ETSI Drafting Rules (EDR)

Compared version between V38 and V39

(28 September 2018)

What are the ETSI Drafting Rules?

The present document specifies rules for the structure and drafting of documents intended to become ETSI deliverables. These rules complement the ETSI Technical Working Procedures (TWP) which are part of the ETSI Directives. (https://portal.etsi.org/Resources/ETSIDirectives.aspx~~and~~). The ETSI Drafting Rules (EDR) are intended to ensure that ~~such documents~~ETSI deliverables are drafted in as uniform a manner as is practicable, irrespective of the technical content.

ETSI is frequently maintaining guides on the use of templates and other tools such as ETSI deliverable skeletons which include many editorial aspects such as styles, font, table and figure formatting (and many others) for documents to be processed in accordance with the ETSI Directives. These can be found on the *editHelp!* website.

1 ETSI deliverable

1.1 ~~All~~ ETSI deliverable types

To draft an ETSI deliverable, one of the types defined in annex A.3 of the TWP **shall** be chosen.

For each ETSI deliverable typea pre-structured deliverable skeleton is available from the *editHelp!* website and **shall** be used as a basis for drafting.

~~To draft an ETSI deliverable one of the following type **shall** be chosen:~~

~~The European Standard (EN) is a standard adopted by a European standardisation organisation and shall be chosen when the document is intended to meet needs that are specific to Europe and requires transposition into national standards.~~

~~NOTE: An EN developed in response to a mandate issued by the European Commission (EC) is referred to as Harmonised Standard. Harmonised Standards provide technical detail necessary to achieve the "essential requirements" of an EU Directive.~~

~~The Technical Specification (TS) is the preferred deliverable when the document contains normative provisions and where rapid time to "market", validation and maintenance are essential. A TS may later be converted to an ES or an EN, or be used to publish the contents of a draft ES being sent for vote or a draft EN being sent for Public Enquiry or vote.~~

~~The ETSI Guide (EG) shall be chosen when the document contains informative elements providing guidance on handling of technical standardization activities in the whole or major parts of the Technical Organization.~~

~~The ETSI Standard (ES) shall be chosen when the document contains normative provisions and it is considered preferable or necessary that the document be submitted to the whole ETSI membership for its approval.~~

~~The Technical Report (TR) is the default deliverable when the document contains only informative elements.~~

~~The Special Report (SR) shall be used for any other kind of document containing informative elements of general ETSI member or public interest. The SR is also the appropriate deliverable type for a deliverable with dynamic content generated by a software application on the ETSI web site on the basis of database content.~~

~~The Group Specification (GS) is an ETSI deliverable, containing either specifications and/or information elements, produced by an Industry Specification Group.~~

~~ETSI skeletons documents (pre-structured deliverable templates) are available from *editHelp! website*.~~

1.2 Objective of an ETSI deliverable

The objective of ~~an~~ ETSI deliverables is to define clear and unambiguous provisions in order to facilitate international and European trade and communication. To achieve this objective, ~~the~~an ETSI deliverable **shall**:

- be as complete as necessary within the limits specified by its scope;
- be consistent, clear and accurate;
- provide a framework for future technological development; ~~and~~
- be comprehensible to qualified persons who have not participated in its preparation~~.~~; and
- respect the rules for the drafting of ETSI deliverables set by the present document.

1.3 Homogeneity

Uniformity of structure, of style and of terminology **shall** be maintained not only within each ETSI deliverable, but also ~~within a series of associated~~across all ETSI deliverables. The structure of ~~associated~~ ETSI deliverables and the numbering of their clauses **shall**, as far as possible, be identical. Analogous wording **shall** be used to express analogous provisions; identical wording **shall** be used to express identical provisions.

The same term **shall** be used throughout each ETSI deliverable or series of ETSI deliverables to designate a given concept. The use of an alternative term (synonym) for a concept already defined **shall** be avoided. As far as possible, only one meaning **shall** be attributed to each term chosen.

These requirements are particularly important not only to ensure comprehension of the ETSI ~~deliverable~~deliverables but also to derive the maximum benefit available through automated text-processing techniques.

1.4 Consistency

~~In order to~~To achieve the aim of consistency within ~~the~~ ETSI deliverables, the text of every ETSI deliverable **shall** be in accordance with the ~~relevant provisions of existing basic ETSI deliverables~~rules specified in the present document. This relates particularly to:

- standardized terminology;
- principles and methods of terminology;
- quantities, units and their symbols;
- abbreviations;
- tables and figures numbering;
- bibliographic references; and
- graphical symbols.

~~In addition, for specific technical aspects, the relevant provisions of general ETSI deliverables dealing with the following subjects shall be respected:~~

~~limits;~~

~~tolerance of dimensions and uncertainty of measurement;~~

~~preferred numbers;~~

~~statistical methods; and~~

~~environmental conditions and associated tests.~~

1.5 Equivalence of official language versions

ETSI deliverables **shall** be in the English language only.

1.6 Fitness for implementation as a national, regional or international standard

The content of an ETSI deliverable **shall** be drawn up in such a way as to facilitate its direct application and its adoption without change as a national, regional or international standard (see ETSI Rules of Procedure, ~~article~~Article 13.7, in ETSI Directives).

1.7 Planning

Rules for the planning of new ~~work items~~Work Items are given in ~~ETSI Technical Working Procedures, annex C.~~clause 1.6 of TWP. When creating ~~a~~ new ~~work item~~Work Items, it is useful to consider whether the end result will be one or more ETSI deliverables (e.g. multi-part deliverable).

~~EXAMPLE: A multi-part deliverable.~~

In the case where multiple mutually related ETSI deliverables are planned, the structure of the deliverables and any interrelationships between them need to be well defined when Work Items are created as this facilitates work planning in both the Reference Body (RB) and in the Secretariat.

~~In the case where multiple deliverables are expected, some thought should be given to the intended structure and any interrelationships between the various components as this facilitates work planning in both the Technical Body (TB) and in the Secretariat.~~

~~In the case of a multi-part ETSI deliverable, a list of the intended parts together with their titles should be drawn up, (see also clause 1.8 of the present document). The drafting rules given in the present document shall be applied from the very beginning of the work and throughout all subsequent stages to avoid delay at any stage.~~

1.8 Subdivision of the subject matter

1.8.0 General rules on the subdivision of the subject matter

~~ETSI deliverables are so diverse that no universally acceptable rules can be established for the subdivision of the subject matter.~~

~~However, as a general rule, an~~ An individual ETSI deliverable ~~shall~~**should** be prepared for each subject to be standardized ~~and published as a complete entity.~~. In specific cases and for practical reasons, ~~for~~an ETSI deliverable may be split into separate parts as a multipart deliverable. For example:

- ~~the~~an ETSI deliverable is likely to become too voluminous;
- subsequent portions of the content are interlinked;
- portions of the ETSI deliverable could be referred to in regulations; or
- portions of the ETSI deliverable are intended to serve for certification purposes.

~~The ETSI deliverable may be split into separate parts under the same number.~~ This has the advantage that each part can be changed ~~separately~~independently when the need arises.

In particular, the aspects of a product which will be of separate interest to different parties (e.g. manufacturers, operators, certification bodies, legislative bodies) **shall** be clearly distinguished, preferably as parts of an ETSI deliverable or as separate ETSI deliverables.

Such individual aspects are, for example:

- performance requirements;
- maintenance and service requirements; and

- quality assessment.

1.8.1 Subdivision of the subject matter within a series of parts

There are two systems in use for subdividing into parts:

a) each part deals with a specific aspect of the subject and can stand alone;

b) there are both common and specific aspects to the subject. The common aspects shall be given in part 1. Specific aspects (which may modify or supplement the common aspects and, therefore, cannot stand alone) **shall** be given in individual parts.

Where the system described in b) is used, care **shall** be taken that the references from one part to another are always to the appropriate version. There are two ways to achieve this:

- if reference is made to a particular element, the reference **shall** be specific (see clause 2.10.1.~~3).~~2);
- since the complete series of parts is normally under the control of the same ~~Technical Body,~~RB the use of non-specific references (see clause 2.10.1.~~4~~3) is permitted, provided that corresponding changes are implemented simultaneously in all parts.

The use of non-specific references requires a high degree of discipline by the ~~Technical Body~~RB responsible for the ETSI deliverable.

1.8.2 Parts and sub-parts

The number of a part **shall** be indicated by Arabic numerals, beginning with 1 (limited to ~~2~~two digits), following the ETSI deliverable number and preceded by a hyphen, ~~for~~see example~~:~~ 1.

EXAMPLE 1: ETSI ES 201 999-1, ETSI ES 201 999-2, ETSI EN 300 356-33, ETSI EN 300 356-34.

The number of a sub-part **shall** be indicated by Arabic numerals, beginning with 1-1 (limited to ~~2~~two digits), following the ETSI deliverable number and preceded by a hyphen, ~~for~~see example 2:

EXAMPLE 2: ETSI ES 201 999-1-1, ETSI ES 201 999-1-2, ETSI EN 300 356-33-10, ETSI EN 300 356-33-11.

Further details are given in annex B of the TWP, "Numbering of deliverables" contained in the ETSI Directives.

1.9 Legal master of an ETSI deliverable

The prevailing version of an ETSI deliverable is the one made publicly available at http://www.etsi.org/deliver in PDF format.

~~ETSI deliverables are made publicly available by ETSI in PDF format. Other formats may also be available.~~

1.10 Neutrality and impartiality

In order to respect the principles of neutrality and impartiality, ETSI deliverables **shall** neither promote nor endorse services, products and/or technologies of one company over another.

If it is known that only one product, service or technology is currently available and that the use of this product, service or technology is needed to fulfil the purpose of an ETSI deliverable, the rules set in clause 4 **shall** be respected.

~~From a legal point of view, the official version of a document is the one which is recognized by the author as being the definitive and mature version of his/her work at a certain date. The official version of a document constitutes a reference from which it is possible to identify that amendments have been made.~~

~~In ETSI, the reference version of an ETSI deliverable (until further amendments are made) is the one that has been checked by the Secretariat and incorporates the amendments resulting from the approval process prescribed for the ETSI deliverable in the Technical Working Procedures. The reference version of an ETSI deliverable is the Portable Document Format (PDF) kept on a specific network drive within the Secretariat.~~

2 Structure of an ETSI deliverable

2.0 Arrangement of elements in an ETSI deliverable

An ETSI deliverable need not contain all the normative technical elements shown in table 1 and it may contain others than those shown. Both the nature of the normative technical elements and their sequence are determined by the nature of the ETSI deliverable in question.

~~In order to comply with~~ETSI deliverables **shall** be drafted on the ~~structure~~basis of ~~an~~the corresponding ETSI deliverable~~, the use of~~ skeletons. For each ETSI deliverable type, ETSI deliverable skeletons impose the appropriate ~~ETSI "skeleton~~ document~~" is mandatory.~~ structure.

Table 1: Typical arrangement of elements in an ETSI deliverable

Legend: **Bold type** = required element
Unbold type ~~(regular)~~ = optional element
Upright type = normative element
Italic type = informative element

Type of element	Arrangement of elements in an ETSI deliverable	Reference in the present document	Permitted content of element(s) in an ETSI deliverable
Informative preliminary	***Cover page***	clause 2.1	**Title** **ETSI deliverable type and number** **Version number** **Date of publication** **Disclaimer** *(for GR, GS and PAS TS)* **Logo(s)** *(authorized ones)*
	Table of contents ~~*for clauses*~~	clause 2.3.1	*(generated content)*
	~~*Tables*~~*List of* ~~*contents for*~~ *figures and/or tables*	clause 2.3.2	*(generated content)*
	Intellectual Property Rights ***Foreword*** ***Transposition*** *(ENs only)*	clause 2.4 clause 2.5 clause 2.5.1	***Text*** *Note(s)* *Table*
	Modal verbs terminology	clause 2.6	***Text***
	~~**Modal verbs terminology**~~ *Executive summary* *Introduction*	~~clause 2.6~~ clause 2.7 clause 2.8	*Text* *Figure(s)* *Table(s)* *Note(s)*
Informative general	***Scope*** *Informative* ~~*Reference(s)*~~*references* ***Definition(s)*** ~~*Symbol(s) and abbreviation(s)*~~***Terms*** ***Abbreviations*** ***Symbols*** *Reproduction of text, signs and material legally protected*	clause 2.9 clause 2.10.2 clause 2.11 clause 2.11.1 clause 2.11.2 clause 2.11.3 clause 4.	***Text*** *Figure(s)* *Table(s)* *Note(s)* *References*
Normative general	**Normative ~~References~~references**	clause 2.10.1	**Normative Reference(s)**
Normative technical	Requirements Normative ~~annex(s)~~annexes	clauses 3.1 and 3.2 clause 2.13.1	**Text** Figure(s) Table(s) *Note(s)*
Informative supplementary	*Informative guidance* *Informative* ~~*annex(s)*~~*annexes*	clause 2.13.2	*Text* *Figure(s)* *Table(s* *Note(s)*
	Bibliography	clause 2.14	*Additional* ~~*informative*~~ *reading material*
	Change history/Change request (history) ***(required for HS)***	clause 2.15	*Table*
	History	clause 2.16	***Table***

2.1 Cover page

The cover page **shall** contain the title of the ETSI deliverable, together with the version number and the date of publication.

The wording of the title **shall** be established by the ~~Technical Body with the greatest care.~~RB. While being as concise as possible, it **shall** indicate, without ambiguity, the subject matter of the ETSI deliverable in such a way as to distinguish it from that of other ETSI deliverables, without going into unnecessary detail. ~~Any necessary additional particulars~~Additional details **shall** be given in the scope.

The title **shall** be composed of separate elements, each as short as possible, proceeding from the general to the particular. In general, not more than the following three elements should be used:

a) an introductory element (optional) indicating the general field to which the ETSI deliverable belongs; it should not be based on the name of the ~~Technical Body~~RB which drafted the ETSI deliverable, especially if this is too broad to add much value;

b) a main element (obligatory) indicating the principal subject treated within that general field;

c) a complementary element (optional) indicating the particular aspect of the principal subject or giving details that distinguish the ETSI deliverable from other ETSI deliverables, or other parts of the same ETSI deliverable.

The rules above also apply to multi-part deliverables. The complementary element **shall** be preceded in each ETSI deliverable part by the designation "Part #: ..." and "Sub-part #: ....".

The Secretariat is responsible for the final preparation of the cover page.

