INTERNATIONAL TELECOMMUNICATION UNION

CCITT E.164

THE INTERNATIONAL
TELEGRAPH AND TELEPHONE
CONSULTATIVE COMMITTEE

TELEPHONE NETWORK AND ISDN

OPERATION, NUMBERING, ROUTING AND MOBILE SERVICE

NUMBERING PLAN FOR THE ISDN ERA

Recommendation E.164

Geneva, 1991

FOREWORD

The CCITT (the International Telegraph and Telephone Consultative Committee) is a permanent organ of the International Telecommunication Union (ITU). CCITT 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 Plenary Assembly of CCITT which meets every four years, establishes the topics for study and approves Recommendations prepared by its Study Groups. The approval of Recommendations by the members of CCITT between Plenary Assemblies is covered by the procedure laid down in CCITT Resolution No. 2 (Melbourne, 1988).

Recommendation E.164 was prepared by Study Group II and was approved under the Resolution No. 2 procedure on the 23 of august 1991.

CCITT NOTES

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

2) A list of abbreviations used in this Recommendation can be found in Annex E.

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Recommendation E.164 [1)]

NUMBERING PLAN FOR THE ISDN ERA

(Incorporating the "Numbering plan for the international telephone service", Recommendation E.163, CCITT *Blue Book*, 1988.)

1 Introduction

The rapid advances in telecommunications technology coupled with increased diversification of customer demands served by a number of different types of dedicated public switched networks (telephone, telex, data, etc.) have created a need to provide a uniform customer access and network structure. Such a structure is called the integrated services digital network (ISDN). Implementation of ISDNs has begun in a number of countries and eventually these will carry the full range of existing and new services.

To provide a broad base for the growth of ISDN arrangements, numbering has been kept compatible with that originally established for the international telephone service. As recounted in this Recommendation, numbering for the international telephone service is a subset of the numbering plan for the ISDN era. The timetable for implementation of new provisions introduced primarily to support the ISDN era is described in Recommendation E.165, upon which all references to time T are based.

2 Definitions

Within the integrated service environment, the terms used for all networks and services must be compatible and consistent. A list of terms and their definitions relating to numbering are contained in Recommendation E.160.

3 National numbering plan

3.1 Each telephone Administration should give the most careful consideration to the preparation of a national numbering plan [2)] for its own network. This plan should be designed so that a typical subscriber is always called by the same number in the trunk service. It should be applicable to all incoming international calls.

Administrations are strongly urged to advise the ITU or CCITT of national numbering plan changes well in advance of the event, so that this information can be published in the *ITU Operational Bulletin*.

3.2 *Number analysis*

3.2.1 The national numbering plan of a country (region) should be such that digit analysis need not exceed established limits (given below in § 3.2.2) applicable to the national (significant) number, N(S)N (see Recommendation E.160 for definitions) but allows:

a) determination of routing that reflects economic and other appropriate network factors;

b) distinctions for charging according to destination area in those countries where distinctions are applicable.

3.2.2 Prior to time T the following traditional limits for digit analysis remain in effect.

In the case of a country with a two- or three-digit country code, not more than the initial two digits of the national (significant) number need be analysed for routing and charging.

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1) This Recommendation is also listed in the I-Series Recommendations as Recommendation I.331.

2) See the CCITT Manual cited in [1] for a comprehensive study of national numbering plans from the national point of view.

In the case of a country with a one-digit country code, not more than the initial three digits of the national (significant) number need be analysed for routing and charging.

3.2.3 In the case where an integrated numbering plan covers a group of countries, the digit analysis specified in § 3.2.2 should also determine the country of destination.

3.2.4 *Number analysis post-time T*

In order to determine:

– the country [3] of destination;

– the most appropriate network routing;

– the proper charging,

the originating country [3] must analyse a number of digits of the international number. The national destination code (NDC) increases the potential requirement for number analysis because it provides for a combination of either a trunk code (TC) and/or a network identification function. Careful consideration should be given to the preparation of the national destination code (NDC) assignments [4].

On international calls the number analysis performed at the originating country [3] need not be more than the country code and:

– three digits of the N(S)N in the case of a country with a three-digit country code;

– four digits of the N(S)N in the case of a country with a two-digit country code;

– five digits of the N(S)N in the case of a country with a one-digit country code.

(Translation beyond this requirement could be arranged by bilateral agreement if required, e.g. countries assigned a one-digit country code may require analysis of up to six digits beyond the country code.)

4 Limitation of the number of digits to be dialled by subscribers

4.1 *International number*

The CCITT recommended in 1964 that the number of digits to be dialled by subscribers in the automatic international service should not be more than 12 (excluding the international prefix). It is emphasized that this is the maximum number of digits until subsequent ISDN provisions involving time T (see Recommendation E.165) apply. Administrations are invited to do their utmost to limit the digits to be dialled to the degree possible consistent with the service needs.

