

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

E.164

Amendment 1
(06/2011)

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

International operation – Numbering plan of the
international telephone service

The international public telecommunication
numbering plan

**Amendment 1: Revised Annex A – Clarification
and explanation of the structure and function of
international ITU-T E.164-numbers**

Recommendation ITU-T E.164 (2010) – Amendment 1

ITU-T E-SERIES RECOMMENDATIONS

OVERALL NETWORK OPERATION, TELEPHONE SERVICE, SERVICE OPERATION AND HUMAN FACTORS

INTERNATIONAL OPERATION	
Definitions	E.100–E.103
General provisions concerning Administrations	E.104–E.119
General provisions concerning users	E.120–E.139
Operation of international telephone services	E.140–E.159
Numbering plan of the international telephone service	E.160–E.169
International routing plan	E.170–E.179
Tones in national signalling systems	E.180–E.189
Numbering plan of the international telephone service	E.190–E.199
Maritime mobile service and public land mobile service	E.200–E.229
OPERATIONAL PROVISIONS RELATING TO CHARGING AND ACCOUNTING IN THE INTERNATIONAL TELEPHONE SERVICE	
Charging in the international telephone service	E.230–E.249
Measuring and recording call durations for accounting purposes	E.260–E.269
UTILIZATION OF THE INTERNATIONAL TELEPHONE NETWORK FOR NON-TELEPHONY APPLICATIONS	
General	E.300–E.319
Phototelegraphy	E.320–E.329
ISDN PROVISIONS CONCERNING USERS	E.330–E.349
INTERNATIONAL ROUTING PLAN	E.350–E.399
NETWORK MANAGEMENT	
International service statistics	E.400–E.404
International network management	E.405–E.419
Checking the quality of the international telephone service	E.420–E.489
TRAFFIC ENGINEERING	
Measurement and recording of traffic	E.490–E.505
Forecasting of traffic	E.506–E.509
Determination of the number of circuits in manual operation	E.510–E.519
Determination of the number of circuits in automatic and semi-automatic operation	E.520–E.539
Grade of service	E.540–E.599
Definitions	E.600–E.649
Traffic engineering for IP-networks	E.650–E.699
ISDN traffic engineering	E.700–E.749
Mobile network traffic engineering	E.750–E.799
QUALITY OF TELECOMMUNICATION SERVICES: CONCEPTS, MODELS, OBJECTIVES AND DEPENDABILITY PLANNING	
Terms and definitions related to the quality of telecommunication services	E.800–E.809
Models for telecommunication services	E.810–E.844
Objectives for quality of service and related concepts of telecommunication services	E.845–E.859
Use of quality of service objectives for planning of telecommunication networks	E.860–E.879
Field data collection and evaluation on the performance of equipment, networks and services	E.880–E.899
OTHER	E.900–E.999
INTERNATIONAL OPERATION	
Numbering plan of the international telephone service	E.1100–E.1199
NETWORK MANAGEMENT	
International network management	E.4100–E.4199

For further details, please refer to the list of ITU-T Recommendations.

Recommendation ITU-T E.164

The international public telecommunication numbering plan

Amendment 1

Revised Annex A – Clarification and explanation of the structure and function of international ITU-T E.164-numbers

Summary

Replace the current clause A.8 of Annex A of Recommendation ITU-T E.164 with new text.

History

Edition	Recommendation	Approval	Study Group
1.0	ITU-T E.164/I.331	1984-10-19	
2.0	ITU-T E.164/I.331/Q.11 bis	1988-11-25	
3.0	ITU-T E.164/I.331	1991-08-23	II
4.0	ITU-T E.164	1997-05-30	2
4.1	ITU-T E.164 Suppl. 2	1998-11-13	2
4.2	ITU-T E.164 Suppl. 3	2002-05-16	2
4.3	ITU-T E.164 Suppl. 4	2003-05-02	2
4.4	ITU-T E.164 Suppl. 5	2008-05-15	2
5.0	ITU-T E.164	2005-02-24	2
6.0	ITU-T E.164	2010-11-18	2
6.1	ITU-T E.164 Suppl. 1	1998-03-09	2
6.2	ITU-T E.164 Suppl. 2	2009-11-24	2
6.3	ITU-T E.164 Suppl. 3	2004-05-28	2
6.4	ITU-T E.164 Suppl. 3 Amd. 1	2009-11-24	2
6.5	ITU-T E.164 Suppl. 4	2004-05-28	2
6.6	ITU-T E.164 Suppl. 4 Amd. 1	2009-11-24	2
6.7	ITU-T E.164 Suppl. 5	2009-11-24	2
6.8	ITU-T E.164 (2010) Amd. 1	2011-06-10	2

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.

