



DRAFTING STANDARDS

ISO HOUSE STYLE

ISO House Style specifies the language, formatting and presentation of ISO documents: editorial elements that are outside the scope of the ISO/IEC Directives, Part 2. It is intended to be used alongside the ISO/IEC Directives, Part 2 and generally does not duplicate its content, although some relevant sections have been reproduced in order to add further details.

When drafting ISO documents, the primary reference is the ISO/IEC Directives, Part 2, which states the general principles and rules to follow to ensure that ISO and IEC documents are clear, precise and unambiguous.

ISO aims to deliver high-quality documents when and where the market needs them, both in terms of technical content and ease of use. ISO documents are used globally and are translated into many languages. Consistency in writing style and tone, and in document look and feel, allows the user to easily recognize an ISO document, to know how to use it and to have confidence in the quality of its contents. It also enables documents to be published more efficiently.

ISO House Style has been prepared by ISO Central Secretariat (ISO/CS).

MORE INFO

Drafting guidance and model documents are also available on the [drafting standards page](#).

A full list of revisions to the House Style, ordered by date, can be found [here](#).

Any comments or queries should be sent to drafting@iso.org

TEXT

PLAIN ENGLISH

Use Plain English to explain the subject of a document as simply and effectively as possible. Plain English is easier to read, which results in less misunderstanding and misapplication of instructions.

ISO documents have international users who often read in their non-native language. ISO documents are also often translated. Clear and concise writing avoids errors in translation. Plain English is not unprofessional or informal; it is a tool of good communication.

- Write in short sentences and paragraphs to break up the text and make it easier to follow. A sentence should contain only one idea. A sentence should not contain more than 20 words. A page should contain several short paragraphs.
- Use frequent subclause headings and lists to split up concepts, processes and methods into smaller pieces. If a list is very long or has complex subdivision, try to break it into several shorter lists.
- Use tables and figures to illustrate anything that is difficult to explain in words. Avoid very complicated tables and figures. Try to use several shorter tables that can each fit onto one page and use sub-figures for the individual components of a complex figure.
- Use lots of punctuation. For example, a comma creates a pause in a sentence that helps the user to follow the flow of words.
- Use ISO verbal forms to easily identify requirements, recommendations, permissions, possibility and capability and external constraints in the text. Alternative expressions are not always easily understood in place of the ISO verbal forms. See ISO/IEC Directives, Part 2, 2018, Clause 7.
- Every technical sector uses specific terminology (i.e. jargon) and it is appropriate to use technical language in ISO documents. However, it can be helpful to provide a simple explanation for technical terms. Use Plain English to write the definition of these terms in Clause 3. Do not assume that all users will have the same level of understanding as the members of an ISO Technical Committee.

TONE

- Give instructions using direct, active verbs. For example, the following instruction is

clearer in the second version:

- “Each test sample obtained in accordance with A.4.1 shall be weighed to the nearest 0,1 g and the different defects shall be separated into the bowls.”
- “Weigh, to the nearest 0,1 g, each of the test samples obtained in accordance with A.4.1. Separate the different defects into the bowls.”
- Use the present tense by default. Only use past or future tenses when specifying something that happened in the past or will happen in the future.
- Use an impersonal tone. Avoid “I”, “we”, “you” and other personal pronouns.
- Remove extra details that do not help the user to implement the document and make the document longer than it needs to be. For example, details about the development of the document (e.g. N documents, meetings, individual contributors, decisions taken) are of interest to the members of the Working Group but not the document user.

GRAMMAR

GENERAL

Grammar is everything known about the structure of a language. It is a big topic beyond the scope of any style guide. However, here are answers to some common questions.

AGREEMENT OF THE VERB WITH THE SUBJECT

In any clause of a sentence, the verb must agree with its subject in terms of singular or plural. For example:

- “The method is used”: singular subject with singular verb.
- “The methods are used”: plural subject with plural verb.
- “Method A and procedure B are used”: two singular subjects with plural verb.

For singular collective nouns (nouns that refer to a group of individuals, e.g. organization, top management, government, committee), the subject can be treated as either singular or plural depending on whether the group is described as a single, impersonal entity or as a collection of individual members. For example:

- “The committee was elected in March”: refers to the committee as a single entity.
- “The committee were in heated debate”: refers to the actions of the individual members of the committee.

When the collective noun is followed by a [non-defining relative clause](#), use the relative

pronoun “which” for a singular subject and “who” for a plural subject:

- “This requires some training of the team, which normally consists of two, three or four people, when all tissues are sampled. Members of the team, who are located throughout the force, are used to assist operational officers respond to various situations.”

DEFINING AND NON-DEFINING RELATIVE CLAUSES (I.E. USING “THAT” OR “WHICH”)

A relative clause is the part of a sentence used to describe a noun. It comes immediately after the noun it describes. There are two types of relative clauses:

- A defining clause identifies who or what is being discussed. It cannot be omitted without affecting the meaning of the sentence. It is not enclosed with commas.
 - “The ISIN is allocated to those products that are not financial instruments when they are underlying or reference assets.”
- A non-defining clause adds information to the sentence and can be omitted without changing the meaning. It is enclosed with commas.
 - “The ISIN is allocated to these products, which are not financial instruments, when they are underlying or reference assets.”

In the first example sentence, the ISIN is allocated only to those products that are not financial instruments. The relative clause (“that are not financial instruments”) defines the products to which the ISIN is allocated. Removing it would change the meaning of the sentence.

In the second example sentence, the ISIN is allocated to the specified products, none of which are financial instruments, and the relative clause (“, which are not financial instruments,”) merely provides additional information. If it was removed, the sentence would retain its meaning.

Either “that” or “which” can be used to introduce a defining clause. However, “which” is always used to introduce a non-defining clause.

A OR AN

The choice depends on the sound of what follows:

- “a” is used before a word or abbreviated term beginning with a consonant sound, e.g. a

bank, a European, a hospital, a hotel, a one-term appointment, a user.

- “an” is used before a word or abbreviated term beginning with a vowel sound, e.g. an organization, an ISO meeting, an MSS [“em-s-s”], or an “h” if the “h” is silent, e.g. an hour.

AFFECT OR EFFECT

Affect (verb) means to have an influence on, e.g. “The use of method A affects the result”.

Effect (verb) means to cause or to accomplish, e.g. “The use of method A effects a change in the system”.

Effect (noun) means a change or result caused by something or someone, e.g.

“Ecotoxicological test systems are applied to obtain information about the effects of contaminants in soil”.

ASSURE OR ENSURE

Assure (verb) means to remove someone’s doubts, e.g. “When a customer wants to be assured that the quality of a lot conforms to the quality specified, sampling should be carried out in accordance with ISO 1234”.

Ensure (verb) means to make sure of something, e.g. “The Technical Committee defines its method to ensure the International Standard is suitable for the intended use”.

FEWER OR LESS

Use “fewer” for things that can be counted and use “less” for things that cannot be counted, e.g. fewer test samples but less test equipment, fewer days but less time.

IT’S AND OTHER CONTRACTIONS

Contractions such as it’s, they’ll and they’d create an informal tone and are not appropriate for ISO documents. Use the full forms instead.

RESPECTIVELY

“Respectively” is an adverb that is often misused. It means “in the order given” and is only used if the sentence would be unclear without it. For example:

- “Samples 1 and 2 shall contain 100 ml and 50 ml of ethanol, respectively.”

In this case, “respectively” is used to attribute each of the two values individually to the two samples in the order in which they appear, i.e. sample 1: 100 ml, sample 2: 50 ml.

SPELLING AND WORDING

SPELLING

ISO documents use Oxford English spelling, which is British spelling in combination with the suffix -ize (rather than -ise) for about 200 verbs that originate from the Greek -izo suffix, e.g. organize, standardize. Words that do not originate from Greek use an “s”, e.g. analyse, paralyse. In case of doubt, follow the spelling of the Oxford English Dictionary. For an online version, see www.lexico.com. Use spelling consistently throughout a document.

Spelling exceptions are allowed for technical reasons. For example, in a piece of code, the US spelling of “color” is required for the code to function correctly.

