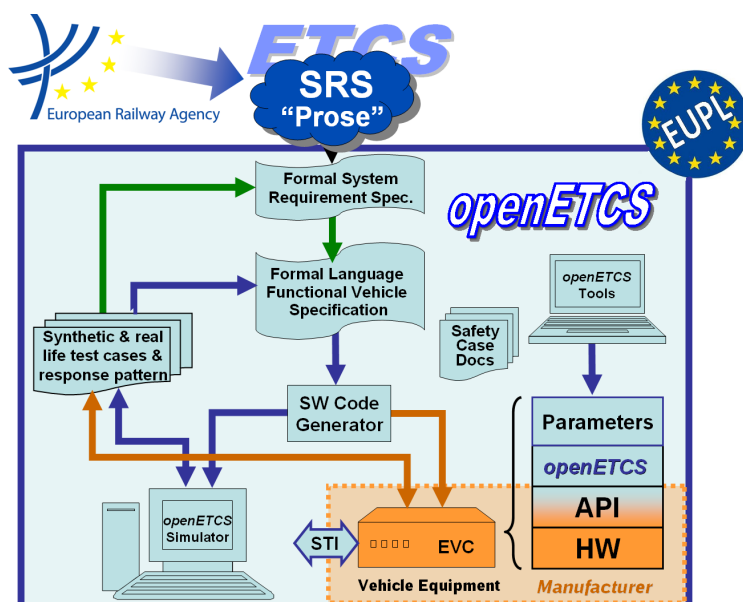


## Work-Package 1: “Management”

# Project Quality Assurance Plan - Review Process

Ainhoa Gracia

July 16, 2013



**Funded by:**



Federal Ministry  
of Education  
and Research

Région de  
Bruxelles-  
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DE INDUSTRIA, ENERGÍA  
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**OETCS/WP1/D1.3.1**

**July 16, 2013**

# Project Quality Assurance Plan - Review Process

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Description of work

Prepared for openETCS@ITEA2 Project

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## Document History

Version	Date	Chapters modified	Reason	Name
0.1.0	24.05.2013	All	First version	SQS
0.2.0	06.06.2013	All	Simplified version	SQS
0.2.1	20.06.2013	Planned reviews	Quick guide added and Review plan referred	SQS

# 1 Introduction

## 1.1 Purpose of the document

This document presents the whole process to follow when documents need review. It aims to provide a set of guidelines as technical instructions to be used whenever a review process is ongoing, or there are a set of issues reported that shall be considered. The roles involved in the process are clearly identified as well as their responsibilities and tasks. And finally, the mechanisms needed to achieve the proposed objectives are also included, so the process can be carried out successfully.

## 1.2 Intended Audience

This document applies to the whole development life-cycle of the project and it addresses all the author(s) and reviewers involved. This document should be available to all of them in read access mode and it provides guidance about the Review process whenever it is needed.

## 1.3 Supporting documents

Supporting documents		
Name	Path	Contents
Revision process	governance/Review Process	Presentation of the Revision process with details about the flow and technical instructions.
Revision and Review Processes summary	governance/Review Process	Brief presentation of the Revision process and the Review process as well as their interactions.
Review Guidelines	Ecosystem/Wiki/openETCS Development Process	It describes major aspects to be assessed during a Review Cycle.
QA Plan	governance/QA Plan	It defines the processes, methods and tools that will be used to develop the OpenETCS project

**Table 1. Supporting documents**

## 1.4 Definitions and acronyms



Definitions and acronyms	
Abbreviation	Meaning
Revision Process	It is the process through which committers and selected contributors perform a through analysis of a document, propose contributions and improvements to be included before the document is published in the OpenETCS repository.
Review Process	It is the process through which the OpenETCS community is invited to make comments and suggestions, propose corrections and improvements to a document.
Committer	The role played by a member of the OpenETCS project who have been granted with this role by other committers and the project leader. There are some tasks that only can be done by committers such as: editing and pushing changes or new documents into a GitHub repository, closing of issues in the <i>Issue Tracker</i> or being involved in Revision processes.

