

**Methods for Testing and Specification (MTS);  
Technical quality of telecommunications standards;  
Complementary methods and technical quality manual**

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## Foreword

This Technical Report (TR) has been produced by ETSI Technical Committee Methods for Testing and Specification (MTS).

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## 1 Scope

The present document is the outcome of continuing studies in TC MTS aimed at improving the technical quality of standards (and other types of deliverable) drafted in ETSI Technical Bodies. It contains a description of a set of macros operating under the ETSI-approved word processor Microsoft Word 7™ contained in Office 95™. These macros are designed to:

- combine advice with a tool that automated routine tasks for rapporteurs' and so made their work easier and more interesting;
- provide automated tools that help to improve the consistency of documents and provide a different perspective that enables errors to be noticed more easily;
- provide a solution that is used on screen in association with the draft deliverable rather than advice that is in separate reports and so remains unread.

Tutorial advice conforms to the ETSI Drafting Rules [1]. The whole output of the STF is contained in this template. The present document is adds no additional information to that contained in the template.

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## 2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies.
- A non-specific reference to an ETS shall also be taken to refer to later versions published as an EN with the same number.

[1] SR 001 262: "ETSI drafting rules".

[2] EG 201 014: "Methods for Testing and Specification (MTS); ETSI Standards-making; Technical quality criteria for telecommunications standards".

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## 3 Definitions and abbreviations

None.

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## 4 Introduction

The technical accuracy and correctness of a standard is more important than on the finer details of presentation. Yet, it is hard to communicate with editors/rapporteurs as they are usually short of time and disinclined to read reports or guides that they do not consider to be essential.

The approach has therefore been taken of

- combining advice with a tool that automated routine tasks for rapporteurs' and so made their work easier and more interesting;
- providing automated tools that help to improve the consistency of documents and provide a different perspective that enables errors to be noticed more easily;

- providing solutions that are used on screen in association with the draft deliverable rather than advice that is in separate reports and so remains unread.

Accordingly a suite of macros containing tutorial advice was developed for use alongside the ETSI template. Tutorial advice conforms to the ETSI Drafting Rules [1]. The whole output of the STF is contained in this template. The present document adds no additional information to that contained in the template.

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## 5 The Macros

The macros work only in Microsoft Word 7 as in Office 95. They do NOT work in Office 97. A version for Office 97 may be produced later. The macros are written for English versions of Word. Some macros may work in other language versions but some will not.

The macros are contained in a template that should be loaded alongside the draft deliverable by using the FileTemplates command and clicking Add. Select the template and add it. The name of the template should remain stored in the dialog box so long as you do not Remove it. You can activate it by checking the box next to its name.

Ensure that the template's toolbars are showing by using ViewToolbars and checking the toolbar:

### **MTS: Rapporteur's Assistant**

this toolbar contains several buttons for toggling other toolbars with the individual controls.

Each toolbar has a "?" button that displays a HELP document for you to read and store or print.

There are the following toolbars:

- Scope + Language;
- Abbrs + Defs;
- Figs + Tables;
- References;
- Characters;
- Styles.

A table on the macros is given in annex A listing the macro names and relating the toolbar buttons to the macro names.

The following subclauses repeat the instructions for using the macros.

### 5.1 Scope and Language Macros

#### 5.1.1 Shall/Should; Is/Are; May; Can; Could; May Not; Must

These macros colour and double underline each occurrence of the word in your document. They then return the cursor to where you started in your document.

Blue: - denotes a word that can be used in normative text.

Magenta: - used only for SHOULD whose status should be clarified.

Green: - denotes a word that is either informative or used in logic conditions.

Red: - denotes a word that should not be used at all or should be used only with great care.

If bad or dangerous words are used, a new file is created with the page numbers where the words occur. This helps you to check potential problems in long documents. You can print, copy and paste or delete this new file after reading it.

If you are using revision marking, the colour chosen for your revisions takes precedence over the colour for the marked words.

**Think very carefully about your use of language as this will help you to make the requirements as clear as possible.**

### 5.1.2 Remove Colour

Removes the colouring and any double underlining.

### 5.1.3 Section Para

Colours and double underlines all occurrences of SECTION, PARAGRAPH and PARA in red and gives a list of page numbers where they occur. These terms should not be used for referring to parts of an ETSI document.

### 5.1.4 Occurrences

Colours and double underlines all occurrences of a word that you specify, and allows you to choose the colour. You can use this in long documents to check where you have covered particular topics

### 5.1.5 Scope

Finds the SCOPE clause and inserts a check list of important issues to be included. Check that you have covered them and then delete the checklist.

