ITU-T

Q.708

TELECOMMUNICATION STANDARDIZATION SECTOR OF ITU (03/93)

## SPECIFICATIONS OF SIGNALLING SYSTEM No. 7

# NUMBERING OF INTERNATIONAL SIGNALLING POINT CODES

## ITU-T Recommendation Q.708

(Previously "CCITT Recommendation")

#### **FOREWORD**

The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of the International Telecommunication Union. The 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 Conference (WTSC), which meets every four years, established the topics for study by the ITU-T Study Groups which, in their turn, produce Recommendations on these topics.

ITU-T Recommendation Q.708 was revised by the ITU-T Study Group XI (1988-1993) and was approved by the WTSC (Helsinki, March 1-12, 1993).

#### **NOTES**

As a consequence of a reform process within the International Telecommunication Union (ITU), the CCITT ceased to exist as of 28 February 1993. In its place, the ITU Telecommunication Standardization Sector (ITU-T) was created as of 1 March 1993. Similarly, in this reform process, the CCIR and the IFRB have been replaced by the Radiocommunication Sector.

In order not to delay publication of this Recommendation, no change has been made in the text to references containing the acronyms "CCITT, CCIR or IFRB" or their associated entities such as Plenary Assembly, Secretariat, etc. Future editions of this Recommendation will contain the proper terminology related to the new ITU structure.

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

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#### NUMBERING OF INTERNATIONAL SIGNALLING POINT CODES

(Málaga-Torremolinos 1984, modified at Helsinki, 1993)

#### 1 Introduction

This Recommendation describes the numbering scheme of international signalling point codes for Signalling System No. 7 networks. The technical aspects of the signalling networks are specified in Recommendation Q.705.

The worldwide signalling network is structured into two functionally independent levels, namely the international and national levels. This structure makes possible a clear division of responsibility for signalling network management and allows numbering plans of signalling points of the international network and the different national networks to be independent of one another.

It is also noted that the point code is intended to be processed within the Message Transfer Part of each signalling point or signalling transfer point, so that there is no direct relationship to the telephone, data, or ISDN numbering.

#### 2 Numbering of International Signalling Points

- **2.1** A 14-bit binary code is used for the identification of signalling points.
- **2.2** An international signalling point code (ISPC) should be assigned to each signalling point which belongs to the international signalling network. For some network environment, one physical network node may serve as more than one signalling point, and may therefore be assigned more than one signalling point code.
- 2.3 All international signalling point codes (ISPC) should consist of three identification sub-fields as indicated in Figure 1. The sub-field of 3 bits (NML) should identify a world geographical zone. The sub-field of 8 bits (K-D) should identify a geographical area or network in a specific zone. The sub-field of 3 bits (CBA) should identify a signalling point in a specific geographical area or network. The combination of the first and second sub-fields could be regarded as a signalling area/network code (SANC).

N M L	K J I H G F E D	СВА	
Zone identification	Area/network identification	Signalling point identification	
Signalling area/network code (SANC)			
International signalling point code (ISPC)			First bit transmitted
3	8	3	T1158340-93/d01

FIGURE 1/Q.708

Format for international signalling point code (ISPC)

- **2.4** Each country (or geographical area) should be assigned at least one signalling area/network code (SANC).
- 2.5 Two of the zone identifications, namely 0 and 1 codes, are reserved for future allocation.

- 2.6 The system of international signalling point codes (ISPC) will provide for  $6 \times 256 \times 8$  (12288) ISPCs.
- **2.7** If a country (or geographical area) should require more than 8 international signalling points, one or more additional signalling area/network code(s) (SANC) would be assigned to it.
- 2.8 Lists of signalling area/network codes (SANC) to be used in the development of international signalling point codes (ISPC) is given in Annex A to this Recommendation. It shows SANCs assigned to each geographical area that already has other code assignments in existing public telecommunication networks. All codes not shown on the lists are spare codes.
- **2.9** The assignment of signalling area/network codes (SANC) is to be administered by the CCITT. The assignment of signalling point identifications in the sub-field (CBA) will be made by each country (or geographical area) and the CCITT Secretariat notified.
- 2.10 The Member countries of the International Telecommunications Union not mentioned in Annex A who wish to take part in the international signalling network or those Members that require an additional signalling area/network code (SANC) should ask the Director of the CCITT for the assignment of an available SANC. In their request, they may indicate the available SANC preferred.
- **2.11** The Director of the CCITT takes care that:
  - Generally the assignments are made on a one by one basis and contiguously for a given geographical area, or a given signalling network. (Geographical designations, or network names, may be entered in the list.)
  - The needs of each Member country of the International Telecommunication Union for a new SANC shall be met under all circumstances. Should there not be any additional contiguous codes available, a new sequence of contiguous codes shall be opened up for the country concerned. Such a new code sequence will be established firstly at the bottom of the block of spare codes at the end of the lists in Annex A, and secondly at the bottom of existing sequences when it is likely that the adjacent code groups will not require the spares.
  - Code assignments appearing in Annex A, but obviously not required anymore because the networks concerned are reached with other SANCs will be deleted from the annex.
- 2.12 Assignments by the Director of the CCITT of SANC as well as assignments by countries of the signalling point identifications will be published in the Operational Bulletin of the ITU. The representation of ISPC should be shown in decimal form in each sub-field, i.e. Z-UUU-V where Z, UUU, and V are corresponding to bits NML, K-D and CBA, respectively.

