



INTERNATIONAL TELECOMMUNICATION UNION

**ITU-T**

TELECOMMUNICATION  
STANDARDIZATION SECTOR  
OF ITU

**T.52**

**Amendment 1**

(10/96)

SERIES T: TERMINALS FOR TELEMATIC SERVICES

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Non-latin coded character sets for telematic  
services

**Amendment 1**

ITU-T Recommendation T.52 – Amendment 1

(Previously CCITT Recommendation)

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ITU-T T-SERIES RECOMMENDATIONS  
**TERMINALS FOR TELEMATIC SERVICES**

*For further details, please refer to ITU-T List of Recommendations.*

## FOREWORD

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

The approval of Recommendations by the Members of the ITU-T is covered by the procedure laid down in WTSC Resolution No. 1 (Helsinki, March 1-12, 1993).

Amendment 1 to ITU-T Recommendation T.52, was prepared by ITU-T Study Group 8 (1993-1996) and was approved by the WTSC (Geneva, October 9-18, 1996).

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## NOTE

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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## **SUMMARY**

In order to align the names of characters from Recommendation T.52 to those of ISO/IEC 10646-1, and respecting the naming rules of T.52, some editorial changes are made. In this Amendment, the Greek supplementary set is placed by a new version offered by the Greek Administration.

**NON-LATIN CODED CHARACTER SETS  
FOR TELEMATIC SERVICES**

**AMENDMENT 1**

(Geneva, 1996)

- 1) “CCITT” shall be changed to “ITU-T” in all relevant places.
- 2) Paragraphs 7.1.3, 7.2.5, 7.3.3, 7.4.3, 7.5.3, 7.6.3, 7.7.3 (“Usage of the ... set”) shall be deleted (also in CONTENTS).
- 3) In 1.1:
  - (e) shall be deleted;
  - (d) shall be (e); and “... base coding ...” shall be changed to “... Latin-based coding ...”;
  - (f) shall be (d);
  - (g) shall be (f).
- 4) In 1.4:
  - “... in accordance to ...” shall be changed to “... based on ...”
  - “... consists...” shall be changed to “... consist ...”.
- 5) In 2.1:
  - “– CCITT Recommendation T.50 ...” shall be changed to “CCITT Recommendation T.50, *International Reference Alphabet (IRA) (formerly International Alphabet No. 5 or IA5) – Information technology – 7-bit coded character set for information interchange, 1992*”;
  - “– CCITT Recommendation T.51 ...” shall be changed to “CCITT Recommendation T.51, *Latin-based coded character sets for telematic services, 1992 and its Amendment 1, 1995*”;
  - “– CCITT draft Recommendation T.53 ..., 1993” shall be changed to “– ITU-T Recommendation T.53 ..., 1994”;
  - “– CCITT Recommendation T.61 ... 1992” shall be deleted;
  - “– CCITT Recommendation T.101 ... 1990” shall be deleted.
- 6) In 2.2:
  - “ISO 2022 ..., 1986” shall be changed to “ISO/IEC 2022 ..., 1994”;
  - “ISO 6429 ...” shall be changed to “ISO/IEC 6429 ...”;
  - “ISO/IEC 6937 ..., 1992” shall be changed to “ISO/IEC 6937 ..., 1994”;
  - “JTC1/SC2 ...” shall be deleted;
  - Add “ISO/IEC 10646-1, *Information technology – Universal Multiple-Octet Coded Character Set (UCS) – Part 1: Architecture and Basic Multilingual Plane, 1993.*”
- 7) In 4.1:
  - Add “ITU-T International Telecommunication Union – Telecommunication Standardization Sector (replaces CCITT from 1 March 1993)”.

- 8) In 6.3:
- Add the footnotes as in 8.4, as indicated in item 12) of this Amendment.
- 9) In 6.4:
- Delete the crossreference: “GREEK SMALL LETTER OMICRON WITH TONOS” with “CHN”;
  - Delete the crossreference: “GREEK SMALL LETTER FINAL SIGMA” with “JKN” and the corresponding NOTE in the table.
- 10) After 7.4.2:
- Add a new “7.4.3 Structure of the Greek supplementary set” with the following text:  
 “The Greek supplementary set defined in this Recommendation is a 94-graphic character set to be used in either 7-bit or 8-bit environment.”
  - Add a new “7.4.4 Designation sequences of the Greek supplementary set” with the following text:  
 “The Greek supplementary set (Registration No. 70 Rev.) of graphic characters shall be designated using the following designation sequences:  
 ESC 02/08 06/02 Greek supplementary set (G0)  
 ESC 02/09 06/02 Greek supplementary set (G1)  
 ESC 02/10 06/02 Greek supplementary set (G2)  
 ESC 02/11 06/02 Greek supplementary set (G3)”
- 11) In 8.2:
- In the list of characters, all “THIS POSITION SHALL NOT BE USED” code points 02/00, 07/03 to 07/10 and 07/15 shall be changed to “(This position shall not be used)”.
- 12) In 8.4 (and in 6.3):

