

Process and design checklists for software documentation

The checklists are based on Annex A and Annex B of ISO/IEC 18019:2004. ISO waives copyright for these checklists. (ISO/IEC 26514:2008 replaces ISO/IEC 18019:2004, but the checklists remain useful.)

Use the process checklists to record decisions and actions at each stage of documentation development.

Use the design checklists for reviews of the documentation.

Modify the checklists to suit your needs.

Process checklists

- A.1 Objectives _____ 2
- A.2 Planning _____ 3
- A.3 Analysis _____ 4
- A.4 Design _____ 5
- A.5 Development and review _____ 5

Design checklists

- B.1 Content checklist _____ 2
- B.2 Navigation checklist _____ 4
 - B.2.1 On-screen documentation _____ 4
 - B.2.2 Paper-based and printable documentation _____ 6
- B.3 Style checklist _____ 8
- B.4 Presentation checklist _____ 10
 - B.4.1 On-screen documentation _____ 10
 - B.4.2 Paper-based and printable documentation _____ 12
- B.5 Overall _____ 14

A.1 Objectives

Collect all relevant information that exists such as:

- Customer requirements
- Marketing requirements
- Product plans
- Task analysis
- Evaluation reports
- Customer feedback
- Previous versions of the product and product documentation

Find out the objectives for the following:

- The product
- Scheduling
- Usability
- Accessibility
- Future modifications
- Internationalisation, localisation and customisation
- Translation
- Packaging
- Legal requirements
- Security
- International Standards and conventions
- Costs
- Documentation delivery and viewing mechanism

Write the Documentation Proposal

A.2 Planning

This checklist should be used at each planning stage. Not all the subjects will be included in plans at every stage. Some may be added in the later stages.

Collect relevant documents, such as:

- Previous version of the Documentation Plan
- Specifications
- Requirements documents
- Documentation Proposal
- Quality Plan

Decide the standards and conventions to be followed

Decide the version and change control procedures

Plan provision of personnel

Plan provision of equipment

Assign responsibilities for aspects of the documentation

Estimate the financial costs

Prepare the schedules

Plan the prototypes

Plan the system tests

Plan the documentation reviews

Plan the user tests

Plan the localisation

Plan the customisation

Plan the approval mechanism for the documentation

Decide how to handle updates and future developments

Plan the reproduction method for the printed documentation

Agree on the form of the deliverable to be handed over for release

Write the Documentation Plan

A.3 Analysis

Collect all relevant documents that exist, such as:

- Documentation Proposal
- Documentation Plan
- Output from systems analysis

List the audiences

Write a profile of each type of audience including:

- Learning stages
- Working environment

Draw up or find a task analysis

Map the audiences to the tasks

List the characteristics of each task

Work out the information needed by users including:

- Context of use
- Volume of documentation
- Kind of information
- Document structures

Specify usability goals

A.4 Design

Collect all relevant documents that exist, such as:

- Documentation Plan

Decide what medium to use for information

Decide what tools to use

Design the details of the documentation including:

- Content
- Structure of printed documents
- Navigation in on-screen documentation
- Style
- Presentation

Specify the usability goals and measures

Develop prototypes

Plan user tests

A.5 Development and review

Collect all relevant documents that exist, such as the Documentation Plan

Examine the prototypes and the feedback from them

Draft the information

Review the information

Carry out usability tests

Carry out system tests

Carry out validation and field trials

Prepare subsequent draft and retest

Hand over the finished documentation

Hand over the documentation for localisation or customisation

Prepare the archive

B.1 Content checklist

This checklist should be applied to the complete documentation suite, both embedded and separate, taken as a whole.

General information:

- Is it clear what version of the software the documentation applies to?
- Is the name of the manufacturer clear?
- Is the information that users need when asking for support included?
- Is there a copyright statement?

Overview of the application:

- Is there an overview of the application?
 - Does it explain what the application is for?
 - Does it explain what application functions are available?
 - Does it explain the structure of the application?