## 5.2 Abbreviations & Definitions

### 5.2.1 Abbreviations: Colour

Runs through Abbreviations clause and checks use of each one. Colours used abbreviations green and unused ones red. Colours blue each occurrence of each abbreviation after the Abbreviations section so you can see which abbreviations are uncoloured and need to be added to the list.

Identifies the Abbreviations clause by finding the word ABBREVIATION in style Heading 1 or Heading 2, followed by style EW for each abbreviations. Will not work if these styles are not present.

### 5.2.2 Abbreviations: Add

Select an abbreviation in the main body of the document and then run this macro. The macro checks whether the abbreviation is used and if not prompts you to add the meaning (expansion). The abbreviation and meaning are then added to the end of the Abbreviations clause and the cursor is returned to where you started. If the abbreviation is added then the addition to the Abbreviations clause is coloured light green and each occurrence is coloured blue.

Identifies the Abbreviations clause by finding the word ABBREVIATION in style Heading 1 or Heading 2, followed by style EW for each abbreviations. Will not work if these styles are not present.

In addition, the macro searches for a file called abbs.doc in the same directory as the MTS template that contains the macros. If it finds this file, it offers to add the abbreviation to this master file as well as to the Abbreviation Clause. If the "+" abbreviation is already in the master clause, the macro offers the existing abbreviation for inclusion in the document. Matching uses a form of "fuzzy logic".

### 5.2.3 Abbreviations: Go To

Goes to the start of the list with style EW in the Abbreviations clause. Identifies the Abbreviations clause by finding the word ABBREVIATION in style Heading 1 or Heading 2, followed by style EW for each abbreviation.



## 5.2.4 Generate Master List: Abbreviations

Creates a files called abbs.doc in the same directory as the MTS template that contains the macros, if such a file is not already present. This file is then used by Abbreviations: ADD for collecting a master list of the abbreviations used in your document

## 5.2.5 Generate Master List: Definitions

Creates a files called defs.doc in the same directory as the MTS template that contains the macros, if such a file is not already present. This file is then used by Definitions: ADD for collecting a master list of the definitions used in your document.

## 5.2.6 Add Definition

Select in the main body of the document a word or words that need to be defined and then run this macro. The macro checks whether the word(s) are already defined and if not prompts you to add the definition. The definition is then added to the Definitions clause and the cursor is returned to where you started. If the definition is added then the addition to the Definitions clause is coloured light green and each occurrence is coloured blue.

Identifies the Definitions clause by finding the word DEFINITION in style Heading 1 or Heading 2. Will not work if these styles are not present.

In addition, the macro searches for a file called defs.doc in the same directory as the MTS template that contains the macros. If it finds this file, it offers to add the definition to this master file as well as to the Definitions Clause. If the definition is already in the master clause, the macro offers the existing definition for inclusion in the document. Matching uses a form of "fuzzy logic".

## 5.2.7 Sort List

Select a list of at least 2 lines and macro sorts list alphabetically. Do not use it within Tables

## 5.2.8 Remove Colour

Removes the colouring and any double underlining.

# 5.3 Figures & Tables

## 5.3.1 How to Use

Displays some instructions on use.

## 5.3.2 Annexes

Displays some instructions about how to reset the number sequences in annexes.

## 5.3.3 Table

Type in the caption in the correct place and click the Table button. The macro will add the correct Style, the word TABLE and the field code for the sequence number.

## 5.3.4 Figure

Type in the caption in the correct place and click the Figure button. The macro will add the correct Style, the word FIGURE and the field code for the sequence number.

### 5.3.5 Toggle Codes

Toggles the display of field codes so you can examine and problems.

### 5.3.6 Update

Updates field codes starting from the Scope so that it avoids the Table of Contents to improve speed of operation. Displays the results of fields rather than the codes. To see the codes click TOGGLE CODES.

## 5.4 References

### 5.4.1 Collect

Searches for references of the following type:

- EN nnnn(nn);
- ETS nnn nnn(-nn-nn);
- ES nnn nnn(-nn);
- EG nnn nnn;
- TS nnn nnn(-nn);
- TR nnn nnn(-nn);
- ETR nnn(-nn);
- ISO nnnn(n)(-nn);
- IEC nnnn(n)(-nn);
- ISO/IEC nnnn(n)(-nn);
- ECMA nnn(n)
- x.n(nnnn)(.nn) - ITU-T/CCITT Recommendations;
- RFC nnn(n)(-nn),

and copies the text found into a new file, which you can save or print. Duplicates are excluded. The page numbers of the occurrences are given. All occurrences within the standard are coloured blue to help identification of references that have been missed. This macro does not check to see if the reference is already in the Reference section.