ISO SPELLING RULE	EXAMPLES, EXCEPTIONS AND FURTHER INFORMATION
Use -ize for words originating from Greek	organize (organization), standardize (standardization), harmonize, recognize, realize
Use -ise for words that do not originate from Greek	advertise, advise, arise, comprise, compromise, enterprise, exercise, franchise, revise, supervise
Use -yse and not -yze	analyse, breathalyse, catalyse, dialyse, electrolyse, hydrolyse, paralyse, psychoanalyse
Use -re and not -er	calibre, centre, fibre, litre, metre*, spectre, theatre *except use meter for a measuring instrument
Use -our and not -or	colour, favour, flavour, harbour, honour, humour, labour, neighbour, rumour
Use -ogue and not -og	analogue, catalogue, dialogue, homologue, monologue
Use “ ll ” not “l” spellings of certain words	cancel – cancelled, cancelling label – labelled, labelling enrol – enrolled, enrolling (but: enrolment) fulfil – fulfilled, fulfilling (but: fulfilment) model – modelled, modelling signal – signalled, signalling

	travel – travelled, travelling, traveller
Use -ae , -oe and not -e spellings of certain words	aesthetic, anaemia, anaesthetic, archaeology, haematology, orthopaedics, paediatrics, foetal, manoeuvre, oestrogen
Use the -e spellings of certain words	acknowledgement, ageing, judgement* *except use judgment in a legal context
For nouns, use the suffix -ence and not -ense	defence, licence, offence, pretence But note: defensive, offensive, pretension
Use different spellings for the noun and the verb forms of certain words	licence (noun) – to license (verb) practice (noun) – to practise (verb)
Use programme and not program*	*except use program for computer programs
Use Petri (dish) not petri or Pétri or pétri	
Use sulfur and not sulphur Use sulfate and not sulphate Use sulfide and not sulphide	Reason: ISO documents follow the spelling used by the International Union of Pure and Applied Chemistry (IUPAC) in their periodic table of the elements (element 16): iupac.org
Use artefact and not artifact	

FOREIGN SPELLING

Follow the spelling of proper nouns and words from foreign languages, including accented letters, cedillas, ligatures or other special marks and any alphabetical forms that do not normally occur in English.

As specified in ISO/IEC Directives, Part 2, 2018, 8.3:

- “The names of organizations and their abbreviated forms, shall be written as used by those organizations.”

Reproduce the names of foreign companies as used by the company itself, with all the appropriate characters (French accents, Spanish tildes, etc.), e.g. Crédit Agricole, Compañía Española de Petróleos S.A., Polmos Żyrardów.

These characters are also used in headings and on capital letters.

LATIN AND GREEK WORDING

Avoid the use of Latin words as far as possible. Use [Plain English](#) instead.

Do not italicize commonly used Latin expressions, e.g. a priori, in situ, in vitro.

Italicize Latin words used for scientific terms, e.g. species, bacteria, plants. For example, “This document describes a horizontal method for the detection of *Salmonella* spp. in food”.

Many nouns (particularly from Latin) retain their original plurals; others have taken on the anglicized “s” ending. In some cases, both forms are still used.

For Latin and Greek words, use the English plural if one exists, e.g. forums, stadiums, statuses. Otherwise, use the appropriate foreign plural forms that are still commonly used.

- addendum – addenda
- analysis – analyses
- axis – axes
- basis – bases
- corrigendum – corrigenda
- crisis – crises
- criterion – criteria
- curriculum – curricula
- datum – data*
- genus – genera
- medium – media
- memorandum – memoranda
- millennium – millennia
- nucleus – nuclea
- phenomenon – phenomena
- series – series
- species – species
- spectrum – spectra
- stratum – strata

*Data is the plural of the Latin word datum. In modern English usage, it is often treated as a mass noun with a singular verb. ISO style is to use the plural form: “The data are clear”.

In some cases, the choice of plural depends on the context of the sentence:

- antenna – antennae (insects), but antennas (aerial)
- appendix – appendices (in books), but appendixes (anatomy)
- formula – formulae (maths), but formulas (general)
- index – indices (maths), but indexes (in books)

NAMES OF COUNTRIES, TERRITORIES AND CURRENCIES

Codes for countries, dependencies, other areas of particular geopolitical interest and their subdivisions are specified by ISO 3166 (parts [1](#), [2](#), [3](#)) and are available to view on the Online Browsing Platform: <https://www.iso.org/obp>. Select “country codes” and “search” to see the full list.

For example, use:

- the Democratic People's Republic of Korea (DPRK) and not North Korea;
- the Republic of Korea (ROK) and not South Korea;
- the Russian Federation and not Russia;
- Viet Nam and not Vietnam.

As exceptions it is permitted to use:

- the United Kingdom (UK) and not the United Kingdom of Great Britain and Northern Ireland;
- the United States (US) and not the United States of America (USA).

Codes for countries' currencies are specified by [ISO 4217](#) and are available to download from the ISO 4217 Maintenance Agency:

<https://www.currency-iso.org/en/home/tables/table-a1.html>.

IT TERMS

Use “online” and not “on-line”.

Use lower case for general IT terms (e.g. "file format", "key wrap", "syntax"), see [Capitals](#).

CONFORMITY AND CONFORMITY-RELATED TERMS

The word “compliance” is used in connection with legislation and regulations, which are not generally mentioned in ISO documents. See [Legal statements](#).

Use the word “conformity” when referring to requirements. The phrase “in accordance with”

can also be used for expressing conformity-related requirements.

ISO/CASCO, the Committee on conformity assessment, has produced definitions for conformity-related terminology, e.g. “competence” and “assessment”. If there is a need to define this kind of terminology in a standard, search the [Online Browsing Platform](#) to find the CASCO definition to use as a source. Do not develop a new definition for the document. Contact CASCO at an early stage when developing a standard containing conformity assessment elements: CASCO@iso.org

LEGAL STATEMENTS

Do not include legal, regulatory or statutory requirements or recommendations.

It is permitted to refer factually to the law and regulations to explain how they relate to the subject of the document.

See the [Guidance on legal statements in ISO standards](#).

When referring to the law, use clear language so the user understands the meaning. For example, write “legal requirements” not “jurisdictional regulations”.

FORMULA(E)

In ISO documents, the words “formula” (singular) and “formulae” (plural) are used when referring to all types of equations, relations, inequalities, expressions and other mathematical forms.

INFORMATIVE AND NORMATIVE LABELS

Use the label “(informative)” or “(normative)” under an annex title to indicate how the annex has been referenced in the text. Remember that informative annexes can contain requirements that apply if the user chooses to implement the annex.

Clause 2 is always called “Normative references”.

Do not label any other titles of elements of the document (clauses, subclauses, tables, figures, etc.) as either informative or normative. Do not use the words “informative” or “normative” for cross-references in the text. For example, write: “The object shall be registered in accordance with Annex A” and not “The object shall be registered in accordance with normative Annex A” (it is the “shall” that makes the annex normative).

Unless there is a clear requirement ("shall") or imperative language in the text, all document content is informative by default.

MIGHT AND COULD

ISO/IEC Directives, Part 2, 2018, Clause 7, explains the verbal forms to be used in ISO documents to express requirements, recommendations, permissions, possibilities and capabilities, and external constraints.

In the English language, the words "may", "can", "might" and "could" are often used interchangeably. The subtle differences in meaning are not easily translated into other languages when ISO documents are used around the world.

To ensure that a document is understood and applied correctly, use "may" to express a permission and "can" to express a possibility or capability. Avoid substituting either of these terms with "might" or "could", even if this seems logical in English. Revise a sentence that uses "might" or "could" to avoid confusion and misapplication of the text.

For example, change:

"Materials which are or might be in contact with cryogenic fluids shall be in accordance with ISO 21010."

"Sources related to earlier temperature scales may have to be recalibrated."

"Copper, lead and zinc concentrates could gain or lose moisture rapidly when exposed to air."

To:

"Materials which are or which will possibly be in contact with cryogenic fluids shall be in accordance with ISO 21010."

"It is possible that sources related to earlier temperature scales will have to be recalibrated."

"Copper, lead and zinc concentrates can gain or lose moisture rapidly when exposed to air."

INTERLABORATORY OR INTRALABORATORY

An "interlaboratory" comparison involves testing the same or similar samples, using the proposed or existing method, in different laboratories and comparing the results. Do not use

the terms "round robin" or "ring test" instead of "interlaboratory".

Reproducibility (R) is obtained from the interlaboratory comparison.