Overview of the documentation:

- Is there an overview of the documentation?
 - Does it explain what documentation there is?
 - Does it explain how to use the documentation?

Task descriptions:

- Is there a task description for each task that users can perform?
- Are there process descriptions that put the tasks in context?

Fields:

- Are all fields explained?
- Are all options explained?
- Is the information about different types of field appropriate?

User interface elements:

- Are all the elements of the application's user interface explained?

Application functions:

- Are all the functions of the application described?

Messages:

- Are messages explained, if necessary?

Terms:

- Are all the terms used either defined in the documentation or already familiar to users?
- Is the terminology used consistently?

Concepts:

- Are all the important concepts explained?

Exploitation:

- Is there information on how to exploit the advanced features of the application?

Questions and problems:

- Does the documentation answer questions that the users may have?
- Is there any problem-solving information provided, if necessary?
 - Does it cover all the problems users may be expected to encounter?
 - Does it provide solutions?

Examples:

- Are there sufficient examples?
- Are the examples suitable?
- Are examples presented consistently?

Captions and callouts:

- Are captions and callouts for illustrations, tables, photographs and other graphics effective and consistent?

User-supplied content:

- Can the users annotate the text?
 - If so, can the original text be restored?

B.2 Navigation checklist

B.2.1 On-screen documentation

General:

- Is it easy to find the documentation?
- Are the access methods consistent?
- Is it easy to exit from the documentation?

Finding the right information:

- Is context-sensitive access available?
 - If so, is the right information for the context displayed?
- Are topics easy to find?
- Is there an index facility, is it easy to use?
 - Is the index comprehensive, accurate and well-edited?
 - Does it make effective use of synonyms and cross-references?
 - Is it designed from the reader's viewpoint of how to access information?
- Is the speed of access adequate?

Structure:

- Is the information structured in a logical way?
- Is the structure of the information clear or else explained to the users?
- Is the information structured in the way users need to understand it, rather than the way the program was written?
- Is the material split into suitable chunks?
- Is the order of information within each chunk sensible?

Orientation:

- Is it clear what type of information is displayed?
- Does each topic have a clear heading?
- Can users get back to a previous topic?
- Can each user find the best starting point for their needs?

Links:

- Are different types of link clearly distinguished?
- Are the links appropriate?
- Are all the links necessary?
- Are the links sufficient?
- Do the links go to the correct places?

Browsing:

- Is it possible to browse through the on-screen information in a logical sequence?
- Can users browse backwards as well as forwards?

Scrolling:

- Do the text and graphics scroll at an adequate speed?
- Do titles and headings remain displayed?

Can users see how near the end they are in a scrollable topic?

B.2.2 Paper-based and printable documentation

General:

- Is it easy to obtain the documentation?
- Does each user have the documents that they need?

Finding the right information:

- Is it clear in which documents to find each type of information?
- Is it easy to find the right information within each document?
- Is there a table of contents for each document?
 - Is each table of contents comprehensive, useful, accurate and well-edited?
- Is there an index for each document in which users need to find particular information?
 - Is the index comprehensive, accurate and well-edited?
 - Does it make effective use of synonyms and cross-references?
 - Is it designed from the reader's viewpoint of how to access information?
- Are references from the contents list and index easy to follow?

Structure:

- Is the information structured in a logical way?
- Is the structure of each document obvious or else explained to the users?
- Is each document or each part structured into chapters or major sections?
- Is it easy to find the start of each part and each chapter or section?
- Are appendices or annexes used appropriately for reference or lengthy information?
- Is the information structured in the way users need to understand it, rather than in the way the program is written?
- Is the material split into sections of a suitable length?
- Is the sequence of information within each section suitable for the expected method of use?

Orientation:

- Is it clear what type of information is contained in each section?
- Does each section have a clear heading?
- Can each user find the best starting point for their needs?

Sequence of information:

- Are subjects presented in a logical sequence in each document?
- Does the sequence of information in each document or each part correspond to the way users need to use it?

