



INFORMATION TECHNOLOGY SUPPORT SERVICE Level II

Learning Guide #15

Unit of Competence: -	Update and Document Operational Procedures
Module Title: -	Updating and Documenting Operational Procedures
LG Code:	<u>EIS ITS2 M05 1019 LO1-LG15</u>
TTLM Code:	<u>EIS ITS2 TTLM 1019 V1</u>

LO1: Assess technical and user documentation

This learning guide is developed to provide you the necessary information regarding the Following content coverage and topics –

- Reviewing current version of technical and user documentation
- Comparing technical and user documentation with current system
- Identifying and documenting in accuracies for future reference.

This guide will also assist you to attain the learning outcome stated in the cover page. Specifically, upon completion of this Learning Guide, you will be able to –

- Current version of technical and user documentation is reviewed based on the latest operational procedures.
- Accuracy of technical and user documentation is compared with current system functionality.
- Inaccuracies are identified and documented for future reference

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described below **3 to 4**.
3. Read the information written in the information “Sheet 1, Sheet 2, and Sheet 3,” in **page 1, 5, and 8** respectively.
4. Accomplish the “Self-check 1, Self-check t 2, and Self-check 3” in **page 4,7, and 15** respectively

1.1. Documentation

Documentation may refer to the process of providing evidence ("to document something") or to the communicable material used to provide such documentation (i.e. a document).

1.1.1. User documentation –

Designed for the end user of the computer hardware or software. It may not be a computer specialist

Examples of user documentation

- Instructional materials which usually come with the hardware or software such as installation instructions or a troubleshooting guide.
- Training materials designed to teach the user the skills required to use the hardware or software. Examples include tutorials and user manuals.
- Reference materials designed so users can look up a particular task. An example is a quick reference guide.
- Policies and procedures of an organization. This documentation helps all staff and management work to the same guidelines and rules.

1.1.2. Technical documentation

Technical documentation is the generic term for documentation with regard to a product. People mainly associate the term with the documents and information that are passed on to the public by the manufacturer. It is also a documentation that is produced for a person who has enough expertise in a particular computer system to support or maintain that system.

Examples of technical documentation

- User instructions
- Operating instructions
- Servicing instructions
- Installation manuals
- Software manuals

- **Why user documentation is important**

Computer users need documentation so that they can make the best use of their computers as work tools. A computer system can assist them to do their work efficiently and effectively but they need to be able to do three things:

- learn how to use the system and its applications
- know how to get help when they need to learn more
- know what to do when they experience problems.

Users will be working across all parts and levels of an organisation carrying out different functions such as data entry, financial administration, executive and middle management. However, user documentation is for anyone in an organisation who needs assistance with these three tasks.

- **Types of user documentation and appropriate media**

Books, manuals, computer-based tutorials and online help are all media for user documentation. Traditionally user documentation has consisted of a range of paper-based documents. However, we are no longer limited to these, and organisations are shifting their paper-based user documentation to an online form. There are very good reasons for this:

- increased productivity — users have up-to-date, comprehensive information that they can access quickly and easily.
- increased corporate intelligence — information is stored centrally but distributed universally
- consistency and quality — documentation appears in the same format and is easily updateable
- reduced printing costs.

- **Reflect**

What user documentation are you familiar with? Make a list of the different kinds of user documentation you have used or you are familiar with, both personally and at work.

- **Feedback**

Your list could include a training manual, user guide, quick reference sheet, licensing agreement software registration form, maintenance manual, procedure manual, documentation register, online help, online tutorial, organisation's intranet, the Internet.

- **Standards organization's**

What are 'standards organization's'?

- **Standards** ensure that levels of quality, safety, reliability and efficiency are incorporated into products and services when they are developed and used. Sometimes if we are disappointed in the quality of a product it is because it was not produced to a recognised standard. Standards organisations, such as **Standards Australia**, develop, monitor and maintain standards in many areas of business and industry.

- **What is ISO?**

ISO stands for the International Organisation for Standardisation. This is a global organisation that produces standards. Members are government bodies, industry associations and private organisations that have an interest in industry standardisation. They reach consensus on standards for industries that meet the needs of both industries and consumers.