An "intralaboratory" comparison involves testing samples, under the same conditions, within a single laboratory to ensure the reliability of test results produced by the laboratory.

Repeatability (r) is obtained from the intralaboratory comparison.

IN ACCORDANCE WITH OR ACCORDING TO

Use "in accordance with" with "shall" or the imperative form to express a requirement, e.g. specifying a test method or a reference document to use for conformity: "The method shall be validated in accordance with ISO 1234".

Use "according to" as an informative statement, e.g. for providing the source of a quotation: "according to Reference [4]".

INCLUSIVE LANGUAGE

Use inclusive language that is neutral.

Use "she or he", "him or her" and "his or her" or, for example, "the operator" or "the manufacturer" when referring to an individual. Alternatively, "they", "them" and "their" can be used as a gender-neutral singular pronoun.

Avoid using words that are unnecessarily gender specific. For example, write: "The material was synthetic" rather than "The material was man-made".

TRADITIONAL (GENDERED)	ALTERNATIVE (GENDER-NEUTRAL)
businessman	business manager; executive; agent; representative (plural: business people; business community)
chairman	chair
craftsman	artisan; craftworker
foreman	supervisor
man	person or individual
man a project	staff a project; hire personnel; employ staff
man-made	artificial; synthetic; manufactured; industrial; [relevant verb, e.g.

	made, created, caused] by human beings
mankind	people, humanity; human beings; the human race; men and women; homo sapiens; the public; society
manpower	staff; labour; workforce; personnel; workers; human resources
middleman	go-between, intermediary
mother tongue	first language; native language
policeman/men	police officer (plural: police)
spokesman	spokesperson; spokesman or woman (for specific person)
the common man	the average or ordinary person
workman	worker
workmanship	skill, craft, artistry, handiwork, work, technique

The terms “male and female” are sometimes used to describe electronic and mechanical connectors or fasteners. These terms can be substituted with, for example, “convex”, “plug”, “pin” or “prong” as opposed to “concave”, “receptacle”, “socket” or “slot”.

Avoid stereotyped assumptions about the roles of men and women or people of different ages and backgrounds. For example, do not assume that a construction worker is a man or that an older person does not possess skills in using modern technology. When writing about groups of people, use language that highlights that they are individual people with X characteristics in common rather than a group defined only by that characteristic. For example, write “people with a visual impairment” rather than “the blind and partially sighted”.

Avoid terminology related to race. For example, alternative wording for “master and slave” components include “primary and replica”, “main and secondary” or “main and supporting”, and “upstream and downstream”. Instead of describing lists as “black and white”, use “block and allow” lists.

CAPITALS

Use capitals sparingly. The use of many capitals makes a page look bureaucratic or pretentious, especially when ordinary words such as method or framework are unnecessarily capitalized.

Proper nouns are always capitalized, e.g. Reynolds number.

Otherwise, nouns are given in lower case, i.e. words such as committee, organization, report, government only have a capital when part of a full title, e.g. the ISO Council.

If the full form of an abbreviated term is not a proper noun, the abbreviated term is generally presented in capital letters, e.g. DMA, but the full written form is not given initial capital letters, e.g. decision-making application and not Decision-Making Application.

Capital letters are used when referring to an “International Standard” and to the elements of a document, e.g. Introduction, Scope, Bibliography, “see Clause 6”, “an example can be found in Annex B”.

In titles and headings, only the first word is capitalized, except for proper nouns, acronyms or initialisms.

ABBREVIATED TERMS, ABBREVIATIONS AND CONTRACTIONS

ABBREVIATED TERMS (ACRONYMS AND INITIALISMS)

ISO documents use the wording “abbreviated terms” to refer to both acronyms and initialisms. They are formed from the initial letters of other words.

NOTE Acronyms are strings of initial letters pronounced as a word (CEN, UNESCO).
Initialisms are not pronounced as a word (IEC, USA).

Do not use the term “abbreviations” in this context because this refers instead to shortened words, see [Abbreviations and contractions](#).

ISO/IEC Directives, Part 2, 2018, 8.4, includes instructions on presenting abbreviated terms:

- "The use of abbreviated terms shall be consistent throughout the document. If a list of abbreviated terms is not given in the document (see Clause 17), then the first time that an abbreviated term is used, the full term shall be given with the abbreviated term following in brackets.
EXAMPLE 1 the weighted root mean square (RMS) width of the active output interface optical spectrum ..."

Exceptions can be made when the abbreviated term is so familiar that it is used more often than the full form, e.g. AFNOR, ANSI, IMF, NATO, OECD, UNESCO, and when in addition the full form does not provide extra clarity, e.g. DNA, HIV.

If a list of abbreviated terms is given, it is not necessary to spell out the full term at the first use (but it is allowed).

There is no need to give the abbreviated form of a term if it is not referred to again.

Avoid repeatedly spelling out abbreviated terms, except when the abbreviated term is used in both the document Title and Scope, in terms and definitions, and in clause/subclause headings.

In terms and definitions, the full term is spelled out at the first use in each entry. This is because terms and definitions are available as standalone items on the [Online Browsing Platform](#).

In clause/subclause headings, using the full term rather than the abbreviated form can lead to overly long or complex headings. Either form can be used providing its use is consistent.

As specified in ISO/IEC Directives, Part 2, 2018, 8.4:

- "Any abbreviated term should be in upper case letters, without a full stop after each letter.
EXAMPLE 2 "RH" for "relative humidity"."

Do not use capital letters for the full term unless it is a proper noun, see [Capitals](#).

As specified in ISO/IEC Directives, Part 2, 2018, 8.4:

- "Occasionally, abbreviated terms in common use are written differently, either for historical or for technical reasons.
Technical specifications regarding marking may impose other requirements."

For example, the abbreviated terms "scuba" and "sonar" are not written in capital letters.

If the abbreviated term can be pronounced (e.g. CEN, ISO), it does not generally require the definite article ("the"). Otherwise, it is preceded by an article (e.g. a GPS, the UN, a URN, the WHO).

The plural form of an abbreviated term generally uses a lower-case “s”, e.g. for critical control point (CCP): “the plan shall be given for each CCP” and “critical limits as CCPs shall be specified”. Exceptions include abbreviated terms that are already plural, e.g. comma-separated values (CSV), and management system standard, which is always MSS without an “s” whether singular or plural.

ABBREVIATIONS AND CONTRACTIONS

Abbreviations and contractions are shortened words. These are not included in a list of abbreviated terms.

An abbreviation has the beginning of a word but not the end. Examples of abbreviations are “min.”, “max.”, “lab.”. Put a full stop after the abbreviation and capitalize it in the same way as the unabbreviated word. Only use abbreviations in tables and figures; write words in full in the text.

A contraction has the first and last letters of a word and sometimes other letters in between. Contractions have no full stops. Examples are Mr, Mrs, Ms, Rd, dept, Dr, St. They are also capitalized like the uncontracted word. An exception is “no.” (from the Italian “numero”, for number), which is a contraction but has a full stop to avoid confusion with the word “no”. But the plural, “nos”, is formed like other contractions without a full stop.

E.G., ETC., I.E.

These common Latin shortened forms are used regularly in ISO documents. They are punctuated as shown:

- e.g. (exempli gratia, for example);
- etc. (et cetera, and other things);
- i.e. (id est, that is).

Use “e.g.” when giving an example in brackets or at the end of a sentence:

- “The results can be affected by the storage conditions (e.g. time, temperature).”
- “Documented information should be controlled to ensure it is adequately protected, e.g. from loss of confidentiality, improper use or loss of integrity.”

But use “for example” when the example is given as part of the sentence:

- “Applicable actions can include, for example, the provision of training or the re-

assignment of personnel.”

Never include both e.g. and etc. in the same sentence clause. For example, “e.g. managers, technicians, experts, etc.” is not acceptable.

ALTERNATING CURRENT, DIRECT CURRENT AND RADIO FREQUENCY

For a.c. and d.c.:

- when used as an adjective, use instead “AC” and “DC”, respectively, e.g. “AC transmitter”;
- when used as a noun, use the full forms “alternating current” and “direct current”, respectively, at least in the first instance. The abbreviated terms “a.c.” and “d.c.” can be used subsequently.

Do not use the term “r.f.” as it is obsolete:

- when used as an adjective, use instead the abbreviation “RF” or the full form “radio frequency” (including the hyphen);
- when used as a noun, use instead the full form “radio frequency”.