Numbering:

- For documents divided into volumes, are the volumes clearly labelled?
- For documents divided into parts, are the parts numbered?
- Are chapters or sections clearly numbered or labelled in some prominent way?
- Do the page numbers in each volume or each part make it clear to which volume or part they belong?
- Is the page numbering scheme suitable for the type of document?
- Is the page numbering clear?
- Is the page numbering scheme consistent with the section numbering scheme?
- Is the section numbering clear?
- Are illustrations that are referred to from the text numbered?
- Are tables that are referred to from the text numbered?
- Are preliminary pages numbered in a separate sequence from the rest of the document?

Cross-references:

- Are there cross-references between separate documents?
- Are there sufficient cross-references between sections containing related information?
- Are the cross-references appropriate?
- Are all the cross-references necessary?
- Are the cross-references easy to follow?

B.3 Style checklist

This checklist should be applied to each separate document individually, that is, all the separate documents should be examined.

Vocabulary:

- Are terms and abbreviations defined where necessary?
- Are terms used consistently?
- Are definitions provided for the terms?
- Is the vocabulary suitable for the intended readership?
- Are most words in the vocabulary short and simple?

Grammar:

NOTE. Be aware of the differences between UK and US English (the default setting of the available spelling and grammar checker may be US English).

- Is the spelling correct?
- Is the grammar correct?
- Are tenses used correctly?
- Are instructions in the imperative?
- Is the punctuation correct?

Style:

- Does the sentence length vary?
- Are most sentences short and simple to understand?
- Are most verbs active?
- Is the reader addressed directly (using 'you')?
- Is the writing concise?
- Do sentences lead the user from the known to the unknown?
- Do paragraphs lead the user from the known to the unknown?
- Is the style appropriate for the intended readership?
- Is the text easy to understand?
- Are goals given for the instructions?
- Are pre-requisite conditions given at the beginnings of instructions?
- Is hyphenation used where necessary to avoid misunderstandings?
- Are facts written the right way round (leading from known information to unknown information)?
- Does each message explain what type of message it is?
- Has giving the computer or the application a human personality been avoided?
- Have clichés been avoided?
- Are upper-case letters used appropriately?

Illustrations:

- Are illustrations used in appropriate places?
- Are the types of illustration suitable for the information?
- Are illustrations simple and clear?
- Are illustrations of similar types consistent?
- Are illustrations complete?
- Is meaning conveyed using methods other than colour alone?

B.4 Presentation checklist

B.4.1 On-screen documentation

Windows:

- Does the windowing scheme accommodate the information characteristics the user needs?
- Are the default sizes and placements of windows suitable?
- Can users resize and move information windows?
- Can the default sizes and placements be restored?

Window layouts:

- Are similar topics displayed in windows with similar layouts?
- Are window layouts appropriate for the types of information they display?
- Is there sufficient blank space so that the windows do not seem crowded?
- Is the title of each window clear?
- Are the navigation controls in a consistent place?
- Are topic titles and controls contained in non-scrolling areas?

Colours:

- Are colours used appropriately?
- Are colours used consistently?
- Are only a few colours used?
- Does the presentation work in monochrome?
- Can the user change the foreground and background colours?
- Is the polarity consistent (for example, dark text on light background)?
- Is the contrast between foreground and background colours suitable?

Typography:

- Are only a few typefaces used?
- Are typefaces used consistently?
- Are the typefaces legible?
- Are the typefaces used suitable for on-screen use (for example Verdana or Arial)?
- Are the different levels of heading easy to distinguish?
- Do the different heading levels represent the hierarchy correctly?
- Is most of the text in mixed upper and lower case?
- Are the typefaces available on the users' screens?
- Are the upper-case letters at least 3 mm high on the screen?
- Have underlines that cut through the descenders been avoided?
- Is the method used for highlighting words and phrases consistent?

- Is the method used for highlighting words and phrases effective?
- Is the line spacing at least twice the x-height?
- Is the line spacing at least one thirtieth of the line length?