The ISO standard IS1590 outlines the way user documentation should be planned. This standard is designed to be part of a contract but there is a new standard (ISI8019) that will not have this restriction.

ISO 9000 is a quality management system. Organisations that meet the ISO 9000 standards are entitled to include this standard in their documentation. For example, the Open Training and Education Network, part of the NSW Department of Education and Training, is entitled to display the quality logo accredited by an organisation called Benchmark.

- **What is IEC?**

The International Electro technical Commission (IEC) prepares and publishes international standards for all electrical, electronic and related technologies. The IEC often works in conjunction with the ISO to put standards together, particularly standards for the IT industry. ISO user documentation standards were developed in conjunction with the IEC.

Name: _____

Date: _____

Instruction: Answer all the questions listed below, if you have some clarifications- feel free to ask your teacher.

I. Fill the blank space

1. _____ ensure that levels of quality, safety, reliability and efficiency are incorporated into products and services when they are developed and used.
2. _____ prepares and publishes international standards for all electrical, electronic and related technologies.

Note: Satisfactory rating – 2 points**Unsatisfactory - below 2 points**

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____

Rating: _____

List of Reference Materials

1. **BOOKS**
2. <https://training.gov.au/Training/Details/ICTSAS506>
3. web1.keira-h.schools.nsw.edu.au/faculties/IT

2.1. Review current version of technical and user documentation**Why Documentation Review?**

- ✓ Overall improvement
- ✓ Accurate and up-to-date documents
- ✓ Increases credibility

The Need

- ✓ Technically correct document
- ✓ Concise Information
- ✓ Avoid Chaos/disorder
- ✓ Timely Delivery
- ✓ Satisfaction

Review Objectives

- ✓ Evaluate the documented information
 - Accuracy = Correctness
 - Completeness = wholeness
 - Conciseness = shortness
- ✓ Reduce the defect percentage
- ✓ Improve the quality of documents
- ✓ Focus on correcting the defects

Types of documentation reviews

- Peer Review
 - Review by people who have coordinated knowledge and skills.
 - Provide a list of exactly what you need them to review
 - Assess peer review practice
 - Prepare procedure documents
 - Formulate a program agenda
- Presentation Review
- Review amongst the technical writers

- Subject matter expert review
- Review for technical information
- Overall Review
- Review by the testing team for detecting defects.

The Review Process

- Plan the review process
- Develop a clear, focused charge for each reviewer to identify important issues and invite suggestions for improvement.
- Prepare and maintain a review record.
- Make recommended changes to document and respond to the reviewer's comments.

Review Focus

- ✓ Before circulation
 - Review the document for readability and clarity.
 - Review for correct English usage
 - Review and evaluate the technical content
 - Make a reviewers checklist
 - Focus on the technical review and not on editorial review
 - Verify the technical accuracy of all procedural steps.
 - Verify the accuracy of all screen captures in the document.
- ✓ After review
 - Review the sent checklist
 - Take a positive approach
 - Maintain a tracking list
 - Decide and let the reviewer know which comments would be incorporated
 - Call a meeting if required.
 - Publish the final copy.

Challenges

- Involving Team (Let us do it)
- Getting Proper reviews
- Handling Last Minute Changes

Name: _____

Date: _____

Instruction: Answer all the questions listed below, if you have some clarifications- feel free to ask your teacher.

II. Write the answer briefly

1. Why Documentation Review?
2. List types of documentation reviews?
3. Write The Review Process?
4. List Challenges Review ?

Note: Satisfactory rating – 2 points**Unsatisfactory - below 2 points**

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____

Rating: _____

List of Reference Materials

1. **BOOKS**
2. <https://training.gov.au/Training/Details/ICTSAS506>
3. web1.keira-h.schools.nsw.edu.au/faculties/IT

3.1. Comparing accuracy of technical and user documentation's with the current document (functionality will be treated later)

Make sure the facts as stated in the document are correct, helpful, and on topic. To do a technical accuracy review, you really need to know your subject matter, probably as well or better than the original author. Use whatever other documentation is available for your subject, including man pages, program documentation, other printed books, etc. You might also use mailing lists on the topic, asking for third parties to verify certain facts of which you are in doubt.