CA. (APPROXIMATELY)

Do not use “ca.” as an abbreviation of approximately. Write instead “approximately” in the text or “≈” in tables. Do not write “~” instead of “≈” in a table.

PUNCTUATION

GENERAL

Punctuation helps make meaning clear, but there are changes in practice over time and different writers adopt different approaches. The priority for ISO documents is to be easily understandable and unambiguous. Use punctuation consistently within a document.

AND/OR

The phrase “and/or” is often used in English to express “either or both” of two options. The meaning can be ambiguous, especially in translation to other languages where the “/” is not a recognized punctuation mark.

Avoid using “and/or” in a document to avoid confusion and misapplication. Use the

construction “either x or y, or both” instead.

AND OR &

ISO documents do not use the ampersand (&) in ordinary text. Use the word “and” instead.

APOSTROPHES

When used to indicate possession, the apostrophe comes before the “s” in the singular and after it in the plural:

- “The sample’s identification number...”
- “The users’ feedback...”

The meaning can often be made clearer by rewording, e.g. “the identification number of the sample”.

For plural nouns not ending in “s”, the apostrophe comes before the “s”, e.g. “people’s opinions”.

Phrases such as “two weeks’ time”, “six months’ development”, “nine years’ worth” need apostrophes.

Do not use an apostrophe for plurals of names, abbreviated terms, numbers or words not usually used as nouns, e.g. two Johns, URNs, 1990s, the three Rs, dos and don’ts.

Sometimes clarity is needed when letters and symbols are referred to as objects, e.g. subtract the xs from the ys. In these cases, use quote marks and not apostrophes, e.g. subtract the “x”s from the “y”s.

COMMAS

ISO documents do not use the Oxford (serial) comma before the last item in a list, unless it is needed to avoid ambiguity. For example:

“The capture, measurement and analysis of the data should be automated” is an unambiguous list of three items and does not need an Oxford comma.

“The procedural steps are sample preparation, instrument set-up and calibration, and image capture” requires an Oxford comma to be clear that “calibration” is part of the second step and is not part of the “image capture” third step.

FULL STOPS

Use plenty of full stops. They keep sentences short. This helps the user. Do not use full stops between letters in abbreviated terms or at the end of clause/subclause headings, table titles, figure titles, normative references or bibliographic entries.

HYPHENS

Hyphens in words or phrases can improve clarity and avoid misinterpretation. Use hyphens consistently throughout a document or series.

In case of doubt, follow the spelling of the Oxford English Dictionary. For an online version, see <https://www.lexico.com>.

PREFIXES

A word formed from a prefix plus a word is not usually hyphenated unless the word begins with the same letter as the last letter of the prefix:

- multilateral, bilingual, misled, subclause, interlaboratory;
- anti-inflammatory, pre-eminent, re-enter (but interrelated, microorganism).

Words beginning with co- (meaning joint), anti-, non- and ex- (meaning former) tend to keep their hyphen, e.g. co-worker, anti-reflective, non-existent, ex-president (but cooperate, coordinate, antidote).

Prefixes before a capitalized name, number or date use a hyphen, e.g. sub-Saharan, pre-2000.

SUFFIXES

Words formed with suffixes are generally not hyphenated, e.g. sizeable, hyphenate, fruitful, patronize, greenish, kindness, twofold (but industry-wide, oil-based paint, sugar-free syrup, list-style functionality).

COMPOUNDS

Compound nouns are usually presented as a single word with no hyphen or as two separate words, e.g. bypass, website, labour market. Exceptions include cross-reference and decision-making.

Compound adjectives that modify the noun are hyphenated when they come before the noun, e.g. up-to-date figures, medium-term outlook, energy-deficient countries, third-party assessment, well-known problem.

Do not use a hyphen when the compound comes after the noun, e.g. “The figures were up to date”, “changes in the medium term”, “the result is well known”.

Do not hyphenate compound adjectives when the first word is an adverb ending in -ly, e.g. newly discovered planet, finely ground powder.

LISTS

ISO documents use two formats for lists.

- If the list comprises several sentences, then use the following list format.
 - The introductory sentence is a complete sentence and ends with a colon or a full stop.
 - The list items are complete sentences that start with a capital letter and end with a full stop.
- If the list comprises one sentence broken into a list format, then:
 - the introductory sentence is a partial sentence and preferably ends with a colon;
 - the list items start in lower case and end with a semicolon (preferred) or a comma, used consistently;
 - the penultimate list item does not include “and” or “or”, except to avoid ambiguity;
 - the final list item ends with a full stop.

EXAMPLES

When preparing the Foreword, add all document-specific elements into the fixed text.

- The number and title of the responsible TC and SC.
- A statement of collaboration with another organization, if relevant.
- A statement of revision if the document cancels and replaces another document. Include any related published amendments or corrigenda that are also cancelled and replaced. The revision statement shall briefly specify the main changes between editions.

When reviewing draft text, ensure that for each table there is:

- a consecutive table number;

- a concise table title;
- a cross-reference within the text; it is recommended to include a sentence above the table to explain its relevance to the user.

A list can be subdivided up to four levels. If more levels are required, consider using a table or splitting into several shorter lists.

For an unnumbered list, an em dash ("—") is used for the bullet symbol at all four levels.

The default order for a numbered list is a), b), c) for the first level; 1), 2), 3) for the second level; i), ii), iii) for the third level; and a), b), c) for the fourth level.

Use numbered lists so that it is easy to cross-reference a specific list item, e.g. "see 5.4 a)".

Avoid having more than one numbered list in a clause/subclause. If a second numbered list is necessary, insert a new clause/subclause to separate it from the first list or use an unnumbered list.

There can be unlimited unnumbered lists per clause/subclause.

Try to keep lists short so that they are easy to use. If a list requires a lot of subdivision or runs over several pages, try to break it down into several shorter, simpler lists.

No punctuation is required if the list items are very short (one or two words each) or if the bulleted list is in a table, for example:

TARGETS FOR PRODUCTIVE CAPACITY (AREA A)	INDICATOR
(a) increased value addition in natural resource-based industries	<ul style="list-style-type: none"> - industry, value added (constant 2000 USD) - industry, value added (annual % growth) - GDP per person employed (constant 1990 PPP USD) - employment in industry (% of total employment)

QUOTATION MARKS

ISO uses double quotation marks. For quotes inside quotes, use single quotation marks.

When the quote is a full sentence and stands completely alone, put the punctuation mark (e.g. full stop) before the closing quotation mark.

- “The ‘neutrality principle’ means that the content of the standard shall not state a preference for a form or one type of assessment over another.”

When the quote is within a sentence and the punctuation mark is part of the quote, keep it within the quotation marks.

- The answer to the question: “Are the references normative or informative?” depends on how each document has been cross-referenced in the text.

When the quote is within a sentence and the punctuation mark is not part of the quote, place it outside the final quotation mark.

- Content such as an excel sheet can be processed as an “electronic attachment”; it is uploaded to the ISO Standards Maintenance Portal as part of a published document.

EM DASHES

Use spaced em dashes (—) between the elements in titles and between figure or table numbers and titles:

- “Geometrical product specifications (GPS) — Dimensional measuring equipment — Part 2: Design and metrological characteristics of calliper depth gauges”
- “Figure 1 — Example design of a vernier calliper depth gauge (slider with locking screw)”
- “Table 1 — Typical dimensions of calliper depth gauges”

EN DASHES

Use closed-up en dashes (–) in ranges in references, e.g. “pp. 45–49”.

Spaced en dashes can be used as parenthetical dashes, e.g. “The indication can be either analogue – vernier scale or circular scale – or digital.”

Use an en dash instead of a hyphen between two names to show joint authorship or ownership, e.g. “The ISO–UN agreement”.

NUMBERS, VALUES AND DATES

GENERAL

The rules for the representation of numbers and values are given in 9.1 and 9.2 of the ISO/IEC Directives, Part 2.

NUMBERS

In general, write numbers as words up to nine and use digits after that. However, exceptions can be made to improve readability.

Be consistent within sentences, e.g. "Fill three flasks with liquid A and eleven flasks with liquid B".

Use words for approximations, e.g. "794 people" but "about four hundred people".

Use digits with units of measurement, amounts of money and ages, e.g. "A 9-year-old boy weighed 30 kg".