#### Annex A

#### Lists of Signalling Area/Network Codes (SANC)<sup>1)</sup>

(This annex forms an integral part of this Recommendation)

NOTE – These lists are shown by the decimal representation, i.e. Z-UUU where Z is zone identification and UUU is area/network identification.

#### Zone 2

Code Geographical Area or Signalling Network

2-004 Greece

2-008 and 2-009 Netherlands (Kingdom of the)

<sup>1)</sup> The SANC for several ITU Members of these lists will be assigned in the near future, as soon as these Members make the request to the TSB Director.

#### Zone 2 (cont.)

Code Geographical Area or Signalling Network

2-012 and 2-013 Belgium
2-016 through 2-023 France
2-024 Monaco
2-028 through 2-030 Spain

2-032 Hungary (Republic of)

2-040 Yugoslavia (Federal Republic of)

2-044 through 2-046 Italy
2-052 Romania

2-056 and 2-057 Switzerland (Confederation of)

--- Czech Republic
--- Slovac Republic

2-064 and 2-065 Austria

2-068 United Kingdom of Great Britain and Northern Ireland

(British Telecom)

2-072 United Kingdom of Great Britain and Northern Ireland

(Mercury Telecommunications Limited)

 2-076
 Denmark

 2-080 through 2-083
 Sweden

 2-084 through 2-086
 Norway

 2-088 through 2-091
 Finland

2-092 Estonia (Republic of)
--- Latvia (Republic of)
2-100 Russian Federation
2-120 Poland (Republic of)

2-036 through 2-039, and Germany (Federal Republic of)

2-124 through 2-131

2-132 Gibraltar
2-136 through 2-138 Portugal

2-140 Luxembourg

2-144 Ireland 2-148 Iceland

2-152 Albania (Republic of)

2-156 Malta

2-160 Cyprus (Republic of)2-168 Bulgaria (Republic of)

2-172 Turkey

2-180 Croatia (Republic of)
--- Slovenia (Republic of)

2-184 San Marino

## Zone 2 (cont.)

Code	Geographical Area or Signalling Network
2-188	United Kingdom of Great Britain and Northern Ireland (World Com)
2-192	Sweden (Fonetel)
	Lithuania (Republic of)
	Armenia (Republic of)
	Belarus (Republic of)
	Georgia (Republic of)
	Ukraine
	Bosnia and Herzegovina (Republic of)
	The Former Yugoslav Rep. of Macedonia
	Moldova (Republic of)

Zone 2, Spare Codes: 224

	Zone 3
Code	Geographical Area or Signalling Network
3-004 through 3-012	Canada
3-016	St. Pierre and Miquelon (French Department of)
3-020 through 3-059	United States of America
3-060	Puerto Rico
3-064	Virgin Islands (USA)
3-068, 3-069 and 3-070	Mexico
3-076	Jamaica
3-080	French Antilles
3-084	Barbados
3-088	Antigua and Barbuda
3-092	Cayman Islands
3-096	British Virgin Islands
3-100	Bermuda
3-104	Grenada
3-108	Montserrat
3-112	St. Kitts and Nevis
3-116	St. Lucia
3-120	St. Vincent and the Grenadines
3-124	Netherlands Antilles

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## Zone 3 (cont.)

Code	Geographical Area or Signalling Network
3-128	Bahamas (Commonwealth of the)
3-132	Dominica (Commonwealth of)
3-136	Cuba
3-140	Dominican Republic
3-144	Haiti (Republic of)
3-148	Trinidad and Tobago
3-152	Turks and Caicos Islands
3-156	Guadeloupe
3-160	Martinique

Zone 3, Spare Codes: 228

### Zone 4

Code	Geographical Area or Signalling Network
4-008	India (Republic of)
4-020	Pakistan (Islamic Republic of)
4-024	Afghanistan (Islamic State of)
4-026	Sri Lanka (Democratic Socialist Republic of)
4-028	Myanmar (Union of)
4-030	Lebanon
4-032	Jordan (Hashemite Kingdom of)
4-034	Syrian Arab Republic
4-036	Iraq (Republic of)
4-038	Kuwait (State of)
4-040	Saudi Arabia (Kingdom of)
4-042 and 4-046	Yemen (Republic of)
4-044	Oman (Sultanate of)
4-048	United Arab Emirates
4-050	Israel (State of)
4-052	Bahrain (State of)
4-054	Qatar (State of)
4-056	Mongolia
4-058	Nepal
4-060	United Arab Emirates (Abu Dhabi)

