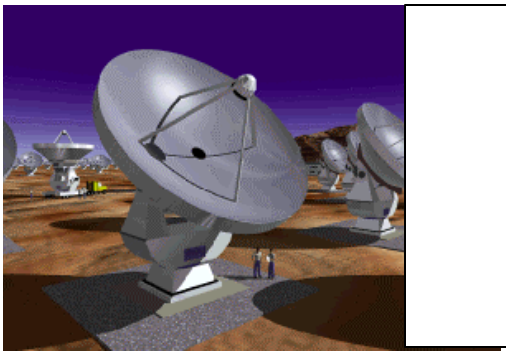

Atacama Large Millimeter Array	ALMA-SW-9999 Revision: 1 2001-09-17 *Software Standard* Mzampare

Alma Software Document Review Procedure

Software Standard

Author

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Released by: Institute:	Signature: Date:

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Change Record

REVISION	DATE	AUTHOR	SECTIONS/PAGES AFFECTED
	REMARKS		
1	2001-07-05	Michele Zamparelli	Draft version

1 Introduction

1.1 Purpose

This document describes how to review an ALMA Software Document.

Such a procedure is intended for, but not restricted to the ALMA Computing Group for the review of the documentation produced either in house or by external contractors.

1.2 Scope

This document includes a break down of the review procedure: preparation, execution and follow-up of review meetings.

At this stage no utilities to assist in this aim are provided.

The following aspects are not in the scope and are covered by procedures/conventions established at ALMA Programme Level and valid for any ALMA Document:

- The structure of a document (see [3] for the contents of specific types of documents)
- Numbering of documents
- Approval to modify existing document
- Document distribution
- Internal and external usability of a document

1.3 Reference Documents

1. ALMA-SW-0008, 5 2001-06-06 The ALMA Software Documentation Standard, Alan Bridger

2. ALMA Computing Group Web Page: http://alma.nrao.edu/development/computing/docs

3. ALMA-PRO-ESO-xxxxx-xxxx,1,2000-07-28, Software Development Process: Methodology and Tools, G.Chiozzi, R.Karban. P.Sivera

1.4 Glossary

See http://www.alma.nrao.edu/development/computing/docs/joint/draft/Glossary.htm

For a complete glossary.

2 Overview

A documentation review is a method by which a new or changed document is examined to ensure that:

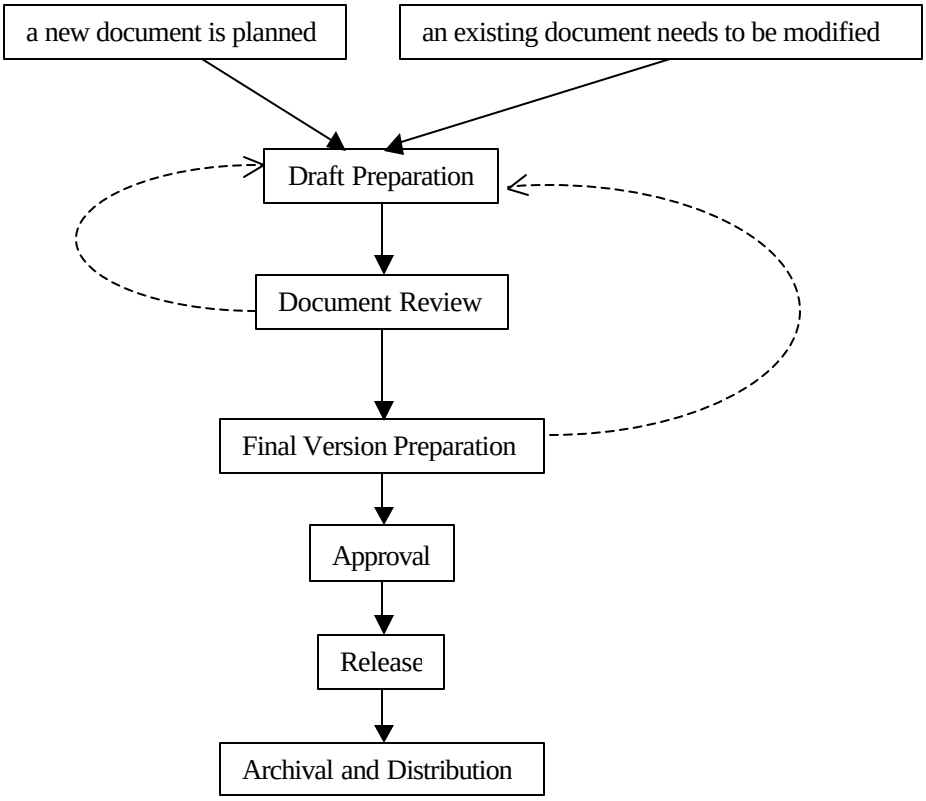
- it is technically correct

- it suits the purpose it is intended for
- fulfills the requirements expressed in previous phases, when applicable
- provides an adequate basis for the subsequent phases
- if applicable, conforms to a defined standard
- for changed document only: changes only affect those areas previously identified

The outcome of the review, the review report, provides the input for deciding the next step in the life cycle of the document. The review process is the main instrument used in the verification of software documentation thus assuring the quality of the final document.

