



Language Manual

Greek

Dimitris

Language Manual – Greek: Dimitris

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Chapter 1. General

This document discusses certain aspects of text-to-speech processing for the Greek text-to-speech system, in particular the different types of input characters and text that are allowed.

This version of the document corresponds to the High Quality voice Dimitris.

Please note that the *User's Guide*, mentioned several times in the manual, is called *Help* in some applications.

Chapter 2. Letters in orthographic text

Characters from A-Ω and α-ω may constitute a word. Other characters from A-Z and a-z are also considered as letters. Words containing these Latin characters are pronounced as English words by default.

Characters outside of these ranges (i.e. numbers, punctuation characters and other non-alphanumeric characters) are not considered as letters.

Chapter 3. Punctuation characters

Punctuation marks appearing in a text affect both the rhythm and the intonation of a sentence. The following punctuation characters are permitted in the normal input text string:

, : “ ” «» . ? ; ! () { } []

3.1. Comma, colon and “*ano teleia*”

Comma ‘,’, colon ‘:’ and *ano teleia* ‘”’ cause a brief pause to occur in a sentence, accompanied by a small rising intonation pattern just prior to the character.

3.2. Quotation marks

Quotes ‘ “ ’ and ‘ « » ’ appearing around a single word or a group of words cause a brief pause before and after the quoted text.

3.3. Full stop

A full stop ‘.’ is a sentence terminal punctuation mark which causes a falling end-of-sentence intonation pattern and is accompanied by a somewhat longer pause. A full stop may also be used as a decimal marker in a number (see chapter *Number processing*) and in abbreviations (see chapter *Abbreviations*).

3.4. Question mark

A question mark ‘?’ or ‘;’ ends a sentence and causes a question intonation, first rising and then falling.

3.5. Exclamation mark

The exclamation mark ‘!’ behaves in a similar manner to the full stop, causing a falling intonation pattern followed by a pause.

3.6. Parentheses, brackets and braces

Parentheses ‘()’, brackets ‘[]’, and braces ‘{}’ appearing around a single word or a group of words cause a brief pause before and after the bracketed text

.

Chapter 4. Other non alphanumeric characters

4.1. Non-punctuation characters

The characters listed below are processed as non-letter, non-punctuation characters. Some are pronounced at all times and others are only pronounced in certain contexts, which are described in the following sections of this chapter.

Table 4.1. Non-punctuation characters

| Symbol | Reading |
|--------|-----------------|
| / | (see below) |
| \ | ανάποδη κάθετος |
| + | συν |
| \$ | δολάριο |
| € | ευρώ |
| < | μικρότερο από |
| > | μεγαλύτερο από |
| % | τοις εκατό |
| ^ | σιρκονφλέξ |
| | κάθετος |
| ~ | περισπωμένη |
| @ | παπάκι |
| = | ίσον |
| - | (see below) |
| * | (see below) |

4.2. Symbols whose pronunciation varies depending on the context

4.2.1. Hyphen

A hyphen '-' is pronounced *πλην* in two cases:

1. if followed by a digit and no other digit is found in front of the hyphen, i.e. as in the pattern -X but not in X-Y or X-Z where X, Y, and Z are numbers.
2. if followed by a digit and an equals sign, '=', i.e. as in the pattern X-Y=Z. Spaces are allowed between digits, hyphen and equals sign.

If there is no equals sign '=', as in X-Y or X-Z, the hyphen is pronounced "παύλα".