4.2 *National (significant) number – pre-time T definition*

The CCITT,

Noting

(a) that the international number (excluding the international prefix) consists of the country code followed by the national (significant) number;

(b) that the smallest possible number of digits to be dialled in the automatic international service is achieved by limiting the number of digits of the country code and/or of the national (significant) number;

(c) that in some countries where telephony is already developed to an advanced stage, the national numbering plans in force enable the number of digits of the international number to be limited to less than 12;

(d) that some other countries which drew up their national numbering plans some time before 1964 have taken steps to ensure that the number of digits of the international number will not exceed 12 and may even be less,

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[3] Country or geographical area.

[4] The use of NDC is nationally optional, see § 4.4.

recommends

that the number of digits of the national (significant) number should be equal to a maximum of 12 – *n*, where *n* is the number of digits of the country code.

4.3 *Digit capacity of international registers – pre-time T*

The CCITT considers it advisable to recommend that the digit capacity of registers dealing with international traffic should allow for future conditions that may arise, but not possible to specify at the present time. In this regard, registers dealing with international traffic should have a digit capacity, or a capacity that can be expanded, to cater for more than the maximum 12 digit international number envisaged at present. The increase in the number of digits above 12 is left as a matter of decision to be taken by individual Administrations. However, for new applications a minimum digit capacity of 15 digits is recommended. Administrations are recommended, when making such a decision, to take account of the new applications likely to be introduced in the international service, and which are now being studied by the CCITT.

4.4 *Structure of the international ISDN number*

The international ISDN number is composed of a variable length of decimal digits arranged in specific code fields. The international ISDN number code fields are the country code (CC) and the national (significant) number.

The country code (CC) is used to select the destination country [5)] and varies in length as outlined in § 5.2.

The national (significant) number N(S)N is used to select the destination subscriber. In selecting the destination subscriber, however, it may be necessary to select a destination network. To accomplish this selection, the national (significant) number N(S)N code field comprises a national destination code (NDC) [6)] followed by the subscriber's number (SN). The NDC and SN may be inseparably connected in some national applications to form a single composite dialling sequence.

The NDC field will be variable in length depending upon the requirements of the destination country. Each NDC may have one of the following structures:

a) a destination network (DN) code, which can be used to select a destination network serving the destination subscribers;

b) a trunk code (TC), the format of which is defined in Recommendation E.160;

c) any combination of destination network (DN) code and trunk code (TC).

The NDCs of an Administration may consist of any of the above structures.

Note – The sequences DN-TC and TC-DN are a national matter (see Annex D).

The subscriber's number (SN) varies in length depending on the requirements of the destination country [5)] and is in accordance with Recommendation E.160.

Figure 1/E.164 shows the number structure.

Where appropriate, identification of an ISDN within the destination country [5)] shall be through the use of a national destination code (NDC) incorporated in the ISDN number.

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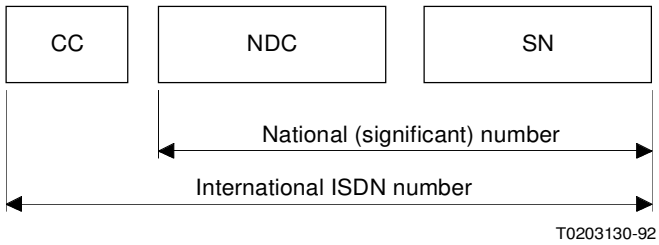
5) Country or geographical area.

6) See definitions in Recommendation E.160.



CC Country code as defined in § 5.2
NDC National destination code
SN Subscriber number

Note – National and international prefixes are excluded as they are not considered to be part of the international ISDN number.

FIGURE 1/E.164

Number structure

4.5 *Number length – post-time T*

The international number may be of variable length. The maximum number length shall be 15 digits.

The length does not include prefixes, language digit, address delimiters (e.g. end of pulsing signals, etc.) since these items are not considered as part of the international ISDN number.

Note – The limit of 15 digits specified above applies exclusively to the international number. With regard to the capacity to be provided at the exchange, some Administrations may wish to exceed the above maximum number length (e.g. the use of prefixes for network and service selection). The decision on storage capacity is left as a matter to be decided by individual Administrations.

5 Prefixes and codes

5.1 *Applications*

5.1.1 The use of prefixes shall be in accordance with Recommendations E.160 and E.166. Where necessary, prefixes can also be used for network and service selection.

5.1.2 The short-term use of digit "0" (zero) as an escape code for numbering plan interworking pre-time T is described in Recommendation E.166.

5.1.3 It is recommended by the CCITT that the Administrations of countries that have not yet introduced automatic international operation, or Administrations that are, for various reasons, revising their numbering plans adopt an international prefix [7] (a code for access to the international automatic network) composed of the two digits 00.

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7) See definitions in Recommendations E.160.

