INTERNATIONAL TELECOMMUNICATION UNION

ITU-T E.123

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

(02/2001)

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

International operation – General provisions concerning users

Notation for national and international telephone numbers, e-mail addresses and Web addresses

ITU-T Recommendation E.123

(Formerly CCITT Recommendation)

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.409
International network management	E.410–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

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

ITU-T Recommendation E.123

Notation for national and international telephone numbers, e-mail addresses and Web addresses

Summary

This Recommendation applies specifically to the printing of national and international telephone numbers, electronic mail addresses and Web addresses on letterheads, business cards, bills, etc. Regard has been given to the printing of existing telephone directories. The standard notation for printing telephone numbers, E-mail addresses and Web addresses helps to reduce difficulties and errors, since this address information must be entered exactly to be effective.

Source

ITU-T Recommendation E.123 was revised by ITU-T Study Group 2 (2001-2004) and approved under the WTSA Resolution 1 procedure on 2 February 2001.

FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications. 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.

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, implementors are cautioned that this may not represent the latest information and are therefore strongly urged to consult the TSB patent database.

CONTENTS

ITU-T Recommendation E.123

Notation for national and international telephone numbers, e-mail addresses and Web addresses

1 General

The statements below apply specifically to the printing of national and international telephone numbers, electronic mail addresses and Web addresses on letterheads, business cards, bills, etc. Regard has been given to the printing of existing telephone directories. The standard notation for printing telephone numbers, e-mail addresses and Web addresses helps to reduce difficulties and errors, since this address information must be entered exactly to be effective[1].

2 Notation for National and International Telephone Numbers

2.1 The international number should be printed below the national number, with corresponding digits lined up one under the other to facilitate understanding of the composition of the international number as shown in the examples in 2.3 and 2.4 below.

2.2 The words "National" and "International" in the appropriate language should be placed to the left of the national and international numbers, and these should be separated by a horizontal line.

2.3 Either the symbol for telephone given in ITU-T E.121 or the word "Telephone" in the appropriate language should be placed to the left of (or above) the national and international numbers (to avoid confusion with other letterhead numbers). The + (plus) signifies the international prefix (see 7.1).

Example: Telephone

National	(607) 123 4567
International	+ 22 607 123 4567

(Additional examples are shown in clause 6 below.)

2.4 Because the countries of World Numbering Zone 1 (North America) have the country code 1, the same number as is used for the trunk prefix, and because dialling between these countries is the same as long-distance dialling within them, subscriber difficulties are avoided by using an alternative notation that has been found superior for use within these countries and equally good for subscribers in other countries dialling to Zone 1. This is to substitute for "National" on the upper line the phrase "Within N. Amer. zone".

Example: Telephone

Within N. Amer. zone	(302) 123 4567
International	+ 1 302 123 4567

2.5 If it is desirable to write only the international number, it should be written in the form:

Telephone International +22 607 123 4567

2.6 If it is desirable, for example, to save space to accommodate printing several different numbers for FAX, mobile, etc. as well as an ordinary telephone number, each number should be printed as a short label (e.g., "Tel") followed by the number in the desired domestic or international format. The domestic format should be the same as used on the top line shown in 2.3, and the international format should be that shown on the bottom line in the same paragraph, but omitting the words "National" or "International" in each case.

Example 1: Tel. (0607) 123 4567

[1] It is also desirable that the printing of other information on letterheads, etc. such as telex and telegraph numbers and postal codes should not cause subscriber confusion with the telephone number.

	Fax	(0607) 123 4568
	Mobile	(0607) 321 9876
Example 2:	Tel.	+22 607 123 4567
	Fax	+22 607 123 4568
	Mobile	+22 607 321 9876

2.7 To show an extension number of a PABX without direct in-dialling, the nationally used word or abbreviation for "extension" should be written immediately after the telephone numbers and on the same line as the word "telephone", followed by the extension number itself.

Example 1: Telephone Within N. Amer. zone (302) 123 4567 / International +1 302 123 4567 ext. 876

Example 2: Telephone international +22 607 123 4567 ext. 876

In this way, the extension number is separated from the digits to be dialled and, where it must be typed onto a letterhead, for example, it need be typed only once.

2.8 It is often necessary to draw the attention of subscribers to the need to omit the foreign national trunk prefix when dialling an international call. This need occurs when the destination country conventionally writes its telephone numbers such that the trunk prefix appears with the trunk code (in parentheses). To compose a comprehensible and accurate statement can prove difficult: suitable forms are given in 3.2/E.122.

2.9 Grouping the digits of a telephone number is advisable for reasons of memorizing, oral presentation, and printing.

3 Notation for Electronic Mail Addresses

3.1 An electronic mail address, if present, should be printed in the SMTP style below the telephone number information, and denoted by the label "E-mail" or some easily recognized variation such as "email," or the equivalent in the appropriate language.