In certain date formats, in between days or years, the hyphen is pronounced "έως (τις, το)" (depending on the context). In other cases the hyphen is not pronounced.

| Expression | Reading |
|----------------|--|
| -3 | πλην τρία |
| 44-3 | σαράντα τέσσερα παύλα τρία |
| 44-3=41 | σαράντα τέσσερα πλην τρία ίσον σαράντα ένα |
| 1998-2004 | χίλια εννιακόσια ενενήντα οκτώ έως το δύο χιλιάδες τέσσερα |
| 10-12 Απριλίου | δέκα έως δώδεκα Απριλίου |

10/04/98 - 12/04/98
ενενήντα οκτώ

από τις δέκα Απριλίου του χίλια εννιακόσια

έως τις δώδεκα Απριλίου του χίλια εννιακόσια

ενενήντα οκτώ
παιδί-θαύμα
γυναίκα-δηλητήριο

παιδί θαύμα

γυναίκα δηλητήριο

4.2.2. Asterisk

Asterisk '*' is only pronounced *επί* if it is part of a mathematical expression containing an equals sign ("="). The expression may contain spaces. In other cases it is pronounced *αστερίσκος*.

| Expression | Reading |
|------------|---------|
|------------|---------|

| | |
|-------|-----------------------|
| 2*3 | δύο αστερίσκος τρία |
| 2*3=6 | δύο επί τρία ίσον έξι |
| *bc | αστερίσκος b c |

4.2.3. Slash

The slash sign "/" is read *δια* if the input matches the pattern X/Y=Z. If the pattern is X/Y, the expression is read as a fraction. In certain date formats, where "/" is the delimiter between parts of the date, it is not pronounced. In other cases it is read *κάθετος*.

| Expression | Reading |
|------------|---------|
|------------|---------|

| | |
|---|---|
| 6/2=3 | έξι δια δύο ίσον τρία |
| 2/3 | δύο τρίτα |
| 10/02/2000 | δέκα Φεβρουαρίου του δύο χιλιάδες |
| http://acapela-group.com | h t t p άνω κάτω τελεία κάθετος κάθετος acapela παύλα group τελεία com |
| cb/bc | c b κάθετος b c |

Chapter 5. Number Processing

Strings of digits that are sent to the text-to-speech converter are processed in several different ways, depending on the format of the string of digits and the immediately surrounding punctuation or non-numeric characters. To familiarize the user with the various types of formatted and non-formatted strings of digits that are recognized by the system, a brief description of the basic number processing is provided below, along with examples.

Number processing is subdivided into the following categories:

Full number pronunciation

Leading zero

Decimal numbers

Currency amounts

Ordinal numbers

Arithmetical operators

Mixed digits and letters

Time of day

Dates

Phone numbers

5.1. Full number pronunciation

Full number pronunciation is given for the whole number part of the digit string.

Example

| | |
|-------|---|
| 2425 | full number |
| 2.425 | full number |
| 2 425 | full number |
| 24,25 | 24 is a full number, 25 is the decimal part |

Numbers denoting thousands, millions and billions (numbers larger than 999) may be grouped using space or full stop (not comma). In order to achieve the right pronunciation the grouping must be done correctly.

The rules for grouping of numbers are the following:

- Numbers are grouped in groups of three starting at the end.
- The first group in a number may consist of one, two, or three digits.
- If a group, other than the first, does not contain exactly three digits, the sequence of digits is not interpreted as a full number.
- The highest number read is 999999999999 (twelve digits). Numbers higher than this are read as separate digits.

| Number | Reading |
|--------|---------------------------------|
| 2580 | δύο χιλιάδες πεντακόσια ογδόντα |
| 2 580 | “ |
| 2.580 | “ |

| | |
|-----------------|--|
| 25800 | εικοσιπέντε χιλιάδες οκτακόσια |
| 25 800 | “ |
| 25.800 | “ |
| 2580350 | δύο εκατομμύρια πεντακόσιες ογδόντα χιλιάδες τριακόσια πενήντα |
| 2 580 350 | “ |
| 2.580.350 | “ |
| 1000000000 | ένα δισεκατομμύριο |
| 234 567 890 123 | διακόσια τριάντα τέσσερα δισεκατομμύρια πεντακόσια εξήντα επτά εκατομμύρια οκτακόσιες ενενήντα χιλιάδες εκατόν είκοσι τρία |
| 1234567890123 | ένα δύο τρία τέσσερα πέντε έξι επτά οκτώ εννέα μηδέν ένα δύο τρία |

5.2. Leading zero

Numbers that begin with 0 (zero) are read as a whole number, with a zero preceding it.

| Number | Reading |
|--------|--|
| 09253 | μηδέν εννέα χιλιάδες διακόσια πενήντα τρία |
| 020 | μηδέν είκοσι |

5.3. Decimal numbers

Comma is used when writing decimal numbers. However, the system also manages decimals written with full stop, as long as the format cannot be interpreted as a full number. I.e., a number containing a full stop followed by exactly three digits is not read as a decimal number but as a full number, following the rules in the section *Full number pronunciation*.