Use digits if numbers are being compared, e.g. "The resolution was adopted by 8 votes to 6, with 5 abstentions".

Always use digits with the percentage symbol (%), e.g. "an increase of 5 %".

In text, use "per cent" not "percent" (two words) but "percentage". For example, "expressed in per cent", "down by half a per cent"; "the percentage of cases" or "a small percentage increase".

Use "to" instead of a hyphen between digits, even in tables, e.g. "5 mm to 10 mm".

Use words if the number starts a sentence, e.g. "Eleven samples should be taken". There is no need to also give the digits in brackets following the words.

If the number is very long, try to redraft the sentence, e.g. rather than "One thousand one hundred and four people were tested" write "Testing was carried out on 1 104 people".

Write "100 million USD" rather than "100 000 000 USD" to avoid a string of zeros, except in tables.

Use “one billion” for “1 000 million”.

Sometimes using a variety helps to make the meaning clear, e.g. “Three 2-week courses followed the six 4-week courses”.

Write first, second, third rather than firstly, secondly, thirdly.

Write “replace the third paragraph” and not “replace paragraph 3”.

Do not use a hyphen instead of a minus symbol.

DATES

In text, write “31 October 2020” (day, month, year; no comma between month and year; no 31st or 23rd or 5th).

For a duration of time, write:

- “10 to 15 March” and not “from 10–15 March”
- “2020 to 2030” and not “2020–2030” or “2020–30”
- “the twentieth century” and not “the 20th century”
- “the twenty-first century” and not “the 21st century”

In tables or figures, use the format “2020-10-31” (YYYY-MM-DD), as specified in ISO 8601-1. Avoid ambiguous phrases such as “last year” or “recently” since a publication is likely to remain in use for several years. Give the date instead.

SYMBOLS

GENERAL

The rules for the representation of symbols for quantities and units and for mathematics are given in Clause 9, Clause 27, 28.5.2 and Annex B of the ISO/IEC Directives, Part 2.

QUANTITIES AND UNITS

The ISO 80000 and IEC 80000 series (Parts 3 to 13) gives symbols for most quantities and units.

ISO 80000-1 gives general rules for quantities and units.

Symbols for quantities are presented in italics. Words or numbers are presented in upright characters.

Do not use multi-letter abbreviated terms as symbols for quantities. Symbols are used in mathematical formulae and figures; [abbreviated terms](#) are used in the text. Symbols for quantities are generally a single letter (Latin or Greek, lowercase or uppercase), except for characteristic numbers covered in ISO 80000-11.

EXAMPLES:

- m (mass), t (time), λ (wavelength), μ (permeability), U (electric tension),
 Re (Reynolds number)

The quantity “weight” is a force (gravitational force) and is measured in newtons (N).

The quantity “mass” is measured in kilograms (kg).

Use one symbol to represent similar quantities. Do not use the same symbol to represent different quantities. For example, if several lengths are given in the document, use the symbol “ l ”. Do not then use “ l ” to represent a different quantity.

Add subscripts to symbols to distinguish between similar quantities. Subscripts can be numbers (e.g. 1, 2, 3, ..., n , $n+1$) or letters (e.g. “f” for final, “i” for initial, “min” for minimum, “max” for maximum, “ m ” for mass, “ v ” for volume). When the subscript is a quantity or a mathematical variable, it is also presented in italics. Otherwise, it is upright.

EXAMPLES:

l_1	length of the gap
l_2	length of the workpiece
b_1	width of the gap
b_2	width of the workpiece
m_i	initial mass
m_f	final mass
q_m	mass flow rate
q_v	volume flow rate
D_t	diameter of the tube
D_{\max}	maximum diameter
D_{\min}	minimum diameter

<i>p</i>	pressure
<i>V</i>	volume
<i>g</i>	gravitational acceleration NOTE There is no space between the value and the symbol, i.e. 1 000 <i>g</i> not 1 000 <i>g</i> .

ISO documents use the International System of Units (SI) for measurement.

Unit symbols can be one or more letters (Latin or Greek, lowercase or uppercase) and are always upright.

EXAMPLES:

m	metre
kg	kilogram
l	litre
A	ampere
Ω	ohm
V	volt
h	hour
min	minute
s	second
mol	mole
cd	candela
K	kelvin

When non-SI units need to be used, give the equivalent value in SI units in brackets. Some equivalent units use a decimal point rather than a decimal comma, e.g. inches, feet, miles.

EXAMPLES:

- 3.5 miles (5,6 km)

The unit “bar” can be used as an alternative for the SI unit “pascal”, provided that the following text is included as a footnote:

¹1 bar = 0,1 MPa = 10⁵ Pa; 1 MPa = 1 N/mm².

MATHEMATICAL SYMBOLS

Mathematical symbols and their rules are given in ISO 80000-2.

Variables are presented in italics.

EXAMPLES

- (x, y) , running numbers (i, j, n) , parameters (a, b) and functions (f, g)

Defined functions, constants and numbers are upright.

EXAMPLES

- Defined functions: \sin , \cos , \exp , Δ (for finite increment), d (for derivative)
- Constants: e , i and π

Vectors, tensors and matrices are in bold italics.

In figures, X, Y and Z axes are shown in uppercase upright. However, to give coordinates, use “ x, y, z ” (lowercase italics).

The decimal sign is a comma and is placed on the line.

For numbers, group digits by three to facilitate reading, e.g. 1 234, 567 890 1.

STATISTICAL SYMBOLS

The statistical terms and their symbols are defined in the ISO 3534 series.

Use the term “coefficient of variation” with the symbol C_V , not “relative standard deviation” (RSD), which is the deprecated term.

EXAMPLES

- coefficient of variation, repeatability: $C_{V,r}$
- coefficient of variation, reproducibility: $C_{V,R}$

CHEMICAL FORMULAE

The naming of chemicals and materials should follow as far as possible the naming conventions from the International Union of Pure and Applied Chemistry ([IUPAC](#)) chemical nomenclature.

The following prefixes need to be italicized:

- *cis-*, *trans-*, *tert-*, *n-* (e.g. *cis*-but-2-ène, *trans*-but-2-ène)
- *N,N-* (e.g. *N,N*-Dimethylbenzylamine)
- *o*, *p*, *m* (ortho, para, meta) (e.g. *o*-xylene)

Greek letters used in chemical names are upright (e.g. α -terpineol, β -phenylethyl alcohol).

For hydrates, use the middle dot (e.g. $\text{CoCl}_2 \cdot 6\text{H}_2\text{O}$).

ISO uses small caps for dextrorotatory and laevorotatory (D- ; L-), e.g. “L-amino acids”.

REFERENCING

GENERAL

The rules for the presentation of references are given in ISO/IEC Directives, Part 2, 2018, Clauses 10, 15, and 21.

REFERENCES IN A DOCUMENT TO ITSELF

Use the phrase “this document” when referring to the ISO document itself in the text, as specified in ISO/IEC Directives, Part 2, 2018, 10.6.

CROSS-REFERENCES TO A NUMBERED DOCUMENT

Always use the standard identifier (document number and type) rather than the title when referring to an ISO or IEC document in the text, including when a specific element (clause, table, figure, etc.) is referred to.

Only write “International Standard”, “Technical Specification”, etc. when making a general reference. For example, “X is specified in other International Standards, e.g. ISO 12345”. Do not write “ISO Standard”, “ISO specification” or other alternatives.

Only write out the title of a numbered document in Clause 2 and in the Bibliography.

When referring to the whole document, use an undated document number unless it is necessary that the user refers to a specific edition:

- “...in accordance with ISO 12345.”

Use the order of “document number:date, element” when referring to a specific element:

- “...in accordance with ISO 12345:2018, 4.3.9.”
- “...in accordance with ISO/IEC TR 6789:2020, Table 3.”
- “...in accordance with ISO 12345:2018/Amd 1:2019, Figure C.1.”

When referring to a document that is not published by ISO or IEC, use the same style as for an ISO or IEC document if a document number is available:

- “...in accordance with IETF RFC 2046.”
- “...in accordance with Rec. ITU-T X.96:2000, Annex F.”