INTELLECTUAL PROPERTY RIGHTS

ITU draws attention to the possibility that the practice or implementation of this Recommendation may involve the use of a claimed Intellectual Property Right. ITU takes no position concerning the evidence, validity or applicability of claimed Intellectual Property Rights, whether asserted by ITU members or others outside of the Recommendation development process.

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/>.

© ITU 2011

All rights reserved. No part of this publication may be reproduced, by any means whatsoever, without the prior written permission of ITU.

Recommendation ITU-T E.164

The international public telecommunication numbering plan

Amendment 1

Revised Annex A – Clarification and explanation of the structure and function of international ITU-T E.164-numbers

Clause A.8

Replace the current clause A.8 with the following text:

A.8 National-Only Numbers

Introduction

A.8.1 Any number within the responsibility of an Administration, which does not conform to the structure, length and uniqueness as defined in the main body of this Recommendation, is not an international E.164-number, and is termed a National-Only Number.

A.8.2 National-Only Numbers may not be accessed when calls are originating from other national numbering plans, within the responsibility of a different Administration. For the purpose of this Annex, National-Only Numbers may include numbers that exist within Integrated Numbering Plans.

A.8.3 Listed below are some examples of National-Only Numbers. The list is not exhaustive.

A.8.3.1 Short Codes

Short Codes utilise significantly fewer digits than subscriber numbers in either their local, national or international format, and are valid for a specific purpose only. Examples of short codes are for access to a specific service or for indicating customer preferences, and may include for some countries, as allowed for by the National Numbering Plan:

- Emergency numbers
- Call-by-Call Carrier Selection
- National Helplines

Countries with integrated numbering plans may have the same number allocated as an emergency number within each country.

The provision of short codes in open dialling plans may differ from a similar provision in a closed dialling plan. For example, the provision of a short code in an open dialling plan that utilises digits in the local network, taken from the SN field, may clash with digits utilised to indicate an NDC if the same digits were to be utilised in an international originated call. In this case, the short code is considered to be a national-only number.

A.8.3.2 Special Use Numbers (SUNs)

Special Use Numbers (SUNs) are numbers with significantly fewer digits than ordinary subscriber numbers, and which only exist in the country which provides it. The digits of SUNs could be identical to the leading digits of one or more subscriber numbers. The decision by which these numbers are implemented is a national matter.

Since SUNs are significantly shorter than the subscriber numbers, they are within the limits of Table A.1.

All incoming international calls to the number will fail because the CC + NDC + SUN and the leading digits of NDC + SN are ambiguous and therefore not international ITU-T E.164-numbers. In order to have certainty, digits following the SUN should not be assigned. Also, the leading digits of the SUN should not be assigned for any other purposes. The assignment has implications for Number Management and Utilisation and that is the responsibility of a national Administration.

A.8.3.3 National (significant) numbers with excessive length

The national (significant) numbers (NDC + SN) as used nationally have differing lengths, and the longest national (significant) numbers violate the maximum given in Table A.1.

The numbers have a hierarchical structure as follows. The structure is independent of the number length.

- Local level: SN.
- National level: NDC + SN.
- International level: CC + NDC + SN.

Some of the national (significant) numbers (NDC + SN) and international numbers (CC +NDC + SN) are longer than the maximum given in Table A.1. These numbers are not international ITU-T E.164-numbers. The most significant part of the national (significant) numbers, truncated to the limits given in Table A.1, are international ITU-T E.164-numbers provided that they are unique.

SERIES OF ITU-T RECOMMENDATIONS

Series A	Organization of the work of ITU-T
Series D	General tariff principles
Series E	Overall network operation, telephone service, service operation and human factors
Series F	Non-telephone telecommunication services
Series G	Transmission systems and media, digital systems and networks
Series H	Audiovisual and multimedia systems
Series I	Integrated services digital network
Series J	Cable networks and transmission of television, sound programme and other multimedia signals
Series K	Protection against interference
Series L	Construction, installation and protection of cables and other elements of outside plant
Series M	Telecommunication management, including TMN and network maintenance
Series N	Maintenance: international sound programme and television transmission circuits
Series O	Specifications of measuring equipment
Series P	Terminals and subjective and objective assessment methods
Series Q	Switching and signalling
Series R	Telegraph transmission
Series S	Telegraph services terminal equipment
Series T	Terminals for telematic services
Series U	Telegraph switching
Series V	Data communication over the telephone network
Series X	Data networks, open system communications and security
Series Y	Global information infrastructure, Internet protocol aspects and next-generation networks
Series Z	Languages and general software aspects for telecommunication systems