The full number part of the decimal number (the part before comma or full stop) is read according to the rules in the section *Full number pronunciation*. The decimal part (the part after comma or full stop) is also read as a full number.

| Number | Reading |
|----------|--|
| 2,50 | δύο κόμμα πενήντα |
| 2.50 | δύο κόμμα πενήντα |
| 3,141 | τρία κόμμα εκατόν σαράντα ένα |
| 3,1415 | τρία κόμμα χίλια τετρακόσια δεκαπέντε |
| 1251,04 | χίλια διακόσια πενήντα ένα κόμμα μηδέν τέσσερα |
| 1.251,04 | χίλια διακόσια πενήντα ένα κόμμα μηδέν τέσσερα |

5.4. Currency amounts

The following principles are followed for currency amounts:

- Numbers with zero or two decimal places preceded or followed by the currency markers \$, €, £, USD, EUR, GBP, CHF, NOK, SEK, CYP are read as currency amounts.
- Accepted decimal markers are comma ‘,’ and full stop ‘.’.
- The decimal part (consisting of two digits) in currency amounts is read as *και xx σεντ, και xx πένες* or *και xx όρε*.
- If the decimal part is 00 it will not be read.

5.7. Mixed digits and letters

If a letter appears within a sequence of digits, the groups of digits will be read as numbers according to the rules above. The letter marks the boundary between the numbers. The letter will also be read.

| Expression | Reading |
|------------|---|
| 77B84D3 | εβδομήντα επτά Β ογδόντα τέσσερα D τρία |
| 0092B87-B | μηδέν μηδέν ενενήντα δύο Β ογδόντα επτά Β |
| 0092Γ87-Γ | μηδέν μηδέν ενενήντα δύο γάμμα ογδόντα επτά γάμμα |

5.8. Time of day

The colon and full stop are used to separate hours, minutes and seconds. If the full stop is used, the words *η ώρα* must be present after the time format for it to be recognized as such.

Possible patterns are:

- a) hh:mm (or h:mm)
 - b) hh:mm:ss (or h:mm:ss)
 - c) hh.mm η ώρα
- h = hour, m = minute, s = second.

In patterns a and b:

The word *και* will be inserted between the hours and minutes, the word *λεπτά* will be inserted after the mm-part.

If there are seconds, the word *και* will be inserted before the ss-part and the word *δευτερόλεπτα* will be inserted after it.

In pattern c:

The word *και* will be inserted between the hours and minutes, the words *η ώρα* will be inserted after the mm-part.

| Expression | Reading |
|------------|---|
| 9:30 | εννέα και τριάντα λεπτά |
| 9:30:20 | εννέα και τριάντα λεπτά και είκοσι δευτερόλεπτα |
| 9:00 | εννέα και μηδέν λεπτά |
| 9.30 η ώρα | εννέα και τριάντα η ώρα |

5.9. Dates

The valid formats for dates are:

1. dd.mm.yyyy and dd/mm/yyyy
2. dd.mm.yy and dd/mm/yy

yyyy is a four-digit number, yy is a two-digit number, mm is a month number between 1 and 12, and dd is a day number between 1 and 31. Full stop and slash may be used as delimiters. In all formats, one or two digits may be used in the mm and dd-part. Zeros may be used in front of numbers below 10.