## Zone 4 (cont.)

	` ,
Code	Geographical Area or Signalling Network
4-062	United Arab Emirates (Dubai)
4-064	Iran (Islamic Republic of)
	Azerbaijani Republic
	Uzbekistan (Republic of)
	Kazakhstan
4-080, 4-081 4-083 and 4-085	Japan
4-100	Korea (Republic of) (Korea Telecom)
4-101	Korea (Republic of) (DACOM)
4-104	Viet Nam (Socialist Republic of)
4-108	Hong Kong
4-110	Macao
4-112	Cambodia
4-114	Lao People's Democratic Republic
4-120	China (People's Republic of)
4-135	Korea (Democratic People's Republic of)
4-140	Bangladesh (People's Republic of)
4-144	Maldives (Republic of)

Zone 4, Spare Codes: 223

#### Zone 5

Code	Geographical Area or Signalling Network
5-004	Malaysia
5-010 and 5-011	Australia Telstra
5-016	Australia Vodafone
5-019	Australia OPTUS
5-020	Indonesia (Republic of)
5-030	Philippines (Republic of)
5-040	Thailand
5-050	Singapore (Republic of)
5-056	Brunei Darussalam
5-060	New Zealand (Telecom Corporation of New Zealand Ltd)
5-065	New Zealand (Clear Communications Ltd)
5-070	Guam

## Zone 5 (cont.)

Code	Geographical Area or Signalling Network
5-072	Nauru (Republic of)
5-074	Papua New Guinea
5-078	Tonga (Kingdom of)
5-080	Solomon Islands
5-082	Vanatu (Republic of)
5-084	Fiji (Republic of)
5-086	Wallis and Futuna Islands
5-088	American Samoa
5-090	Niue Island
5-092	New Caledonia and Dependencies
5-094	French Polynesia
5-096	Cook Islands
5-098	Western Samoa (Independent State of)
5-100	Kiribati (Republic of)
5-102	Tuvalu

Zone 5, Spare Codes: 232

## Zone 6

Code	Geographical Area or Signalling Network
6-004	Egypt (Arab Republic of)
6-006	Algeria (People's Democratic Republic of)
6-008	Morocco (Kingdom of)
6-010	Tunisia
6-012	Libya (Socialist People's Libyan Arab Jamahiriya)
6-014	Gambia (Republic of the)
6-016	Senegal (Republic of the)
6-018	Mauritania (Islamic Republic of)
6-020	Mali (Republic of)
6-022	Guinea (Republic of)
6-024	Côte d'Ivoire (Republic of the)
6-026	Burkina Faso
6-028	Niger (Republic of the)
6-030	Togolese Republic

## Zone 6 (cont.)

Code	Geographical Area or Signalling Network
6-032	Benin (Republic of)
6-034	Mauritius (Republic of)
6-036	Liberia (Republic of)
6-038	Sierra Leone
6-040	Ghana
6-042	Nigeria (Federal Republic of)
6-044	Chad (Republic of)
6-046	Central African Republic
6-048	Cameroon (Republic of)
6-050	Cape Verde (Republic of)
6-052	Sao Tome and Principe (Democratic Republic of)
6-054	Equatorial Guinea (Republic of)
6-056	Gabon Republic
6-058	Congo (Republic of the)
6-060	Zaire (Republic of)
6-062	Angola (People's Republic of)
6-064	Guinea-Bissau (Republic of)
6-066	Seychelles (Republic of the)
6-068	Sudan (Republic of the)
6-070	Rwanda (Republic of)
6-072	Ethiopia
6-074	Somali Democratic Republic
6-076	Republic of Djibouti
6-078	Kenya (Republic of)
6-080	Tanzania (United Republic of)
6-082	Uganda (Republic of)
6-084	Burundi (Republic of)
6-086	Mozambique (Republic of)
6-090	Zambia (Republic of)
6-092	Madagascar (Democratic Republic of)
6-094	Reunion (French Department of)
6-096	Zimbabwe (Republic of)
6-098	Namibia (Republic of)
6-100	Malawi
6-102	Lesotho (Kingdom of)
6-104	Botswana (Republic of)

## Zone 6 (cont.)

Code	Geographical Area or Signalling Network
6-106	Swaziland (Kingdom of)
6-108	Comoros (Islamic Federal Republic of the)
6-110	South Africa (Republic of)

Zone 6, Spare Codes: 203

### Zone 7

Code	Geographical Area or Signalling Network
7-004	Belize
7-008	Guatemala (Republic of)
7-012	El Salvador (Republic of)
7-016	Honduras (Republic of)
7-020	Nicaragua
7-024	Costa Rica
7-028	Panama (Republic of)
7-032	Peru
7-044	Argentine Republic
7-048	Brazil (Federative Republic of)
7-060	Chile
7-064	Colombia (Republic of)
7-068	Venezuela (Republic of)
7-072	Bolivia (Republic of)
7-076	Guyana
7-080	Ecuador
7-084	Guiana (French Department of)
7-088	Paraguay (Republic of)
7-092	Suriname (Republic of)
7-096	Uruguay (Eastern Republic of)

Zone 7, Spare Codes: 236