Table 2. Definitions and acronyms

## 2 Tools

Tools	
GIT	<ul style="list-style-type: none"> <li>• <u>GitHub</u>: A web-based hosting service for projects that use Git revision control system.</li> <li>• <u>Issue Tracker (in GitHub)</u>: The issue tracker is integrated with the project's repository. Some of the features included are: the possibility of modifying tickets from within commit messages, creating and applying labels to issues to assign to users or categorize, voting on issues that you want to see tackled, searching, sorting, and filtering, and keyboard shortcuts.</li> </ul>
PDF documents	<ul style="list-style-type: none"> <li>• <u>Adobe Acrobat Reader</u>: Software package that allows to view, navigate and print pdf files.</li> <li>• <u>Diffpdf</u>: Open source application that compares different PDF files for discrepancies.</li> </ul>

Table 3. Tools

## 3 Review Process overview

There are two types of Review Processes:

- **Planned Review Process**: It is launched by the product owner; there is a deadline for receiving comments (by default, 2 weeks) from the community and if considered appropriate, there are well identified review objectives and/or guidelines. A Planned Review Process will always be launched after a Revision Process. The following Review types are considered as Planed reviews:

- Creation Review: launched after the proposal of a new project has been made.
- Graduation Review: it is about the phase change from Incubation Phase to Mature Phase in the project lifecycle.
- Release Review: performed during the Incubation phase.
- Promotion Review: it is about the phase change from Mature Phase to Top-Level phase.
- Continuation Review: launched at Incubation, Mature or Top-Level phases of the project lifecycle.
- Termination Review: launched whenever it is necessary.
- Move Review: launched whenever it is necessary.
- Restructuring Review: launched whenever it is necessary.
- Open Review Process: At any time, an expert can make comments and suggest improvements to the documents published in the repository. Comments will be assessed by the Product Owner as they are received, and the appropriate actions taken.

In both cases:

- The review process will be performed against documents already revised and therefore published in the repository. Therefore no specific branch for review will be created.
- All comments will be made and answered using the Issue Tracker tool.
- The Product Owner will be assisted by a group of selected Key Customers of the document under review when necessary.

### 3.1 Review Roles

This section describes the roles of the participants in the review process of a document:

Roles	
Role	Competencies
Product owner	He/She is the main responsible of a document. He/She is in charge of launching the review; preparing the plan and controlling and monitoring the process progresses according to the plan; informing and interacting with the review team members
Review Team	As experts in the theme of the project, they will provide meaningful contributions to guarantee the document meets its scope and purpose in a complete and accurate way.
Key Customers	It is composed of members of the community of users of a document. Their role is to guarantee completeness, accuracy and validity of the contents of a document. Therefore, they are not only reviewers but they will assess the Product Owner in the acceptance for publication of a document.

**Table 4. Review Roles**

### 3.2 Description of the Review Process

The next figure shows the different stages of the Review Process. Right after the activities to be performed in each Stage are provided. The technical instructions on how to accomplish such activities are included in the Annex.