Examples of valid formats and their readings:

Type 1:

| | | | |
|------------|----|-----------|--|
| 10.02.2003 | or | 10.2.2003 | δέκα Φεβρουαρίου του δύο χιλιάδες τρία |
| 10/02/2003 | or | 10/2/2003 | “ |

Type 2:

| | | | |
|----------|----|---------|--|
| 10.02.03 | or | 10.2.03 | δέκα Φεβρουαρίου του δύο χιλιάδες τρία |
| 10/02/03 | or | 10/2/03 | “ |

Ranges of years and dates are also supported.

| Expression | Reading |
|---------------------|---|
| 1998-1999 | χίλια εννιακόσια ενενήντα οκτώ έως το χίλια εννιακόσια ενενήντα εννέα |
| 1939-45 πέντε | χίλια εννιακόσια τριάντα εννέα έως το σαράντα πέντε |
| 7-8.02.2007 | επτά έως οκτώ Φεβρουαρίου δύο χιλιάδες επτά |
| 7-8/02/2007 | επτά έως οκτώ Φεβρουαρίου δύο χιλιάδες επτά |
| 10/04/98 - 12/04/98 | από τις δέκα Απριλίου του χίλια εννιακόσια ενενήντα οκτώ έως τις δώδεκα Απριλίου του χίλια εννιακόσια ενενήντα οκτώ |

Other possible formats include:

| Expression | Reading |
|----------------------------|---|
| Τρίτη, 10 Απριλίου 1998 | τρίτη δέκα Απριλίου χίλια εννιακόσια ενενήντα οκτώ |
| Τρίτη 10 του Απριλίου 1998 | τρίτη δέκα του Απριλίου χίλια εννιακόσια ενενήντα οκτώ |
| Τρίτη 10 Απριλίου | τρίτη δέκα Απριλίου |
| Τρίτη, 10 του Απριλίου | τρίτη δέκα του Απριλίου |
| 10 Απριλίου 1998 | δέκα Απριλίου χίλια εννιακόσια ενενήντα οκτώ |
| 10 του Απριλίου 1998 | δέκα του Απριλίου χίλια εννιακόσια ενενήντα οκτώ |
| σεπτ. 1998 | Σεπτεμβρίου χίλια εννιακόσια ενενήντα οκτώ |
| 10-12 Απριλίου | δέκα έως δώδεκα Απριλίου |
| 10-12 Απριλίου 1998 | δέκα έως δώδεκα Απριλίου χίλια εννιακόσια ενενήντα οκτώ |
| 10-12 του Απριλίου | δέκα έως δώδεκα του Απριλίου |
| 10-12 του Απριλίου 1998 | δέκα έως δώδεκα του Απριλίου χίλια εννιακόσια ενενήντα οκτώ |

Day and month abbreviations are only expanded when appearing in correct date contexts.

Valid abbreviations for months: Ιαν., Φεβρ., Μάρτ. or Μαρτ., Απρ., Ιούν. or Ιουν. , Ιούλ. or Ιουλ., Αύγ. or Αυγ., Σεπτ., Οκτ., Νοέμ. or Νοεμ., Δεκ.

Valid abbreviations for days: Δευ., Δευτ., Τρ., Τετ., Πέμ., Παρ., Σάβ., Κυρ.

5.10. Phone numbers

In this section the patterns of digits that are recognized as phone numbers are described. In the pronunciation of phone numbers, each group of digits is read out with a pause between the groups.

The digit strings will be read as follows:

- Groups of 1, 2 or 3 digits are read out as regular numbers.
- Groups of 4 digits are split into two groups of 2.
- Groups of 5 digits are split into two groups of 2 and a group of 1.
- Groups of 6 digits or more are spelled out.

5.10.1. Ordinary phone numbers

Sequences of digits in the following formats are treated as phone numbers. The following sequences can be separated by a space, full stop or hyphen:

Format

- xxx xx xx xxx
- xxxx xx xx xx
- xxx x xx xx xx
- xxxxx xx xxx
- xxxx x xx xxx
- xxx xxxx

The abbreviations *τηλ.* (τηλέφωνο), *σταθ.* (σταθερό) and *κιν.* (κινητό) are expanded if they occur in front of a phone number. The words *τηλέφωνο*, *σταθερό*, *κινητό*, *φαξ* and *αριθμός τηλεφώνου* can also be found in front of a phone number.