5.2 *Country code* [8), 9)]

5.2.1 Country codes will be used:

– in semi-automatic operation, to route calls to the required country when the calls are transit calls or when, on the outgoing positions, there is common dialling access to all the outgoing routes;

– in automatic operation.

5.2.2 A list of country codes was prepared by the CCITT within the framework of a world-wide automatic telephone numbering plan.

This list was set up according to the following principles:

a) the number of digits of the country code is one, two or three according to the foreseeable telephonic and demographic development of the country concerned;

b) the nine digits from one to nine have been allocated as the country code or as the first digit of the country code. These digits define world numbering zones;

c) in the case of Europe, owing to the large number of countries requiring two-digit codes, the two digits 3 and 4 have been allocated as the first digit of the country codes.

5.2.3 The list of country codes already assigned is given in Annex A.

5.3 *Assignment of country codes*

5.3.1 The existing world numbering plan should be maintained and codes presently assigned should not be changed, unless consolidation of an existing numbered area yields an advantage in terms of code usage.

5.3.2 All spare country codes will be assigned on a three-digit basis, as detailed in Annex B. The list of spare country codes for the international semiautomatic and automatic service is given in Annex C.

5.3.3 In the case where all the country codes in a world numbering zone have been assigned and an additional code is required in that zone, a spare country code from another world numbering zone can be used in accordance with the following rules.

5.3.3.1 Preference should be given to the assignment of a spare country code from an adjacent world numbering zone.

5.3.3.2 If spare codes are not available from an adjacent world numbering zone, assignments will be made from the zones with the most spare codes.

5.4 *Codes for new international services*

The introduction of some international services requires the allocation of a country code. In such cases, the assignment of a country code will be determined by the rules detailed in Annex B.

5.5 *Trunk prefix* [8)]

5.5.1 The national (significant) number (see definition 8 of Recommendation E.160) does not include the trunk prefix. Accordingly, in the international service, the trunk prefix of the country of destination must not be dialled.

It should be noted that, in some countries, it is customary to consider for national purposes that the trunk prefix is included in the national number [which is then not the national (significant) number]. A careful distinction must therefore be made between such national definition or practice and the CCITT definition, which is internationally valid. In order to avoid misunderstanding, the CCITT definition includes the word “significant” between brackets, reading as follows: “national (significant) number”.

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8) See definitions in Recommendations E.160.

9) A“country code” may be assigned either to an individual country or to a geographical area.

5.5.2 It is recommended by the CCITT that the Administrations of countries that have not yet adopted a trunk prefix for access to their national automatic trunk network adopt a prefix composed of a single digit, preferably 0. Irrespective of what digit is adopted as a trunk prefix, this digit should be precluded from being used also as a first digit of the trunk codes.

The reasons for this Recommendation are:

– to provide the maximum degree of standardization of the trunk prefixes used in different countries, so that dialling is made as easy as possible for a person travelling from one country to another;

– to minimize the number of digits to be dialled in the automatic national service;

– to reduce user problems which arise because of the requirement, in automatic international operation, that the trunk prefix of the country of destination must not be dialled.

5.5.3 In the automatic international service, following the international prefix and country code of the called country, the caller should dial the national (significant) number of the called subscriber (i.e. without dialling the trunk prefix).

5.5.4 The use and printing of symbols and separators in national and international telephone numbers are detailed in Recommendation E.123.

6 ISDN numbering plan principles

6.1 *General*

The ISDN numbering and addressing principles are described in Recommendation I.330. The ISDN numbering plan will be based on and evolve from the existing numbering plans applicable to national and international public telephone networks.

In view of the evolutionary nature of ISDN, the international numbering plan should provide for substantial capacity to accommodate future network requirements.

Where multiple destinations (i.e. RPOAs/networks) serve the called party's geographical area, the national ISDN numbering arrangement in the country[10)] of destination shall provide for discrimination between these RPOAs/networks. The procedure for discrimination between multiple transit RPOAs/networks is not considered to be a destination address requirement and shall therefore be excluded from the ISDN numbering arrangements.

Before the ISDN numbering arrangement attains global penetration, it must allow for interworking between the ISDN and other public networks. Such arrangements are discussed in Recommendation E.166. Interworking with private networks shall also be taken into account. The definition of private networks and the methods of interworking are for further study and will be covered in future E-Series Recommendations.

The ten-digit decimal character set 0-9 is used throughout the ISDN numbering plan format including subscriber number, national (significant) number and the country code.

Prefixes and other information concerned with identifying selection procedures or Network Service parameters (such as Quality of Service or transit delay) do not form part of the ISDN number.

The ISDN numbering plan shall include an unambiguous identification of a particular country [10)]. In addition, the ISDN number will identify networks and/or ISDNs within these countries [10)], if required. In doing so, it shall retain the integrity of the telephone country code as defined in Recommendation E.160 and in § 5.2 of this Recommendation.

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10) Country or geographical area.

