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

International operation – General provisions concerning
users

Presentation of national numbering plans

Recommendation ITU-T E.129



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Recommendation ITU-T E.129

Presentation of national numbering plans

Summary

The objective of Recommendation ITU-T E.129 is to specify a methodology that will provide a standardized method for presenting ITU-T E.164 numbers in the national numbering plans (NNPs) of all countries (i.e., each country's application of Recommendation ITU-T E.164). This Recommendation also includes a method to make such NNP information available to all interested parties, as well as timely information on numbering plan changes that influence the routing, charging and accounting of international telecommunication traffic. This Recommendation also helps to collect other information that may be relevant, such as numbers related to important services like emergency services (emergency numbers) and services of social value, as well as information on the implementation of number portability (NP) of ITU-T E.164 numbers.

History

Edition	Recommendation	Approval	Study Group
1.0	ITU-T E.129	2002-09-06	2
2.0	ITU-T E.129	2009-11-24	2
3.0	ITU-T E.129	2013-01-31	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.

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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/>.

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Recommendation ITU-T E.129

Presentation of national numbering plans

1 Scope

This Recommendation assists numbering plan administrators by describing a methodology to access and provide ITU-T E.164 numbering information on their country's national numbering plan (NNP) in a timely manner. Guidance includes, but is not limited to, methods on how to obtain information on national numbering plans, how to present and describe the numbering plans, and how to ensure the timely posting of numbering plan changes in a standardized presentation that is consistent with [ITU-T E.164]. While the basic objective of this Recommendation is to present geographic country code (CC) information, it may also be used to communicate numbering information for network code applications and for country codes assigned to groups of countries (GoC). In addition, this Recommendation helps to collect other information that may be relevant, such as numbers related to important services like emergency services (emergency numbers) and other services of social value¹, as well as information on the implementation of number portability (NP) of ITU-T E.164 numbers.

2 References

The following ITU-T Recommendations and other references contain provisions which, through reference in this text, constitute provisions of this Recommendation. At the time of publication, the editions indicated were valid. All Recommendations and other references are subject to revision; users of this Recommendation are therefore encouraged to investigate the possibility of applying the most recent edition of the Recommendations and other references listed below. A list of the currently valid ITU-T Recommendations is regularly published. The reference to a document within this Recommendation does not give it, as a stand-alone document, the status of a Recommendation.

- | | |
|---------------------|---|
| [ITU-T E.101] | Recommendation ITU-T E.101 (2009), <i>Definitions of terms used for identifiers (names, numbers, addresses and other identifiers) for public telecommunication services and networks in the E-series Recommendations.</i> |
| [ITU-T E.164] | Recommendation ITU-T E.164 (2010), <i>The international public telecommunication numbering plan.</i> |
| [ITU-T E.164 Sup.2] | Recommendation ITU-T E.164 – Supplement 2 (2012), <i>Number Portability.</i> |

3 Definitions

This Recommendation defines the following terms:

- 3.1 mail exploder list:** Part of an electronic mail delivery system which allows a message to be delivered to a list of addresses.
- 3.2 parallel running:** The co-existence of new and old numbers during a limited period of time (e.g., six months) to support a smooth transition to a new numbering plan.

¹ As defined in [b-ITU-T E.164 Sup.6].

4 Abbreviations and acronyms

This Recommendation uses the following abbreviations and acronyms:

ACQ	All Call Query
CC	Country Code
CRDB	Central Reference Database
ENUM	TElephone NUmber Mapping
GoC	Group of Countries
NDC	National Destination Code
NGN	Next-Generation Network
NNP	National Numbering Plan
NP	Number Portability
NPA	Numbering Plan Administrator
OR	Onward Routing
QoR	Query on Release
RtP	Return to Pivot
N(S)N	National (Significant) Number
UTC	Coordinated Universal Time

5 Background

The establishment of a standardized methodology and presentation for each country's application of [ITU-T E.164] has been required to address difficulties in gaining access to information on newly assigned and implemented numbering resources on a worldwide basis. To meet this need, this Recommendation presents and identifies a process for worldwide notification of new assignments and changes of ITU-T E.164 numbers in the NNPs. In addition, the applicability of number portability (NP) and the assignment of important numbers within a specific jurisdiction are essential information to be shared. Therefore, notification of applicability of NP in each country is also included in this process, although it is recognized that NP may not have been implemented in every country. Reference is also made to numbers defined in the national numbering plan for allocation to important services like emergency services and services of social value.