Code position	Present text	Change
02/04	CYRILLIC CAPITAL LETTER IE (Ukrainian)	<i>add a footnote with the following text:</i> The name of this character in ISO/IEC 10646-1 is: CYRILLIC CAPITAL LETTER UKRAINIAN IE
02/06	CYRILLIC CAPITAL LETTER I (Byelorussian-Ukrainian)	<i>add a footnote with the following text:</i> The name of this character in ISO/IEC 10646-1 is: CYRILLIC CAPITAL LETTER BYELORUSSIAN-UKRAINIAN I
07/04	CYRILLIC SMALL LETTER IE (Ukrainian)	<i>add a footnote with the following text:</i> The name of this character in ISO/IEC 10646-1 is: CYRILLIC SMALL LETTER UKRAINIAN IE
07/06	CYRILLIC SMALL LETTER I (Byelorussian-Ukrainian)	<i>add a footnote with the following text:</i> The name of this character in ISO/IEC 10646-1 is: CYRILLIC SMALL LETTER BYELORUSSIAN-UKRAINIAN I

- 13) In 8.5:
- In the list of characters, all “This position shall not be used” code points 02/02 to 02/12, 02/14, 02/15, 07/00 and 07/02 to 07/15 shall be changed to “(This position shall not be used)”.

14) In 8.6:

- The title “**The Greek primary set**” shall be changed to “**The Greek set**”;
- The table on page 66 shall be replaced with the following one:

Bit comb.	Name or description	Bit comb.	Name or description
02/00	(This position shall not be used)	05/00	GREEK CAPITAL LETTER PI
02/01	EXCLAMATION MARK	05/01	GREEK CAPITAL LETTER RHO
02/02	QUOTATION MARK	05/02	(This position shall not be used)
02/03	NUMBER SIGN	05/03	GREEK CAPITAL LETTER SIGMA
02/04	CURRENCY SIGN	05/04	GREEK CAPITAL LETTER TAU
02/05	PERCENT SIGN	05/05	GREEK CAPITAL LETTER UPSILON
02/06	AMPERSAND	05/06	GREEK CAPITAL LETTER PHI
02/07	APOSTROPHE	05/07	GREEK CAPITAL LETTER CHI
02/08	LEFT PARENTHESIS	05/08	GREEK CAPITAL LETTER PSI
02/09	RIGHT PARENTHESIS	05/09	GREEK CAPITAL LETTER OMEGA
02/10	ASTERISK	05/10	(This position shall not be used)
02/11	PLUS SIGN	05/11	LEFT SQUARE BRACKET
02/12	COMMA	05/12	REVERSE SOLIDUS
02/13	HYPHEN, MINUS SIGN	05/13	RIGHT SQUARE BRACKET
02/14	PERIOD	05/14	CIRCUMFLEX ACCENT
02/15	SOLIDUS	05/15	LOW LINE
03/00	DIGIT ZERO	06/00	(This position shall not be used)
03/01	DIGIT ONE	06/01	GREEK SMALL LETTER ALPHA
03/02	DIGIT TWO	06/02	GREEK SMALL LETTER BETA
03/03	DIGIT THREE	06/03	GREEK SMALL LETTER GAMMA
03/04	DIGIT FOUR	06/04	GREEK SMALL LETTER DELTA
03/05	DIGIT FIVE	06/05	GREEK SMALL LETTER EPSILON
03/06	DIGIT SIX	06/06	GREEK SMALL LETTER ZETA
03/07	DIGIT SEVEN	06/07	GREEK SMALL LETTER ETA
03/08	DIGIT EIGHT	06/08	GREEK SMALL LETTER THETA
03/09	DIGIT NINE	06/09	GREEK SMALL LETTER IOTA
03/10	COLON	06/10	GREEK SMALL LETTER KAPPA
03/11	GREEK QUESTION MARK (Erotimatiko)	06/11	GREEK SMALL LETTER LAMDA
03/12	LESS-THAN SIGN	06/12	GREEK SMALL LETTER MU
03/13	EQUALS SIGN	06/13	GREEK SMALL LETTER NU
03/14	GREATER-THAN SIGN	06/14	GREEK SMALL LETTER XI
03/15	QUESTION MARK	06/15	GREEK SMALL LETTER OMICRON
04/00	COMMERCIAL AT	07/00	GREEK SMALL LETTER PI
04/01	GREEK CAPITAL LETTER ALPHA	07/01	GREEK SMALL LETTER RHO
04/02	GREEK CAPITAL LETTER BETA	07/02	GREEK SMALL LETTER FINAL SIGMA
04/03	GREEK CAPITAL LETTER GAMMA	07/03	GREEK SMALL LETTER SIGMA
04/04	GREEK CAPITAL LETTER DELTA	07/04	GREEK SMALL LETTER TAU
04/05	GREEK CAPITAL LETTER EPSILON	07/05	GREEK SMALL LETTER UPSILON
04/06	GREEK CAPITAL LETTER ZETA	07/06	GREEK SMALL LETTER PHI
04/07	GREEK CAPITAL LETTER ETA	07/07	GREEK SMALL LETTER CHI
04/08	GREEK CAPITAL LETTER THETA	07/08	GREEK SMALL LETTER PSI
04/09	GREEK CAPITAL LETTER IOTA	07/09	GREEK SMALL LETTER OMEGA
04/10	GREEK CAPITAL LETTER KAPPA	07/10	(This position shall not be used)
04/11	GREEK CAPITAL LETTER LAMDA	07/11	LEFT CURLY BRACKET
04/12	GREEK CAPITAL LETTER MU	07/12	VERTICAL LINE
04/13	GREEK CAPITAL LETTER NU	07/13	RIGHT CURLY BRACKET
04/14	GREEK CAPITAL LETTER XI	07/14	MACRON
04/15	GREEK CAPITAL LETTER OMICRON	07/15	(This position shall not be used)