~~For multi-part deliverables, all the individual titles in a series of parts shall contain the same introductory element (if present) and main element, while the complementary element shall be different in each case in order to distinguish the parts from one another. The complementary element shall be preceded in each case by the designation "Part …:" and "Sub-part ...:".~~

~~For endorsement of documents from other standards organizations, see clause 9.~~

2.2 Second page

The content of the second page is provided by the Secretariat and **shall not** be modified. The following **shall** be filled in:

- Work Item number;
- ~~Keywords~~pre-defined keywords of the ETSI deliverable.

2.3 Table of contents and list of figures and/or tables

2.3.1 Table of contents ~~for clauses~~

The table of contents **shall** be generated automatically ~~and shall not be set manually.~~. It is a required element. The title **shall** be "Contents~~".~~" and shall be unnumbered.

~~Use **TT** style for the title.~~

~~Use the field **{TOC \o\w}** for the table itself.~~

~~NOTE 1:~~ The Secretariat is responsible for the final layout of the table of contents ~~Table of Contents.~~

~~NOTE 2: To unlock the Table of Contents: select the Table of Contents, click simultaneously: Ctrl + Shift + F11.~~
~~To lock it: reselect the Table of Contents and then click simultaneously: Ctrl + F11.~~

~~2.3.2 Tables for figures and/or tables~~.

~~The tables contents for are also allowed. They shall be generated automatically and not be set manually. If present, they shall appear after the table of contents for clauses "Contents".~~

2.3.2 List of figures and/or tables

A list of figures and/or a list of tables may be included in ETSI deliverables. If included, the respective titles **shall** be "List of figures" and/or "List of tables~~" the clause~~", **shall** be unnumbered**, shall** appear after the table of contents and **shall** be generated automatically.

~~Use **TT** style for the title.~~

~~Use the field **{TOC \t "TF" \c}** for~~The Secretariat is responsible for the final layout of the list of figures and~~ the field **{TOC \t "TH" \c}** for the list of~~ /or tables.

2.4 Intellectual Property Rights (~~IPRs~~IPR)

The "Intellectual Property Rights (IPR)" clause is the first unnumbered clause. It is a required, informative element.

~~The content, provided by the Secretariat,~~The entire text blocks **shall** ~~not~~ be ~~modified and can be found~~as given in the applicable ETSI deliverable skeleton ~~documents~~ available ~~from~~on the *editHelp!* website and **shall not** be modified in any way.

The Secretariat is responsible for the final layout of the IPR clause.

2.5 Foreword

2.5.0 General rules for the foreword

The "Foreword" clause is the second unnumbered clause and on the same page as the IPR clause. It is a required, informative element. It **shall not** contain requirements, figures or tables, except for the transposition table (see clause 2.5.1).

It **shall** always contain a general part, provided by the Secretariat, giving information on:

- the designation and name of the ~~Technical Body~~RB that prepared the ETSI deliverable; and
- information regarding the approval of the ETSI deliverable.

Optionally, a specific part of the "Foreword" clause may be provided by the ~~Technical Body~~RB including as many of the following as is appropriate:

- an indication of any other organization that has contributed to the preparation of the ETSI deliverable;
- a statement that the ETSI deliverable cancels and replaces other documents in whole or in part;
- a statement of significant technical changes from the previous version of the ETSI deliverable;
- the relationship of the ETSI deliverable to other ETSI deliverables or other documents;
- the existence of an electronic attachment accompanying the ETSI deliverables, if this is not mentioned elsewhere.

For multi-part deliverables, there are two options for explaining the relationship between the various parts in the series~~. Either~~:

a) the first part **shall** include in its "Foreword" clause an explanation of the intended structure of the series. In the "Foreword" clause of each part belonging to the series~~,~~ a ~~reference~~ list of known parts with their titles **shall** be ~~made to the titles of all other parts, if they are known~~provided;

b) a specific part (part 1) **shall** provide an explanation of the intended structure of the series, together with details of the titles of the various parts and sub-parts. Each time a new part or sub-part of the ETSI deliverable is made publicly available, the Secretariat **shall** publish a new version of part 1 showing the details of the new document.

Option b) is the preferred option.

Examples and textblocks to be used can be found in the appropriate ETSI deliverable skeleton ~~document~~ available from *editHelp!* website.

2.5.1 Transposition table

Each ETSI European Standard (EN) **shall** contain a transposition table as the last element in the "Foreword" clause. This element is provided by the Secretariat and its purpose is described in the ~~ETSI Technical Working Procedures~~TWP, clause 2.4 (see ETSI Directives).

2.6 Modal verbs terminology

The "Modal verbs terminology" clause specifies how the modal verbs **shall** be used within the ETSI deliverable (see also clause 3.2).

~~The "Modal verbs terminology" appears after the "Foreword", it shall not be numbered. It is a required informative element.~~

~~The "Modal verbs terminology" specifies how the modal verbs **shall** be used within the ETSI deliverable (see also clause 3.2).~~

The "Modal verbs terminology" clause is a required informative element that appears after the "Foreword" clause. It **shall not** be numbered.

The content, provided by the Secretariat, **shall** ~~not be modified and can be found~~be as given in the ETSI deliverable skeleton ~~documents~~ available from *editHelp!* website and **shall not** be modified.

2.7 Executive summary

The "Executive summary" clause may be used to summarize the ETSI deliverable. It should contain enough information for the readers to become acquainted with the full document without reading it. It is usually one page or shorter.

~~The "Executive summary" appears after the "Modal verbs terminology" and before the "Introduction" and shall not be numbered. It is an optional informative element and shall not contain requirements.~~

~~The "Executive summary" is used, if required, to summarize the ETSI deliverable. It contains enough information for the readers to become acquainted with the full document without reading it. It is usually one page or shorter.~~

~~2.8 Introduction~~

~~The "Introduction" shall appear after the "Executive summary" (if present).~~ It is an optional informative element and **shall not** contain requirements.

If used, the "Executive summary" clause appears after the "Modal verbs terminology" clause and before the "Introduction" clause and **shall not** be numbered.

2.8 Introduction

The "Introduction" ~~is~~clause may be used~~, if required,~~ to give specific information or commentary about the technical content of the ETSI deliverable, and about the reasons prompting its preparation.

It is an optional informative element and **shall not** contain requirements.~~It shall not be numbered unless there is a need to create numbered subdivisions. In this case, it shall be numbered 0 with clauses being numbered 0.1, 0.2, etc. Any numbered figure, table or displayed formula shall be numbered normally beginning with 1 (see also clause 2.12.1).~~

The "Introduction" clause may appear after the "Executive summary" clause (if present) and **shall not** be numbered.

2.9 Scope

The "Scope" clause **shall** start on a new page and be clause number 1 of each ETSI deliverable. It is a required informative element and **shall not** contain requirements.

The "Scope" clause defines without ambiguity the subject of the ETSI deliverable and the aspect(s) covered, thereby indicating the limits of applicability of the ETSI deliverable or particular parts of it.

In ETSI deliverables that are subdivided into parts, the ~~scope~~"Scope" clause of each part **shall** define the subject of that part of the deliverable only.

The "Scope" clause **shall** be succinct so that it can be used as a summary for bibliographic purposes.

This element **shall** be worded as a series of statements of fact.

Forms of expression such as the following **shall** be used:

"The present document

- ~~specify~~specifies: the functional requirements for …"

  a method of …"

  the characteristics of …";

- establishes: a system for …"

  general principles for …";

- gives guidelines for …";

- gives terms and definitions …".

Statements of applicability of the ETSI deliverable **shall** be introduced by the following wording:

- "The present document is applicable to …".

2.10 References

2.10.0 General information ~~- References~~on references

The "References" clause **shall** be clause number 2 of each ETSI deliverable. It is a required element and **shall not** contain requirements.

The "References" clause ~~lists~~ **shall** list all the documents ~~referred to~~cited anywhere in an ETSI deliverable including annexes. It ~~consists~~**shall** consist of clause 2.1 "Normative references" and clause 2.2 "Informative references~~.~~".

~~ETSI deliverables may include references to ETSI documents and also to documents of non-ETSI organizations. In the second case it shall be ensured that implementers and evaluators of deliverables standardized by ETSI, and other interested parties, have access to all materials needed to implement those deliverables. These rules apply to documents that are produced in accordance with the ETSI Rules of Procedures but also to any deliverables that are developed elsewhere that are sent to ETSI to be standardized.~~

~~These rules are pointed toward normative references because they are functionally a part of the ETSI deliverable itself. It is best practice to follow these principles for informative references as well, but more flexibility is permitted for informative references because these documents are not strictly necessary for the implementation of an ETSI deliverable.~~

References should preferably be given to standards issued by ETSI and other recognized standardization bodies. Referencing of documents other than standards may be made provided that:

- all referenced documents are publicly available in the English language;

- when public availability cannot be guaranteed, the Secretariat **shall** obtain the right to keep the copy of the referenced document.

Reproduction of elements from other documents is deprecated (i.e. referencing is the preferred method in ETSI).

The textblock to be used for the "References" clause ~~can~~**shall** be ~~found~~as given in the appropriate ETSI deliverable skeleton ~~document~~ available ~~from~~on the *editHelp!*~~!~~ website.

2.10.1 Normative references

2.10.1.0 General ~~- Normative~~ rules on normative references

The "Normative References" clause ~~is~~**shall** be numbered 2.1 and ~~lists~~ **shall** contain exclusively a numbered list of all normative references ~~to~~of an ETSI deliverable.

Documents may be normatively referenced provided that they contain technical requirements. This in particular means that informative documents ~~to which conformance is necessary to claim compliance to~~**shall not** be normatively referenced as they do not contain any normative requirements.

The requirements from the ~~ETSI deliverable~~referenced documents are effectively made integral part of the requirements set by an ETSI deliverable, even though they are actually in another document.

The requirements with a normative reference to an entire document **shall** be made only when all provisions contained in a referenced documents are relevant. If only some provisions from the referenced document are relevant, the requirements with normative references **shall** precisely point to clauses, tables or figures containing ~~the reference. Normative references can be mentioned anywhere in an ETSI deliverable including annexes and shall be indicated by appropriate wording which underlines the normative impact of the reference within the ETSI deliverable~~relevant requirements.

EXAMPLE: "the test method shall be as ~~described~~specified in clause #.# of Recommendation ITU-T M.50",
Recommendation ITU-T M.50 is a normative reference.

~~In considering whether a normative reference to a document should be included~~For each entry in ~~an ETSI deliverable, preference should be given to standards and specifications by recognized standards development organizations and to~~ the ~~directives of the European Union.~~

~~Normative referencing of documents under the possession of other organizations is allowed where the use of such~~ normative references ~~has been justified by the Technical Body in charge of development of the ETSI deliverable containing the reference. Where an objection to the use of a normative reference has been raised within Technical Body discussion, this~~ list all information necessary to identify the referenced document **shall** be ~~noted in the minutes or some other record that will be available to ETSI Members.~~

~~Normative references list shall contain~~provided. This may include:

- the issuing organization;

the document ~~identity;~~

- ~~the edition or version~~ number ~~or date of publication (for Harmonised Standards, see clause 8.4);~~ ;
- the title.

The ~~list~~ edition, version or date of publication may (and in some cases **shall**) be provided for some documents ~~in~~ the normative references list (for HSs see clause 8.4).~~not include:~~

~~referenced documents which are not publicly available (see clause 2.10.1.1);~~

~~referenced documents which are only cited in an informative manner (such references shall be listed in clause 2.2 "Informative references");~~

~~other reading material not explicitly referred to anywhere in an ETSI deliverable including annexes (such publications have to be listed in an informative annex entitled "Bibliography" see clause 2.14);~~

~~referenced documents not available in English language.~~

Examples are given in the ETSI deliverable skeletons available on the *editHelp!* website.

Use the **EX** style, enclose the *editHelp!* number in square brackets and separate it from the title with a tab (you may use sequence fields for automatically numbering references, see clause 6.9.2. (See example).

EXAMPLE:

[1] ETSI EN 301 025-3: "Electromagnetic compatibility and Radio spectrum Matters (ERM); VHF radiotelephone equipment for general communications and associated equipment for Class "D" Digital Selective Calling (DSC); Part 3: Harmonised EN under article 3.3 (e) of the R&TTE Directive".

[2] ETSI EN 300 163: "Television systems; NICAM 728: transmission of two-channel digital sound with terrestrial television systems B, G, H, I, K1 and L".

2.10.1.1 Public availability of the normative references

A normative reference **shall** be publicly available in English language during the approval phases, procedures (see clause 2.2 of TWP), at the time of publication and for the duration of the expected lifespan of the ETSI deliverable. If public availability cannot be guaranteed after publication of the ETSI deliverable has occurred, the originating body of the document **shall** be requested to provide ETSI with the right to make the copies available the text; the Secretariat **shall** establish and maintain a list of the referenced documents and the relevant external bodies, for document tracking and cross-referencing purposes, and keep the necessary liaison with the originating body.

IfAs long as all normative references in an ETSI deliverable are not publicly available during, the drafting stage, the ETSI deliverable **shall not** be published or submitted to an approval procedure untilprocess (EN Approval Process (ENAP) or Membership Approval process (MAP), see annex A.5 of TWP).

Alternatively, the text of the reference is publicly available or the text **shall** be held and made available to be held by ETSI.the Secretariat.

For references to online referenced documentsavailable material, information sufficient to identify and locate the source **shall** be provided. Preferably, the primary source of the referenced documentmaterial should be citedreferenced, in order to ensurefacilitate traceability. Furthermore, the reference should, as far as possible, remain valid for the expected life of the document. The reference shall include the method of access to the referenced document and the full network address, with the same punctuation and use of upper case and lower case letters.ETSI deliverable.

2.10.1.2 Test suites availability

If conformance with a specification that includes normative references requires the use of a test suite, the test suite for the normatively referenced part should also be made publicly available. Any such test suite should be usable by potential implementers on terms at least as favourable as those contained in ETSI Rules of Procedure, annex 6 (see).

2.10.1.3 Specific normative references

A "specific" normative reference is a referencepoints to thea particular revision or version of the normatively referenced document. Specific references are favoured because they lead to permanence and stability in ETSI deliverables. Normative references generally should be limited to documents that are finally approved by the organizations responsible for issuing them.