CROSS-REFERENCES TO AN UNNUMBERED DOCUMENT

To refer to unnumbered documents in the Bibliography (e.g. a journal or literature reference), use any of the following styles:

- “...see Reference [6]”
- “...an initial interlaboratory test^[6] was carried out...”
- “...in the initial interlaboratory test^[6]”
- “...in the six subsequent interlaboratory tests^{[7]–[12]}”

For non-ISO or IEC documents, it is possible to provide both a document number and a superscript callout:

- “...as described in IEEE 802.3^[9]”

If it is considered necessary to write the title, give the correct wording consistently throughout the text, not a shortened name or abbreviation:

- “...for example, in the United Nations’ Recommendations on the Transport of Dangerous Goods – Model Regulations^[1]”

It is permitted to use a mixture of these styles within the text when referring to bibliographical entries.

To refer to unnumbered documents in Clause 2, use the full title of the document without a superscript callout.

CROSS-REFERENCES TO A DOCUMENT THAT IS NOT YET PUBLISHED

If a document needs to be referenced by date but is not yet published (but is publicly available), add a footnote in both the text and the list it is located in to note its status in the development process:

First cross-reference in the text:

“... as described in ISO 10101.¹⁾”

Reference list:

ISO 10101¹⁾, *ISO style for references — Example unpublished document with added footnote*

1) Under preparation. Stage at the time of publication: ISO/DIS 10101:2020.

CROSS-REFERENCES TO A WITHDRAWN DOCUMENT

Avoid making reference to withdrawn documents but, if it is necessary, add a footnote in both the text and the list it is located in to note its status.

For a document that has been withdrawn and has no replacement, add the following:

First cross-reference in the text:

“...as described in ISO 78910-6:1994¹⁾”

Reference list:

ISO 78910-6:1994²⁾, *ISO style for references — Example withdrawn documents — Part 2: Withdrawn without replacement*

- 1) Withdrawn.
- 2) Withdrawn.

For a document that has been cancelled and replaced, add the following:

First cross-reference in the text:

“...as described in ISO 5725-2:1994¹⁾”

Reference list:

ISO 5725-2:1994²⁾, *Accuracy (trueness and precision) of measurement methods and results — Part 2: Basic method for the determination of repeatability and reproducibility of a standard measurement method*

- 1) Cancelled and replaced by ISO 5725-2:2019.
- 2) Cancelled and replaced by ISO 5725-2:2019.

REFERENCES WITHIN THE DOCUMENT

Do not use imprecise references such as “the following clause” or “the figure above”. When referring to a specific element of the document, use only the element identifier (number or letter):

- “...in accordance with Clause 7”
- “...as shown in Figure 4”
- “...the limits specified in Table 12”
- “...the method described in Annex B”
- “...calculated using Formula (5)”
- “...fulfilling list items a) to d) in 8.4.5”

It is permitted to refer to an element informatively without making it part of the sentence:

- “...the prepared sample (Figure 6)”

- “...using the syntax (see Annex C)”

NOTE Remember that to be labelled “normative” an annex needs to be clearly referenced as part of a requirement (see ISO/IEC Directives, Part 2, 2018, 20.2). If an annex is only mentioned in brackets as per this example, it is labelled “informative”.

When referring to figures and tables, give the citation in the text before the place where the figure or table appears in the document.

Do not include cross-references in the text to the terminological definitions listed in Clause 3. Cross-references to terms and definitions are only included within Clause 3.

If a specific element in the document is contained within another element, it does not need a number. For example, a figure or formula within a terminological entry (including examples and notes to entry) can be unnumbered; a formula in an example or note can be unnumbered; a table within a figure is unnumbered; and a figure within a table is unnumbered.

REFERENCES TO WEBSITES

References to websites are not recommended. Any content hosted externally is subject to changes, movement or deletion that cannot be controlled by ISO. This can cause problems for users as well as making a document difficult to keep up to date.

Normative references to online-only publications with version control are permitted, e.g. W3C specifications. Normative references to general website content are not permitted.

Occasional, informal references to websites are possible, such as in a bibliographical entry, example or footnote. These references should always be to authoritative and reliable websites, such as another standards-developing organization. Do not reference websites that have unstable content, such as Wikipedia.

Always provide a URL address written in full rather than embedding a link in the text.

REFERENCES IN CLAUSE 3 (TERMS AND DEFINITIONS)

Sources of terminological entries are usually other ISO or IEC documents. Reference them by document number in the [SOURCE] line:

3.11

nitrogen content

quantity of nitrogen determined after application of the procedure described

NOTE 1 to entry: It is expressed as a mass fraction of dry product, as a percentage.

[SOURCE: ISO 20483:2013, 3.1]

Avoid unnecessarily modifying terms and definitions from other sources, e.g. improving or changing the wording.

If an entry is taken from a different type of document, reference it in the [SOURCE] line with any additional information provided in a Note to entry. For example:

3.1**high level waste****HLW**

waste with levels of activity concentration high enough to generate significant quantities of heat by the radioactive decay process or waste with large amounts of long-lived radionuclides that need to be considered in the design of a disposal facility for such waste

NOTE 1 to entry: The International Atomic Energy Agency (IAEA) is a global intergovernmental forum for scientific and technical co-operation in the nuclear field.

[SOURCE: IAEA Safety Guide, No. GSG1]

Sources of terminological entries are informative. List these documents in the Bibliography.

Cross-references within a terminological entry to other terms defined in Clause 3 are helpful for users because they aid navigation between entries. Avoid any other cross-references in terms and definitions.

To cross-reference another term listed in Clause 3 as part of a terminological entry, put the referenced term in italics with its reference number given in brackets afterwards. The term number will become a hyperlink in the [XML-processed](#) PDF document. Do this for the first usage only within each terminological entry – there is no need to repeat the cross-reference formatting multiple times within each entry. For example, in the following entry, the word “filter” is not treated as a cross-reference in its second appearance:

3.2.701

solid contaminant retention capacity

DEPRECATED: dirt capacity amount of contaminant (3.2.129) that can be retained by the filter (3.2.273) up to the point at which a given differential pressure (3.2.211) across the filter at specified conditions (3.2.703) is reached

If a reference to other elements of the document or to reference documents is useful for the terminological entry, provide this in a Note to entry:

3.1.25

random access point

RAP

sample in a track that starts at the index of a first access unit of a SAP of type 1 or 2 or 3

NOTE 1 to entry: SAP types are defined in Annex I.

3.1.1

3D-AVC NAL unit

3D-AVC VCL NAL unit

NAL unit with type 21 with `avc_3d_extension_flag` equal to 1

NOTE 1 to entry: NAL units are specified in ISO/IEC 14496-10:2014, Annex J.

ORDER OF NORMATIVE REFERENCES

The normative references clause is not numbered. The list is ordered as follows:

- ISO documents
- IEC documents
- other international standards

For each of these document types, the documents are listed in ascending numerical order.

It is not recommended that other types of document (e.g. regional and national standards)

are used as normative references. Only publicly available documents, authoritative and reliable publications can be cited normatively (as specified in ISO/IEC Directives, Part 2, 2018, 10.2).

ORDER OF BIBLIOGRAPHIC REFERENCES

The Bibliography is always numbered. There are two ways of structuring bibliographical entries:

- By numerical order, followed by literature references:
 - ISO documents followed by IEC documents and then other international standards;
 - regional standards;
 - national standards;
 - literature references.
- In the order in which the references are cited in the text.

Avoid providing bibliographical references that are not cross-referenced in the document. Only include bibliographical references which support standardization by helping users to implement the document.

For any type of standard that is not published by ISO or IEC, it is possible to provide an online reference to the bibliographical entry in a footnote:

[7] Standard No I.C.C. 167¹⁾, *Determination of the protein content in cereal and cereal products for food and animal feeding stuffs according to the Dumas combustion method*

1) Available at <http://www.icc.or.at>.

The presentation of references follows the guidelines in [ISO 690](#).

For a literature reference, use the format of: Author/organization name. *Document title*.