7 Numbering allocation principles

The assignment of country codes is administered by the CCITT, while NSN (NDC plus SN) code assignments are a national responsibility.

ISDN number assignments may be allocated from the range of numbers available in the local ISDN exchange. These will be assigned to customers who subscribe only to the telephone service, customers with one or more data services and customers with a mixture of telephony and data services.

Subscribers equipped with basic access (the definition of ISDN basic access is given in the I-Series Recommendations) should ideally be allocated one unique number.

8 Network identification

In countries [11] served by more than one ISDN and/or public switched telephone network (PSTN) the network identification of each is a national matter.

Network identification within the national (significant) number shall be such that:

- in a country [11] all destination ISDN and PSTN networks shall operate under a single country code;
- the international number maximum length of 15 digits shall not be exceeded, nor shall it be necessary for the number of digits for number analysis to exceed that specified in § 3.2.4;
- provision of network identification is not mandatory for countries using a single integrated numbering plan arrangement for their ISDNs and PSTNs.

9 Service identification

The ISDN number by itself will not identify the particular nature of the service, type of connection or quality of service required. An indication of parameters describing the service required by the calling terminal will be included in a service identifier in the signalling information. This service identifier is not considered to be part of the numbering plan. For example, for ISDN calls, in addition to a number and possible prefix, there is a requirement to provide a choice of bearer capability in the signalling protocol.

10 Calling/connected line identity

Calling/connected line identity (CLI/COLI) is address information which is passed across the network to provide supplementary services such as calling (or connected) line identification presentation. The format of the CLI and COLI for international calls should be the full international number, i.e. country code (CC), national destination code (NDC) and subscriber number (SN). No other information, such as prefixes or symbols (e.g. "+"), should be included, although a sub-address may be associated with the CLI/COLI. When implemented the NPI (numbering plan identifier) TON (type of number) mechanism should define the numbering status of the calling/connected line.

11 Dialling procedures

The subscriber dialling procedures for local, national and international calls shall be in accordance with § 5.5. However, subscribers' control procedures for supplementary services will be as defined in Recommendation E.131 or in separate Recommendations for each service [12].

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[11] Country or geographical area.

[12] If approved, other references may be cited here.

ISDN subscribers will always be called by the same subscriber number irrespective of where in the network the call originates. For calls in the same numbering area or local network the subscriber number alone is dialled. For national calls between numbering areas or local networks the subscriber number may be preceded by the national prefix and the national destination code.

The addressing procedures for calls using sub-addressing are described in § 12.

12 Addressing within a subscriber's installation

Identification within a subscriber's installation of a point beyond the ISDN boundary requires the transfer of address information from the public network to the subscriber's equipment. Two cases can apply:

– identification by an ISDN number,

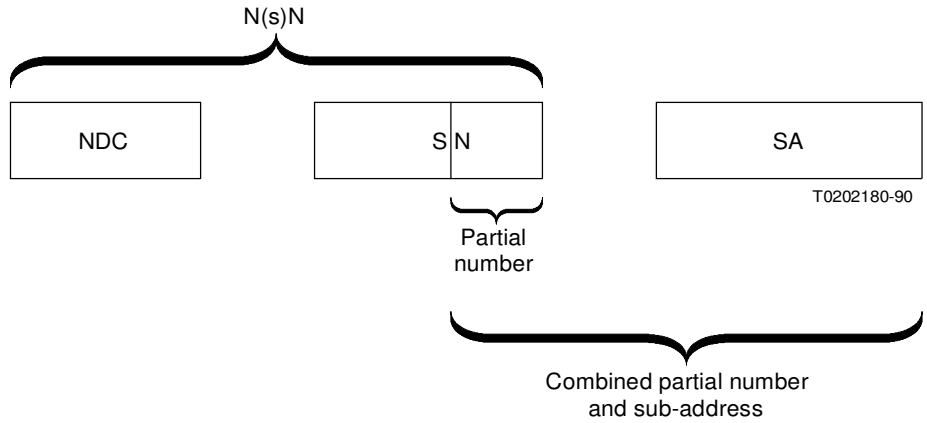
– identification by an ISDN number plus additional address information.

12.1 *Addressing by an ISDN number*

When selecting a destination in the subscriber installation, digits forming the end of the ISDN subscriber number are transferred to the called subscriber's installation as a partial number (see Figure 2/E.164). The number of digits used depends upon the requirements of the called subscriber's equipment and the capacity of the numbering plan used.

If the subscriber's installation includes an NT2 (see Recommendation I.330), the partial number will be used in the context of the direct-dialling-in supplementary service.

If the subscriber's installation consists of terminal equipment only, the transferred digits will be used in the context of the multiple-subscriber-number supplementary service.



NDC National destination code
N(s)N National (significant) number
SA Sub-address
SN Subscriber number

Note – The multiple-subscriber-number application is not covered in the diagram.

