile network code
MSIN	Mobile station identification number
NMSI	National mobile station identity
IMSI	International mobile station identity

FIGURE 1/E.212

4.2   *Identity allocation principles*

4.2.1   Only numerical characters (0-9) shall be used.

4.2.2   Since the international mobile station identity is not used for dialling and routing purposes through the public switched telephone network (PSTN), public switched data networks (PDNs), integrated services digital network (ISDN), etc., its length will not be influenced by any numbering constraints of these networks. However, Administrations should endeavour to keep the International Mobile Station Identity as short as possible; it shall under no circumstances exceed 15 digits.

4.2.3   The mobile country code (MCC) consists of 3 digits.

        The allocation of MCCs is to be administered by the CCITT and is given in Annex A. Further MCCs may be allocated, if required. The first digits 0, 1, 8 and 9 are reserved for future use.

4.2.4   The national mobile station identity is to be assigned by each Administration.

4.2.5   The allocation of mobile network codes should be such that not more than 6 digits of the international mobile station identity have to be analysed in a foreign PLMN for information transfer.

4.2.6   Only one international mobile station identity shall be assigned to each mobile station independent of the number and type of services which terminate in the mobile station.

ANNEX A

(to Recommendation E.212)

List of mobile country or geographical area codes

Note – The countries or geographical areas shown in this annex include those that already have code assignments in the case of other public telecommunication networks.

Zone 2

Code	*Country or Geographical Area*
202	Greece
204	Netherlands (Kingdom of the)
206	Belgium
208	France
212	Monaco
214	Spain
216	Hungarian People's Republic
218	German Democratic Republic
220	Yugoslavia (Socialist Federal Republic of)
222	Italy
226	Romania (Socialist Republic of)
228	Switzerland (Confederation of)
230	Czechoslovak Socialist Republic
232	Austria
234	United Kingdom of Great Britain and Northern Ireland
235	United Kingdom of Great Britain and Northern Ireland
238	Denmark
240	Sweden
242	Norway
244	Finland
250	Union of Soviet Socialist Republics

DOCKET ALARM

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts

Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research

With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips

Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS
Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS
Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS
Sync your system to PACER to automate legal marketing.

fastcase®
Smarter legal research.