A request for assistance in providing and receiving worldwide information on operation and numbering was addressed to numbering plan administrators (NPAs). As a result, this Recommendation has been developed to provide a solution to the problem of disseminating national operational and numbering information, including requirements associated with the use of ITU-T E.164 numbers, like the implementation of NP and important numbers such as those allocated to emergency services and services of social value. ITU-T has been involved in this process and the efforts of the Telecommunication Standardization Bureau (TSB) are integral to its implementation and success.

6 Description of approach and recommended solution

To meet the objectives of this Recommendation, a standardized methodology is herein described to recommend:

- a) the gathering of Internet web addresses and hyperlinks, made available on the ITU-T home page entitled "International Numbering Resources", to access the websites of national numbering plan administrators to obtain descriptions of national numbering plan(s).
- b) the gathering of Internet web addresses and hyperlinks, made available on the ITU-T home page entitled "Implementation of Number Portability", to access the websites of national numbering plan administrators to obtain descriptions of each country's number portability.
- c) a standardized format to describe a country's implementation of emergency numbers and other important numbers related to services of social value. This information can be posted on the national numbering plan administrator's website.
- d) a standardized format to post and describe changes to a country's numbering plan. This information will be posted on the ITU-T website under the specific country to which it applies.
- e) a standardized format to describe a country's implementation of number portability and a format to post this information on the ITU-T website.
- f) a method to inform all requesting parties to subscribe and participate in an e-mail exploder list that will announce relevant changes to a country's numbering plan and number portability implementation.

The remainder of this Recommendation expands on these objectives and describes how they are implemented.

7 ITU-T website and exploder list

7.1 General

The ITU-T website is a critical component in the successful application of the solution to provide free, accurate and timely access to the most current international numbering information.

The section of the ITU-T home page entitled "National Numbering Plans"² is the focal point for obtaining accurate and timely numbering information for countries worldwide³. The section of the ITU-T home page entitled "Implementation of National Number Portability"⁴ is the focal point for obtaining accurate and timely portability information for countries worldwide. The section of the ITU website entitled "ITU-T E.129 National-only numbers linked with emergency services and other services of social value"⁵ is the focal point for obtaining accurate and timely information on important numbers worldwide. The ITU-T will post both the current contact and website information for national numbering plan administrators worldwide that provide the ITU-T with this information.

In addition, the ITU-T will e-mail updates to all parties who register with them, via an exploder list. In this way, subscribers will receive the latest information on changes in numbering and/or number portability, as soon as it is notified to the TSB. Details of how to subscribe to receive and/or submit numbering information are available on the ITU-T website: <http://www.itu.int/oth/T0202.aspx?parent=T0202>.

The ITU-T databases accessible via the ITU-T website, and the ITU Operational Bulletin <http://www.itu.int/pub/T-SP/e>, remain the authoritative sources for ITU-T E.164 numbering information.

² Currently available at the following URL: <http://www.itu.int/oth/T0202.aspx?parent=T0202>

³ The primary purpose of the ITU-T website referenced in this Recommendation is for national numbering plan information. However, NPA websites may also include information on other national naming, numbering, addressing or identification plans.

⁴ Currently available at the following URL: <http://www.itu.int/oth/T0202.aspx?parent=T0202>

⁵ Currently available at the following URL: http://www.itu.int/net/itu-t/inrdb/e129_important_numbers.aspx