Example:	Telephone:	National	(0609) 123 4567
		International	+22 609 123 4567
	E-mail:		jdeo@isp.com

3.2 If necessary to save space, it is permissible to omit the label "E-mail."

4 Notation for Web Addresses

4.1 A Web address, if present, should be printed without the prefix http:// near the e-mail address information, and denoted by the label "Web" or the equivalent in the appropriate language.

Example:	Telephone:	National	(0609) 123 4567
		International	+22 609 123 4567
	E-mail:		jdeo@isp.com
	Web:		www.doecorp.com

5 Classes of symbols

5.1 There are four classes of symbols in national or international numbers. No symbol should be used in more than one class, nor should any symbol within a class have more than one meaning.

5.2 These classes are:

- diallable symbols (in French: *symboles servant à la composition du numéro*);
- procedural symbols (in French: *symboles opératoires*);
- information symbols (in French: *symboles d'information*);
- spacing symbols (in French: *symboles d'espacement*).

6 Diallable symbols

A *diallable* symbol is a symbol which is to be dialled and appears on a telephone set to designate either a finger hole of a dial or a push button of a keyset[2]. These symbols can be digits, letters, or other signs. Some desirable properties to be considered when selecting diallable symbols are listed in Annex A.

7 Procedural symbols

A *procedural* symbol is a symbol which tells the subscriber how to dial. Such symbols should not appear in a finger hole or on a push button because they are not to be dialled.

7.1 International prefix symbol

The *international prefix symbol* should be + (plus) and should precede the country code in the international number. It serves to remind the subscriber to dial the international prefix which differs from country to country and also serves to identify the number following as the international telephone number.

7.2 Use of parentheses

The symbol ( ) (parentheses) should be used to indicate that the digits within the ( ) are not always dialled.

The ( ) should enclose:

- the trunk prefix and trunk code in a national number[3];
- the trunk code when the trunk prefix is not in universal use within a country.

This is done to remind the user not to dial the enclosed digits for calls within the same numbering area.

The ( ) should not be used in an international number.

7.3 Multiple numbers reached through automatic search

For a subscriber with multiple numbers reached through automatic search from the main number, only the main number should be printed, without any symbol to denote the existence of the multiple numbers. This avoids encouraging subscribers to dial other numbers in a group immediately after finding the main number busy, a problem that is particularly important when only calls to the main number are capable of triggering automatic search.

---

[2] Specific recommendations on the symbol for buttons 11 to 16 of a telephone keyset are contained in clause 3/E.161.

[3] It should be noted that certain Administrations, for national purposes, use a hyphen between the trunk code and subscriber number as a substitute for the symbol ( ) parentheses in national numbers.

7.4 Multiple numbers without automatic search

For a subscriber with multiple numbers who does not have automatic search, the symbol / (oblique stroke, solidus, or slant) may be used to separate the alternative numbers.

Example A: (0607) 123 4567 / 123 7272 / 627 1876

(0607) 123 4567 / 393 9844 / 564 1692

+ 22 607 123 4567 / 393 9844

To avoid dialling confusion in Example A, it is especially important that there be a space on either side of the symbol /.

When it is desired to abbreviate the alternative numbers and they are consecutive, only the last digit should be shown for the alternative numbers.

Example B: (0607) 123 4567 / 8 / 9

To avoid dialling confusion in Example B, it is especially important that there be *no* space on either side of the symbol /.

The general use of / is to indicate a choice when dialling. It may therefore also be used to indicate a choice of prefix codes as, for example, the choice of dialling personal or station calls.

7.5 In-dialling

In the national and international number no symbol should be used to show that a subscriber number is an in-dialling number of a PBX. Where it is desired to indicate the existence of in-dialling within a PBX and to indicate the in-dialling access code the following format is recommended:

(0607) 123 ...

(0607) 1 23 4...

The number of dots (periods) is equal to the number of digits in the extension number of the PBX. The spacing between numbers and dots should conform to national standards.

On letterheads, subscribers could insert their own in-dialling numbers in the dotted spaces. Presentation of the main listed number should conform to 1.3 above.

7.6 Symbol to indicate the existence of an additional dial tone[4]

Some Administrations use one or more additional dial tone responses as procedural elements, after the calling customer obtains access to the public network. Where a symbol is needed to indicate the existence of an additional dial tone, that symbol should be the graphical representation of a full cycle of a sine wave, or a close approximation to such a representation. It should be placed at the point in the number where it is expected to occur, and it should be preceded and followed by a space to avoid confusion with a hyphen used as a spacing symbol (6.1). Its meaning is to tell the user to wait for the additional dial tone.