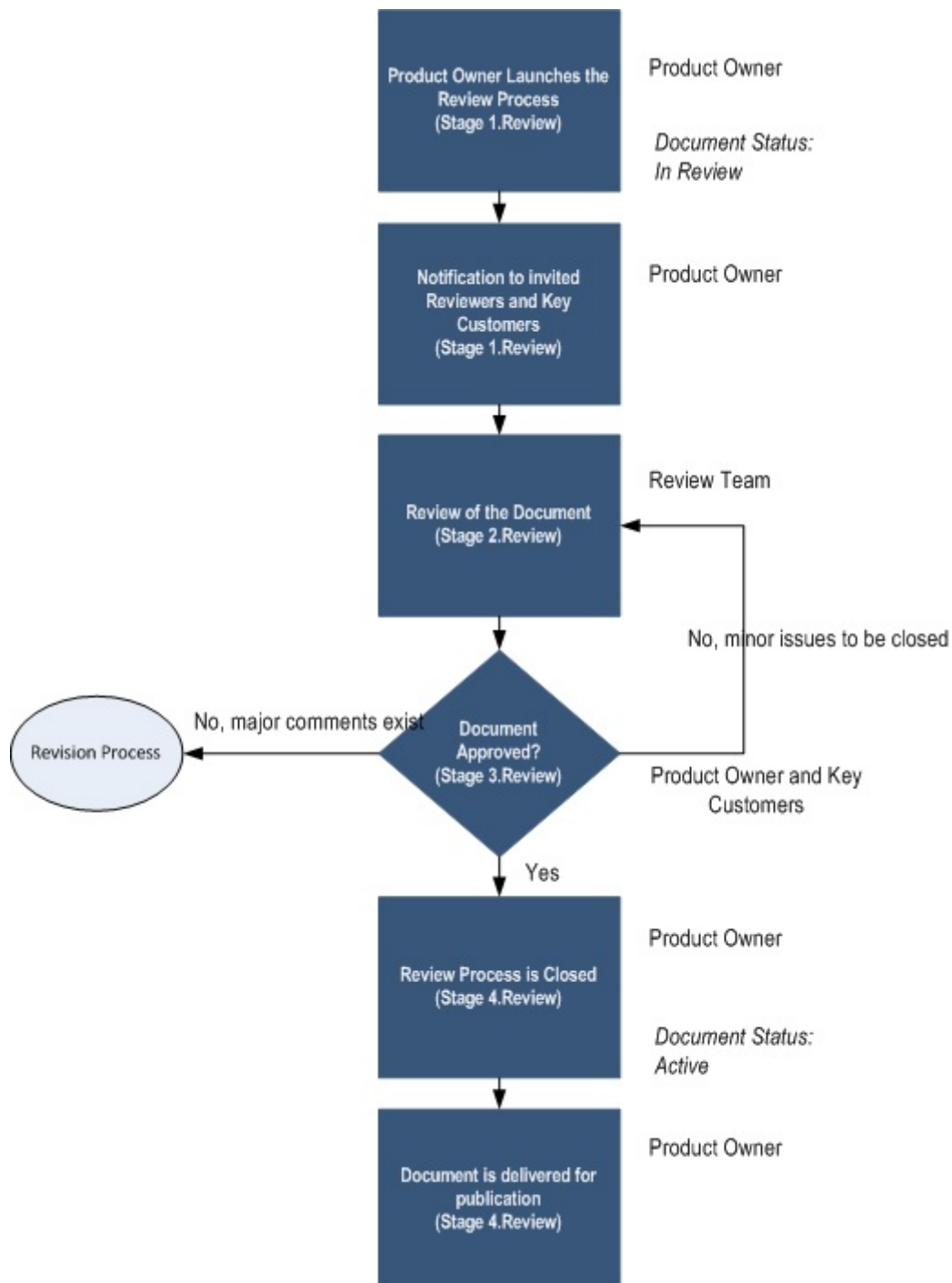


Figure 1. Review Process flow

#### 3.2.1 Stage One: Launching of the Review Process

- The Product Owner elaborates the Review Plan with the information to be sent to the reviewers: deadline for the different stages and specific review guidelines and/or objectives.
- The Product Owner updates the status of the document in the wiki page “List of Documents” of the project to “In Review”. Besides, a specific reference to the review process is to be included in the ReadMe file.
- The Product Owner creates the list of reviewers and key customers and invites them to participate. Refer to *A2.1.Review Process-Control and Monitoring* in Annex for Technical Instructions.
- The Review Process is officially launched.

### 3.2.2 Stage Two: The Review Process

- Reviewers will make comments in the form of appropriately labeled Issues. Reviewers are invited to include the “relevance” of the comment (high, medium, low). Refer to Section *A2.2. Review Process* for detailed instructions.
- The Product Owner jointly with the Authors will interact with the reviewers, when needed, in order to clarify comments.
- The deadline for receiving comments may be extended by the Product Owner. Both the finalization and the extension will be notified to the revision team members. Refer to *A2.1. Review Process-Control and Monitoring* in Annex for Technical Instructions.