When doing this type of review, consider if the information is only valid for certain types of hardware or software. If this is the case, make sure to note the limitations of the document within the document, either within the abstract or as a note at the beginning of the document. For example, if the solutions in the document only are relevant for one type or brand of hardware, make sure that that limitation is defined. This will keep readers from trying to apply a certain type of technology to an application or situation where it will not work.

The same should apply for the prerequisite knowledge of the reader. If prior knowledge of a subject is assumed or required, the author should say so somewhere at the beginning of the document, and it's helpful to ask that authors provide a Resource section for further reading, to bring readers that much closer to the required information.

3.2. Language Review

Because writers come from all types of backgrounds, there may be problems within the documentation that need to be fixed. Writers may be very knowledgeable in their subject areas but not great writers, or they may be excellent writers but not completely fluent in the language of the document. The language review addresses these types of problems by focusing on language issues that make the document easier for the user to read and understand. Some of the problems that may occur within the document are poor sentence structure, grammar, organization, clarity, and spelling.

If you are doing a language review, you should be fluent in the language and the structure of the language. You want to consider both the logic and grammar of the document. Your primary goal in a language review is to identify and correct areas that could lead to confusion for the reader/user of

the document. To this end, you can most certainly use language and grammar references such as dictionaries and handbooks when in doubt.

Although this review does address the structure and delivery of the language, you should not attempt to purge the document of individuality and personality in an attempt to make it "sound better" or more technical. Stilted or overformal, humorless language and structures are not the goals here. Again, your goal should be to make the document clear, unambiguous, and correct in spelling and grammar.

3.3. Items to evaluate:

- **Spelling.** Spelling should conform to a standardized English spelling of terms. For words that are new to the language and not yet standardized (for example technical Linux terminology that is generally accepted in the community), follow the most common spelling for the term.
- **Grammar.** For the purposes of this review, grammar should address issues such as standards of subject/verb agreement, pronoun/antecedent agreement, etc

For example, to say, "You will need to set several parameters in the config file to make it compile correctly. The ones you choose to set make a big difference."

- **Use of capital letters.** The document's title and section headings may follow one of two conventions, but must be consistent throughout. Titles may either capitalize only the first word, or may capitalize each word. In the second case the only words not capitalized in a title are prepositions, articles, and proper nouns which would not be capitalized.
- **Clarity.** Judgments on clarity are sometimes difficult to make. One successful strategy in evaluating clarity is asking the question "If I did not already know this information, would the explanation be clear from this document." If it is confusing to you and you already generally understand what the author is trying to say, then there is a good chance that the explanation is really confusing for someone reading the document for the first time. If you run across this situation, and you don't really know how to correct the technical explanation, or you are afraid your changes might affect the meaning of the document, ask for help from a technical expert. If no technical expert is available or no one responds to your requests, note the needed changes in the review and mark that these concerns need to be addressed in the technical review.

- **Organization.** In some cases the document would really benefit from a different structure. You should address these issues when they interfere with the understanding of the information within the document. If a document gives background information after a procedure has been performed, this may well be too late for the reader to fully consider the information he or she needs before performing the task. Look for document organization that might confuse or mislead the reader. These will be the types of issues you want to address. Once these are identified, it may be worthwhile to let the author know your rationale and discuss major changes with him or her.
- **Sentence Structure.** To some extent, sentence structure issues are discussed in the grammar section; however, there are some additional issues that are not grammatically incorrect but do interfere with the readers comprehension of the material. One of the most noticeable of these is stacked prepositional phrases.

Stacked prepositional phrases become a problem when the document's readability suffers because it becomes less and less clear what the subject and action of the sentence are. In some cases more precise descriptors are needed or sentences need to be changed from one long sentence that is hard to comprehend, to two or three more easily read sentences.