FIGURE 2/E.164

12.2 *Sub-addressing (network address extension)*

Sub-addressing provides a separate additional addressing capacity outside the ISDN numbering plan but constitutes an intrinsic part of the ISDN addressing capabilities. As shown in Figure 2/E.164, up to 20 octets (or 40 digits) may follow the ISDN number and form the ISDN sub-address, which is transferred to the equipment at the subscriber's premises.

When required, the sub-address is sent by the calling party within the call set-up procedure and is passed transparently through the network as a separate entity from both the ISDN number and user-to-user information. Sub-address information is not required to be processed within the public network.

Sub-addressing procedures are the subject of a separate Recommendation.

12.3 *Combination of addressing and sub-addressing*

Sub-addressing may be used separately or in combination with a partial number (see Figure 2/E.164).

12.4 *Address delimiters*

DDI address information may contain an "end of address" (e.g. ST) delimiter. In the case of sub-addressing, an "end of subscriber number/beginning of sub-address" delimiter and the "end of address" delimiter are required.

(The use of an address delimiter at the end of an ISDN address is for further study.)

13 Recommendation history

Recommendation E.163, first issue 1964 – revised at all subsequent Plenary Assemblies.

Recommendation E.163 – merged with Recommendation E.164 (see below).

Recommendation E.164, first issue 1984.

Recommendation E.164, second issue 1988.

Recommendation E.164, third issue 1991 – merged with Recommendation E.163.

ANNEX A

(to Recommendation E.164)

List of country codes incorporating amendments proposed by the World Plan Committee, 1988

World numbering ZONE 1

Anguilla	1 [a]	Bermuda	1 [a]
Canada	1 [a]	Bahamas (Commonwealth of the)	1 [a]
United States of America, including Puerto Rico and the Virgin Islands	1 [a]	Dominican Republic	1 [a]
		Grenada	1 [a]
Jamaica	1 [a]	Montserrat	1 [a]
Barbados	1 [a]	Saint Kitts and Nevis	1 [a]
Antigua and Barbuda	1 [a]	Saint Lucia	1 [a]
Cayman Islands	1 [a]	Saint Vincent and the Grenadines	1 [a]
British Virgin Islands	1 [a]	Turks and Caicos (Islands)	1 [a]

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[a] Integrated numbering area.

World numbering ZONE 2

Egypt (Arab Republic of)	20	Guinea-Bissau (Republic of)	245
Morocco (Kingdom of)	21 [a]	Diego Garcia	246
Algeria (People's Democratic Republic of)	21 [a]	Ascension	247
		Seychelles (Republic of)	248
Tunisia	21 [a]	Sudan (Republic of the)	249
Libya (Socialist People's Libyan Arab Jamahiriya)	21 [a]	Rwandese Republic	250
		Ethiopia	251
Gambia (Republic of the)	220	Somali Democratic Republic	252
Senegal (Republic of)	221	Djibouti (Republic of)	253
Mauritania (Islamic Republic of)	222	Kenya (Republic of)	254
Mali (Republic of)	223	Tanzania (United Republic of)	255
Guinea (Republic of)	224	Uganda (Republic of)	256
Côte d'Ivoire (Republic of)	225	Burundi (Republic of)	257
Burkina Faso	226	Mozambique (People's Republic of)	258
Niger (Republic of the)	227	Zanzibar (Tanzania)	259
Togolese Republic	228	Zambia (Republic of)	260
Benin (People's Republic of)	229	Madagascar (Democratic Republic of)	261
Mauritius	230	Reunion (French Department of)	262
Liberia (Republic of)	231	Zimbabwe (Republic of)	263
Sierra Leone	232	Namibia	264
Ghana	233	Malawi	265
Nigeria (Federal Republic of)	234	Lesotho (Kingdom of)	266
Chad (Republic of)	235	Botswana (Republic of)	267
Central African Republic	236	Swaziland (Kingdom of)	268
Cameroon (Republic of)	237	Comoros (Islamic Federal Republic of the)	269
Cape Verde (Republic of)	238		
Sao Tome and Principe (Democratic Republic of)	239	South Africa (Republic of)	27
		Saint Helena	290
Equatorial Guinea (Republic of)	240	San Marino (Republic of)	295
Gabonese Republic	241	Trinidad and Tobago	296
Congo (People's Republic of the)	242	Aruba	297
Zaire (Republic of)	243	Faroe Islands (Denmark)	298
Angola (People's Republic of)	244	Greenland (Denmark)	299

Spare codes 280, 281, 282, 283, 284, 285, 286, 287, 288, 289
290, 291, 292, 293, 294

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[a] *Integrated numbering area with subdivisions:*
- Morocco: 210, 211, 212 (212 in service);
- Algeria: 213, 214, 215;
- Tunisia: 216, 217;
- Libya: 218, 219.

