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| GENUS INNOVATION LIMITED |
| Requirements Development and Management Procedure |
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| **Genus** |

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| Requirements gathering and analysis are critical for the success of the project. Improperly understood or documented requirements, or insufficiently controlled requirements changes, late delivery, and poor quality lead to a dissatisfied customer. Many of the defects found during system and acceptance testing originate from poor requirements analysis. |

Contents

[Overview 2](#_Toc427248593)

[Objective 2](#_Toc427248594)

[Scope 2](#_Toc427248595)

[Inputs 2](#_Toc427248596)

[Entry Criteria/Triggers 2](#_Toc427248597)

[Tasks 2](#_Toc427248598)

[Verification 5](#_Toc427248599)

[Guidelines 5](#_Toc427248600)

[Impact Analysis 5](#_Toc427248601)

[Applicable Measurements 5](#_Toc427248602)

[Exit Criteria/Outputs 5](#_Toc427248603)

# Overview

Requirements gathering and analysis are critical for the success of the project. Improperly understood or documented requirements, or insufficiently controlled requirements changes, late delivery, and poor quality lead to a dissatisfied customer. Many of the defects found during system and acceptance testing originate from poor requirements analysis.

# Objective

The objectives of this process are:

* To define the requirements of the customer
* To develop a specifications document
* To manage requirements

# Scope

This document covers all Requirements Management and Definition Activities in all Development Projects.

# Inputs

* Feature / Specifications requests from the customer
* Approved Change Requests

# Entry Criteria/Triggers

* Requirements provided by the Customer
* Change in Requirements
* The practitioners have undergone QMS trainings with focus on performing their processes.

# Tasks

|  |  |  |
| --- | --- | --- |
| Sr.No | Task | Owner/Role |
|  | **Obtain understanding of Requirements** |  |
|  | Study and analyze customer requirements. | Functional Head |
|  | Populate the “Needs” sheet of the “Functional Specifications” (TMPL\_FUNSPC) and elaborate the needs as required so as to make them easy to implement. |  |
|  | * List customer needs / Capture Voice of Customer (VOC). * The product requirements shall be gathered and refined with inputs from the customer / Development team and analyzed for feasibility. Refer “Functional Specifications” (TMPL\_FUNSPC). |  |
|  | * Capture Voice of Product ( VOP)/ Identify Concept of Operation (CONOPs). * Perform what-if and scenario analysis on the VOC. Also Use the customer feedback captured for development of the requirements. The same shall form the basis for preparation of Functional Specifications. |  |
|  | Obtain clarifications from the internal /external customer, if required. | Functional Head / Customer |
|  | A meeting for obtaining clarifications with Customer is scheduled using suitable communication means.  Communication means can be like a face to face meeting, a telephone call, E-mail etc.Record the communication using “Minutes of Meeting” (TMPL\_MINMET).  Record unclear requirements and resolution schedule in the “Issue Log”. |  |
|  | Prepare “Functional Specifications” (TMPL\_FUNSPC). | Functional Head |
|  | **Review** |  |
|  | Send “Functional Specifications” (TMPL\_FUNSPC) to the Project Manager for Review. | Functional Head |
|  | Review Functional Specifications using “Requirement Review Checklist” (CHKL\_REQVAL). The requirements must be reviewed with respect to clarity, completeness, unambiguity, conciseness, verifiability, testability and granularity. | Project Manager |
|  | Resolve the review findings, if any, and send the revised “Functional Specifications” (TMPL\_FUNSPC) to Project Manager and customer for approval. | Functional Head, customer, Project manager |
|  | Baseline the Functional Specifications Document. | Functional Head |
|  | **Requirements Traceability Table** |  |
|  | Each requirement shall have a unique identifier. | Functional Head |
|  | The requirements shall be traced in the subsequent phases of the project through the usage of “Requirements Traceability Table” (TMPL\_REQTRT). | Functional Head |
|  | Requirements Traceability Table shall be appropriately updated whenever the requirements change. Refer “Instruction for use” in “Requirements Traceability Table” (TMPL\_REQTRT) for details. | Functional Head |
|  | **Requirements Changes** |  |
|  | Log the received Change Request in the “Change Request Template”(TMPL\_CHGREQ). | Project Manager |
|  | Changes are evaluated, and assessed for risk. Impact Analysis shall be conducted using the project’s “Requirement Traceability Table” (TMPL\_REQTRT). Refer [Guidelines for Impact Analysis](#_Impact_Analysis).  Estimate the impact of Change Requests on the schedules of the project. | Project Manager |
|  | Discuss the Change Request with the customer and inform him about the acceptance or rejection along with the impact of the Change Request on the Schedules and Efforts. | Project Manager |
|  | Update the Project Plan on the basis of reestimation | Project Manager |
|  | Assign responsibility for implementing the changes and track to closure. | Project Manager / Functional Head |
|  | Revise Functional Specifications and “Requirement Traceability Table” (TMPL\_REQTRT) to incorporate the changes. | Functional Head |
|  | Review and approve revised “Functional Specification” and “Requirement Traceability Table” (TMPL\_REQTRT). | Project Manager |
|  | Place finalized “Functional Specification” and “Requirement Traceability Table” (TMPL\_REQTRT) under configuration control in the respective project folder. | Configuration Administrator |
|  | Baseline the revised Functional Specifications. | Functional Head |

\* Improvements/Suggestions are solicited on “Process Improvement Proposals Database”.  
\*For details on the Roles and Responsibilities of the practitioners, Refer "Roles and Responsibility" document in the QMS.

# Verification

* Review of Functional specifications by the customer and the Project Manager
* Concurrence of reviewed Functional Requirements by customer
* Review of Requirements Traceability Table by Project Manager
* Peer Review of Impact Analysis
* Review of the process and its work products by PPQA members.
* Review of the process and its work products by Senior Management.

# Guidelines

Refer "Configuration Management and Release Procedure" (PRCD\_CONFIG) for Access Rights, location of work products, naming convention and types of controls.

## Impact Analysis

1. The project’s RTT is used for Impact Analysis
   1. Determine the related requirements.
   2. Determine the associated project artifacts that may be affected by the proposed change.
   3. Determine the impact on the interfaces of the affected design elements /modules to other modules/design elements.
2. The impact of the requirement change on the project’s plan and work products is analysed based on the
   1. Life cycle stage at which Change Request was initiated
   2. The criticality of change required

# Applicable Measurements

NA

# Exit Criteria/Outputs

* Signed off Functional Specifications
* Updated Requirement Traceability Table (TMPL\_REQTRT)
* Requirements Change Log
* Functional Specification and Requirements Review Records(Review and Testing Defects Log)
* Any communication mails to/from stakeholders.