2.1 Document Life Cycle

The life cycle of a document can be summarized as follows:



2.2 Draft Preparation

A new Draft of the document is prepared according to the general guidelines referenced in [1].During the preparation it is up to the author to involve other people by means of informal meetings, interviews, private communications, etc. to collect opinions contributions, ideas and to have a preliminary check of the content of the document.

2.3 Document Review

The review is the action of revising the content of the document. It involves a meeting of the Review Panel, either physically or by phone.

The outcome of the review is a recommendation to the author on how to change the document. According to the amount of changes the document might require one or more further loop Preparation->Review.

2.4 Final Version Preparation

It is the implementation of the changes to the document that have been recommended during the last review when the document has been accepted. The document is then identified as an official issue (ALMA-SW-<nnnn>).

Remainder to the Author:

With the author lies the final responsibility to check that:

- the document is free of spelling errors and the content is presented in good English
- temporary texts, like “document prepared for review” or “to be discussed at the meeting” or “TBD” have been removed
- the correct number and title appears on the front cover and on each page
- the change record is properly updated
- all references are correct
- there are no missing pages (also check page sequence in case of double sided documents)

2.5 Approval/Release

The final version of the document, and the meeting minutes are presented to the responsible for approval and to the one for the release.

It may happen that either the approver or the releaser can ask for minor changes to the document. *Exceptionally* the document can be rejected and it has to undergo again a full revision cycle. In such a case the document shall be renumbered as an intermediate version before being distributed.

The approver and/or releaser can add other names to the distribution list, if any.

2.6 Archiving/Distribution

Currently there is no distribution list for ALMA Software documents. They are published by default on the designated web pages ([2]) and are as such available to the entire ALMA Computing group.

The author sends to the designated ALMA Archive:

- an electronic version of the document

- a distribution list, for documents to be distributed outside of the ALMA Computing group.
- copies the final version of the electronic files plus all the files involved in the review process to whatever filesystem area has been designated as a temporary document archival.

To reduce space, the ALMA Archive stores only the approved version, and it takes care of distributing copies as indicated in the distribution list, if applicable.

Draft documents should not be distributed to external partners or used as official documents. If, for information purposes only, it is necessary to give it outside, it has to be clearly marked as draft. If instead, using a document that is still in a preliminary version is unavoidable, it shall be made "official" (archived). The "Change Record" table of the document shall record the reason why the document has been published in an intermediate state

The approval is given by the ALMA Software Management. Documents produced outside of the ALMA Member organizations are approved by the contract responsible.

As a general rule, only documents having contractual implications and general procedures require the ALMA Programme Manager's signature for release. All other documents can be approved/released by the Joint software group leaders or by someone designated by them.

3 Procedure

1. Management appoints a main author, who starts working on the draft.

   This normally implies that a number of iterations with comments/replies and editing of the document. In this phase comments are normally solicited by the author, who is given the freedom to consult whoever he deems appropriate.

2. Management decides draft is mature for review and appoints a Review Panel

   A panel of reviewers is nominated by Software. Reviewers can also represent System Engineering and Science, particularly for PDR documents. The reviewers list should include reviewers of previous versions of the same document.

3. Author makes document available, issues a call for review

   The author has to check the correctness of document number, date, draft label and to ensure that no pages are missing. The draft is put on the Web for review, in [2] and an e-mail notification of REVIEW CALL, clearly identifying the document, the reviewer panel, and the deadline for the review is sent to the Review Panel via the `alma-sw-announce` mailing list. A template for the Review Call can be found in [2].

4. Author globally replies to comments

   Two weeks are granted to reviewers to supply comments to the author. The comments will be made by e-mail following a standard format specifying the page number first. The author replies collectively to enable everyone to be informed on the various issues.

Prior to review meeting, the author sorts all the comments according to Section and page, and according to *theme*, to enable a swift review.

5. Review Meeting takes place , minutes are collected

   A review meeting takes place, where only controversial replies are discussed. The meeting is chaired by one of the Software Managers or a person delegated by them. Minutes are circulated after this meeting and they should clearly indicate whether the review was passed.

6. Review is passed, last changes implemented, published

   When a document is approved a final editing is needed to include the replies to the comments received and the outcome of the review meeting. Once this is done by the author, the document is listed as a reviewed document on the Web.

7. Review not passed, draft goes back to author

   If the ALMA Software Management deems the document as too controversial for approval, the document it may either nominate a different author or maintain the same one who will restart the procedure from scratch.

3.1 Notes about Computer support

Pending a real document management system to be introduced in the ALMA Community, some thoughts must be spent on which basic requirements a computerized document review support tool should have.

- It should interface with a database of published documents, containing: title authors, current revision, current state, review panel list.
- It should visualize the schedule for each document, showing when the draft or the next review is due, and the number of comments received so far.
- It should enable reviews to file comments using a form, in which they select the document and specify the category or page for the comment. The completeness of the input will be checked and the author informed. All the comments for one document will be sorted together in one report, which will clearly state the commentator and the page the comments refer to.

These requirements become all the more strict, the higher the number of documents planned for ALMA Software each year, the ultimate goal being minimizing time spent collectively for reviews for authors and reviewers.