Expression

φαξ 123 4567
Κινητό 123 45 67 981
Τηλ. 12345 56 789

Reading

φαξ 123 45 67
κινητό 123 45 67 981
τηλέφωνο 12 34 5 56 789

The following formats are only recognized as phone numbers if one of the above words or abbreviations, or an international prefix, or both, appear in front of the number:

Format

- xxxxxxxxxxx
- xxx
- xxxx
- xxxxx
- xxxxxxx

5.10.2. International phone numbers

All the preceding formats can be recognised if preceded by an international prefix:

Format

+x

+xx

+xxx

00x

00xx

Example

+1 1234 5 68 974

+12 1234 5 68 974

+123 1234 5 68 974

001 1234 5 68 974

0012 1234 5 68 974

00xxx

00123 1234 5 68 974

Chapter 6. How to change pronunciation errors

Words that are not pronounced correctly by the text-to-speech converter can be entered in the user lexicon (see *User's guide*). In this lexicon, the user enters a phonetic transcription of the word (see chapter *Greek Phonetic Text*). Phonetic transcriptions can also be entered directly in the text, using a PRN-tag (see *User's guide*).

Chapter 7. Greek Phonetic Text

The Greek text-to-speech system uses symbols based on the SAMPA phonetic alphabet (*Speech Assessment Methods Phonetic Alphabet*). The symbols are written with a space between each phoneme.

Only the symbols listed here may be used in phonetic transcriptions. Symbols not listed here are not valid in phonetic transcriptions and will be ignored if included in the user lexicon or in a PRN tag.

7.1. Consonants

Table 7.1. Symbols for the Greek consonants

| Symbol | Word | Phonetic text | Comment |
|--------|--------------|------------------------|-----------------------|
| p | που | p u | |
| b | μπάμπη | b a1 m b i | |
| t | τρόμπα | t r o1 m b a | |
| d | ντροπή | d r o p i1 | |
| k | κοντά | k o n d a1 | |
| g | γκόρντον | g o1 r d o n | |
| c | και | c e | Palatalized consonant |
| gj | γκέιτς | g j e1 t s | Palatalized consonant |
| f | φαξ | f a k s | |
| v | βουνά | v u n a1 | |
| s | σου | s u | |
| z | ζωική | z o i c i1 | |
| D | δικά | D i k a1 | |
| T | θενά | T e n a1 | |
| C | χίλια | C i1 L a | Palatalized consonant |
| x | χωρίς | x o r i1 s | |
| G | γαρ | G a r | |
| j | για | j a | Palatalized consonant |
| r | ρόδου | r o1 D u | |
| l | λοιπόν | l i p o1 n | |
| L | λιονταρίσιος | L o n d a r i1 s i o s | Palatalized consonant |
| n | νάσια | n a1 s C a | |
| m | μία | m i1 a | |
| J | μια | m J a | Palatalized consonant |
| N | έλεγχος | e1 l e N x o s | |
| M | σύμφωνα | s i1 M f o n a | |
| ts | τσιγκλάει | t s i g l a1 | |
| dz | τζεογκράφικ | d z e o g r a1 f i k | |
| ps | παριανος | p s a r j a n o1 s | |
| ks | ξανά | k s a n a1 | |
| S | chic | S i k | English phoneme |
| Z | immersion | i m e1 r Z o n | English phoneme |
| tS | cheese | t S i1 z | English phoneme |
| dZ | genova | d Z e1 n o v a | English phoneme |
| w | wait | w e1 t | English phoneme |