Unlike ETSI, many other Standards bodies, (e.g. ISO, CEN, CENELEC, etc.) have a policy of regularly reviewing/maintaining their deliverables. Their procedures also involve Directives stipulate that ETSI ENs need to be reviewed at least every five years possibly leading to either new revisions or the automatic withdrawal of the previous version. It therefore follows thatETSI EN. As a consequence, any ETSI deliverable making specific references to such documents will need to be revised.

2.10.1.43 Non-specific normative references

A "non-specific" normative reference ispoints to a document without giving any information on its version or revision. Such a reference to a deliverableimplies that will apply to all future revisions and versions of the originally referenced document may be used. Non-specific references require additional procedures to ensure

that any revisions made necessary to the ETSI deliverable by virtue of revisions made to the normatively referenced materials are considered by the appropriate ~~Technical Body~~RB in charge of the ETSI deliverable.

If a normative reference is non-specific, the ~~Technical Body~~RB in charge of the ETSI deliverable should establish a process for gaining access to all future revisions and versions of the normatively referenced material. In addition, the ~~Technical Body~~RB should establish a work plan for ensuring that any such new revisions and versions of the normatively referenced material do not require a substantive amendment to the ETSI deliverable referencing that document or, alternatively, for ensuring that any such needed amendments are made and approved appropriately. Any future versions incorporated by reference **shall** meet ~~with~~ the requirements for public availability and Intellectual Property.

It may, therefore, be appropriate that an ETSI deliverable ~~contain~~contains non-specific references, provided that the following requirements can be fulfilled:

- it is accepted that it will be possible to use future versions of the document referred to for the purposes of the referring ETSI deliverable;
- it is granted that the structure of the document referred to will not change for the specific areas which are used by the referring ETSI deliverable (e.g. the referred to document is controlled by the same ~~Technical Body~~RB as the referring one).

2.10.1.~~5~~4 Referring to normative references (specific or non-specific ~~references~~)

The following form **shall** be used consistently throughout the ETSI deliverable:

- " … shall be as specified in ~~accordance with~~ETSI ES 201 001 [n], clause 3, … ".
- " … ETSI ES 201 001 [n], clause 3 shall apply".
- " … ETSI ES 201 001 [n], clause 3 shall be used".

2.10.1.~~6~~5 ETSI Intellectual Property Rights (~~IPRs~~IPR) policy for normative references

ETSI promotes a policy that any essential Intellectual Property Rights (~~IPRs~~IPR) embodied in normatively referenced documents be available for use in ETSI deliverables on licensing and disclosure terms that do not materially differ from the terms defined in the ETSI IPR Policy. This normative reference policy, however, does not imply any obligation on the ~~Technical Body,~~ ETSI members or ~~Technical Body~~RB members to investigate or ensure the availability of any essential normatively referenced ~~IPRs~~IPR, under any specific licensing and disclosure terms, at the time a normative reference is provided, explicitly or implicitly, within an ETSI deliverable.

2.10.2 Informative references

The "Informative references" clause ~~is~~**shall** be numbered 2.2 and ~~lists~~**shall** provide a numbered list of all informative references ~~to~~in an ETSI deliverable. Informative references cite documents that may be useful in implementing an ETSI deliverable or add to the reader's understanding but which are not required for conformance to the ETSI deliverable. ~~Informative references can be mentioned anywhere in an ETSI deliverable including annexes and are indicated by appropriate wording which **does not** imply normative impact (claim of conformity) of the reference within the ETSI deliverable.~~

EXAMPLE: **"the test method is described in Recommendation ITU-T M.50"**, Recommendation ITU-T M.50 is an **informative** reference.

~~Informative~~It is preferable that informative references ~~should be~~are publicly available ~~(but no check will be made by~~. Current practice is that the Secretariat need not check the public availability of informative references~~).~~

~~Use the **EX** style, add the letter "i" (for informative) before the number (which shall be in square brackets) and separate this from the title with a tab (you may use sequence fields for automatically numbering references, see clause 6.9.2. (See example).~~.

~~EXAMPLE:~~

~~[i.1] ETSI TR 102 473: "Digital Video Broadcasting (DVB); IP Datacast over DVB-H: Use Cases and Services".~~

~~[i.2] ETSI TR 102 469: "Digital Video Broadcasting (DVB); IP Datacast over DVB-H: Architecture".~~

Layout and display of "Informative references ~~**not mentioned** anywhere~~" clause are given in ~~an~~the ETSI deliverable skeletons given on the *editHelp!* ~~including annexes will be listed in the Bibliography annex, see clause 2.14~~ website.

2.10.3 Reference to ~~3GPP™~~ETSI Partnership Projects' deliverables

~~All~~In deliverables ~~prepared by the 3rd Generation Partnership Project (3GPP™) contain the following notice:~~

~~"The present document has been~~ developed ~~within the 3rd Generation~~ by an ETSI Partnership Project (~~3GPP™~~) ~~and may be further elaborated for the purposes of 3GPP™. The present document has not been subject~~ EPP) and to ~~any approval process by the 3GPP™ Organizational Partners and shall not be implemented. This Specification is provided for future development work within 3GPP™ only. The Organizational Partners accept no liability for any use of this Specification. Specifications and reports for implementation of the 3GPP™ system should be obtained via the 3GPP™ Organizational Partners' Publications Offices."~~

~~For this reason~~be published by ETSI, all references ~~made~~ to ~~3GPP™ documents made in draft deliverables will be changed by the Secretariat to a reference to~~ an EPP deliverable **shall** be replaced with the equivalent ETSI deliverable.

EXAMPLE: A reference to 3GPP TS 23.040 will be changed to a reference to ETSI TS 123 040.

This was a necessary step taken by ETSI due to the provision clause implemented in all EPP drafts/documents relating to liability and non implementation.

2.11 ~~Definitions, symbols and~~ Definition of terms, abbreviations and symbols

2.11.0 General information ~~–~~on definitions

The "Definitions~~, symbols and~~ of terms, abbreviations ~~"Definitions, and~~ symbols ~~and abbreviations~~" clause **shall** be numbered 3 and ~~depending on applicability it will~~ **shall** consist of clauses 3.1 "~~Definitions~~Terms", 3.2 "Symbols" and 3.3 "Abbreviations". They are ~~optional~~required informative elements and **shall not** contain requirements.

The textblocks to be used ~~can~~**shall** be ~~found~~as given in the appropriate ETSI deliverable skeleton ~~document~~ available ~~from~~on the *editHelp!* ~~**!**~~ website.

Other useful definitions may also be added in such as "Conventions" and "Notation".

~~NOTE: Even if no definitions, symbols and abbreviations are present in the deliverable, the presence of~~ this clause ~~is highly recommended to avoid renumbering of clauses in future revisions.~~

2.11.1 ~~Definitions~~Terms

~~The "Definitions" clause gives~~Clause 3.1 of an ETSI deliverable provides the definitions of all the terms necessary for ~~the~~ understanding of ~~certain terms used in~~their use within the ETSI deliverable.

The definitions of terms **shall** follow the rules hereafter:

- not take the form of, or contain, a requirement;
- be presented in alphabetical order;

- ~~**The form of** a~~ definition of term should be such that it can replace the term in context. Any additional information **shall** be given only in the form of examples or notes~~. If there are several notes or examples for the same definition, the notes shall be numbered. Otherwise it is not necessary.~~;

- if there are several notes or examples for the same definition, the notes and examples **shall** be numbered.

~~The term shall be in **bold**, and shall start with a lower case letter (unless it is always rendered with a leading capital) followed by a colon, one space, and the definition starting with a lower case letter and no ending full stop.~~

~~Use the **Normal** style.~~

~~Examples of term's usage, and notes concerning entries, shall be presented as shown below.~~

~~EXAMPLE 1:~~

~~**communal site:** location at which there is more than one fixed transmitter~~

~~NOTE: There are two types of communal site; one having separate equipment and antennas but housed in a common equipment room, and the other having an engineered system employing common antenna working where the isolation between equipment is determined by the filter system. At all communal sites equipment installed on the site meet the limits as specified in the relevant standards.~~

~~EXAMPLE 2:~~

~~**fast channel:** channel with low latency but higher BER in comparison to the slow channel~~

~~EXAMPLE: In contrast to the slow channel, the fast channel is not interleaved.~~

~~EXAMPLE **requirement:** provision that conveys criteria to be fulfilled~~

~~2.11.2~~2.11.3 Symbols ~~and abbreviations~~

The "Symbols" ~~and "Abbreviations" clauses give~~clause gives a list of ~~the~~ symbols ~~and abbreviations~~ which are used within the ETSI deliverable and are necessary for the understanding of the ETSI deliverable.

The symbols list **shall** contain in alphabetical order the symbols and their corresponding explanations.

Entries in the "Symbols" clause **shall not** be numbered.

~~The abbreviations list shall contain in alphabetical order the acronyms and their corresponding full terms.~~

~~Do not number the entries in the symbols and/or abbreviations clause.~~

~~Use the **EW** style (**EX** style for the last element in the list).~~

~~Separate the symbol/abbreviation from the full term with a tab.~~

~~EXAMPLE:~~

~~dB decibel~~
~~DDI Direct Dialling In, or direct dialling in~~

2.12 Clauses

2.12.0 General information - Clauses

From clause 4 the technical content of the ETSI deliverable **shall** be inserted.

Each clause **shall** have a title ~~which~~. For numbered clauses the title **shall** be placed after its number ~~(except "Intellectual Property Rights (IPR)", "Foreword", "Modal verbs terminology", "Executive summary" and "Introduction" clauses, which are unnumbered), separated by a tab~~.

A clause can have numbered subdivisions, e.g. 5.1, 5.2, 5.1.1, 5.1.2, etc. This process of subdivisions may be continued as far as the sixth heading level (e.g. 6.5.4.3.2.1). If present, there **shall** be at least two numbered subdivisions.

~~For numbering issues, see clause 2.12.1.~~

~~Use the **Heading** style appropriate to its level (see clause 6.1, table 8).~~

~~Separate the number of the heading and the text of the heading with a tab.~~

~~Treat clause titles as normal text (i.e. **no additional capitalization**), **but** no full stop.~~

2.12.1 Clause numbering

2.12.1.0 Clause numbering issues

The "Intellectual Property Rights (~~IPRs~~IPR)", "Foreword", "Modal verbs terminology", "Executive summary" and the "Introduction" clauses **shall** be unnumbered, other clauses **shall** be numbered.

The numbered clauses in each ETSI deliverable **shall** be numbered with Arabic numerals, beginning with 1 for the "Scope~~".~~" clause.

Every attempt **shall** be made to use continuous numbering. However, if continuous numbering cannot be ~~maintained~~kept, a new element **shall** be inserted in existing text using an appropriate alphanumeric designation that does not disturb the existing numbering scheme. This applies to all elements (e.g. clauses, annexes, figures, tables, notes, lists):~~clause, annex, figure, table, note, list).~~

EXAMPLE 1: It is necessary to update an ETSI deliverable. A new clause needs to be inserted between the existing clauses 8 and 9. A new clause 8a **shall** be inserted in preference to avoid re-numbering the existing clauses.

EXAMPLE 2: A new figure needs to be inserted between existing figures 4 and 5. A new figure 4a **shall** be inserted to avoid re-numbering of all subsequent figures.

Similarly, an existing element may be deleted and replaced with the term "Void" to minimize disruption to the numbering scheme.

EXAMPLE 3: During the updating of an ETSI deliverable, it is decided that annex C is no longer required. The title of annex C becomes "Void". Later annexes, therefore, remain unchanged.

EXAMPLE 4: It is decided to delete a note 3, so the text of note 3 becomes "Void" and there is no need to re-number note 4.

2.12.1.1 Automatic clause numbering

Automatic numbering **may be used** in ETSI deliverables.

The automatic numbering, if used, **shall** be applied anywhere in an ETSI deliverable including annexes using the appropriate ETSI styles, otherwise it may corrupt the deliverable.

2.12.2 Paragraph

A paragraph is an unnumbered subdivision of a clause.

To be able to precisely reference every paragraph, clauses **shall** have either numbered or unnumbered subdivisions.

Example 1 shows the two alternatives that **shall be used** for subdividing a clause.

EXAMPLE 1:

5 Title
5.1 Title
Paragraphs
5.2 Title
Paragraphs
5.3 Title
Paragraphs
6 Test report

5 Title
Paragraph 1
Paragraph 2
…
Paragraph n
6 Test report

Mixed numbered and unnumbered subdivisions **shall not** be used as they make precise paragraph referencing ~~not possible~~impossible.

Example 2 shows clause subdivision that **shall not be used**.

EXAMPLE 2:

5 Title
Paragraph 1 (text that cannot be precisely referenced)
Paragraph 2 (text that cannot be precisely referenced)
5.1 Title
Paragraphs
5.2 Title
Paragraphs
5.3 Title
Paragraphs
6 Test report

2.13 Annexes

2.13.0 General information - Annexes

Each annex **shall**:

- start on a new page;
- be designated by a heading comprising the word "Annex" followed by a capital letter designating its serial order, beginning with "A", e.g. "Annex A" (see also clause 2.12.1);
- have its heading followed by the indication "(normative):" or "(informative):", and by the title on the next line.

EXAMPLE 1: Annex A (normative):
Title of annex A

EXAMPLE 2: Annex A (informative):
Title of annex A

Exceptions to this rule are for the ETSI deliverable types EG, GR, TR and SR which are entirely informative. Thus the addition of "(normative):" or "(informative):" after the annex identifier is superfluous and **shall not** be provided, see example 3.

EXAMPLE 3: Annex A:
Title of annex A

Numbers given to the clauses, tables, figures and mathematical formulae of an annex **shall** be preceded by the letter designating that annex followed by a full-stop (e.g. figure B.1, table C.4). The numbering **shall** start afresh with each annex. A single annex **shall** be designated "Annex A".

Clauses in annex A **shall** be designated "A.1", "A.2", "A.3", etc. (see also clause 2.12.1).

~~Use the **Heading 8** style for the annex heading (except for EGs, TRs and SRs use the **Heading 9** style). Insert a line break ("shift" + "enter") between the colon and the title.~~

~~For all annex clause headings use the appropriate Heading styles, starting from **Heading 1,** e.g. for clause A.1 use **Heading 1**, for clause A.1.1 use **Heading 2**. (See clause 6.1, table 8).~~

For annexes in endorsement of documents from other standards organizations, see clause 9.

For annexes in Harmonised Standards, see clause 8.5.

2.13.1 Normative annexes

For reasons of convenience it may be decided to place some part of the normative text in an annex.