### 3.2.3 Stage Three: The Approval Process

- The Product Owner will analyze the comments and proceed with their acceptance or rejection. In case of conflicts, the Key Customers will support the Product Owner in this process. Refer to *A2.3.Approval/Rejection of changes* in Annex for Technical Instructions.
- The Product Owner will implement the changes in the document under review.
- The Product Owner with the support of the Key Customer will decide whether the project is ready for publication or not.
- If ready for publication, the review process will be closed. Otherwise, a revision process will be launched, A notification with the published in the form of an issue. Refer to *A2.1. Review Process-Control and Monitoring* in Annex for Technical Instructions.

### 3.2.4 Stage Four: Review Closing

- The Product Owner publishes a new version of the document. Refer to section *A2.6.Versioning* for versioning instructions.
- The Product Owner closes the Review Process. Refer to section *A2.5. Review Closing* for instructions
- The Product Owner updates the status of the document in the wiki of the Project to “Active”.
- The Product Owner moves the Review Plan from the directory of the document under review to the ‘Review plans’ available in the repository/project.

### 3.3 Planned Reviews

According to the *Eclipse Development Process* there are different kinds of reviews that shall be launched at different moments during the project Lifecycle. This section provides guidance on how to deal with these planned reviews following the Review process previously described.

#### 3.3.1 Creation Review

- The review consists on verifying that in a new document there are appropriate and available resources, and to confirm a list of *initial committers* to be involved in future reviews.
- The Review Process is officially launched in the *Issue Tracker* of the *governance* repository.
- The Product Owner with the support of the Key Customer will decide whether the proposal of a new document with the suggested structure is approved or not.
- A name for the document is approved by the Product Owner with the support of the Committers.
- The Product Owner creates the new document and adds the appropriate contributions in that moment.
- The Product Owner closes the Review Process in the *governance Issue Tracker*.

#### 3.3.2 Graduation Review

- The review consists on confirming that the sections and contributions of the document are of sufficiently high quality, and there are active and sufficiently diverse communities (authors, committers, contributors, key costumers).

#### 3.3.3 Release Review

- The review consists on summarizing the accomplishments of the release, verifying that the OpenETCS QAPlan has been followed and all approvals have been received, and highlighting any remaining quality and/or architectural issues.

#### 3.3.4 Promotion Review

- The review consists on determining whether the document has demonstrated the appropriate characteristics to be held in a Top-Level Project.

#### 3.3.5 Continuation Review

- The review consists on verifying that there are not inactive documents, sections or contributions in a document looking promising but never actually delivering extensible frameworks, exemplary tools or useful information to the OpenETCS project.

### 3.3.6 Termination Review

- The review consists on providing a final opportunity for the Committers, Contributors or any person involved in the community to discuss the proposed withdrawal of a Proposal/Document or its archiving. The desired outcome is to find sufficient evidence of renewed interest and resources in keeping it active.

### 3.3.7 Move Review

- A Move Review is considered to be a special type of Restructuring Review.

### 3.3.8 Restructuring Review

- The review consists on identifying significant changes to one or more documents. It shall include: movement of significant sections from one document to another or moving documents from one project to another; modification of the document structure (combining multiple sections into a single document, or decomposing a single document into multiple documents); and/or change of document scope.
- The Review process shall be launched jointly with the Change Management process, so the impact of changes are assessed and a backout plan is prepared.
- The creation of new documents shall be done by the Product Owner that shall be the responsible for that repository.
- The modification of the structure of the affected documents shall be done by the Product Owner of each document.
- The process shall be equivalent to the Creation Review.

## 4 ANNEXES A1.- Review plan template

A general template has been designed to include the key points any Planned Review shall take into consideration. This template shall be fulfilled by the Product Owner before a Planned review is launched and a short summary shall be included in the corresponding Review Issue opened in the *Issue Tracker tool*.

The objectives and scope sections of the template shall vary depending on the type of review; the Product Owner shall be aware of the specific goals of each type of Review described in the 3.3 section when completing these rows.

The template is available in the governance repository [[openETCS Planned Review Template](#)].