### 5.4.2 Add

Select the standard number of a new reference in the body of the standard and run the macro. Macro checks if the standard is already in the reference section. If it is not, it adds the [ ] and number (using SEQ and bookmark) at the end of the reference section, then returns to the original position and adds a copy of the [ ] with bookmark just after the reference.

This macro does NOT do any colouring. After running it you need to run UPDATE and manually add details about the reference to the Reference clause, eg the title of the reference. This macro will work with any type of reference and is not limited to the list of types stored in the RapHelp template.

### 5.4.3 Check Use

Checks though the reference list and colours all used and colours the unused references red. Uses the stored list of reference types for finding references.

This macro will work only with any types of reference stored in the RapHelp template.

## 5.4.4 Colour Non Seqs

Within reference section, colours the [n] RED where n is a simple digit string. These references then need to be converted using CHANGE TO SEQ.

NOTE: Does not colour references that use fields that are different from the system used in these tools.

## 5.4.5 Change to Seq

To be used when the user has selected a standard number within the references section, not the number in []. Replaces the [ ] with sequences and underlying bookmarks, and replaces all occurrences of the original number with copies of the bookmarks. After this process, the bookmarks will be updateable automatically if they are re-ordered or have new ones added. Does not add any colouring..

## 5.4.6 Missing []s

Searches for all stored reference types and checks if a [ occurs in the subsequent 12 characters. Colours references without subsequent [ red and double underlines them. Generates a list of page numbers with such problems.

## 5.4.7 Empty []s

Colours all occurrences of empty [ ] red and double underlines them. Generates a list if the pages on which they occur.

## 5.4.8 Add [] in body

Select a standard number within the MAIN text. Adds the [ ] with sequences and underlying bookmarks, to the right of the selected text. After this process, the bookmarks will be updateable automatically if they are re-ordered or if new references are added. Does not add the reference to the Reference clause, for that you should use ADD.

## 5.4.9 Remove Colour

Removes the colouring and any double underlining.

## 5.4.10 Toggle Codes

Toggles the display of field codes so you can examine and problems.

## 5.4.11 Update

Updates field codes starting from the Scope so that it avoids the Table of Contents to improve speed of operation. Displays the results of fields rather than the codes. To see the codes click TOGGLE CODES.

# 5.5 Characters

## 5.5.1 Correct Characters

Runs all the individual macros available under INDIVIDUAL CHARACTERS.

## 5.5.2 Individual Characters

Displays another floating toolbar for making individual corrections. For details please use the Help file on that toolbar.

## 5.5.3 Insert MU

Inserts the Greek character  $\mu$ .

### 5.5.4 Insert Deg

Inserts the degree symbol °.

### 5.5.5 Get Ascii

Displays in a message box the ASCII value of any single character that you have selected.

## 5.6 Individual Characters

### 5.6.1 Correct Double Spaces

Replaces most double, treble and quadruple spaces with single, colours characters adjacent to remaining ones red for manual checking. Tells you how many manual checks needed.

### 5.6.2 Remove Spaces before Punctuation

Removes all single spaces between letters and a subsequent punctuation mark ie ,,:;tab line break paragraph.

### 5.6.3 Correct Hyphens

Replaces normal hyphens with non-breaking ones when preceded by a number or letter and followed by a number  
Changes ASCII (45) to ASCII (30).

### 5.6.4 Correct Spaces to Non-breaking

Replaces ordinary spaces with non-breaking ones when followed by a number and preceded by: -

- another number;
- the word CLAUSE;
- the abbreviation ETS, EN, ES, EG, TS, TR, ETR, ECMA, ISO, IEC, RFC.

### 5.6.5 Correct to kbit/s

Replaces wrong abbreviations of bits per second, ie corrects: -

- kb/s; Kb/s; Kbit/s to kbit/s;
- mb/s; Mb/s; mbit/s to Mbit/s;
- gb/s; Gb/s; gbit/s to Gbit/s.

### 5.6.6 Correct Super and Subscripts

Replaces use of super and sub scripts with 8 point font shifted up or down by 3 points.

### 5.6.7 Get Ascii

Displays in a message box the ASCII value of any single character that you have selected.

## 5.7 Styles

### 5.7.1 Set Revisions

Sets Revision marking with deleted text hidden and new text blue without underlining or revision lines in the margin.

### 5.7.2 Revs Strike

Sets Revision marking with deleted coloured red and struck through, and new text blue without underlining or revision lines in the margin.

### 5.7.3 Revs Off

Turns off Revision Marking.

### 5.7.4 Accept / Reject

Accepts or Rejects revisions in selected text. You should select the revision before clicking the button. If used in Tables these macros may leave the whole row selected due to unexpected operation of the commands in Word.

After using Accept or Reject, the Revisions are always set and you may need to turn them off.