Location: publisher, date

- Leboffe, M.J. and Pierce, B.E. *Microbiology: laboratory theory and application*. Englewood, Colorado: Morton Publishing Company, 2010
- Advance Life Support Group. *Acute medical emergencies: the practical approach*. London: BMJ Books, 2001

For a journal reference, use the format of: Author. Article title. Journal title. Date, **edition number**, page number. Online reference

- Cropley, A. J. Creativity and mental health in everyday life. *Creativity Research Journal*. 1990, **3**(3), 167–178. doi:10.1080/10400419009534351

For an online reference, use the format of: Author. Article title. Publication title. Location, date [viewed date]. URL

- Nunn, G. Don't ditch the adverb, the emoji of writing. *The Guardian* [online]. London, UK, 2 April 2019 [viewed 27 April 2020]. Available from:
<https://www.theguardian.com/commentisfree/2019/apr/29/dont-ditch-the-adverb-the-emoji-of-writing>

FORMATTING

GENERAL

The rules for the typography, layout and presentation of ISO documents ensure consistency across ISO's documents and enable an efficient process for their publication. As the publisher, ISO/CS determines the formatting choices.

ISO documents are produced using an XML workflow, which is the standard process for the publishing industry. An XML workflow makes it possible to make changes quickly, automate processes and output content into multiple digital deliverables such as PDF, HTML and ePub.

Working in XML has limitations. The content as XML is purely information without any formatting. The style elements of a document are programmed into templates, into which an XML file is run to create the various deliverables. Therefore, changes to formatting, such as spacing and pagination, are either not possible or difficult and time-consuming.

Documents are submitted to ISO/CS in Word and then converted into XML. Note that submission layouts cannot be preserved. Line numbering is removed when documents are processed by ISO/CS. See [Requirements and guidelines for the submission of drafts to ISO/CS](#).

ISO/CS provides the PDF, ePub, Word, XML and graphics files for a document, along with

an abstract. Because the PDF is produced from XML and not Word, the PDF formatting is different from the Word file. Exceptions to ISO formatting are not allowed. A very small number of document submissions are not suited to the XML workflow and are instead processed directly from Word to PDF. This decision is made by ISO/CS. These documents are still expected to have the same typography, layout and presentation as a document produced in the XML workflow regardless of the original source files.

DOCUMENT SET-UP

FONTS, SIZING, SPACING, PAGINATION

ISO documents use Cambria font throughout. Exceptions are for code (which uses Courier New font), in technical drawings (which follow the rules in [ISO 3098-2](#)) and when required to correctly reproduce character sets.

The size of fonts, the spacing between lines and headings, the row heights and column widths of tables, and the pagination of documents are determined by the rules programmed into the XML templates and cannot be changed. The margins of the text in the PDF template are left- and right-aligned so that the document has a spine when it is printed. The text itself is fully justified.

The text in a document runs continuously. There are no intentional page breaks between clauses or blank pages within the main body of the document. Blank pages are sometimes added in the preliminary pages and in the back pages to ensure that the document can be correctly printed on even pages. Blank pages are not numbered.

ISO documents do not contain empty clauses or annexes. A clause or annex cannot contain only a note related to a previous edition (e.g. that the content has been moved or deleted). Any such clauses or annexes need to be removed and the document renumbered accordingly.

The preliminary pages (cover, copyright page, Contents, Foreword, Introduction) are numbered using Roman numerals starting from i. The pages in the main body (Scope to Bibliography or last technical page if there is no Bibliography) are numbered using Arabic numerals starting from 1. The back cover page includes the ICS index code and document price, which is based on the number of pages. For vocabularies, the document price is given as “Price group A” because terms and definitions are available free of charge from the [Online Browsing Platform](#).

NOTE Any language versions produced by ISO indicate the number of pages from the English version to ensure the document price is the same.

ITALICS, BOLD AND UNDERLINE

Avoid using italics, bold and underline to give emphasis to words or paragraphs in the text. Overuse of formatting styles like these make text more difficult to read and the document becomes inaccessible to the user. Instead, use the [Plain English tips](#) to make the document clear and easy to use.

SPACES

ISO/CS processing tools insert non-breaking spaces throughout the document to ensure that related elements are not separated by a line break or page break in the PDF. For example, a non-breaking space is used in cross-references to a document (e.g. "ISO 14005") to keep together the standards developer (ISO) and the document number (14005).

The processing tools also remove double spaces used before or after punctuation.

In certain elements, such as code point identifiers, spaces can have technical significance. For any documents containing technically significant spaces, ISO/CS can exceptionally avoid using this processing tool. Committee Managers must always note this special request when submitting such a document to ISO/CS.

COVER, COPYRIGHT, HEADERS AND FOOTERS

The cover of a published ISO document gives: the type of deliverable (e.g. International Standard, Technical Specification); the document number (e.g. ISO 1234); the edition number; the publication date (year-month); the document title; the full reference information [e.g. ISO/TS 5678:20XX(E)]; the ISO copyright; and the ISO logo.

Other elements are added when required, e.g. logos and reference numbers for documents co-published with other organizations, translated text for documents published in multiple languages.

Various cover templates are used throughout the production process to include relevant elements such as the status of the current draft, the voting dates, the TC responsible, CEN parallel processing and guidance for recipients of the draft.

The copyright notice is given on page ii. The text of the copyright notice is determined by the Policy for the Distribution, Sales and Reproduction of ISO Publications and the Protection of ISO's Copyright (POCOSA). Co-publications can include the copyright notice of the other organization.

A header is included on every page except the cover and any blank back pages. It gives the document reference number, the current stage of the document and the language version, e.g. ISO/FDIS 1234:20XX(E), ISO/IEC 12345:20XX(F). The header of page 1 also gives the type of deliverable, e.g. International Standard. There are no additional elements such as clause titles in the header.

A footer is included on every page except the cover and any blank back pages. It gives the page number and the abbreviated copyright notice: © ISO 20XX – All rights reserved. The final back page does not include the page number. Co-publications can include the name of the other organization, e.g. © ISO/IEC 20XX – All rights reserved.

TABLE OF CONTENTS

The table of contents is given on page iii and is called simply "Contents". For the main text, it shows the heading titles up to level 3. For the preliminary pages, the annexes and the Bibliography, it shows the heading titles only up to level 1. It does not include a list of any other elements, e.g. tables, figures, examples.

The table of contents is generated automatically by the XML workflow and cannot be modified.

NUMBERING

The rules for numbering are given in ISO/IEC Directives, Part 2, 2018, 11.4, 12.4, 13.4, 14.4, 15.4, 16.4, 17.4, 18.4, 20.4, 21.4, 22.3, 23.3, 24.3, 25.3, 26.3, 27.3, 28.3, 29.3.

Use consecutive numbers for numbered lists, numbered paragraphs, and terms and definitions.

NOTE The reagents, materials and apparatus clauses are considered as numbered lists. The rules are given in ISO/IEC Directives, Part 2, 2018, 18.5.2, 18.5.3 and 18.5.4.

Avoid breaking up items in a numbered list with sentences or paragraphs in between. Use an unnumbered list or insert a new subclause title, see Table 1 below.

Do not resume numbering in a different clause/subclause.

Numbering needs to be consistent at the same level. To start using the next level of numbering, first insert a new subclause title, see Tables 2 and 3 below.

Avoid using numbered paragraphs unless it is necessary to reference a specific paragraph.

Avoid hanging paragraphs, as explained in the ISO/IEC Directives Part 2, 22.3.3.

TABLE 1 — INCORRECT AND CORRECT NUMBERING OF A LIST

INCORRECT	CORRECT (UNNUMBERED LIST)	CORRECT (NEW SUBCLAUSE TITLE)
<p>10 Test report</p> <p>The test report shall include the following information:</p> <ul style="list-style-type: none"> a. the sample; b. a reference to this document, i.e. ISO 1234:2020; c. the method used; d. the result; e. any deviations from the procedure; f. any unusual features observed; g. the date of the test. <p>It may also include:</p> <ul style="list-style-type: none"> h. the test schedule; i. the test operator. 	<p>10 Test report</p> <p>The test report shall include the following information:</p> <ul style="list-style-type: none"> a. the sample; b. a reference to this document, i.e. ISO 1234:2020; c. the method used; d. the result; e. any deviations from the procedure; f. any unusual features observed; g. the date of the test. <p>It may also include:</p> <ul style="list-style-type: none"> — the test schedule; — the test operator. 	<p>10 Test report</p> <p>10.1 Requirements</p> <p>The test report shall include the following information:</p> <ul style="list-style-type: none"> a. the sample; b. a reference to this document, i.e. ISO 1234:2020; i.e. ISO 1234:2020; c. the method used; d. the result; e. any deviations from the procedure; f. any unusual features observed; g. the date of the test. <p>10.2 Optional</p> <p>It may also include:</p> <ul style="list-style-type: none"> a. the test schedule; b. the test operator.