## 5 ANNEXES A2.- Technical Instructions for using the Issue Tracker tool

### A2.1 Review Process-Control and Monitoring

TI	Review Process-Control and Monitoring
Action	Role/Instruction
Invitation to Participate to the Review Team	<p>Product Owner</p> <p>Create a new Issue (Main Issue of the Review Process) in the Repository indicating a new review is launched:</p> <ul style="list-style-type: none"> <li>• Open Github and go to the correspondent repository</li> <li>• Select the <i>Issues section</i></li> <li>• Push the <i>New issue</i> button</li> <li>• Add a descriptive title indicating the document under review</li> <li>• Add a significant description about the causes that have motivated the review and summarizes the objectives of the review. Provide the list of required Committers/Contributors.</li> <li>• Push <i>Submit new issue</i></li> </ul> <p>Besides, a direct mail addressing the selected Review Team Members will be sent.</p>
Interaction with the Review Team to clarify comments	<p>Product Owner</p> <p>Create an Issue addressing the corresponding Review Team Member:</p> <ul style="list-style-type: none"> <li>• Add a Title identifying the RC process</li> <li>• Add Text describing the details of the clarification requested</li> </ul> <p>This Issue will be the Main Issue for the interaction with the expert. The rest of the communication will adopt the form of Comments to this Main Issue</p>
Notification of Extension of the Review Stage	<p>Product Owner</p> <p>Add a Comment to the Main Issue of the Review Process indicating the deadline for receiving comments has been extended. The new deadline will be indicated.</p>
Notification that the Review Stage has finalized	<p>Product Owner</p> <p>Add a Comment to the Main Issue of the Review Process indicating the date for receiving comments has finalized.</p>

Table 5. TI - Review Process-Control and Monitoring

## A2.2. Review Process

TI	Review Process
Roles	Review Team
Description	The review team shall perform the review in the expected time and conditions. The work of the review team shall finish when the Product owner confirms the closing of the Review Process.
Steps	<p>The reviewers shall:</p> <ol style="list-style-type: none"> <li>1. Make comments, suggestions or improvement proposals with the <i>Issue Tracker tool</i>.</li> <li>2. Add comments in the Review issue thread when it applies: <ul style="list-style-type: none"> <li>• Go to the repository where the document under Review is located.</li> <li>• Select the issue that refers to the document under Review.</li> <li>• The reviewers comments posted shall be a reference to a new issue (if it not exists) where a description of the comments, suggestions or improvement proposal is.</li> <li>• Push the <i>Comment</i> button to post the message.</li> <li>• Create a new issue in the repository that contains the document under review. <ol style="list-style-type: none"> <li>(a) Open Github and go to the appropriate repository</li> <li>(b) Select the <i>Issues section</i></li> <li>(c) Push the <i>New issue</i> button</li> <li>(d) Add a descriptive title indicating the name of Document under Review and a brief title for the comment/suggestion or improvement</li> <li>(e) Provide descriptive enough so any reader can understand the message.</li> <li>(f) When required, include diagrams, figures, partial texts or specific data that help to understand the problematic found.</li> <li>(g) Push Submit new issue</li> </ol> </li> <li>• If a issue exists regarding to the same aspects you want proposed for the document under review, post a reference to the existing review issue, and in the corresponding issue add a comment. Do not edit any comment done. Add a new comment with the additions you proposed.</li> <li>• Push the <i>Comment</i> button to post the message.</li> </ul> </li> </ol>
Steps	<ul style="list-style-type: none"> <li>• In any case, the reviewers shall inform about the progress of the work posting a message in the Review issue thread or sending an e-mail.</li> </ul>

Table 6. TI - Review Process

### A2.3. Approval/Rejection of Changes



TI	Approval/rejection of Changes
Roles	Author(s)
Description	The Author(s) shall study each proposal, recommendation or comment that appears in the issues linked to the review issue of the document under revision and decide how to implement the proposed changes in case he/she estimates it is appropriate to be included in the document.
Steps	<ul style="list-style-type: none"> <li>• Whenever a reviewer has added comments to an opened issue or has created a new one with contributions using the <i>Issue Tracker</i> tool, the Author(s) shall collect all the contributions reported, and assess the implementation of changes.</li> <li>• The Author(s) reads carefully any annotation that appears in the issues linked to the review issue and decides whether the comments shall be implemented or not.</li> <li>• For each issue linked to the review process issue, a written confirmation about what is the decision about the subject shall be provided. <ol style="list-style-type: none"> <li>1. When a suggestion is accepted: <ol style="list-style-type: none"> <li>(a) Assess whether the recommendation made implies writing new paragraphs, sections, adding new figures, etc. and modify the document accordingly.</li> </ol> </li> </ol> </li> <li>• The Author(s) commits the changes made in the document and push them into the document under review so the reviewers can have access to the changes, confirmations and rejections made by the Author(s).</li> <li>• The Author(s) add(s) a message to the Review issue thread (if it exists) or send(s) an e-mail, so everyone can be informed about the commit recently done.</li> </ul>