Normative annexes contain provisions to which it is necessary to conform in order to be able to claim compliance ~~with~~to the ETSI deliverable. Their presence is optional and their status (except for EGs, GRs, TRs and SRs~~, see note in clause 2.13~~) **shall** be indicated in the heading of the annex.

2.13.2 Informative annexes

For reasons of convenience it may be decided to place some part of the informative text in an annex.

Informative annexes give additional information intended to assist the understanding or use of the ETSI deliverable and **shall not** contain provisions to which it is necessary to conform in order to be able to claim compliance ~~with~~to the ETSI deliverable. Their presence is optional and their status (except for EGs, GRs, TRs and SRs, see note in clause 2.13) **shall** be indicated in the heading of the annex.

The following annexes are optional and if present, will be displayed in the following order before the history box (see clause 2.16):

- Bibliography (see clause 2.14);
- Change history/Change request (history) (see clause 2.15).

~~NOTE: Each of these elements **shall** start on a new page.~~

2.14 Bibliography

The "Bibliography" annex **shall** start on a new page and be the last annex of an ETSI deliverable or the last but one if followed by the "Change history/Change request history" annex, if any. The "Bibliography" annex is an optional informative element and **shall not** contain requirements.

The "Bibliography" annex identifies additional reading material not mentioned anywhere in an ETSI deliverable including annexes. ~~Those~~These publications might or might not be publicly available (no check is made by the Secretariat).

The "Bibliography" annex **shall** include~~:~~

a list of standards, books, articles, or other sources on a particular subject which are not ~~referenced~~cited anywhere in an ETSI deliverable including annexes.

The "Bibliography" annex **shall not** include documents listed in clauses 2.1 and 2.2.~~:~~

~~normative references mentioned in the deliverable (such references shall be listed in clause 2.1 "Normative references");~~

~~informative references mentioned in the deliverable (such references shall be listed in clause 2.2 "Informative references").~~

~~Use **Heading 8** style for the "Bibliography" annex (except for EGs, TRs and SRs use the **Heading 9** style), see clause 2.13 for examples.~~

~~For the listed material use the **Normal** style or bulleted lists (e.g. **B1+**), do not use numbered references.~~

~~EXAMPLE 1:~~

~~ITU-T Recommendation X.200: "Title".~~

~~Directive 1999/5/EC of the European Parliament and of the Council of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity ("the R&TTE Directive").~~

~~EXAMPLE 2:~~

~~<Primary responsibility>. <Title>. <Edition>. <Year>, <Issue designation>, <Page location>. (e.g. WEAVER, William. "Command performances". December 1985, vol. 42, n° 12, p. 126-133).~~

~~ISO/IEC 17875: "Title".~~

2.15 Change history/Change request (history)

The "Change history/Change request (history)" annex **shall** start on a new page and be the last annex before the "History" clause. It is an optional, informative element and **shall not** contain requirements.

The "Change history/Change request (history~~)",)~~" annex, if present, describes the list of changes implemented in a new version of the ETSI deliverable. It **shall** be presented as a table.

~~Example~~An example of a change history table can be found in the appropriate ETSI deliverable skeleton ~~document available from~~given on the *editHelp!* website.

2.16 History

The "History" clause **shall** start on a new page and be the final unnumbered clause of an ETSI deliverable. It is a required informative element and **shall not** contain requirements.

The "History" clause identifies the major milestones in the life of an ETSI deliverable through the means of a table. The history box **shall** be provided by the Secretariat.

If it is desired to keep a detailed record of the ETSI deliverable history (other than the major milestones) it is recommended that this is done by inserting a "Change history/Change request" annex, see clause 2.15.

~~Use **Heading 1** style for the title.~~

~~Example~~An example of a history table can be found in the appropriate ETSI deliverable skeleton ~~document~~ available ~~from~~on the *editHelp!* website.

3 Requirements and ~~test methods~~expression of provisions

3.1 Requirements

This element is optional. If present, it **shall** contain:

a) all characteristics relevant to the aspect(s) of the product(s), process(es) or service(s) covered by the ETSI deliverable, either explicitly or by reference;

b) the required limiting values of quantifiable characteristics.

A clear distinction **shall** be made between requirements, statements and recommendations (see also clause 3.2).

Contractual requirements concerning claims, guarantees, covering of expenses, etc. **shall not** be included.

ETSI deliverables listing characteristics for which suppliers are required to state values that are not specified by the ETSI deliverable itself **shall** specify how such values are to be measured and stated.

~~For endorsement of documents from other standards organizations, see clause 9.~~

3.2 Verbal forms for the expression of provisions

~~An ETSI deliverable does not in itself impose any obligation upon anyone to follow it. However, such an obligation may be imposed, for example, by legislation or by a contract.~~ In order to be able to claim compliance with an ETSI deliverable, the user needs to be able to identify the requirements that are obligatory. The user also needs to be able to distinguish these requirements from other provisions where there is a certain freedom of choice.

~~Clear rules for the use of verbal forms (including modal auxiliaries) are therefore essential.~~ This clause is clearly stating the verbal form that **shall** be used to express a particular kind of provision, i.e. a requirement, a recommendation or a permission.

In the first column of tables 2 to 5 the verbal form that **shall** be used to express each kind of provision is given. The equivalent expressions given in the second column ~~shall~~may be used only in exceptional cases when the form given in the first column cannot be used for linguistic reasons.

NOTE: Only singular forms are shown.

The verbal forms shown in table 2 **shall** be used to indicate requirements strictly to be followed in order to conform to the standard and from which no deviation is permitted ~~(see also clause 2.6)~~. For example, the requirements to be followed may relate to values, actions, features to be supported and/or used or presence/absence or optional elements.

Table 2: Requirement

Verbal form	Equivalent expressions for use in exceptional cases (see note)
shall	is to is required to it is required that has to only ... is permitted it is necessary
shall not	is not allowed [permitted] [acceptable] [permissible] is required to be not is required that ... be not is not to be
• Do not use "must", except when used in direct citation. • Do not use "may not" or "has not" instead of "shall not" to express a prohibition. To express a direct instruction, for example referring to steps to be taken in a test method, use the imperative mode in English (e.g. "switch on the recorder").	
NOTE: "exceptional cases" means where the ~~ETSI Drafting Rules, if applied,~~use of verbal form would change the meaning of the sentence or make it difficult to understand.	

The verbal forms shown in table 3 **shall** be used to indicate that among several possibilities one is recommended as particularly suitable, without mentioning or excluding others, or that a certain course of action is preferred but not necessarily required, or that (in the negative form) a certain possibility or course of action is deprecated but not prohibited. For example, the recommendations may relate to values, actions, features to be supported and/or used or presence/absence or optional elements.

Table 3: Recommendation

Verbal form	Equivalent expressions for use in exceptional cases (see note)
should	it is recommended that ought to
should not	it is not recommended that ought not to
NOTE: "exceptional cases" means where the ~~ETSI Drafting Rules, if applied,~~use of verbal form would change the meaning of the sentence or make it difficult to understand.	

The verbal forms shown in table 4 ~~are~~**shall** be used to indicate ~~a course of action permissible within the limits of~~ what is permitted by the ETSI deliverable, which can be values, actions, support and /or use of features or presence/absence of optional elements.

Table 4: Permission

Verbal form	Equivalent expressions for use in exceptional cases (see note)
may	is permitted is allowed is permissible
need not	it is not required that no ... is required
• Do not use "possible" or "impossible" ~~in this context~~to express permission. • Do not use "can" instead of "may" ~~in this context~~to express permission. "May" signifies permission expressed by the standard, whereas "can" ~~refers to the ability of a user of the standard or to~~ whereas "can" signifies a possibility ~~open to him~~that something happens.	
NOTE: "exceptional cases" means where the ~~ETSI Drafting Rules, if applied,~~use of verbal form would change the meaning of the sentence or make it difficult to understand.	

The verbal forms shown in table 5 ~~are~~**shall** be used for statements of possibility and capability, whether material, physical or causal.

Table 5: Possibility and capability

Verbal form	Equivalent expressions for use in exceptional cases (see note)
can	be able to there is a possibility of it is possible to
cannot	be unable to there is no possibility of it is not possible to
• Do not use "may" instead of "can" ~~in this context~~to express possibility or capability. • "Can" refers to ~~the ability of a user of the standard or to~~ a possibility ~~open to him, whereas "may" signifies permission expressed by the standard~~that something happens.	
NOTE: "exceptional cases" means where the ~~ETSI Drafting Rules, if applied,~~use of verbal form would change the meaning of the sentence or make it difficult to understand.	

The verbal forms shown in table 6 **shall** be used to indicate behaviour of equipment or sub-systems outside the scope of the ETSI deliverable in which they appear. For example, in ~~a~~an ETSI deliverable specifying the requirements of terminal equipment, these forms **shall** be used to describe the expected behaviour of the network or network simulator to which the terminal is connected.

Table 6: Inevitability

Verbal form	Equivalent expressions
will	-
will not	-
• Distinguish from "shall"/"shall not". Use to express behaviour of equipment or systems outside the scope of the ETSI deliverable being drafted, where description of such behaviour is essential to the correct understanding of the requirements pertaining to equipment within the scope of the current ETSI deliverable.	

EXAMPLE: Extract from ETSI deliverable specifying behaviour of terminal equipment: "… On expiry of timer T3, the terminal shall send a TIMEOUT message to the network and start timer T4. The network will respond with a TIMOUT-ACKNOWLEDGE message. On receipt of a TIMEOUT-ACKNOWLEDGE message, the terminal shall stop timer T4 …"; thus is distinguished the strong future ("the terminal shall") used for requirements and the normal future ("the network will") used to indicate expected events.

The verbal forms shown in table 7 **shall** be used to indicate statements of fact.

Table 7: Fact

Verbal form	Equivalent expressions
is	Any verb in the indicative mood, present tense.
is not	
• Distinguish from "shall"/"shall not". Do not use present indicative of verbs for expressing requirements.	

~~For further details refer to the "Use of English guide" available from ***editHelp!*** website.~~

~~3.3 Test methods~~

~~This optional element gives all the instructions concerning the procedure for determining the values of characteristics, or for checking conformity to stated requirements, and for ensuring the reproducibility of the results. If appropriate, tests shall be identified to indicate whether they are type tests, routine tests, sampling tests and so on.~~

~~Instructions relating to test methods may be subdivided in~~

4 Use and reproduction of text, signs and material legally protected

4.1 General provisions

The provisions of the ETSI IPR Policy and the ETSI Guide on IPR **shall** be respected.

~~the following order (where appropriate):~~

~~b) principle;~~

~~apparatus;~~

~~preparation and preservation of test samples and test pieces;~~

~~procedure;~~

~~test report.~~

~~Test methods may be presented as separate clauses, or be incorporated in requirements, or be presented as annexes (see clause 2.13) or as separate parts (see clause 1.8.2). A test method **shall** be prepared as a separate ETSI deliverable if it is likely to be referred to in a number of other ETSI deliverables.~~

The use and reproduction of third parties text, signs and material legally protected should be avoided in ETSI deliverables.

If, in exceptional circumstances, the use and reproduction of third parties rights cannot be avoided, the IPRs owner's authorization to use and reproduce their rights in ETSI deliverables **shall** be obtained.

Reference to the source and the owner **shall** always be provided in ETSI deliverables.

~~The need for specification of test methods **shall** be evaluated on a case by case basis, in accordance with TCR-TR 006.~~

~~A test specification enables verification that products designed to a standard conform to its requirements. When writing a TS, ES or EN, you should consider the need for an accompanying test specification.~~

~~Every requirement of an ETSI deliverable specifying a product (equipment, system or service) needs to be testable, and such requirements need to be clearly distinguishable from statements of fact or of supposition.~~

~~EXAMPLE: Comparing the two sentences below:~~

~~"On receiving a START CALL message, the terminal shall respond by sending an ACKNOWLEDGE message within a delay of t_1."~~

~~"On receiving a START CALL primitive, the layer 3 protocol of the terminal shall move to state CALL ACTIVATED and shall start timer t_2."~~

~~It is clear that conformance to the first requirement can be verified by external stimulus and observation, whereas the second puts demands on a conceptual model which cannot be explicitly tested. Whilst requirements of the latter sort are useful – even essential – for describing operational details, the essential behavioural characteristics (normative provisions) are given by requirements of the type of the former, and only these are verifiable.~~

4.2 Trade names and trademarks

The use of trade names and/or trademarks that are asserted and/or registered by their owners for designating particular products or services should be avoided in ETSI deliverables. Instead a corresponding standard should be used or a correct designation or a generic description should be given (see example).

~~Proprietary trade names (e.g. trade marks) for a particular good or service should as far as possible be avoided, even if they are in common use. Instead a correct designation or description of a product should be given.~~

EXAMPLE: Instead of "ZigBee®" refer to IEEE 802.15.4.

If, in exceptional circumstances, ~~trade names~~the use of trademarks/tradenames cannot be avoided, their nature **shall** be indicated~~, e.g.~~ by the symbols ~~® or~~ ™ for any trademark or ® for a registered trademark. ~~trade mark (see example 1).~~

~~EXAMPLE 1: Instead of "Teflon®", write "polytetrafluoroethylene (PTFE)".~~

~~If it is known that only one product is currently available that is suitable for the successful application of the standard, the trade name of the product may be given in the text of the standard but shall be associated with a note as shown in example 2.~~

~~EXAMPLE 2:~~

~~NOTE 1: "… [trade name of product] … is the trade name of a product supplied by … [supplier] …. This information is given for the convenience of users of the present document and does not constitute an endorsement by ETSI of the product named. Equivalent products may be used if they can be shown to lead to the same results."~~

~~If it is considered to be essential to give an example (or examples) of commercially available products suitable for successful application of the standard because the product characteristics are difficult to describe in detail, trade names may be given in a note as shown in example 3.~~

~~EXAMPLE 3:~~

~~NOTE 2: " … [trade name(s) of product(s)] … is (are) an example(s) of a suitable product(s) available commercially. This information is given for the convenience of users of the present document and does not constitute an endorsement by ETSI of this (these) product(s)."~~

4.3 Copyrights

4.3.1 General rules on copyrights

By nature, copyrights may apply to different kind of elements/works regardless of their merits, e.g. a text, a figure, a photography, a software source code, etc.

If, in exceptional circumstances, the use of a copyrighted work cannot be avoided, their nature **shall** be indicated by the symbol ©.