World numbering ZONES 3 and 4

Greece	30	Hungary (Republic of)	36
Netherlands (Kingdom of the)	31	(Reserved)	37
Belgium	32	Yugoslavia (Socialist Federal Republic of)	38
France	33 [a)]	Italy	39
Monaco	33 [a)]	Romania (Socialist Republic of)	40
Spain	34	Switzerland (Confederation of)	41 [a)]
Gibraltar	350	Liechtenstein (Principality of)	41 [a)]
Portugal	351	Czech and Slovak Federal Republic	42
Luxembourg	352	Austria	43
Ireland	353	United Kingdom of Great Britain and	
Iceland	354	Northern Ireland	44
Albania (Republic of)	355	Denmark	45
Malta (Republic of)	356	Sweden	46
Cyprus (Republic of)	357	Norway	47
Finland	358	Poland (Republic of)	48
Bulgaria (Republic of)	359	Germany (Federal Republic of)	49

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[a)] Integrated numbering plan.

World numbering ZONE 5

Falkland Islands (Malvinas)	500	Brazil (Federative Republic of)	55
Belize	501	Chile	56
Guatemala (Republic of)	502	Colombia (Republic of)	57
El Salvador (Republic of)	503	Venezuela (Republic of)	58
Honduras (Republic of)	504	Guadeloupe (French Department of)	590
Nicaragua	505	Bolivia (Republic of)	591
Costa Rica	506	Guyana	592
Panama (Republic of)	507	Ecuador	593
St. Pierre and Miquelon (French Department of)	508	Guiana (French Department of)	594
Haiti (Republic of)	509	Paraguay (Republic of)	595
Peru	51	Martinique (French Department of)	596
Mexico	52	Suriname (Republic of)	597
Cuba00	53	Uruguay (Eastern Republic of)	598
Argentine Republic	54	Netherlands Antilles	599

World numbering ZONE 6

Malaysia	60	Vanuatu (Republic of)	678
Australia	61	Fiji	679
Indonesia (Republic of)	62	Palau	680
Philippines (Republic of the)	63	Wallis and Futuna Islands	681
New Zealand	64	Cook Islands	682
Singapore (Republic of)	65	Niue Islands	683
Thailand	66	American Samoa	684
Mariana Islands	670	Western Samoa (Independent State of)	685
Guam	671	Kiribati (Republic of)	686
Australian External Territories	672	New Caledonia and Dependencies	687
Brunei Darussalam	673	Tuvalu	688
Nauru (Republic of)	674	French Polynesia	689
Papua New Guinea	675	Tokelan	690
Tonga (Kingdom of)	676	F.S. of Micronesia	691
Solomon Islands	677	Marshall Islands	692

Spare codes 693, 694, 695, 696, 697, 698, 699

World numbering ZONE 7

Union of Soviet Socialist Republics	7

World numbering ZONE 8

Japan	81
Korea (Republic of)	82
Viet Nam (Socialist Republic of)	84
Democratic People's Republic of Korea	850
Hong-Kong	852
Macao	853
Democratic Kampuchea	855
Lao People's Democratic Republic	856
China (People's Republic of)	86 [a)]
Maritime Mobile Service	87 [b)]
Bangladesh (People's Republic of)	880 [c)]

Spare codes 800, 801, 802, 803, 804, 805, 806, 807, 808, 809
830, 831, 832, 833, 834, 835, 836, 837, 838, 839
851, 854, 857, 858, 859
890, 891, 892, 893, 894, 895, 896, 897, 898, 899

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a) Within this national code, the Telecommunications Administration of the People's Republic of China has notified that the code 866 has been allocated to the province of Taiwan. (Reference: Notification No. 1157 of 10 December 1980.)

b) The country code 87 is reserved for the Maritime Mobile Service. The following 3-digit country codes are assigned: 871 INMARSAT (Atlantic Ocean-East), 872 INMARSAT (Pacific Ocean), 873 INMARSAT (Indian Ocean), 874 INMARSAT (Atlantic Ocean-West).

c) The remaining combinations in series 88 will not be allocated until the stock of spare 3-digit codes for the region is exhausted.

World numbering ZONE 9

Turkey	90
India (Republic of)	91
Pakistan (Islamic Republic of)	92
Afghanistan (Democratic Republic of)	93
Sri Lanka (Democratic Socialist Republic of)	94
Burma (Socialist Republic of the Union of)	95
Maldives (Republic of)	960
Lebanon	961
Jordan (Hashemite Kingdom of)	962
Syrian Arab Republic	963
Iraq (Republic of)	964
Kuwait (State of)	965
Saudi Arabia (Kingdom of)	966
Yemen (Republic of)	967
Oman (Sultanate of)	968
(Reserved)	969
United Arab Emirates [a)]	971
Israel (State of)	972
Bahrain (State of)	973
Qatar (State of)	974
Kingdom of Bhutan	975
Mongolian People's Republic	976
Nepal	977
Iran (Islamic Republic of)	98

Spare codes 970, 978, 979
990, 991, 992, 993, 994, 995, 996, 997, 998, 999

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a) E.A.U: Abu Dhabi, Ajman, Dubai, Fujeirah, Ras Al Khaimah, Sharjah, Umm Al Qaiwain.