Table 7. TI - Approval/Rejection of Changes

#### A2.4. Final Implementation

TI	Final Implementation
Roles	Product owner
Description	The Product owner shall provide a final version with the considered changes implemented.
Steps	<ul style="list-style-type: none"> <li>• Once the <i>Approval/rejection of comments</i> have been done, the changes implemented and pushed into the corresponding directory, a complete version of the document with those changes shall be prepared.</li> <li>• The pdf and the original document shall be <i>committed</i> and <i>pushed</i> in the <i>Review Documents</i> directory.</li> <li>• A notification shall be included in the issue linked to the ongoing Review Process (if it exists) or send by e-mail: <ol style="list-style-type: none"> <li>1. There, the Product owner shall explain that the changes have been implemented and that there is a complete version available in the corresponding path.</li> </ol> </li> </ul>

Table 8. TI - Final Implementation

### A2.5. Review closing

TI	Review closing
Roles	Product owner
Description	The Product owner shall be the responsible for closing the current Review Cycle after verifying and confirming all the changes done. The first task to be done is to notify the closing and highlight the results obtained.
Steps	<ul style="list-style-type: none"> <li>• Add a Comment in the Review issue thread (if it exists) to indicate that the Review Process has finished               <ol style="list-style-type: none"> <li>1. Go to the repository where the document under Review is located.</li> <li>2. Select the issue that refers to the document under Review.</li> <li>3. The comment posted shall be provide a brief summary of the Review Process:                   <ol style="list-style-type: none"> <li>(a) Indicate the way the objectives have been met</li> <li>(b) Are there pending objectives?. Indicate the reason for closing the Review Process before all the objectives have been met.</li> <li>(c) Identify the key aspects of the Review</li> <li>(d) Highlight the results obtained</li> </ol> </li> </ol> </li> <li>• Close the Review issue pushing the <i>Close</i> button in <i>GitHub</i></li> <li>• Close the issues linked to the Review issue pushing the <i>Close</i> button in <i>GitHub</i></li> <li>• Or notify the closing of the Review Process sending an e-mail. The information included in this case is the same as before.</li> </ul>

Table 9. TI - Review closing

## A2.6. Versioning

TI	Versioning
Description	Once the changes implemented for the document under revision have been confirmed, the Product Owner prepares a new version of it.
Steps	<p>Versions consist of three numbers, e.g. "1.3.1". All digits start with a "0" for the first release, so the first version is always "0.1.0". The digits of a version number have the following meaning: major.minor.service. An increased number in one of the digits marks the corresponding type of release of an artifact, e.g. a version increased from "1.0.1" to "1.0.2" marks a service release, while a version increased from "1.0.1" to "1.1.1" marks a minor release. The three types of releases have the following meaning:</p> <ul style="list-style-type: none"> <li>• Service: Only contains fixes, does not add any new API (for software) or content (for documents).</li> <li>• Minor: Adds new API (for software) or content (for documents), but remains compatible to the last minor release</li> <li>• Major: Changes existing API (for software) or content (for documents) and is not compatible with the previous major release</li> </ul> <p>After the three numbers, a qualifier can be added to specify the state of an artifact:</p> <ul style="list-style-type: none"> <li>• 0.1.0.draft: The ongoing development, which leads to the release 0.1.0</li> <li>• 1.2.1.M1: The first milestone on the road to release 1.2.1</li> <li>• 1.0.0.RC1: The first release candidate for release 1.0.0</li> </ul> <p>Versions should only be increased once in preparation of a release according to the versioning scheme. Versions should not be increased during on-going work. Git will do the versioning during this period.</p> <p>Only graduated projects are allowed to do releases starting with a "1" or higher</p> <p>For further information see <i>Versioning Artifacts</i> in ecosystem wiki</p>