4.3.2 Reproduction of third parties text

Providing a reference to a third party text **shall** be preferred to reproducing such a text. Taking into consideration that a copyright authorization may be withdrawn at any moment from the copyright holder, the reproduction of third parties texts **shall** be avoided.

The reproduction of a third party text in ETSI deliverables requires the author's authorization.

4.3.3 Reproduction of third parties software elements

Many software elements such as the source code, the object code and the graphic interfaces may be protected by copyright.

The reproduction of software elements in ETSI deliverables **shall** be avoided and in case it cannot be avoided, **shall** require to get the software owner's authorization.

In case of open source elements, the risks of contamination of ETSI deliverables **shall** be assessed before introducing such elements into ETSI deliverables.

4.3.4 Photographs

If a photograph shows a person and if there are doubts about the respect of the rights of personality of that person, a written confirmation that those rights have not been invaded and have been fully respected **shall** be obtained from the author of the photograph. If the authorization cannot be obtained the face of that person **shall** be blurred.

5 Elements of an ETSI deliverable

5.1 Figures

5.1.1 Figure usage

Figures should be used wherever appropriate to present information in an easily comprehensible form. Each figure **shall** be referred to explicitly within the text and~~, therefore,~~ **shall** be numbered.

5.1.2 Figure format

Figures **shall** be prepared in accordance to ~~clauses~~clause 7.~~5.2 and/or 7.1.~~

~~Use **FL** style on the paragraph which contains the figure itself.~~

~~Maximum width for figures is 17 cm and maximum height is 22 cm.~~

~~NOTE: For an easy application of the ETSI styles download "the ETSI styles toolbar" from ***editHelp!*** website~~.

5.1.3 Figure numbering

Figures may be numbered sequentially throughout the ETSI deliverable without regard to the clause numbering, e.g. first figure is figure 1 and the twentieth figure ~~(in, say clause 7)~~ is figure 20. For the numbering of figures in annexes, see clause 2.13.

Figures may also be numbered taking account of clause numbering.

EXAMPLE 1: First figure in clause 5 is figure 5.1, second figure in clause 5.1.1 is figure 5.2, third figure in clause 5.2.3 is figure 5.3.

EXAMPLE 2: First figure in clause 7 is figure 7.1, fifth figure in clause 7 is figure 7.5.

EXAMPLE 3: First figure in clause 7.3.2 is figure 7.3.2.1, fifth figure in clause 7.3.2 is figure 7.3.2.5.

One level of subdivision may only ~~is permitted~~be used (e.g. figure 1 may be subdivided as 1 a), 1 b), 1 c), etc.). See also clause 2.12.1.

In an ETSI deliverable lower case figure numbering should consistently be used. If done consistently throughout an ETSI deliverable, upper case numbering may also be used.

For automatic figure numbering see clause 6.9.2.

For the generation of a list of figures see clause 2.3.2.

~~Should you wish to number figures automatically, "Sequence numbering and bookmarking" (see clause 6.9.2) is highly recommended.~~

~~Should you wish to generate a table of contents for figures see clause 2.3.2.~~

5.1.4 Layout of figure title

The figure title may be provided after the figure number. The figure number and optional title **shall** be below the figure.~~ An explicit figure title is optional. See the following examples:~~

Information on styles that **shall** be used is given in the ETSI deliverable skeletons with guidance available on the *editHelp!* website.~~EXAMPLE 1:~~

~~**Figure 1: Details of apparatus**~~

~~EXAMPLE 2:~~

~~**Figure 1**~~

~~Use **TF** style.~~

~~If applicable, the figure number is followed by a colon, a space and the figure title.~~

5.1.5 Notes to figures

Notes to figures **shall** be treated independently from notes integrated in the text (see clause 5.5.1) and for this reason may contain requirements. They **shall** be located ~~above~~ the title of the relevant figure. A single note ~~in~~to a figure **shall** be preceded by "NOTE:". When there are several notes ~~occur in~~to the same figure, they **shall** be designated "NOTE 1:", "NOTE 2:", "NOTE 3:", etc. (see also clause 2.12.1). A separate numbering sequence **shall** be used for each figure.

~~**Write notes**~~Notes to a figure ~~**using the word processor** rather than embedding them~~**shall not** be embedded in ~~the~~a figure itself.

~~Use **NF** style.~~

~~Separate "NOTE:" from the text of the note with a tab.~~

5.1.6 References to figures

Every figure included in the ETSI deliverable **shall** be referred to in the text, for example using the following forms:

- "given in figure 2";
- "(see figure B.2)";
- "shown in figure A.6".

Figure references in the text **shall** use the same lower or upper case numbering as the figures.

~~Lower case letters are recommended (e.g. figure 2), however capital letters are also acceptable (e.g. Figure 2). Usage should be consistent throughout the document.~~

5.2 Tables

5.2.1 Table usage

Tables should be used wherever appropriate to present information in an easily comprehensible form. Each table **shall** be referred to explicitly within the text and ~~therefore be numbered~~**shall** be numbered. If the table continues over more than one page, the column headings **shall** be repeated on all pages after the first.

~~Centre tables horizontally.~~

~~The "space between columns" is 0,1 pt or 0,05 cm (default cell margins Left 0,05 pt & Right 0,19 pt).~~

~~Maximum width for tables in portrait orientation: 17 cm and for landscape orientation: 22 cm.~~

~~Set table columns widths in centimetres (not inches).~~

~~Use borders to separate the rows and columns of tables, as appropriate; the precise format will depend on the structure of each table, but be consistent throughout a deliverable (or series of related deliverables). Borders should be ¾ pt single line.~~

~~Each table shall be followed by an empty "Normal" style paragraph (↵ "Enter" key).~~

5.2.2 Table format

The following styles should be used in table cells.

Table Headings	**TAH**
Left aligned	**TAL**
Text Centred	**TAC**
Text Right aligned	**TAR**
Table Note	**TAN**
List in tables Level 1	**TB1**
List in tables Level 2	**TB2**

NOTE: For an easy application of the ETSI styles download "the ETSI styles toolbar" from ***I*** website.

5.2.3 Continuation of tables

The column headings shall be repeated on all pages after the first.

Use the table headings tool (**Table, Heading Rows Repeat**)

5.2.4 Table numbering

Tables may be numbered sequentially throughout the ETSI deliverable without regard to the clause numbering, e.g. the first table is table 1 and the twentieth table (in, say clause 7) is table 20. For the numbering of tables in annexes, see clause 2.13.

Tables may also be numbered taking account of clause numbering.

EXAMPLE 1: First table in clause 5 is table 5.1, second table in clause 5.1.1 is table 5.2, third table in clause 5.2.3 is table 5.3.

EXAMPLE 2: First table in clause 7 is table 7.1, fifth table in clause 7 is table 7.5.

EXAMPLE 3: First table in clause 7.3.2 is table 7.3.2.1, fifth table in clause 7.3.2 is table 7.3.2.5.

One level of subdivision only is permitted (e.g. table 1 may be subdivided as 1 a), 1 b), 1 c), etc.). See also clause 2.12.1.

Should you wish to number tables automatically, "Sequence numbering" (see clause 6.9.2) is highly recommended.

Should you wish to generate a table of contents for tables see clause 2.3.2.

5.2.5 Layout of table title

The title shall be above the table. An explicit table title is optional. See the following examples:

EXAMPLE 1:

Table 1: Electrical properties

EXAMPLE 2:

Table 1

Use **TH** style.

If applicable, the table number is followed by a colon, a space and the table title.

~~5.2.6 Table headings~~

The first word in the heading of each column **shall** begin with a capital letter. The units used in a given column **shall** ~~generally~~ be indicated within the column heading.

Every table included in the ETSI deliverable **shall** be referred to in the text and **shall** be consistent within an ETSI deliverable.

For automatic table numbering see clause 6.9.2.

Styles for table cells and headers defined in ETSI styles toolbar available on the *editHelp!* website **shall** be used.~~EXAMPLE:~~

~~Type~~	~~Linear density (kg/m)~~	~~Inside diameter (mm)~~	~~Outside diameter (mm)~~

Tables should be used wherever appropriate to present information in an easily comprehensible form. Each table **shall** be referred to explicitly within the text and **shall** therefore be numbered.

5.2.~~7~~2 Notes to tables

Notes to tables **shall** be treated independently from notes integrated in the text (see clause 5.5.1) and for this reason may contain requirements. They **shall** be located within the frame of the relevant table. A single note in a table **shall** be preceded by "NOTE:". When several notes occur in the same table, they **shall** be designated "NOTE 1:", "NOTE 2:", "NOTE 3:", etc. (see also clause 2.12.1). A separate numbering sequence **shall** be used for each table.

~~Use **TAN** style.~~

~~Separate NOTE: from the text of the note with a "Ctrl" + "→" (tab).~~

~~Include notes to a table within its borders in one cell, at the bottom.~~

~~Merge all cells to one, as in the following example:~~

~~EXAMPLE:~~

~~Column 1 cell~~	~~Column 2 cell (see note 2)~~	~~Column 3 cell~~	~~Column 4 cell (see note 1)~~
~~NOTE 1: This cell is a merged cell.~~ ~~NOTE 2: This cell is also a merged cell.~~			

~~5.2.8 References to tables~~

~~Every table included in the ETSI deliverable shall be referred to in the text, for example using the following forms:~~

~~"given in table 2";~~

~~"(see table B.2)";~~

~~"shown in table A.6".~~

~~Lower case letters are recommended (e.g. table 1), however capital letters are also acceptable (e.g. Table 1). Usage should be consistent anywhere in an ETSI deliverable including annexes.~~

5.3 Mathematical formulae

5.3.1 Types of equations

Equations between quantities are preferred to equations between numerical values. Equations **shall** be expressed in mathematically correct form, the variables being represented by letter symbols the meanings of which are explained in connection with the equations, unless they appear in a "Symbols and abbreviations" clause (see ~~clause~~clauses 2.11.2 and 2.11.3). Descriptive terms, acronyms or names of quantities **shall not** be arranged in the form of an equation.

EXAMPLE:

$$\tau = \sqrt{\frac{1}{(6n^2(N-3n+1))}\sum_{j=1}^{N-3n+1}\left(\sum_{i=j}^{n+j-1}(x_{i+2n}-2x_{i+n}+x_i)\right)^2}$$

where: x_j are samples of time errors data;

N is the total number of samples;

τ is the time error sampling interval;

n is the number of sampling intervals, with n = 1, 2, ..., integer part (N/3).

5.3.2 Layout of equations

Tools that **shall** be used for editing equations are given on the *editHelp!* website.

~~It is recommended to use Microsoft® Equation Editor. Examples of editor sizes and styles can be found in *!* website.~~

~~Use **EQ** style.~~

~~Insert one tab before the equation to centre it.~~

5.3.3 Numbering

If it is necessary to number some or all of the formulae in an ETSI deliverable in order to facilitate cross-~~reference~~referencing, Arabic numbers in parentheses **shall** be used, beginning with 1~~:~~.

EXAMPLE 1:

$$x^2 + y^2 < z^2 \qquad (1)$$

Equations may be numbered sequentially throughout the ETSI deliverable without regard to the clause numbering, e.g. first equation is equation 1 and the twentieth equation ~~(in, say clause 7)~~ is equation 20. For the numbering of equations in annexes see clause 2.13.

Equations may also be numbered taking account of clause numbering.

EXAMPLE 2: First equation in clause 5 is equation 5.1, second equation in clause 5.1.1 is equation 5.2, third equation in clause 5.2.3 is equation 5.3.

EXAMPLE 3: First equation in clause 7 is equation 7.1, fifth equation in clause 7 is equation 7.5.

EXAMPLE 4: First equation in clause 7.3.2 is equation 7.3.2.1, fifth equation in clause 7.3.2 is equation 7.3.2.5.

See also clause 2.12.1.

For automatic equation numbering see clause 6.9.2.

~~Should you wish to number equations automatically, the sequence numbering is highly recommended, (see clause 6.9.2).~~

~~Insert a tab between the equation and the number to right-align the number.~~

5.4 Lists

Information on how lists **shall** be managed in ETSI deliverables and examples are available on the *editHelp!* website.~~Lists may be introduced by a sentence, a complete grammatical proposition or by the first part of a proposition, completed by the items in the list.~~

~~Each item in a list shall be preceded by a bullet, a dash, an Arabic numeral followed by a parenthesis, or a lower case letter followed by a parenthesis.~~

~~EXAMPLE 1:~~

~~list item 1~~

~~list item 2~~

~~list item 3~~

~~EXAMPLE 2:~~

~~list item 1;~~

~~list item 2;~~

~~list item 3.~~

~~EXAMPLE 3:~~

~~list item 1,~~

~~list item 2,~~

~~list item 3.~~

~~EXAMPLE 4:~~

~~List item 1~~

~~List item 2~~

~~List item 3~~

~~EXAMPLE 5:~~

~~a) List item a.~~

~~b) List item b.~~

~~c) List item c.~~

~~EXAMPLE 6:~~

~~list item 1~~

~~list item 2~~

~~list item 3~~

~~"And" or "or" shall be used at the end of the penultimate element of a list to indicate unambiguously whether all the elements apply ("and") or whether they are mutually exclusive ("or").~~

~~Use the appropriate bullet styles, i.e. styles **B1** to **B5** or **B1+ to B3+, BN, BL** (see table 8).~~

~~Separate the list item identifier (e.g. bullet) and the text with a tab (if using styles **B1** to **B5**, the others are automatic bullet styles containing the space).~~

~~Ensure that the formatting of the lists is consistent throughout the deliverable.~~

5.5 Notes and examples

5.5.1 Notes and examples integrated in the text

Notes and examples should preferably be placed at the end of the clause, or after the paragraph, to which they refer.

Notes and examples integrated in the text **shall** only be used for giving additional information intended to assist the understanding or use of the ETSI deliverable. They **shall not** contain any information considered indispensable for the use of the ETSI deliverable. Notes and examples **shall not** contain requirements.

A single note in a clause **shall** be preceded by "NOTE:" in upper case, placed at the beginning of the first line of the text of the note. When several notes occur within the same element (e.g. clause, figure or table), they **shall** be designated "NOTE 1:", "NOTE 2:", "NOTE 3:", etc. (see also clause 2.12.1).