- **Readability.** This area is somewhat subjective. What passes for fairly readable material to one person might be confusing to someone else. Because this is a value judgement you should be cautious when marking up an author's work for readability. Realize when basing a judgment on readability that you might be dealing with preferences of style. In evaluating readability you must consider whether or not the way the document is written truly interferes with the readers understanding of the information. If the answer you come up with is "No, but it doesn't sound like I think it should." then you should probably not re-write the text to make it sound better to you.
- **Title.** The title should be in proper title case. The general principle for this is that all words are capitalized in a title except prepositions and articles (an article will be capitalized if it is the first word in the title).
- **Date Formats.** Dates should be in standard ISO format, which is YYYY-MM-DD.
- **Definitions of Acronyms or Slang.** Terminology and language within the realm of computer technology changes rapidly. In reviewing documents you may find that many of

the terms that are being discussed are not valid words in any dictionary or technical reference that you are familiar with. Terms that are less familiar should be defined immediately following the first instance of the term. Slang should be replaced with more common terminology if the slang will cause the reader to be confused by the connotation or denotation of the term.

Remember that readers using the document may not come to English as a primary language and, therefore, you should do your best to make sure that the document is as easy to understand as possible.

- **Latin abbreviations.** Avoid using abbreviations. e.g. (for example), et al. (and others), etc (and so on) and i.e. (that is) should always use the English equivalent.

3.4. Metadata and Markup Review

In order for these scripts to work, documents must use valid markup and include specific metadata.

- **Markup** is a modern system for interpretation of a text in a way that is syntactically distinguishable from that text. Example XML, Pdf, docs ...
- **Metadata** is information about the document and includes author information, copyright, license and a revision history of the document.

3.4.1. Required Markup

- **DocBook** XML version
- **PDF**
- **CHM** (Compiled HTML Help): The **CHM** file type is primarily associated with 'HTML Help' by Microsoft Corporation.

3.4.2. Required Metadata

The following elements are all required:

- **article info or book info**
- **Title.** Every document must contain a short, descriptive title. It should be reasonably unique; check other documents in the collection to make sure your document's title is distinctive from all other documents.
- **Abstract.** A short description of your document must be included in the abstract. This description is typically one or two sentences in length.
- **Author.** Every document must have an author. If there are multiple authors, you may use author group. If the document was prepared by an organization with no individual author, please use author group instead.

- **Editor.** Every new document must go through the review process and have a technical, language and metadata/markup review editor listed
- **update.** The date of publication for the document. The date should be in the ISO standard of YYYY-MM-DD.
- **Copyright.** Authors will always retain the copyright to any documents they submit to the LDP. Although it is not required, a copyright notice may be included. A license, however, is always required.
- **Revision history.** A summary of revisions should be included in the document. The initial release of a document should be marked up as Version 1.0. Subsequent updates should increment the version number appropriately. The preferred format is Major.Minor.Bugfix, where each section is an integer. Some authors use Alan Cox style versions (for example 1.4pre-3) and some include additional information (for example 1.3beta). This is acceptable but not encouraged. The most important thing is that we *have* a version number so we know which version we are dealing with! Once a document goes through review it should advance in minor or bugfix version number, depending on the amount of change introduced.
- **License and Legal Notice.** A license is required.
- **email.**
- **Acknowledgements and Other Credits.** Very few, if any, documents are written only by one person. It is good form to thank those who helped you with either the writing, research, testing or reviewing of your document. If someone added markup, or translated your document to another language they should also be given credit.

Name: _____

Date: _____

Instruction: Answer all the questions listed below, if you have some clarifications- feel free to ask your teacher.

I. Fill the blank

1. _____ is a modern system for interpretation of a text in a way that is syntactically distinguishable from that text. Example XML, Pdf, docs ...

2. _____ is information about the document and includes author information, copyright, license and a revision history of the document.

Note: Satisfactory rating – 1 points

Unsatisfactory - below 1 points

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____

Rating: _____

List of Reference Materials

1. **BOOKS**
2. <https://training.gov.au/Training/Details/ICTSAS506>
3. web1.keira-h.schools.nsw.edu.au/faculties/IT