TABLE 2 — INCORRECT AND CORRECT NUMBERING OF A LIST IN A REAGENTS, MATERIALS OR APPARATUS CLAUSE

INCORRECT	CORRECT (CONSECUTIVE NUMBERING)	CORRECT (NEW SUBCLAUSE TITLE)
5 Reagents	5 Reagents	5 Reagents
5.1 Hydrochloric acid.	5.1 Hydrochloric acid.	5.1 General
5.2 Sodium chloride.	5.2 Sodium chloride.	5.1.1 Hydrochloric acid.
5.3 Standard solutions	5.3 Standard solutions.	5.1.2 Sodium chloride.
5.3.1 Standard solution prepared with titanium.	5.4 Standard solution prepared with oxalate.	5.2 Standard solutions
5.3.2 Standard solution prepared with oxalate.		5.2.1 Standard solution prepared with titanium.
		5.2.2 Standard solution prepared with oxalate.

TABLE 3 — INCORRECT AND CORRECT NUMBERING OF PARAGRAPHS

INCORRECT	CORRECT (CONSECUTIVE NUMBERING)	CORRECT (NEW SUBCLAUSE TITLE)
4.5 Samples	4.5 Samples	4.5 Samples
4.5.1 Samples shall not be processed if the sample or test portion is too small.	4.5.1 Samples shall not be processed if the sample or test portion is too small.	4.5.1 General
4.5.2 Samples shall not be combined differently than described in the procedure.	4.5.2 Samples shall not be combined differently than described in the procedure.	4.5.1.1 Samples shall not be processed if the sample or test portion is too small.
4.5.3 Visual inspection of the sample shall be performed.	4.5.3 Visual inspection of the sample shall be performed.	4.5.1.2 Samples shall not be combined differently than described in the procedure.
4.5.3.1 The sample shall not be assayed if it is damaged on	4.5.4 The sample shall not be assayed if it is damaged on arrival.	4.5.2 Inspection
		4.5.2.1 Visual inspection of the sample shall be performed.
		4.5.2.2 The sample shall

arrival.	4.5.5	The sample shall not be assayed if it is damaged on arrival.
4.5.3.2 The sample shall not be assayed if was damaged during transport.	4.5.5	The sample shall not be assayed if was damaged during transport.
4.5.3.3 The sample shall be inspected upon receipt.	4.5.6	The sample shall be inspected upon receipt.
	4.5.2.3	The sample shall not be assayed if was damaged during transport.
	4.5.2.4	The sample shall be inspected upon receipt.

FIGURES

The rules for the presentation of figures are given in ISO/IEC Directives, Part 2, 2018, Clause 28.

Instructions for submitting figures to ISO/CS are given in [Requirements and guidelines for the submission of drafts to ISO/CS](#) (see “Graphics”).

Guidelines for the production of drawing files are given in the [DRG Directives](#).

TABLES

The rules for the presentation of tables are given in ISO/IEC Directives, Part 2, 2018, Clause 29.

Instructions for submitting tables to ISO/CS are given in [Requirements and guidelines for the submission of drafts to ISO/CS](#).

Tables contain horizontal text by default. Vertical text in tables can be used sparingly, e.g. in the heading row. Punctuation and capital letters are not required for cells that do not contain full sentences.

If necessary, shading can be used sparingly in tables. Remember that shading can make text harder to read, especially if a document is printed in black and white.

Tables in Clauses 3 or 4 that contain symbols, units and abbreviated terms are not numbered or given a title. These tables are considered as lists and do not need to be cross-referenced in the text.

USE OF COLOUR

Text is always black in ISO documents and cannot be presented with background shading.

Colour is not recommended in figures or tables because it can cause issues with accessibility and legibility. Not all users will easily distinguish between colours or be able to view the document on a screen – if printed in black and white the meaning will be unclear.

Do not use colour as the exclusive way to convey meaning in any element of an ISO document.

In figures, use dots and dashes, rather than colours, to differentiate between lines on a graph.

In tables, use text (e.g. footnotes) rather than shading to define the contents of a table cell.

In a small number of specific documents (e.g. for safety signs), it is necessary to specify colours and show examples. Colours are considered to be important if there is a risk of misinterpreting or misusing a document when it has been printed in black and white. Refer to a specific colour if this is needed. An “IMPORTANT” statement, in bold, is placed between the title and the Scope on page 1 of the document to explain the use of colour. The choice of statement depends on the category of colour appearing in the document. ISO/CS provides fixed wording for these statements.

ADDITIONAL ELEMENTS

BOXES

The use of boxes to present text is discouraged as they cannot be cross-referenced as a specified element of the document. Instead use figures, tables or a separate subclause. The exception is for sector-specific standards, in which boxes are used to reproduce the text from the generic standard.

BOXED VALUES

Avoid using boxed values in the text, i.e. values within brackets that can be substituted with alternative values for use in national applications of the document, e.g. “The mass fraction of moisture shall not be more than [13,0 %].”

Instead, remove the brackets and use a recommended value: “The mass fraction of moisture should not be more than 13,0 %.”

Add the following to the Introduction, specifying all the subclauses containing these values and any annexes that list national and regional values:

“As national implementation may differ, national standards bodies are invited to modify the values given in X.X in their national standards. Examples of national and regional values are given in Annex X.”

INDEX

It is not necessary to include an index to present an alphabetical list of terms from Clause 3 because terms can be searched for on the [Online Browsing Platform](#) and in the PDF file.

However, a document can include an index if it is provided by the committee. The committee is responsible for checking it is correct before publication.

The index is placed at the end of the document, i.e. after the annex(es) or the Bibliography (if any).

VOCABULARY DOCUMENTS

ISO/IEC Directives, Part 2, 2018, 11.5.2, gives the rule for the title of vocabulary documents:

“For documents dealing exclusively with terminology, the following expressions shall be used:

- “Vocabulary” if both terms and definitions are included, or
- “List of equivalent terms” if only equivalent terms in different languages are given.”

A vocabulary is the source document for the terms and definitions of a committee or subject. It is not a collection of terms used in the documents of a committee. Therefore, it does not:

- state that it is a collection of terms;
- list the documents that use its terminological entries;
- include documents from its committee as “SOURCE”.

It can include documents from another committee as “SOURCE”.

A vocabulary is the only ISO document that can have terminological entries in clauses other than Clause 3. If terminological entries are given in other clauses, use a clause title starting “Terms related to”. Terminological entries are never included in annexes.

Do not include the first line of the fixed text for Clause 3, i.e. “For the purposes of this document, the following terms and definitions apply.” This is not needed in a vocabulary document because the terminological entries apply to all the documents of the committee.

FURTHER READING

The following resources give detailed information on spelling and grammar rules and can be useful tools when drafting ISO documents.

- [ISO 690](#), *Information and documentation — Guidelines for bibliographic references and citations to information resources*
- [ISO 3098-2](#), *Technical product documentation — Lettering — Part 2: Latin alphabet, numerals and marks*
- ISO 3166 (parts [1](#), [2](#), [3](#)), *Codes for the representation of names of countries and their subdivisions*
- ISO 3534 (parts [1](#), [2](#), [3](#), [4](#)), *Statistics — Vocabulary and symbols*
- [ISO 4217](#), *Codes for the representation of currencies*
- ISO 80000 (parts [1](#), [2](#), [3](#), [4](#), [5](#), [7](#), [8](#), [9](#), [10](#), [11](#), [12](#)), *Quantities and units*
- IEC 80000 (parts [6](#) & [13](#)), *Quantities and units*
- Chambers. *The Chambers Dictionary* [online]. Available from: <https://chambers.co.uk/>
- Collins. *Collins Dictionary* [online]. Available from: <https://www.collinsdictionary.com/>
- Oxford University Press (ed.) New Hart's Rules: *The Oxford Style Guide*. Second Edition. Oxford: Oxford University Press, 2014
- Oxford University Press (OUP) and Dictionary.com. *Lexico* [online]. Available from: <https://www.lexico.com>
- Swan, Michael. *Practical English Usage*. Fourth edition. Oxford: Oxford University Press, 2016
- The Economist. *The Economist Style Guide*. Twelfth edition, London: Profile Books Ltd, 2018