7.2. Vowels

Table 7.2. Symbols for the Greek vowels

| Symbol | Word | Phonetic text | Comment |
|--------|-------|---------------|-----------------|
| a | αυτός | a f t o1 s | |
| e | ενός | e n o1 s | |
| i | η | i1 t a | |
| o | ως | o s | |
| u | ουκ | u k | |
| aI | eye | aI1 | |
| OI | boy | b OI1 | |
| aU | out | aU1 t | |
| eI | angel | eI1 n dZ e I | |
| IU | uses | IU1 z e z | English phoneme |
| oU | owner | oU1 n e r | English phoneme |

7.3. Lexical stress

A lexical stress is used to indicate the level of prominence (or emphasis) of a syllable in a word. In words with more than one syllable, one of the syllables is more prominent than the others. This is referred to as word stress, or lexical stress. Words of one syllable also have word stress when spoken in isolation, although many may lose the stress in certain contexts. For the correct pronunciation of a word, it is important to include stress marks when writing phonetic transcriptions.

Greek words have primary stress mostly on the syllables containing a vowel with a diacritic.

In phonetic transcriptions, primary stress is indicated by the symbol 1 attached to the stressed vowel.

7.4. Word boundary effects

7.4.1. Word boundary reduction

There are several cases in which a word loses its final consonant:

- when a word ends in /s/ and the next word begins with /s/, /z/, /S/
- when a word ends in /n/ and the next word begins with /n/
- when a word ends in /k/ and the next word begins with /k/
- when a word ends in /b/ and the next word begins with /b/

Example:

ψαριανός / ps a r j a n o1 s / σωτήρια / s o t i1 r i a /
ψαριανός σωτήρια / ps a r j a n o1 s o t i1 r i a /

7.4.2. Word boundary voicing

Word boundary voicing occurs when a word ends with /s/ and the next word begins with a voiced consonant. In that case the /s/ becomes voiced (/z/).

Example:

ψαριανός / ps a r j a n o1 s / γκέητς / g j eI1 ts /
ψαριανός γκέητς / ps a r j a n o1 z g j eI1 ts /

7.5. Pause

An underscore ‘_’ in a phonetic transcription generates a small pause.

Chapter 8. Abbreviations

In the current version of the Greek text-to-speech system, the abbreviations in the table below are recognized in all contexts. These abbreviations are mostly case-insensitive (except for those indicated below by '*'). The presence or absence of a full stop after the abbreviation should be observed.

As previously mentioned, there are also abbreviations for the days of the week and the months (see chapter *Dates*).

Table 8. Abbreviations

| Abbreviation | Reading |
|---------------------|---------------------------------------|
| δευτερ. | δευτερόλεπτα |
| στρ. | στρέμματα |
| εκτ. | εκτάρια |
| π.μ. | προ μεσημβρίας |
| μ.μ. | μετά μεσημβριαν |
| ν.μ. | ναυτικά μίλια |
| ναυτ.μ. | ναυτικά μίλια |
| χμ/ω | χιλιόμετρα την ώρα |
| αι. | αιώνας |
| κόμ. | κόμβοι |
| kWh* | κιλοβατώρες |
| MWh* | μεγαβατώρες |
| km/h | χιλιόμετρα την ώρα |
| m/h | μίλια την ώρα |
| κ. | κύριος (κιλά if preceded by a number) |
| κ. κ. | κύριος κύριος |
| κα | κυρία |
| κος | κύριος |
| ΔΝΤ* | Διεθνές Νομισματικό Ταμείο |
| δισ. | δισεκατομμύρια |
| Ε.Ε. | Ευρωπαϊκή Ένωση |
| αριθ. | αριθμόν |
| αριθμ. | αριθμόν |
| βλ. | βλέπε |
| δηλ. | δηλαδή |
| δρχ. | δραχμές |
| κ.α. / κ.ά. | και άλλοι |
| κ.λ.π. | και τα λοιπά |
| κ.λπ. | και λοιπά |
| κλπ | και λοιπά |
| κ.ο.κ. | και ου το καθεξής |
| κ.τ.λ. | και τα λοιπά |
| κ.τ.ό. | και τα όμοια |
| κτλ. | και τα λοιπά |
| λ.χ. | λόγου χάρη |
| μ.Χ. | μετά Χριστόν |
| π.Χ.* | προ Χριστού |
| π.χ.* | παραδείγματος χάρη |
| πρβλ. | παράβαλε |
| dr | ντόκτορ |
| υφ/γου | υφυπουργού |
| μηχ/κος | μηχανικός |
| δντρια | διευθύντρια |
| δ/ντρια | διευθύντρια |