ANNEX B

(to Recommendation E.164)

Rules for the assignment of spare country codes

The rules listed in this annex are provided as a basis for the most effective utilization of the spare country codes.

B.1 Single isolated 3-digit codes should be assigned prior to the assignment of any 3-digit code which is part of a series of more than two consecutive 3-digit codes.

B.2 The assignment of spare codes of a zone, both within that zone and also to another zone, will take place as follows:

a) When assigning a code to a country in the same zone:

start with the lowest numbered 3-digit codes in ascending order.

b) When assigning a code to a country in another zone:

start with the highest numbered 3-digit codes in descending order.

c) Within the code 87 reserved for mobile applications, a third digit will be assigned to codes used for mobile-satellite ocean area systems, with the restriction that codes 878 and 879 may not be touched as they are reserved for national purposes.

In the INMARSAT system, the use of the digit X, in the country code range 87X, to indicate the ocean area in which the mobile earth station is located at the time of the call, is considered a temporary arrangement. It is recognized that such an arrangement should be avoided in the future since it requires the calling customer to know the area of a destination mobile earth station at the time of a call, and such an area may change from time to time for the mobile earth station. The long-term objective is to allocate a new single country code, which will apply irrespective of the location of the destination mobile earth station and subsequently recover the existing four code assignments.

B.3 Country codes for new international services or for the automation of some existing services should be taken from the world numbering zone with the most spare codes.

ANNEX C

(to Recommendation E.164)

List of spare country codes for the international semiautomatic and automatic service

Spare codes

280, 281, 282, 283, 284, 285, 286, 287, 288, 289
291, 292, 293, 294
693, 694, 695, 696, 697, 698, 699
800, 801, 802, 803, 804, 805, 806, 807, 808, 809
830, 831, 832, 833, 834, 835, 836, 837, 838, 839
851, 854, 857, 858, 859
890, 891, 892, 893, 894, 895, 896, 897, 898, 899
970, 978, 979
990, 991, 992, 993, 994, 995, 996, 997, 998, 999

ANNEX D

(to Recommendation E.164)

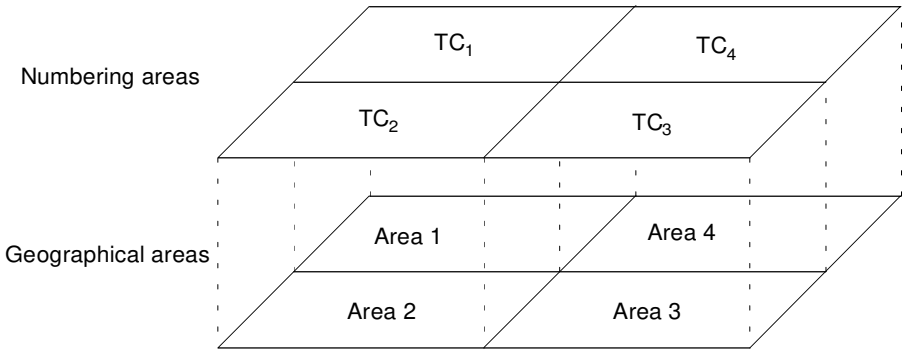
Guidelines for NDC application

The structure of NDC may be one of or a combination of the following four types depending on the national situation where the concerned numbering plan could be applied according to the present form of ISDN or PSTN.

1) *Type 1 (NDC = TC)*

This type is effective when:

– only one ISDN or PSTN serves a certain geographical area.

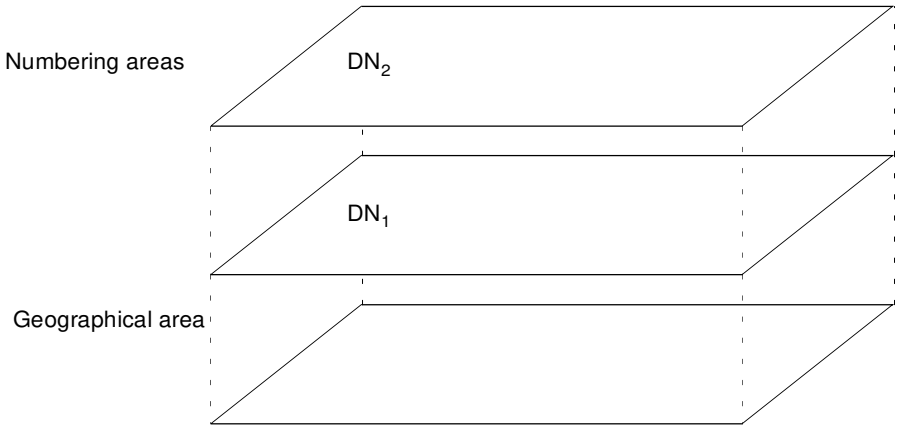


T0202630-91

2) *Type 2 (NDC = DN)*

This type is effective when:

– ISDN or PSTN does not correspond to a geographical area.