~~The word NOTE shall appear in upper case.~~

~~Use the **NO** style.~~

~~Separate NOTE: from the text of the note with a tab.~~

~~EXAMPLE 1:~~

~~NOTE: Text formatted with the **NO** style will be formatted **with** a space after the paragraph.~~

~~END of EXAMPLE 1~~

A single example in a clause **shall** be preceded by "EXAMPLE~~:"~~;" in upper case, placed at the beginning of the first line of the text of the example. When several examples occur within the same element (e.g. clause, figure or table), they **shall** be designated "EXAMPLE 1:", "EXAMPLE 2:", "EXAMPLE 3:", etc. (see also clause 2.12.1).

When there is a danger that it may not be clear where the example ends and the normal text continues, then the end of the example may be designated by "END of EXAMPLE".

Examples are given in the ETSI deliverable skeletons "with guidance text" available on the *editHelp!* website.

~~The word EXAMPLE shall appear in upper case.~~

~~Use **EX** style.~~

~~Separate EXAMPLE: from the text of the *editHelp!* example with a tab.~~

~~EXAMPLE 2:~~

~~EXAMPLE: Example text.~~

~~END of EXAMPLE 2~~

5.5.2 Footnotes to the text

Footnotes **shall not** be used in ETSI deliverables. If necessary notes integrated in the text **shall** be used.

~~5.6 Photographs~~

~~Photographs shall be used only in accordance with the relevant provisions of the ETSI IPR Policy and the ETSI Guide on IPRs.~~

~~If the photograph shows a person and if there are doubts about the respect of the rights of personality of that person, a written confirmation that those rights have not been invaded and have been fully respected shall also be obtained from the author of the photograph. If the authorization cannot be obtained the face of this person shall be blurred.~~

~~5.7 Computer language and other code~~

~~Computer code (e.g. ASN.1, GDMO, C, C++, etc.) may be included in an ETSI deliverable but should be clearly marked as such.~~

~~Use **PL** style.~~

~~Large volumes of program code, source code or formal description language shall be placed in an electronic attachment accompanying the ETSI deliverable. See clause 7.2 for further details.~~

~~5.8 Safety statements~~

~~ETSI Technical Committee (TC) Safety is responsible for statements to be included in any ETSI deliverables regarding the protection of the health and the safety of the user and any other person.~~

~~There are several product safety standards already available from CENELEC that have been cited in the Official Journal of the European Union (OJEU) in connection with the Low Voltage Directive (LVD) 2006/95/EC. Such Harmonised Standards can be used to demonstrate compliance with some or all of the essential requirements of article 3.1(a) of the Radio equipment & Telecommunications Terminal Equipment (R&TTE) Directive 1999/5/EC (see article 18).~~

~~If it is desired to give the user of the deliverable some guidance on safety matters, see the appropriate skeleton document available from **!** website.~~

6 Editorial layout and formatting

6.1 ETSI styles

~~Use table 8~~ In order to achieve greater homogeneity between ETSI deliverables, ETSI is defining a set of styles that **shall** be used in all ETSI deliverables. The ETSI styles toolbar and other tools such as ETSI deliverable skeletons include editorial aspects such as styles, fonts, table and figure formatting as well as many others and **shall** be used when determining which style to use for various elements of the ETSI deliverable. ~~Do not alter existing~~

The styles or formats pre-set in the ETSI deliverable skeletons or ETSI styles~~, do~~ toolbar, **shall not** ~~add new~~be altered or deleted. New styles ~~to the ETSI template and do~~**shall not** ~~delete~~be added to ETSI deliverable skeletons. ~~styles (see style FP in table 8).~~

~~NOTE: For an easy application of the ETSI styles download "the ETSI styles toolbar" from **!**~~**~~Table 8~~**

~~Use this style~~	~~For this type of element~~
~~**Heading styles**~~	~~**For different headings**~~
~~**Heading 1**~~	~~Clause~~
~~**Heading 2 to 5**~~	~~Subdivision level 2 to 5~~
~~**H6**~~	~~Subdivision level 6 (**not** reflected in the table of contents)~~
~~**Heading 8**~~	~~Annex title~~
~~**Heading 9**~~	~~Annex title for TRs and SRs only~~
~~**Example styles**~~	~~**For examples and abbreviations/symbols lists**~~
~~**EX**~~	~~Reference, Example →~~
~~**EW**~~	~~Symbol, Abbreviation, Example continuation in text →~~
~~**Note style**~~	
~~**NO**~~	~~Note integrated in the text →~~
~~**Figure styles**~~	~~**For formatting figures**~~
~~**TF**~~	~~Figure title~~
~~**FL**~~	~~Figure layout~~
~~**NF**~~	~~Note in figure →~~

Use this style	For this type of element
Table styles	**For formatting tables**
TH	Table title
TAH	Heading within table or column heading
TAC	Centred texts
TAL	Left aligned text
TAR	Right aligned text
TB1	List in tables Level 1
TB2	List in tables Level 2
TAN	Note in table →
List styles (indents)	
B1 to B5	Indent 1 to 5
B1+	Bulleted indent 1 (round bullets)
B2+	Bulleted indent 2 (dashes)
B3+	Bulleted indent 3 (square bullets)
BN	Bulleted (numbers) indent 1
BL	Bulleted (letters) indent 1
General styles	**For different items**
Normal	Standard paragraph, Definition
TT	Contents list title
PL	Programming language
EQ	Equation
Header	Header (portrait and landscape pages)
Style which can be user-defined	**For formatting defined by the user that will not be altered by the ETSI processing macros**
FP	Free Paragraph
→ use "tab" between "item/number" and "text". EXAMPLE: The "tab" is preceding this example text.	

6.2 Capital letters

Unnecessary use of capital letters ~~should~~**shall** be avoided.

EXAMPLE: "user" is preferred to "User".

6.3 Different items concerning text

Table 8 provides instructions for text formatting in ETSI deliverables.

Table 8: Text formatting instructions

Bold text	Use bold to emphasize text ~~(the underline attribute causes confusion with weblinks and revision marks).~~
Italic text	Use *italic* for citations, linguistic expressions or when a word/text/expression is extracted from a specific context.
Non-breaking spaces	Use non-breaking spaces (°) or non-breaking hyphens (-) in order to avoid unexpected wrap around between two words and/or numbers (e.g. 50°cm, 1°000, clause°6, etc.). These characters appear as normal spaces ( ) or hyphens (-) when printed out.
Quotation marks	Use "only straight" quotation marks ~~("...") not "curly" or "smart quotes".~~("…").
Underlined text	~~It is~~Do not ~~recommended to~~ use underlined text ~~(~~in order to avoid confusion with ~~weblinks~~web links and revision marks~~).~~.
Spaces after punctuation	Do not put more than one space after a full stop. Do not precede comma (,), semicolon (;), colon (:), full stop (.), question mark (?) or exclamation mark (!) by spaces.
Tabulation	Do not use spaces in place of tabs when indentation/alignment is required; this can cause text to be misaligned.

6.4 Dimensions and tolerances

Dimensions and tolerances **shall** be indicated in an unambiguous manner. The examples are given on the *editHelp!* website.

~~NOTE 1: In the text below, ° represents the non-breaking space character.~~

~~EXAMPLE 1: 80 mm°×°25 mm°×°50 mm (not 80 × 25 × 50 mm).~~

~~EXAMPLE 2: 80 µF°±°2 µF or (80 ± 2) µF.~~

~~EXAMPLE 3: 16 kbit/s to 64 kbit/s (not 16 to 64 kbit/s).~~

~~EXAMPLE 4: 0 °C to 10 °C (not 0 to 10 °C).~~

~~EXAMPLE 4a: X = [1..8].~~

In order to avoid misunderstanding, tolerances on percentages **shall** be expressed in a mathematically correct form.

~~EXAMPLE 5: Write "from 63°% to 67°%" to express a range.~~

~~EXAMPLE 6: Write "(65°±°2)°%" to express a centre value with tolerance.~~
~~The form "65°±°2°%" shall not be used.~~

For "scientific units" (e.g. "s" for second(s)), please refer to the "Use of English guide" given on the *editHelp!* website.

~~NOTE 2: For "scientific units" (e.g. "s" for second(s)), please refer to the "Use of English guide" available from *editHelp!* website.~~

6.5 Quantities, units, symbols and signs

The units in which any values are expressed **shall** be indicated.

6.6 Representation of numbers and numerical values

The decimal sign **shall** be a comma. The thousand separator **shall** be a space.

~~NOTE 1: In the text below, ° represents the non-breaking space character.~~

If a value less than 1 is written in decimal form, the decimal sign **shall** be preceded by a zero.

~~EXAMPLE 1: 0,001.~~

Each group of three digits reading to the left of a decimal sign **shall** be separated by a space from preceding digits or following digits respectively, except for four-digit numbers designating years.

~~EXAMPLE 2: 23°456 2°345 2,345 2,345 6 2,345 67 but the year 1997.~~

For clarity, the symbol × or a lower case x (rather than a point or any other symbol) **shall** be used to indicate multiplication of numbers and numerical values.

~~EXAMPLE 3: Write 1,8°×°10^{-3} (not 1,8 * 10^{-3} or 1,8 •10^{-3} or 1,8 . 10^{-3}).~~

~~NOTE 2: The exception are vector values because it makes a difference whether multiplying with a "•" (scalar value) or with a "×" (vector value).~~

To express numbers of items (as opposed to numerical values of physical quantities), the numerals one to nine **shall** be ~~spelt~~spelled out in full.

~~EXAMPLE 4: "Carry out the test on five tubes, each 5 m long."~~

~~EXAMPLE 5: "Select a further 15 tubes for the pressure test."~~

~~Preserve document identities as in the original titles.~~

~~EXAMPLE 6: ISO/IEC°10531-1 (not ISO/IEC 10°531-1).~~

~~EXAMPLE 7: ES°201°150.~~

~~Put a non-breaking space between a~~A number and its unit~~–~~, including the ~~percent~~percentage sign (%) ~~-~~**shall** be separated with a non-breaking space, even if the unit is not abbreviated~~:~~.

~~EXAMPLE 8: 2°pages 4°seconds 15°%.~~

~~Write a~~A number preceded by ~~a~~an unary operator (sign) ~~without~~**shall not** be separated by an intervening space, except for ≤, ≥, >, ~~<:~~<.

~~EXAMPLE 9: a level of -3°dB …~~

~~EXAMPLE 9a: > 3 dB~~

~~Put a~~A non-breaking space **shall** be inserted both before and after binary operators ~~(+, −, ×,~~(+, −, ×, etc.~~):~~).

The examples on representation of numbers and numerical values are given on the *editHelp!* website.~~EXAMPLE 10: a°+°b°=°c.~~

~~Use non-breaking spaces ("Ctrl" + "Shift" + space) for the thousand separator, before and after binary operators and preceding units.~~

~~Use a non-breaking hyphen for the minus sign:~~

~~For AZERTY keyboard ("Ctrl" + 8)~~

~~For QUERTY keyboard "Ctrl" + "Shift" + "hyphen (_)~~

6.7 Referencing the ETSI deliverable as a whole in its own text

6.7.1 Referencing the single deliverable

The form "the present document ..." **shall** be used.

6.7.2 Referencing a multi-part deliverable

The following formulation **shall** be used:

For a specific part:

- "ETSI EN 300 256-2 is ...".

For various specific parts:

- "ETSI EN 300 256-7 to ETSI EN 300 256-9 are....".
- "ETSI EN 300 256-5 and ETSI EN 300 256-8 are ...".

For all parts:

- "All parts of ETSI EN 300 256 ..."

6.7.3 Referencing elements of text

Use, for example, the following forms:

- "in accordance with clause 3";
- "according to clause 3.1";
- "as specified in clause 3.1 b)";
- "details as given in clause 3.1.1";
- "see annex B";
- "the requirements given in clause B.2";
- "see the note in table 2";
- "see example 2 in clause 6.6.3";
- "see note 3 in clause 6.6.1".

If there is a need to refer to an unnumbered list item, the following formulation **shall** be used:

- "as specified in clause 3.1, second list item".

Lower case letter should be used. The use of lower and upper case letters **shall** be consistent throughout an ETSI deliverable including annexes.

~~Lower case letters are recommended (e.g. clause 1, annex A), however capital letters are also acceptable (e.g. Clause 1, Annex A). Usage **shall** be consistent anywhere in an ETSI deliverable including annexes.~~

~~References shall be made in the forms indicated in clauses 6.7, 5.1.6 and 5.2.8 and~~References **shall not** be made to page numbers.

The terms that **shall** be used to designate the divisions and subdivisions that an ETSI deliverable may have are shown in table 9.

Table 9: Names of divisions and subdivisions

Term	Example of numbering
part	ES 201 111-1
sub-part	ES 201 111-1-2
clause	1
clause	1.1
clause	1.1.1
annex	A
clause	A.1
clause	A.1.1
paragraph	
subclause	

~~NOTE: The use of~~ terms "paragraph" and "subclause" ~~is authorized~~may be used in ~~"~~exceptional cases~~"~~ (e.g. where the ~~ETSI Drafting Rules~~EDR, if applied, would change the meaning of the sentence or make it difficult to understand).

EXAMPLE: "... is described in the remaining subclauses of this clause".

6.8 Pagination

Unnecessary forced pagination, (i.e. use of hard page breaks) ~~should~~**shall not** be ~~avoided~~used.

~~Use Format | Paragraph | Text Flow | Keep Lines Together and Keep with Next attributes instead of "hard" page breaks.~~

6.9 Numbering

6.9.1 Page numbering, page headers and footers

The ETSI deliverable skeleton ~~document~~ supplies fields for automatic page numbering and the identification of the ETSI deliverable in the page header. ~~Do~~These fields **shall not** ~~add anything to or delete anything from the headers and footers.~~be changed.

~~Use the **HEADER** style on all page headers (sections) except for the title page (section).~~

6.9.2 Sequence numbering and bookmarking

Sequence numbering ~~is highly recommended to automatically number~~ should be used for automatic numbering of **sets of items** within an ETSI deliverable, especially if the document is long and/or contains numerous references, tables, figures, equations, etc. ~~It avoids renumbering the whole sets when inserting new items.~~

Sequence numbers may also be bookmarked, in order to facilitate cross-referencing throughout the text: it avoids renumbering cross-references and guarantees their accuracy.

~~**Do not use cross-referencing option, since it implies the use of automatic heading or caption numbering (see clause 2.12.1.1).**~~

Use the following sequence identifiers (**Insert/Field/Numbering Seq** and type in the relevant sequence identifier).