- All the above characters shall be added to **clause 6** and the replaced old ones shall be deleted from clause 6.

– P.67 shall be replaced by the following one:

Name: Greek supplementary set

Registration: No. 70 Rev

Number of characters: 94

				b <sub>7</sub>	0	0	0	0	1	1	1	1
				b <sub>6</sub>	0	0	1	1	0	0	1	1
				b <sub>5</sub>	0	1	0	1	0	1	0	1
					0	1	2	3	4	5	6	7
b <sub>4</sub>	b <sub>3</sub>	b <sub>2</sub>	b <sub>1</sub>									
0	0	0	0	00				◦	∴	—	Ω	Κ
0	0	0	1	01			ı	±	˘	ı	Æ	æ
0	0	1	0	02			ç	²	˘	®	Ð	ð
0	0	1	1	03			£	³	^	©	ª	ð
0	1	0	0	04			\$	×	˜	™	Η	η
0	1	0	1	05			¥	μ	-	♪		ı
0	1	1	0	06			#	¶	˘		İ	ij
0	1	1	1	07			§	•	•		Ł	ł
1	0	0	0	08			α	÷	¨		Ł	ł
1	0	0	1	09			‘	’			Ø	ø
1	0	1	0	10			“	”	◦		Œ	œ
1	0	1	1	11			«	»	◌		◌	β
1	1	0	0	12			←	¼		⅛	Ɔ	ɔ
1	1	0	1	13			↑	½	"	⅜	Ɔ	ɔ
1	1	1	0	14			→	¾	◌	⅝	Ɔ	ɔ
1	1	1	1	15			↓	ı	˘	⅞	ı	

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– P.68 shall be replaced by the following one:

Bit comb.	Name or description
02/00	(This position shall not be used)
02/01	INVERTED EXCLAMATION MARK
02/02	CENT SIGN
02/03	POUND SIGN
02/04	DOLLAR SIGN
02/05	YEN SIGN
02/06	NUMBER SIGN
02/07	SECTION SIGN
02/08	CURRENCY SIGN
02/09	LEFT SINGLE QUOTATION MARK
02/10	LEFT DOUBLE QUOTATION MARK
02/11	LEFT-POINTING DOUBLE ANGLE QUOTATION MARK
02/12	LEFTWARDS ARROW
02/13	UPWARDS ARROW
02/14	RIGHTWARDS ARROW
02/15	DOWNWARDS ARROW
03/00	DEGREE SIGN
03/01	PLUS-MINUS SIGN
03/02	SUPERSCRIP TWO
03/03	SUPERSCRIP THREE
03/04	MULTIPLICATION SIGN
03/05	MICRO SIGN
03/06	PILCROW SIGN
03/07	MIDDLE DOT
03/08	DIVISION SIGN
03/09	RIGHT SINGLE QUOTATION MARK
03/10	RIGHT DOUBLE QUOTATION MARK
03/11	RIGHT-POINTING DOUBLE ANGLE QUOTATION MARK
03/12	VULGAR FRACTION ONE QUARTER
03/13	VULGAR FRACTION ONE HALF
03/14	VULGAR FRACTION THREE QUARTERS
03/15	INVERTED QUESTION MARK
04/00	COMBINING GREEK DIALYTIKA TONOS
04/01	COMBINING GRAVE ACCENT (Varia)
04/02	COMBINING ACUTE ACCENT (Oxia)
04/03	COMBINING CIRCUMFLEX ACCENT
04/04	COMBINING TILDE
04/05	COMBINING MACRON
04/06	COMBINING BREVE (Vrachy)
04/07	COMBINING DOT ABOVE
04/08	COMBINING DIAERESIS (Dialytika)
04/09	(This position shall not be used)
04/10	COMBINING RING ABOVE
04/11	COMBINING CEDILLA
04/12	(This position shall not be used)
04/13	COMBINING DOUBLE ACUTE ACCENT
04/14	COMBINING OGONEK
04/15	COMBINING CARON
05/00	HORIZONTAL BAR
05/01	SUPERSCRIP ONE
05/02	REGISTERED SIGN

Bit comb.	Name or description
05/03	COPYRIGHT SIGN
05/04	TRADE MARK SIGN
05/05	EIGHTH NOTE
05/06	(This position shall not be used)
05/07	(This position shall not be used)
05/08	(This position shall not be used)
05/09	(This position shall not be used)
05/10	(This position shall not be used)
05/11	(This position shall not be used)
05/12	VULGAR FRACTION ONE EIGHTH
05/13	VULGAR FRACTION THREE EIGHTHS
05/14	VULGAR FRACTION FIVE EIGHTHS
05/15	VULGAR FRACTION SEVEN EIGHTHS
06/00	OHM SIGN
06/01	LATIN CAPITAL LETTER Æ (ash)
06/02	LATIN CAPITAL LETTER ETH (Icelandic)
06/03	FEMININE ORDINAL INDICATOR
06/04	LATIN CAPITAL LETTER H WITH STROKE
06/05	(This position shall not be used)
06/06	LATIN CAPITAL LIGATURE IJ
06/07	LATIN CAPITAL LETTER L WITH MIDDLE DOT
06/08	LATIN CAPITAL LETTER L WITH STROKE
06/09	LATIN CAPITAL LETTER O WITH STROKE
06/10	LATIN CAPITAL LIGATURE Œ
06/11	MASCULINE ORDINAL INDICATOR
06/12	LATIN CAPITAL LETTER THORN (Icelandic)
06/13	LATIN CAPITAL LETTER T WITH STROKE
06/14	LATIN CAPITAL LETTER ENG (Sami)
06/15	LATIN SMALL LETTER N PRECEDED BY APOSTROPHE
07/00	LATIN SMALL LETTER KRA (Greenlandic)
07/01	LATIN SMALL LETTER Æ (ash)
07/02	LATIN SMALL LETTER D WITH STROKE
07/03	LATIN SMALL LETTER ETH (Icelandic)
07/04	LATIN SMALL LETTER H WITH STROKE
07/05	LATIN SMALL LETTER DOTLESS I
07/06	LATIN SMALL LIGATURE IJ
07/07	LATIN SMALL LETTER L WITH MIDDLE DOT
07/08	LATIN SMALL LETTER L WITH STROKE
07/09	LATIN SMALL LETTER O WITH STROKE
07/10	LATIN SMALL LIGATURE Œ
07/11	LATIN SMALL LETTER SHARP S (German)
07/12	LATIN SMALL LETTER THORN (Icelandic)
07/13	LATIN SMALL LETTER T WITH STROKE
07/14	LATIN SMALL LETTER ENG (Sami)
07/15	(This position shall not be used)

- 15) In **8.9**:
- The code table shall be enlarged to fit the page size.
- 16) In **Annex A** the last entry (before NOTES):
- “(Note 3) Greek ... 96 ...” shall be replaced by

70 Rev.	Greek supplementary set of graphic characters	94	06/02	x	x	x	x
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- “NOTE 3” shall be deleted.

- 17) In **Annex B**, in **B.1**:
- Add in the end the following text:  
 “This guideline is based on the ISO/IEC 10646-1 Annex K Character naming guidelines, and improved for consistency. Where the names of characters in this Recommendation differ from those in ISO/IEC 10646-1, a footnote is provided.”

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