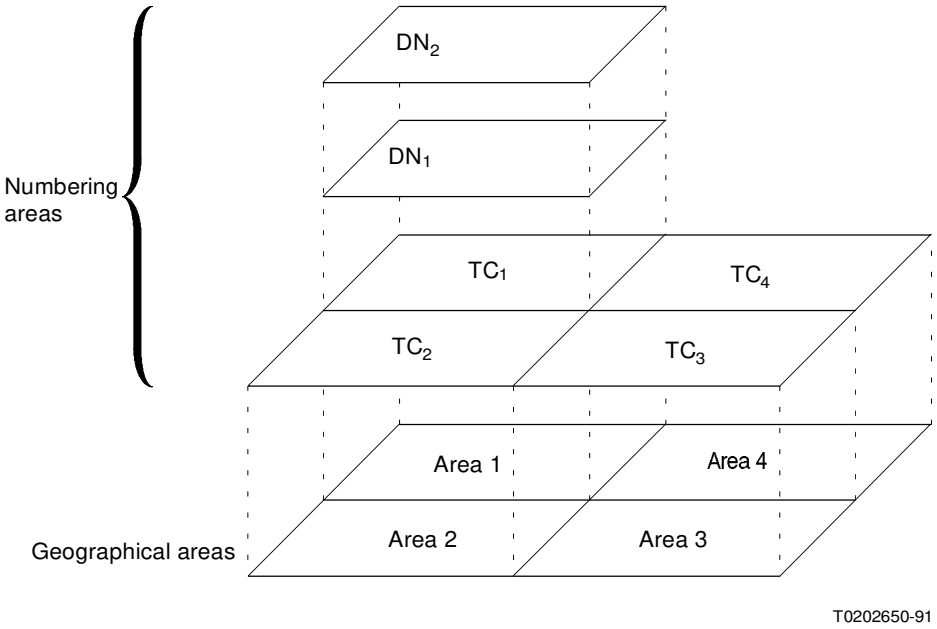
T0202640-91

3) *Type 3 (NDC = TC – DN)*

This type is effective when:

– in the same geographical area, multiple ISDNs and/or PSTNs offer services,

– among all ISDNs and PSTNs, the geographical areas and the TC indicating the area are all common.

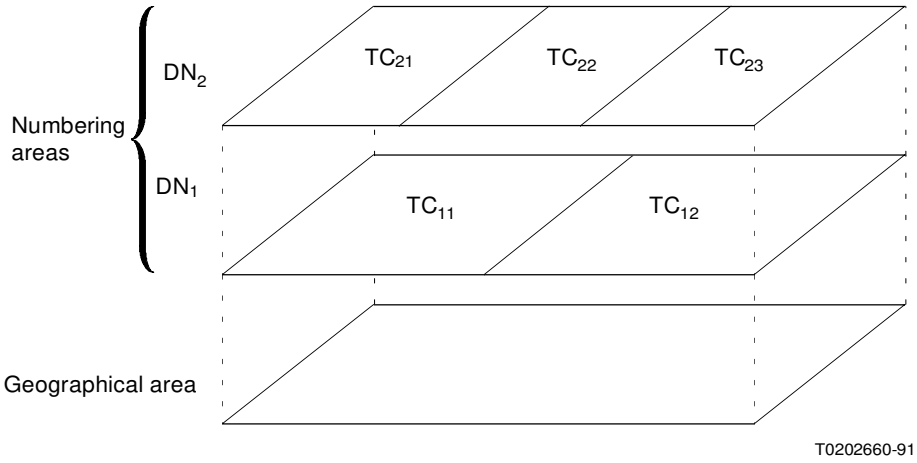


4) *Type 4 (NDC = DN – TC)*

This type is effective when:

– in the same geographical area, multiple ISDNs and/or PSTNs offer services,

– in each ISDN or PSTN, the geographical areas and the TC indicating the area are decided freely.



References

[1.] CCITT Manual *National telephone networks for automatic service*, ITU, Geneva, 1964, 1968, 1978.

ANNEX E

(to Recommendation E.164)

Alphabetical list of abbreviations used in this Recommendation

CC	Country code
CDLI	Called line identity
CLI	Calling line identity
COLI	Connected line identity
DDI	Direct dialling in
DN	Destination network
ISDN	Integrated services digital network
N(S)N	National (significant) number
NDC	National destination code
NPI	Numbering plan identifier
PSTN	Public switched telephone network
SA	Sub-address
SN	Subscriber number
TC	Trunk code
TON	Type of number