Table 10: Sequence numberings

Sequence	Bookmark name	Description
seq equ	equ_xx	for equations (note 1)
seq fig	fig_xx	for figures (note 1)
seq ref	ref_xx	for normative references
seq refi	ref_xx	for informative references
seq tab	tab_xx	for tables (note 1)
NOTE 1: Reset the sequence numbering to one for the first item of each annex of an ETSI deliverable by using the switch **\r1** (e.g. **{ seq fig \r1 }**).		
NOTE 2: "xx" represents the identifier for the particular object concerned, e.g. "fig_ProcessControl" or "ref_en300466". Do not use bookmarks of the form "fig_fig1". You can use underscores as separators in sequence identifiers if necessary.		

Thus the title of a table will be read:

Table { seq tab }: Table title

Bookmark each entry in a sequence (select it and use **Insert/Bookmark/Add**), using a bookmark name of the form shown in table 10. You can then refer to the table, figure, reference, etc. from the text by inserting a sequence field citing the same sequence identifier and the particular bookmark required. For example, table 10 has been bookmarked "tab_Seq_Num". Thus a reference to this table from the text ~~reads~~is read:

… see table { seq tab tab_Seq_Num } …

~~Remember to refresh the fields in order to view the correct numbers by using the "Update fields" command (F9).~~

~~7 Text containing SDL, program code, ICS~~7 Use of specialised technical languages

7.1 Common aspects of using technical languages

Different technical languages may be used in ETSI deliverables. The nonexhaustive list of example languages is:

- Program code in any programing language
- Abstract Syntax Notation One (ASN.1)
- Unified Modelling Language (UML)
- Extended Markup Language (XML)
- Testing and Test Control Notation version 3 (TTCN-3)

~~7.1 SDL and MSC diagrams~~

- ~~There are three ways to include SDL diagrams (~~Tree and Tabular Combined Notation (TTCN-2)
- Specification and Description Language (SDL)~~), MSC diagrams (~~
- Message Sequence Chart (MSC)~~Charts) or HMSC diagrams (High level MSC) as part of an ETSI deliverable.~~

~~One is to embed SDL, MSC or HMSC diagrams in Word documents by selecting the diagram contents in the SDL/MSC tool and copy/paste into Word. Further editing as Word picture gives poor results and should be avoided.~~

~~A second way is to include embedded postscript files produced by an SDL/MSC tool into the Word document.~~

~~In both these cases, provide SDL, MSC or HMSC diagrams in SDT binary files or as CIF files when not using SDT. Do not include SDL headers or footers.~~

~~A third way is to provide the SDL model or MSC and HMSC diagrams as a separate file. This is recommended for large SDL models or large collection of MSC diagrams. In this case, provide CIF files, postscript or PDF files, and also if using SDT include the SDT binary files. If the SDL model uses ASN.1 data, include the ASN.1 data files, to be published with the CIF files.~~

~~NOTE: Microsoft® Visio® shall **not** be used for SDL production.~~

~~7.2 Program~~

Most technical languages have a textual syntax. Small examples of such code may be embedded in the text of the ETSI deliverables. Complete or large pieces of code in one of the above languages **shall** be included in an electronic attachment, in which case the ETSI deliverable **shall** contain an annex that **shall** mention the name of the electronic attachment. Such an annex may be normative or informative.

Some of the above languages also have a graphical syntax. Examples of diagrams may be included in the ETSI deliverable. Complete specifications including graphics may be included in an electronic attachment, in which case the ETSI deliverable **shall** contain an annex that **shall** mention the electronic attachment. Such an annex may be normative or informative.

The Secretariat should be able to edit such graphics and therefore the appropriate sources should be made available before publication.

~~Large volumes of program code, source code or formal description language **shall** be placed in an electronic attachment accompanying the ETSI deliverable.~~

~~Machine readable code contained in an electronic attachment will be considered as the definitive text, in the case of discrepancy with text reproducing the same code in the ETSI deliverable.~~

The text to be used when files are attached to an ETSI deliverable can be found in the appropriate ETSI deliverable skeleton given on the *editHelp!* website.

~~Text to be used when files are attached to the ETSI deliverable (if nothing already mentions it in the deliverable) can be found in the appropriate skeleton document available from *editHelp!!* website.~~

7.2 SDL and MSC diagrams

For small examples SDL and MSC diagrams may be embedded in ETSI deliverables as pictures.

Complete models may be included in electronic attachments in their native SDL/MSC tool format.

7.3 Program code, ASN.1 modules, XML code

As program code, ASN.1 and XML are text based, see clause 7.1 on the way to include them in ETSI deliverables.

XML code may, in addition, be stored at the URI referenced in the XML code. XML code which uses the ETSI root URI http://uri.etsi.org/xxxxx/ (where xxxxx is the five-digit number obtained by removing the first digit of the ETSI deliverable number, and any part or sub-part numbers) may, upon request, be stored by the Secretariat at the appropriate location in the http://uri.etsi.org space.

~~7.3 Implementation Conformance Statement (ICS) proforma tables~~

~~Use the guidance and the ICS proforma templates contained in EG 201 058 (available from *I* website).~~

7.4 Testing and Test Control Notation (formerly Tree and Tabular Combined Notation (TTCN))

Provide TTCN as separate file(s):

- for TTCN ~~version 2 (TTCN-2)~~ 2 attach the TTCN.MP.
- for TTCN ~~version~~ 3 ~~(TTCN-3)~~ attach the TTCN-3 files and other related modules, as well as the HTML documentation of the TTCN-3 files.

The textblock to be used in case of ATSs using TTCN-3 can be found in the appropriate ETSI deliverable skeleton ~~document available from~~given on the *editHelp!* website.

~~7.5 PC configuration~~

~~7.5.1 Configuration of your PC environment~~

~~Set your PC environment to use the English (International) conventions.~~

~~Use centimetres as the preferred unit of measurement.~~

~~Do **not** select Change 'Straight Quotes' to 'Smart Quotes' in the AutoCorrect options.~~

~~Set Default Tab Stops to 0,5 cm.~~

~~The remaining configurable elements of your PC are at your discretion.~~

~~7.5.2 Supported file formats~~

~~The following document formats are currently accepted by the Secretariat:~~

~~Microsoft® Word 97-2013~~

~~Microsoft® Word 97-2007~~

~~Microsoft® Word 97-2003~~

~~NOTE 1: Versions prior to this are strongly discouraged.~~

~~The following file formats for embedding into a document are currently accepted by the Secretariat:~~

~~Microsoft® Visio® 2007 and 2013~~

~~NOTE 2: Regarding the use of "stencils" or "templates", it is recommended to use those supplied with the standard version.~~

~~If additional ones are used, they should be provided to the Secretariat, together with the electronic version of the deliverable.~~

~~NOTE 3: Microsoft® Visio® shall **not** be used for SDL production (see clause 7).~~

~~Microsoft® Office® products (i.e. Excel, Powerpoint)~~

~~The information in this clause was valid at publication of the present document. Please consult the ***!*** website for subsequent updates.~~

8 Harmonised Standards

8.1 General directions

The appropriate ETSI deliverable skeleton ~~document~~ to assist the structuring and drafting of ~~Harmonised Standards~~a HS is ~~available from ***!***~~given on the *editHelp!* website~~).~~.

The elements necessary for the drafting of a ~~Harmonised Standard~~HS are briefly summarized below:

a) ~~The Harmonised Standard~~the HS **shall** be an EN produced in accordance with the ~~ETSI Drafting Rules.~~EDR;

b) the EN **shall** be identified as a ~~Harmonised Standard~~HS, the reference of which is intended to be published in the Official Journal of the European Union (OJEU) referencing the relevant Directive. This identification **shall** be made in the "Foreword" ~~at "Public Enquiry", "EN Approval Procedure" and "National Vote" stage and when the standard is published by ETSI (see clause 8.2).~~clause;

c) ~~The Harmonised Standard~~the HS **shall** have appropriate transposition periods specified. ~~A Harmonised Standard~~A HS confers presumption of conformity when it has been published in the ~~Official Journal of the European Union (~~OJEU~~) and transposed by a member state. The Official Journal~~. The OJEU citation gives the date of cessation of presumption of conformity of a previous standard. This is usually taken to be the date of withdrawal (dow) supplied by the standardization body~~.~~;

d) ~~The Harmonised Standard~~the HS **shall** include all technical specifications necessary for demonstrating presumption of conformity of the products and phenomena within its scope~~.~~;

e) ~~Methods~~methods of measurement may be included in the ~~Harmonised Standard~~HS, or may be normatively referenced in the text~~.~~;

f) ~~The Harmonised Standard~~the HS **shall** contain ~~a normative~~an informative annex identifying the technical specifications with the essential requirements of the relevant Directive (see clause 8.5~~).~~) as well as a change history.

NOTE 1: ETSI Guide EG 201 399 ~~gives~~gave guidance on the production of ~~Harmonised Standards~~HSs for all radio equipment and telecommunication terminal equipment under Directive 1999/5/EC (the R&TTE Directive). The R&TTE Directive ~~will be~~is now repealed with effect from 13th June 2016. This guide is ~~available from~~given on the *editHelp!* ***!*** website.

NOTE 2: ETSI Guide EG 203 336 gives guidance on the production of ~~Harmonised Standards~~HSs for application under Directive 2014/53/EC which ~~will be~~is applied from 13th June 2016. This guide is ~~available from ***!***~~given on the *editHelp!* website.

~~NOTE 3: The information in this clause was valid at publication of the present document. Please consult the ***!*** website for subsequent updates.~~

8.2 Foreword of a Harmonised Standard

For the content of the foreword, see clause 2.5. The ~~textblock~~text block to be used in the foreword of ~~the Harmonised Standard can~~a HS **shall** be ~~found~~as given in the ~~appropriate~~ETSI HS skeleton given on the *editHelp!* website.~~document available from !~~

8.3 EMC statements

ETSI TC ERM WG EMC is responsible for standardization and statements that may be required to be included in any ETSI deliverables regarding the EMC performance.

There are a number of EMC standards from both ETSI and CENELEC that have been cited in the ~~Official Journal of the European Union (~~OJEU~~)~~ in connection with both the EMC Directive ~~2004/108/EC~~(2014/30/EU) and the ~~R&TTE Directive 1999/5/EC.~~RED (2014/53/EU). Such ~~Harmonised Standards can~~HS may be used to demonstrate compliance with some or all of the essential requirements of the EMC Directive or the essential requirements of ~~article~~ Article 3.1(b) of the ~~Radio equipment & Telecommunications Terminal Equipment (R&TTE) Directive 1999/5/EC (see article 18~~RED (2014/53/EU).

If it is desired to give the user of the ETSI deliverable some guidance on EMC matters, the following text may be used in all ETSI deliverables (either as a separate clause or as the final element of the "Scope" clause):

"Requirements for EMC are outside the scope of the present document. Lists of relevant standards cited under the EMC Directive and the ~~R&TTE~~RED Directive can be found at:

- https://ec.europa.eu/growth/single-market/european-standards/harmonised-standards/electromagnetic-compatibility_en; and
- https://ec.europa.eu/growth/single-market/european-standards/harmonised-standards/red_en.

8.4 Normative references in a Harmonised Standard

Normative references in ~~Harmonised Standards~~HS **shall** be specific (identified by date of publication and/or edition number or version number). See clauses 2.10, 2.10.1.1 and 2.10.1.~~3~~2.

8.5 Annex of a Harmonised Standard

The HS **shall** include a table identifying the relationship between the normative clauses of the standard and the essential requirements of Directive YYYY/DD/LL in an annex (see also clauses 2.13 and 2.13.1).

~~The Harmonised Standard **shall** include an annex A as its first normative annex which presents a requirements table and conformance test specifications table (see also clauses 2.13 and 2.13.1).~~

The textblock and the table to be used in ~~this~~the annex ~~can~~of the HS **shall** be ~~found~~as given in the ~~appropriate~~ETSI HS skeleton ~~document~~ available ~~from~~on the *editHelp!* ~~!~~ website.

8.6 The EN title in the official languages

Prior to publication in the ~~Official Journal of the EU~~OJEU, the title of a ~~Harmonised Standard has to~~HS **shall** be available in all of the official languages.

~~NOTE: The~~ The translated titles of ~~Harmonised Standards~~HS are provided to ETSI by the relevant National Standards Organisation (NSO) ~~during~~prior to submission to the European Commission for citation in the ~~public approval procedure (Public Enquiry, Vote and EN Approval Procedure).~~OJEU.

9 Endorsement of documents from other standards organizations

9.0 General information - Endorsement

In the case that an ETSI deliverable would become almost identical to (i.e. with or without modifications use the entirety of) a document from another standards organization, a ~~Technical Body~~RB may decide to prepare an ETSI deliverable defining only the differences, if any, between that document (commonly called "endorsed document") and the ETSI deliverable.

Such an ETSI deliverable, commonly called "endorsement", **shall** be drafted in accordance with the ~~ETSI Drafting Rules~~EDR, in addition to clauses 9.2, 9.3 and 9.4.

Two kinds of endorsements are possible:

- endorsement without modifications;
- endorsement with modifications.

In both ~~of the~~ cases the endorsed text ~~will~~**shall** be introduced by a clause titled "Endorsement notice".

9.1 Endorsement notice

The "Endorsement notice" clause is unnumbered and located after the "Definitions, symbols and abbreviations" clause. The "Endorsement notice" clause is a required normative element~~. The textblock to be used can be found in the appropriate skeleton document available from *!* website~~.

The preferred method of endorsement is defined in clauses 9.2 and 9.3.

In exceptional circumstances and in justified cases only, the methods defined in clause 9.5 may be used.

9.2 Endorsement without modifications

If the endorsed document is referred to without modifications, the title of the ETSI deliverable should be as close as possible to the title of the endorsed document, while still complying with the provisions of clause 2.1 and it **shall** be dated~~. See example:~~

EXAMPLE:

Endorsement of ITU-T Recommendation Q.1215 (1993): "Physical plane for intelligent network CS1", gives the following ETSI deliverable title:

Intelligent Network (IN);
Physical plane for intelligent network
Capability Set 1 (CS1)

[ITU-T Recommendation Q.1215 (1993)]

~~The endorsement skeleton document available from *!* website provides exhaustive examples and textblocks to be used while drafting this kind of document.~~

9.3 Endorsement with modifications

If the endorsed document is referred to with modifications (technical and/or editorial), the title of the ETSI deliverable **shall** clearly indicate that this is the case and **shall** be dated (see example).

