

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

E.212

TELEPHONE NETWORK AND ISDN

OPERATION, NUMBERING, ROUTING AND MOBILE SERVICE

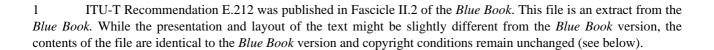
IDENTIFICATION PLAN FOR LAND MOBILE STATIONS

ITU-T Recommendation E.212

Superseded by a more recent version

(Extract from the Blue Book)

NOTES



2	In	this	Recommendation,	the	expression	"Administration"	is	used	for	conciseness	to	indicate	both	a
telecomn	nuni	catio	n administration and	d a re	ecognized or	perating agency.								

© ITU 1988, 1993

All rights reserved. No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the ITU.

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.
 - 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.

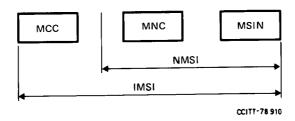
The IMSI consists of the MCC followed by the NMSI.

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

Zone 2 (cont.)

Code	Country or Geographical Area
260	Poland (People's Republic of)
262	Germany (Federal Republic of)
266	Gibraltar
268	Portugal
270	Luxembourg
272	Ireland
274	Iceland
276	Albania (Socialist People's Republic of)
278	Malta (Republic of)
280	Cyprus (Republic of)
284	Bulgaria (People's Republic of)
286	Turkey
288	Faroe Islands
290	Greenland
292	San Marino (Republic of)
	- -

Zone 2, Spare Codes: 64

Zone 3

Code	Country or Geographical Area
302	Canada
308	St. Pierre and Miquelon (French Dept. of)
310	United States of America
311	United States of America
312	United States of America
313	United States of America
314	United States of America
315	United States of America
316	United States of America
330	Puerto Rico
332	Virgin Islands (USA)
334	Mexico
338	Jamaica
340	French Antilles
342	Barbados
344	Antigua and Barbuda
346	Cayman Islands
348	British Virgin Islands
350	Bermuda
352	Grenada
354	Montserrat
356	St. Kitts and Nevis
358	St. Lucia
360	St. Vincent and the Grenadines
362	Netherlands Antilles
364	Bahamas (Commonwealth of the)
366	Dominica (Commonwealth of the)
368	Cuba
370	Dominican Republic
372	Haiti (Republic of)
374	Trinidad and Tobago
376	Turks and Caicos Islands

Zone 3, Spare Codes: 68

Zone 4

Code	Country or Geographical Area
404	India (Republic of)
410	Pakistan (Islamic Republic of)
412	Afghanistan (Democratic Republic of)
413	Sri Lanka (Democratic Socialist Republic of)
414	Burma (Socialist Republic of the Union of)
415	Lebanon
416	Jordan (Hashemite Kingdom of)
417	Syrian Arab Republic
418	Iraq (Republic of)
419	Kuwait (State of)
420	Saudi Arabia (Kingdom of)
421	Yemen Arab Republic
422	Oman (Sultanate of)
423	Yemen (People's Democratic Republic of)
424	United Arab Emirates
425	Israel (State of)
426	Bahrain (State of)
427	Qatar (State of)
428	Mongolian People's Republic
429	Nepal
430	United Arab Emirates (Abu Dhabi)
431	United Arab Emirates (Dubai)
432	Iran (Islamic Republic of)
440	Japan
441	Japan
450	Korea (Republic of)
452	Viet Nam (Socialist Republic of)
454	Hong-Kong
455	Macao
456	Democratic Kampuchea
457	Lao People's Democratic Republic
460	China (People's Republic of)
467	Democratic People's Republic of Korea
470	Bangladesh (People's Republic of)
472	Maldives (Republic of)

Zone 4, Spare Codes: 65

Zone 5

Code	Country or Geographical Area
502	Malaysia
505	Australia
510	Indonesia (Republic of)
515	Philippines (Republic of the)
520	Thailand
525	Singapore (Republic of)
528	Brunei Darussalam
530	New Zealand
535	Guam
536	Nauru (Republic of)
537	Papua New Guinea
539	Tonga (Kingdom of)

Zone 5 (cont.)

Code	Country or Geographical Area
540	Solomon Islands
541	Vanuatu
542	Fiji
543	Wallis and Futuna Islands
544	American Samoa
545	Kiribati (Republic of)
546	New Caledonia and Dependencies
547	French Polynesia
548	Cook Islands
549	Western Samoa

Zone 5, Spare Codes: 78

Zone 6

Code	Country or Geographical area
602	Egypt (Arab Republic of)
603	Algeria (People's Democratic Republic of)
604	Morocco (Kingdom of)
605	Tunisia
606	Libya (Socialist People's Libyan Arab Jamahiriya)
607	Gambia (Republic of the)
608	Senegal (Republic of)
609	Mauritania (Islamic Republic of)
610	Mali (Republic of)
611	Guinea (Republic of)
612	Côte d'Ivoire (Republic of)
613	Burkina Faso
614	Niger (Republic of the)
615	Togolese Republic
616	Benin (People's Republic of)
617	Mauritius
618	Liberia (Republic of)
619	Sierra Leone
620	Ghana
621	Nigeria (Federal Republic of)
622	Chad (Republic of the)
623	Central African Republic
624	Cameroon (Republic of)
625	Cape Verde (Republic of)
626	Sao Tome and Principe (Democratic Republic of)
627	Equatorial Guinea (Republic of)
628	Gabonese Republic
629	Congo (People's Republic of the)
630	Zaire (Republic of)
631	Angola (People's Republic on
632	Guinea-Bissau (Republic of)
633	Seychelles (Republic of)
634	Sudan (Republic of the)
635	Rwandese Republic

Zone 6 (cont.)

Code	Country or Geographical area
636	Ethiopia
637	Somali Democratic Republic
638	Djibouti (Republic of)
639	Kenya (Republic on
640	Tanzania (United Republic of)
641	Uganda (Republic of)
642	Burundi (Republic on
643	Mozambique (People's Republic of)
645	Zambia (Republic of)
646	Madagascar (Democratic Republic of)
647	Reunion (French Department of)
648	Zimbabwe (Republic of)
649	Namibia
650	Malawi
651	Lesotho (Kingdom of)
652	Botswana (Republic of)
653	Swaziland (Kingdom of)
654	Comoros (Islamic Federal Republic of the)
655	South Africa (Republic of)

Zone 6, Spare Codes: 47

Zone 7

Code	Country or Geographical Area
702	Belize
704	Guatemala (Republic of)
706	El Salvador (Republic of)
708	Honduras (Republic of)
710	Nicaragua
712	Costa Rica
714	Panama (Republic of)
716	Peru
722	Argentine Republic
724	Brazil (Federative Republic of)
730	Chile
732	Colombia (Republic of)
734	Venezuela (Republic of)
736	Bolivia (Republic of)
738	Guyana
740	Ecuador
742	Guiana (French Department of)
744	Paraguay (Republic of)
746	Suriname (Republic of)
748	Uruguay (Eastern Republic of)

Zone 7, Spare Codes: 80