Table 10. TI - Versioning

## 6 ANNEXES A3.- Quick guide for the Review process

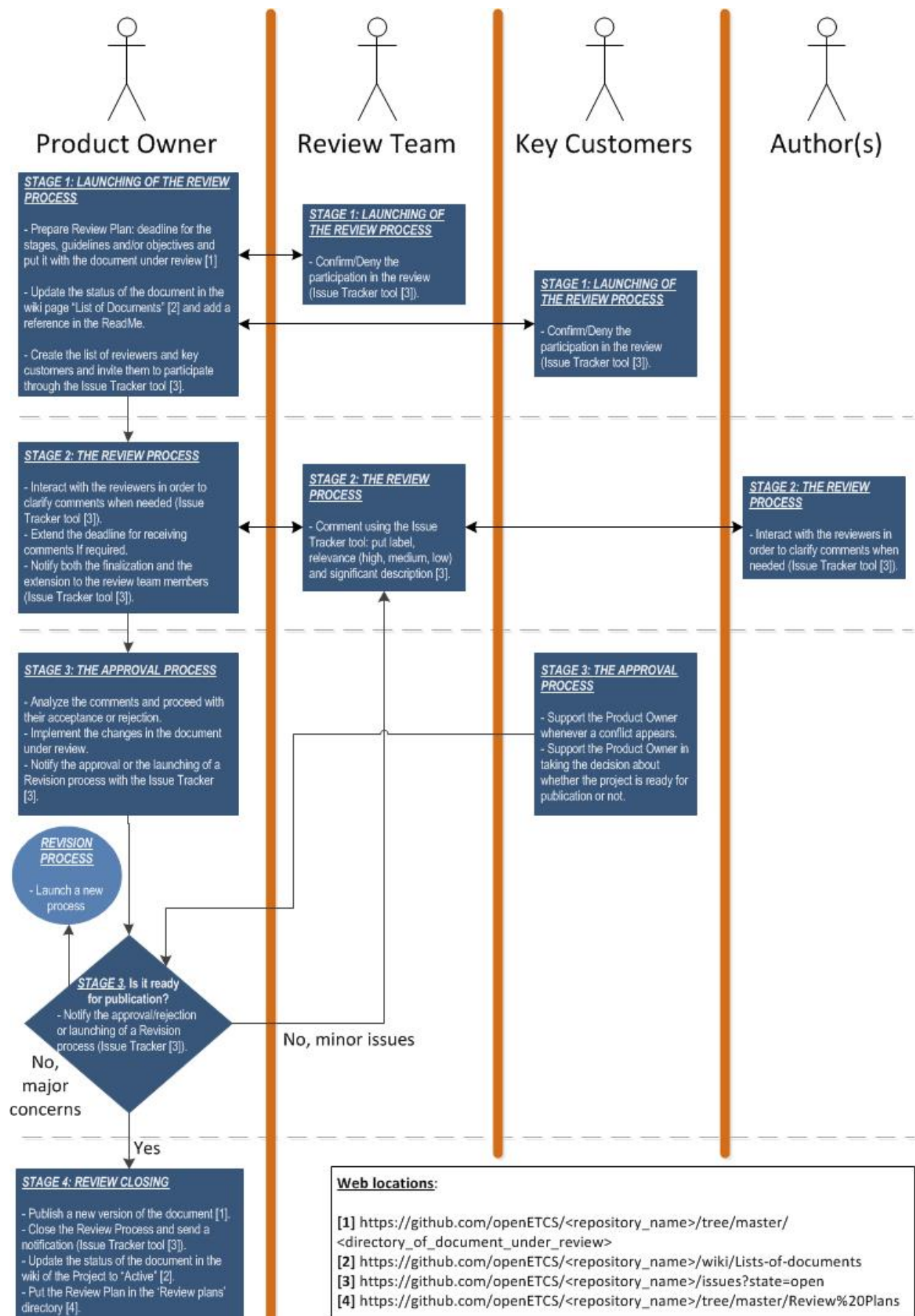


Figure 2. Review Process summary