Example: { Handwritten character: ∼ ; Typewriter character "tilde": ~ }

[4] In some countries, a horizontal line element (-), e.g. a hyphen in North America or a dash in some European countries, is used in national telephone numbers as a spacing character. Therefore, such an element is not available to designate an additional dial tone. Some Administrations, e.g. the Netherlands Administration, on the other hand, uses the dash to indicate an additional dial tone and foresees a continuation of this use for some time.

8 Information symbols

An information symbol is a symbol associated with the subscriber number describing special features of the subscriber telephone service, e.g. the symbol ⌕, where used, indicates that the subscriber has an answering device attached to his telephone (reference should be made to clause 2a) and b)/E.117).

8.1 Such symbols are not to be dialled and therefore should not appear in a finger hole or on a push button, nor can such symbols be procedural in instructing the subscriber how to dial.

8.2 Information symbols should be associated with the word "Telephone". To avoid confusion in dialling, they should not appear either as prefixes or suffixes to the telephone number.

Example:	Telephone (0607) 123 4567 ⌕,	or Telephone ⌕, (0607) 123 4567

See also the example below[5].

9 Spacing symbols

Spacing symbols are symbols which are used solely to separate parts of a telephone number from each other. They cannot be diallable, procedural or information symbols.

9.1 Grouping of digits in a telephone number[5] should be accomplished by means or spaces[6] unless an agreed upon explicit symbol (e.g. hyphen) is necessary for procedural purposes. Only spaces should be used in an international number.

9.2 In the international number, spacing shall occur between the country code and the trunk code and between the trunk code and the subscriber number.

9.3 The major separation among digits in a telephone number (national or international) should occur between trunk code and subscriber number. This separation should therefore always be wider than any other separation within the number. This requirement is automatically met in the notation recommended, as in the examples[5].

10 Facsimile number notation

The printed format for facsimile numbers should follow the conventions set forth for voice telephone numbers except that facsimile numbers should be clearly labelled with the uppercase letters FAX printed to the left of the numbers as illustrated here:

FAX	National	(06) 65 43 21
	International	+ 49 6 65 43 21

The recommended appearance of the printed facsimile symbol (FAX) is specified in ITU-T E.121.

---

[5] Some commonly used existing groupings are:

(	National	(0211) 5432
	International	+39 211 5432
⌕, Telephone	National	(071) 78 901
	International	+41 71 78 901
Telephone	National	(06) 65 43 21
	International	+49 6 65 43 21

[6] Administrations using dots or hyphens as separators nationally may require time to determine the consequences of discontinuing their use.

ANNEX A

Desirable properties of diallable symbols

This annex lists some desirable properties to be considered by the ITU-T when this body standardizes new diallable symbols. There are a large number of properties which are desirable for such symbols, and those indicated below seem particularly relevant. However, their relative importance has not been evaluated, and it is recognized that it may not always be possible to fulfil all these conditions when selecting symbols.

The properties of diallable symbols should be:

A.1 Distinct from other diallable symbols

As used here, "distinct" refers to dissimilarity from other symbols compared with them visually, or aurally. The dissimilarity should be evident in low probability of confusion with other symbols under degraded perceptual conditions.

A.1.1 The symbols should be visually distinct in their designated form as well as in typewritten, handwritten, or printed form, including variations which might occur in each.

A.1.2 The symbols should be aurally distinct in naming them in at least the official languages of the ITU.

A.2 Widely known name

The name of the symbol should be as widely known as possible and be constant over as wide a range of population as possible.

A.3 Reproducible

The symbol should be easily reproducible in handwritten and typewritten form.

A.4 ITU-T-ISO compatible

The symbol should be one which is given as a member of the ITU-T Alphabet No. 5 and the ISO (International Organization for Standardization) standard code for information interchange.

A.5 Made up of a single character

The symbol should not be composed of more than one individually valid symbol; nor should more than one key operation on a typewriter, for example, be required to produce it.

A.6 Abstract

The symbol should not already have intrinsic meaning resulting from other specialized usage.

A.7 Immediately recognizable as a diallable character

The symbol should not be one which is used for procedural or information purposes.

SERIES OF ITU-T RECOMMENDATIONS

Series A	Organization of the work of ITU-T
Series B	Means of expression: definitions, symbols, classification
Series C	General telecommunication statistics
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	TMN and network maintenance: international transmission systems, telephone circuits, telegraphy, facsimile and leased circuits
Series N	Maintenance: international sound programme and television transmission circuits
Series O	Specifications of measuring equipment
Series P	Telephone transmission quality, telephone installations, local line networks
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 and open system communications
Series Y	Global information infrastructure and Internet protocol aspects
Series Z	Languages and general software aspects for telecommunication systems

Geneva, 2001