Layout of information:

- Do important messages stand out sufficiently?
- Are similar elements positioned consistently?
- Is blank space used to separate elements?
- Are paragraphs separated clearly?
- Are lists used where appropriate?
- Are lists consistent?
- Are lists presented as numbered lists where the sequence is significant?
- Are lists presented as bullet lists where the sequence is not significant?
- Are tables used appropriately?
- Are rules and borders used consistently?
- Is the presentation simple?
- Can annotations be distinguished easily?

Illustrations:

- Is the speed of display of the illustrations adequate?
- Can illustrations be seen at the same time as text that relates to them?
- Are the lines thick enough to be seen clearly?
- Is text in illustrations sufficiently large (upper-case letters at least 3 mm high)?
- Can users print the illustrations?
- Are active areas clear and easy to use?

Icons and signposts:

- Are the icons and signposts self-evident or easy to learn?
- Are the graphics clear?
- Do the graphics represent actual objects or actions?
- Do the graphics use culture-independent images?
- Are metaphors used consistently?

B.4.2 Paper-based and printable documentation

Documents:

- Does the presentation of each document make it clear what the document contains?
- Is the overall size of each document suitable for the place in which the document will be used?
- Is the orientation of each document suitable for its intended use?
- Do the majority of the documents have portrait layout?

Binding:

- Is the binding of each document suitable for the place in which the document will be used?
- Is the binding of each document suitable for how the document will be used?
- For documents with a printed spine, is the printing either across the spine or running from top to bottom?
- For documents in ring binders, is there only one document in each binder?
- Are cards and charts folded in a suitable way?

Paper:

- Is the paper suitable for the expected use of the document?
- Are divider pages made of heavy paper or thin card?
- Are divider pages durable enough for their intended use?
- Is opaque paper used in documents printed double-sided?
- Does the paper used for documents that are not leaflets or brochures have a matt finish?
- Is the material used for pages suitable for the environments in which they are to be used (especially for damp or dirty environments)?
- Unless there is a special need for another colour, is the paper white?

Page layouts:

- Are page layouts simple?
- Are page numbers clear?
- Is the document reference number included on the pages?
- Are common elements on pages presented in the same position on each page?

Section layouts:

- Do major sections start on a new page?
- Is the heading of each section clear?
- Are sections clearly distinguished from each other?
- Are similar subjects displayed using similar section layouts?

- Are section layouts appropriate for the types of information they contain?
- Is there sufficient blank space so that pages do not seem crowded?

Layout of information:

- Are line lengths short enough for the text to be easy to read?
- Do important messages stand out sufficiently?
- Are similar elements positioned consistently?
- Are paragraphs separated clearly?
- Are lists used where appropriate?
- Are lists consistent?
- Are lists, where the sequence is significant, presented as numbered lists?
- Are lists, where the sequence is not significant, presented as bullet lists?
- Are tables used appropriately?
- Are rules and borders used consistently?

Colours:

- Are colours used appropriately?
- Are colours used consistently?
- Are only a few colours used?
- If colours are used in printable documents, is the presentation clear when printed in monochrome?
- Is the majority of the text presented as dark characters on a light background?
- Is the contrast between text and paper colours suitable?

Typography:

- Are only a few typefaces used?
- Are typefaces used consistently?
- Are the typefaces legible?
- Are the different levels of heading easy to distinguish?
- Do the different heading levels represent the hierarchy correctly?
- Is most of the text in mixed upper and lower case?
- For printable documents, do the typefaces print correctly on all printers available to the users?
- Is the text size suitable for the environment in which the document will be used?
- Is the method used for highlighting words and phrases consistent?
- Is the method used for highlighting words and phrases effective?
- Is the line spacing sufficient?

Illustrations:

- Do illustrations occur after the text that refers to them?
- Can text and illustrations that need to be together be seen at the same time?
- Are the drawn lines thick enough to be seen clearly?
- Is the text in illustrations legible?

For printable documentation, do the illustrations print correctly, with all drawn lines and text visible?

B.5 Overall

Does the documentation fulfil its objectives for the intended audience?

Does the documentation integrate all elements into a readable and usable publication?

Does the documentation project a professional image of the publication's sponsor?