### 5.7.5 View Style Margin

Displays the style margin on the left of the document in NORMAL view so you can see easily what styles you are using.

### 5.7.6 Other macros

Apply the style shown on the button. Some buttons contain reminders of where the styles should be used.

## Annex A (informative): List of macros

**Table A.1: Table relating Button Names to Macro Names**

<b>Toolbar</b>	<b>Buttons</b>	<b>Macro</b>
MTS: Rapporteur Assistant	Characters	MTSmDisplayCharactersToolbar
	Scope + Language	MTSmDisplayLanguageToolbar
	Abbrs + Defs	MTSmDisplayAbbrsAndDefsToolbar
	References	MTSmDisplayReferencesToolbar
	Figs + Tables	MTSmDisplayFigTablesToolbar
	Styles	MTSmDisplayStylesToolbar
	?	MTSmOutputInstructions
MTS: Characters	Correct characters	MTSmRunCharacterMacros
	Individual characters	MTSmDisplayIndividualCharacters
	Insert MU	MTSmInsertMU
	Insert Degl	MTSmInsertDegl
	Get Ascii	UmGetAscii
	?	MTSmHelpCharacters
MTS: Individual Characters	Correct double spaces	MTSmDoublespaceToSingleSpace
	Remove spaces before punctuation	MTSmRemoveSpacesBeforePunctuation
	Correct Hyphens	MTSmCorrectHyphens
	Correct Spaces to Non-breaking	MTSmCorrectSpacesToNonBreaking
	Correct to bit/s	MTSmCorrectKBSetc
	Correct Super and Subscripts	MTSmCorrectSuperAndSubscripts
	Get Ascii	UmGetAscii
	?	MTSmHelpIndividualChars
MTS: Scope & Language	Shall Should	MTSmShall
	Is Are	MTSmIsAre
	May	MTSmMayNot
	Can	MTSmCan
	Could	MTSmCould
	May (not)	MTSmMay
	Must	MTSmMust
	Remove Colour	MTSmRemoveColour
	Section Para	MTSmOccurrencesOfSectionPara
	Occurrences	MTSmOccurrences
	Scope	MTSmInsertScopeChecklist
	?	MTSmHelpScopeAndLanguage
MTS: Abbrs + Defs	Abbreviations: Colour	MTSmColourAbbreviations
	Abbreviations: Add	MTSmAddAbbreviationToList
	Abbreviations: Go To	MTSmGoToAbbreviations
	Generate Master List: Abbreviations	MTSmGenerateAbbs
	Generate Master List: Definitions	MTSmGenerateDefs
	Add Definition	MTSmAddDefToList
	Sort List	MTSmSortList
	Remove Colour	MTSmRemoveColour
	?	MTSmHelpAbbrsAndDefs
	MTS: References	Collect
Add		MTSmAddReferenceToList
CheckUse		MTSmUnusedReferences
Colour NonSeqs		MTSmColourOldSourceRefs

Toolbar	Buttons	Macro
	Change to Seq	MTSmReviseExistingReferences
	Missing Ref []s	MTSmMissingRefBrackets
	Empty Ref []s	MTSmEmptyRefs
	Add [] in Body	MTSmAddBracketedField
	Remove Colour	MTSmRemoveColour
	Toggle Codes	MTSmCodesOn
	Update	MTSmUpdateFieldsFromScopeOn
	?	MTSmHelpReferences
MTS: Figs + tables	How to Use	MTSmHowToUseFiguresAndTables
	Annexes	MTSmAnnexes
	Table	MTSmTable
	Figure	MTSmFigure
	Toggle Codes	MTSmCodesOn
	Update	MTSmUpdateFieldsFromScopeOn
	?	MTSmHelpFiguresAndtables
MTS: Styles	Set Revisions	MTSmSetRevs
	RevsStrike	MTSmSetRevsStrike
	Revs off	MTSmRevisionsoff
	Accept	MTSmAcceptSelectedRevision
	Reject	MTSmRejectSelectedRevision
	ViewStyleMargin	MTSmViewLeftStyleMargin
	?	MTSmHelpStyles
Macros used only internally	-	AutoOpen
	-	MTSmCheckTemplate
	-	UmPrintMacros
	-	UmListMacrosInOpenTemplate
	-	SubsAndFcns
	-	SortDefinitions
	-	MTSmRapHelpLibrary
		MTSmIndexDefs
	MTSmGoToReferences	

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## Bibliography

The following material, though not specifically referenced in the body of the present document (or not publicly available), gives supporting information.

- "Making better standards - a guide from Technical Committee MTS", ETSI (1996), ISBN 2-7437-0916-2.



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## History

<b>Document history</b>		
V1.1.2	February 2000	Publication