The abbreviations for measurements m , g , s , A , W , κ ., τ ., and λ are only expanded when appearing after a number.

| Examples | Readings |
|-----------------|--------------------|
| 25 m | είκοσι πέντε μέτρα |
| 2 g | δύο γραμμάρια |
| 1 s | ένα δευτερόλεπτο |
| 2 A | δύο αμπέρ |
| 60 W | εξήντα βατ |
| 10 κ. | δέκα κιλά |
| 1 τ. | ένας τόνος |
| 5 λ | πέντε λίτρα |

The following abbreviations are also recognized, and vary according to the number preceding them:

| Expression | Reading |
|-------------------|----------------------------|
| τ.μ. | τετραγωνικό/ά μέτρο/α |
| κυβ.μ | κυβικό/ά μέτρο/α |
| κ.μ. | κυβικό/ά μέτρο/α |
| χιλ. | χιλιοστό/ά |
| τ.χιλ. | τετραγωνικό/ά χιλιοστό/ά |
| κυβ.χιλ. | κυβικό/ά χιλιοστό/ά |
| κ.χιλ. | κυβικό/ά χιλιοστό/ά |
| εκ. | εκατοστό/ά |
| τ.εκ. | τετραγωνικό/ά εκατοστό/ά |
| κυβ.εκ. | κυβικό/ά εκατοστό/ά |
| κ.εκ. | κυβικό/ά εκατοστό/ά |
| χλμ. | χιλιόμετρο/α |
| χμ. | χιλιόμετρο/α |
| τ.χλμ. | τετραγωνικό/ά χιλιόμετρο/α |
| τ.χμ. | τετραγωνικό/ά χιλιόμετρο/α |
| λιτ. | λίτρο/α |
| χγρ. | κιλό/ά |
| γρ. | γραμμάριο/α |
| kg | κιλό/ά |
| m ² | τετραγωνικό/ά μέτρο/α |
| m ³ | κυβικό/ά μέτρο/α |
| cm | εκατοστό/ά |
| cm ² | τετραγωνικό/ά εκατοστό/ά |
| cm ³ | κυβικό/ά εκατοστό/ά |
| mm | χιλιοστό/ά |
| mm ² | τετραγωνικό/ά χιλιοστό/ά |
| mm ³ | κυβικό/ά χιλιοστό/ά |
| km | χιλιόμετρο/α |
| km ² | τετραγωνικό/ά χιλιόμετρο/α |
| °C | βαθμός/οί Κελσίου |
| °K | βαθμός/οί Κέλβιν |

Chapter 9. Web-addresses and email

Web-addresses and email-addresses are read as follows:

- *www* is read as three *w* following each other.
- Full stops (".") are read as *τελεία*, hyphens ("-") as *παύλα*, underscore ("_") as *κάτω παύλα*, slash ("/") as *κάθετος*.
- Country codes (e.g. *gr*, *us*, *fr*) are spelled out letter by letter.
- The @ is read *παπάκι*.
- Words/strings (including *org*, *com*, and *edu*) are pronounced according to the normal rules of pronunciation in the system and in accordance with the lexicon.

String

www.acapela-group.com

<http://www.acapela-group.com>

dimitris@yahoo.gr

dimitris_kotsi@yahoo.gr

Reading

w w w τελεία Acapela παύλα group τελεία com

h t t p άνω κάτω τελεία κάθετος κάθετος w w w τελεία Acapela παύλα
group τελεία com

dimitris παπάκι yahoo τελεία g r

dimitris κάτω παύλα kotsi παπάκι yahoo τελεία g r