EXAMPLE:

Endorsement of ITU-T Recommendation G.957 (1993): "Optical interfaces for ~~equipments~~equipment and systems relating to the synchronous digital hierarchy", gives the following ETSI deliverable title:

Transmission and Multiplexing (TM);
Optical interfaces for equipments and
systems relating to the Synchronous Digital
Hierarchy (SDH)

[ITU-T Recommendation G.957 (1993), modified]

Throughout the ETSI deliverable, the modifications **shall** be presented in an order following the sequence of clauses of the endorsed document. General modifications **shall** precede specific modifications.

The use of underlining and striking out for the presentation of the modifications ~~is recommended~~**shall** be used.

~~The endorsement skeleton document available from *!* website provides exhaustive examples and textblocks to be used while drafting this type of deliverable.~~

9.4 Annex in endorsement document

Designation of the serial order of an annex **shall** be with two letters, the first letter always being Z (i.e. ZA, ZB, ZC, etc.), in order to avoid confusion with any annexes of the endorsed document.

9.5 Reproduction of text from other standards organizations in endorsements

9.5.1 General and copyright

In exceptional and justified cases, it may be desired to reproduce all or part of an endorsed document, in which case the ETSI deliverable **shall** be drafted according to either clause 9.5.2 or 9.5.3, and **shall** take into full consideration the following copyright requirements, unless the owner of the endorsed document agrees to make the document available for easy download from a website, the owner's, ETSI's or a third party site:

- a signed agreement between ETSI and the organization owning the copyright of the endorsed document **shall** be in place;
- the signed agreement **shall** permit ETSI to reproduce and make publicly available the deliverables of the other organization, either in part or in full;
- the resulting document becomes an ETSI deliverable with the ETSI copyright and it may be desired by ETSI to modify the contents of the endorsed document either at the time of initial publication or later. It is implicit therefore that the signed agreement **shall** permit ETSI to modify the text of endorsed documents.

9.5.2 Inclusion without change

The ETSI deliverable (an endorsement without modification) **shall** be drafted in accordance with the ~~ETSI Drafting Rules~~EDR, in particular in accordance with clause 9.2.

ETSI **shall not** modify the endorsed document in any way and **the entire unchanged PDF copy of the endorsed document shall** be attached to the ETSI deliverable.

~~The endorsement skeleton document available *I* website provides appropriate textblock to be used while drafting this type of document.~~

9.5.3 Inclusion with change

The ETSI deliverable (an endorsement with modification) **shall** be drafted in accordance with the ~~ETSI Drafting Rules~~EDR, in particular in accordance with clauses 9.3 and 9.4.

ETSI may modify the endorsed document and **the entire (modified) document shall** be included in the resulting ETSI deliverable (irrespective of whether it is all or part of the document which is being endorsed).

Glossary

bibliography: list of standards, books, articles, or other sources on a particular subject which are not ~~mentioned~~cited anywhere in an ETSI deliverable including annexes

~~**deliverable:** ETSI document, established by consensus and approved by a recognized body, that provides, for common and repeated use, rules, guidelines or characteristics for activities or their results, aimed at the achievement of the optimum degree of order in a given context~~

~~**draft standard:** document containing the text of the technical specifications concerning a given subject, which is being considered for adoption in accordance with the relevant standards procedure, as that document stands after the preparatory work and as circulated for public comment or scrutiny~~

~~**European standardization deliverable:** any other technical specification than a European standard, adopted by a European standardization organization for repeated or continuous application and with which compliance is not compulsory~~

informative element: provides additional information intended to assist the understanding or use of the ETSI deliverable, but which can be removed without changing its technical substance

informative reference: reference that is not ~~essential to~~necessary for the ~~use~~implementation of the ETSI deliverable ~~but~~and that only assist the user ~~with regard to a particular subject area~~

~~NOTE: Informative references mentioned anywhere in an ETSI deliverable itself including annexes, are numbered and listed in clause 2.2 (References) otherwise they are listed in an annex entitled "Bibliography".~~understanding it

informative reference clause: clause listing all informative references ~~cited~~ in the ETSI deliverable ~~which are not necessary for its application but assist the user with regard to a particular subject area~~

instruction: provision that conveys an action to be performed (ISO/IEC Guide 2: 1996, definition 7.3)

normative element: sets out the provisions to which it is necessary to conform in order to be able to claim compliance ~~with the~~to an ETSI deliverable

normative reference: ~~essential to~~ reference cited in a requirement of an ETSI deliverable and therefore necessary for the ~~use~~implementation of the ETSI deliverable~~, i.e. without which the deliverable cannot be implemented~~

normative reference clause: clause listing all normative references ~~cited in the document which are necessary for its application~~

~~NOTE: For specific references, each shall be given with its year of publication or, in the case of enquiry with its year of issue, and full title. The year of publication or year of issue shall not be given for non-specific references. When a non-specific reference is to all parts of a document, the publication number shall be followed by the indication "(all parts)" and the general title of the series of parts.~~an ETSI deliverable

provision: expression in the content of an ETSI deliverable that takes the form of a statement, an instruction, a recommendation or a requirement

NOTE: ~~These types of provision~~Provisions are distinguished by the form of wording they employ; e.g. instructions are expressed in the imperative mood, recommendations by the use of the auxiliary "should" and requirements by the use of the auxiliary "shall" (see clause 3.2).

~~**publicly available:** in the context of referencing documents within ETSI deliverables, a document that may be obtained from the source organization or its distribution channels by any person (with or without payment), simply by quoting the reference given in the ETSI deliverable to the source organization or other typical supplier (e.g. National Standards Organization, Library, etc.)~~

~~NOTE:~~ **publicly available:** document which is available either free of charge or under reasonable and non-discriminatory terms to the public

NOTE 1: Even prior to publication ETSI deliverables are made publicly available during the various stages of the relevant approval procedures ~~prior to publication and at the point of publication. Thus, for ETSI deliverables, public availability is a broader concept than publication.~~. The specific status of a publicly available ETSI deliverable ~~may be determined by examining~~is indicated in its History clause.

NOTE 2: This may also be true ~~of~~for other standardization bodies whose documents are referenced ~~by~~in ETSI deliverables and this is taken into account during the preparation of ETSI deliverables.

EXAMPLE~~:~~ 1: ~~A~~ An EN submitted to a Public Enquiry ~~version of an ETSI deliverable~~ in the frame of the EN Approval Process is made publicly available ~~by ETSI and, therefore, fulfils the above definition~~.

EXAMPLE 2: If it is necessary to become a member of an organisation to obtain a document, the referenced document is not considered as publicly available.

published: ETSI deliverable made available at http://www.etsi.org/deliver~~specific case~~ following successful completion of ~~public availability for an ETSI deliverable, occurring when~~ all relevant approval procedures ~~have been successfully completed~~

~~NOTE: A published deliverable may be identified by examining the History clause of the document in question.~~ NOTE: The last line in the History box of a published ETSI deliverable will contain the word "Publication".

recommendation: expression in the content of a document conveying that among several possibilities one is recommended as particularly suitable, without mentioning or excluding others, or that a certain course of action is preferred but not necessarily required, or that (in the negative form) a certain possibility or course of action is deprecated but not prohibited

~~NOTE: Table "4" specifies the verbal forms for the expression of recommendations.~~

~~**requirement:** expression in the content of a document conveying criteria to be fulfilled if compliance with the document is to be claimed and from which no deviation is permitted~~

NOTE: Table "3" specifies the verbal forms for the expression of recommendations.

reference: document, URI or URL cited anywhere in an ETSI deliverable including annexes

Reference Body: Technical Committee (TC), an ETSI Project (EP), an ETSI Partnership Project (EPP), a Special Committee (SC) or an Industry Specification Group (ISG)

requirement: expression in the content of a document conveying criteria to be fulfilled if compliance with the document is to be claimed and from which no deviation is permitted

NOTE: Table "2" specifies the verbal forms for the expression of requirements.

ETSI deliverable document: pre-structured document that serves as a starting point for drafting a new ETSI deliverable.

standard: document, established by consensus and approved by a recognized body, that provides, for common and repeated use, rules, guidelines or characteristics for activities or their results, aimed at the achievement of the optimum degree of order in a given context

NOTE 1: This definition of standard is taken from ISO/IEC Guide 2: 2018

NOTE 2: This definition is different from the definition of STANDARD (always in capital letters) used throughout other parts of ETSI Directives.

statement: ~~provision~~expression, in the content of a deliverable that conveys information ~~(ISO/IEC Guide 2: 1996, definition 7.2)~~

NOTE: This definition is taken from ISO/IEC Guide 2: 2018.

Acronyms

~~ASCII~~	~~American Standard Code for Information Interchange~~
ASN.1	Abstract Syntax Notation no. 1
~~CIF~~	~~Common Interchange Format~~
~~EDRs~~EDR	ETSI Drafting Rules
EN	European Standard
EG	ETSI Guide
EMC	ElectroMagnetic Compatibility
EN	European Standard
ENAP	EN Approval Process
EP	ETSI Project
EPP	ETSI Partnership Project
ES	ETSI Standard
~~ETS~~	~~European Telecommunication Standard~~
~~GDMO~~	~~Guidelines for the Definition of Managed Objects~~
GR	ETSI Group Report
GS	ETSI Group Specification
~~HMSC~~	~~High level MSC~~
~~ICS~~	~~Implementation Conformance Statement~~
HS	Harmonised Standard
IPR	Intellectual Property Rights
~~LVD~~	~~Low Voltage Directive~~
~~MP~~	~~Machine Processable~~
ISG	ETSI Industry Specification Group
MAP	Membership Approval Process
MSC	Message Sequence Charts
NSO	National Standards Organisation
OJEU	Official Journal of the European Union
PAS	Publicly Available Specification
PDF	Portable Document Format
RB	Reference Body
R&TTE	Radio equipment & Telecommunications Terminal Equipment
RED	Radio Equipment Directive
SC	ETSI Special Committee
SDL	Specification and Description Language
~~SDT~~	~~SDL Development Tool~~
SR	ETSI Special Report
~~TB~~	~~Technical Body~~
TC	ETSI Technical Committee
TR	ETSI Technical Report
TS	ETSI Technical Specification
~~TTCN~~	~~Testing and Test Control Notation~~
TTCN-2	Tree and Tabular Combined Notation version 2
~~NOTE:~~	~~The introduction of TTCN-3 led to a name change from Tree and Tabular Combined Notation to Testing and Test Control Notation. It shall be made clear in each ETSI deliverable which version of applies.~~
TTCN-3	Testing and Test Control Notation version 3
TTCN	any version of TTCN
TWP	ETSI Technical Working Procedures
UML	Unified Modelling Language
URI	Uniform Resource Identifier
URL	Uniform Resource Locator
WNV	Weighted National Vote
XML	Extended Markup Language

History

Document history		
~~v1~~V1.1.1	April 1998	Publication as TR 101 262 (Withdrawn)
~~v1~~V1.2.1	September 2000	Publication as SR 001 262 (Withdrawn)
~~v1~~V1.3.1	April 2001	Publication as SR 001 262 (Withdrawn)
~~v1~~V1.4.1	September 2001	Publication as SR 001 262 (Withdrawn)
~~v1~~V1.5.1	February 2002	Publication as SR 001 262 (Withdrawn)
~~v1~~V1.6.1	July 2002	Publication as SR 001 262 (Withdrawn)
~~v1~~V1.7.1	November 2002	Publication as SR 001 262 (Withdrawn)
~~v1~~V1.8.1	December 2003	Publication as SR 001 262 (Withdrawn)
~~v2~~V2.0.0	July 2004	Publication as SR 001 262 (Withdrawn)
~~v22~~	~~July~~June 2007	~~Incorporation as part of~~Publication in the ETSI Directives ~~Version 22~~(V22, July 2007)
		Publication in the ETSI Directives (V23, December 2007)
~~v24~~	~~May~~April 2008	Publication in the ETSI Directives (V24, May 2008)
~~v25~~	January 2009	Publication in the ETSI Directives (V25, January 2009)
		Publication in the ETSI Directives (V26, July 2009)
~~v27~~	~~May 2010~~October 2009	Publication in the ETSI Directives (V27, May 2010)
~~v28~~	~~May~~January 2011	Publication in the ETSI Directives (V28, May 2011)
~~v29~~	January 2012	Publication in the ETSI Directives (V29, January 2012)
~~v30~~	January 2013	Publication in the ETSI Directives (V30, January 2013)
~~v31~~	April 2013	Publication in the ETSI Directives (V31, April 2013)
		Publication in the ETSI Directives (V32, October 2013)
~~v33~~	May 2014	Publication in the ETSI Directives (V33, May 2014)
~~v34~~	December 2014	Publication in the ETSI Directives (V34, December 2014)
	June 2015	Publication in the ETSI Directives (V35, December 2015)
		Publication in the ETSI Directives (V36, June 2016)
		Publication in the ETSI Directives (V37, April 2017)
		Publication in the ETSI Directives (V38, February 2018)

Document history		
~~v35~~	~~December 2015~~September 2018	~~**Updated EDR clause 1.1** to append the definition of EN with definition of Harmonised Standard as specific case of EN. **Updated EDR clauses 2.13.0, 5.8, 8, 8.1, 8.2, 8.3, 8.4, 8.5 and 8.6** to align the EDRs with the European Standardisation Regulation in their spelling of the term Harmonised Standard, spelled with "s" rather than "z". **Updated EDR clauses 9.2 and 9.3** to specify that the endorsement of documents from other standards organizations shall be dated.~~Publication in the ETSI Directives (V39, September 2018) **What are the ETSI Drafting Rules clause, clauses 1.1, 4, 5.6, 5.7, 7 and 7.5** updated to remove partially or entirely information already available from editHelp! Website, ETSI deliverable skeletons or ETSI Directives. **Clauses 1.2, 1.4a, 2.10, 2.11, 3.2, 4, 6, 7, 8.5 and Glossary** updated to reflect current practice. **Clauses 1.4, 2.10.1.2, 3.3, 5.8 and 7.3** updated to remove irrelevant text. **Clause 7.3** deleted.
~~v36~~	~~June 2016~~	~~Publication in the ETSI Directives~~
~~v37~~	~~April 2017~~	~~Publication in the ETSI Directives~~
~~v38~~	~~February 2018~~	~~Publication in the ETSI Directives~~