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Issue Management Plan

“Asset MAnagement in the new Dlgital Twins environment” (AMADIT)

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<The PM² Methodology originated from the European Commission. Open PM² provides many guidelines and templates to facilitate the management and documentation of your projects.>

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1. INTRODUCTION

The *Issue Management Plan* defines and documents the activities, the roles and responsibilities of those involved in identifying, assessing, assigning, resolving and controlling project issues. **Issues are defined as unplanned project related events that happened and require a project management action.**

In addition, this plan documents decisions, defines decision owners and keeps track of the implementation of key decisions taken. Decisions can be taken in Project Steering Committee (SC) meetings and other meetings.

The objectives of this document are:

- To outline the issue and decision management process to be used for the project;
- To identify the roles and responsibilities related to issue and decision management;
- To specify the methodology, standards, tools and techniques used to support issue and decision management.

2. ISSUE MANAGEMENT OBJECTIVES

Issue management aims to ensure that issues that have a potential impact on project scope, time, cost, quality, risk, or stakeholder satisfaction are assessed and acted upon. Relevant issues should be logged and followed-up in the *Issue log*.

Key decisions can be logged in a *Decision Log*, which brings visibility to decisions and accountability as to how and by whom they are taken, and to whom they should be communicated.

3. ISSUE MANAGEMENT PROCESS DESCRIPTION

The PM² project issue management process defines the activities related to identifying, documenting, assessing, prioritising, assigning, resolving and controlling issues.

The issue management process for this project is a four-step process and falls under the responsibilities of the Project Manager (PM) who should execute the process when required throughout the project lifecycle:

Step 1: Issue Identification

The purpose of this step is to facilitate the identification and documentation of issues. Examples of issues that can arise in the project are:

- There are disagreements on the interpretation of requirements;
- The Project Core Team (PCT) has difficulties achieving the set goals (e.g. in terms of time, resources or quality);
- Non-conformities are identified by the Project Core Team (PCT) or by other Stakeholders (e.g. Quality Assurance Manager);
- Risks identified in the *Risk Log* occur, and thus risks change from potential problems to actual problems;
- External effects that influence the project in a negative way;
- Many other reasons.

Issues can be identified / raised by any Project Stakeholder throughout the project lifecycle, using different communication channels as meetings, emails, reports, among others.

After receiving the issue information, the Project Manager (PM) registers the issue in the *Issue Log*. Issues can be also registered in the *Issue Log* by the Project Core Team (PCT) members and then validated by the Project Manager (PM).

The *Issue Log* contains information to be fulfilled at this stage, such as the issue identifier, the issue category (e.g. IT, business, people & organisation, etc.), the issue details and impact, the status of the issue, the name of the person that identified the issue and the date of identification.

Step 2: Issue Assessment and Action Recommendation:

The purpose of this step is to assess the urgency and impact of the issue and decide on a priority for its resolution.

When an issue arises, an initial assessment (informal) will be performed by the person who raised the issue. This informal assessment will consider dimensions like:

- **Category:** Is the issue related to a specific area?
- **Impact:** What are the possible consequences of this issue? Will it have contractual impacts?
- **Urgency:** How urgent is a solution to this issue? This will influence the speed and planning of the issue reporting and resolution.
- **Size:** Is it an issue that requires some effort/cost to solve, or is it best handled by immediate action?

After this first assessment, the Project Manager (PM) assigns the detailed analysis of the issue to a project stakeholder. This person will assess the issue and identify its root cause. Also, it will recommend a solution and detail the necessary steps, effort and resources involved. This information will be documented in the *Issue Log* and then used as an input to request the approval by the appropriate decision makers (based on the escalation process). The Project Manager (PM) then documents the decisions in the *Decision Log*.

Issues can generate new change requests and therefore the next steps may follow the project change management process.

Step 3: Actions Implementation:

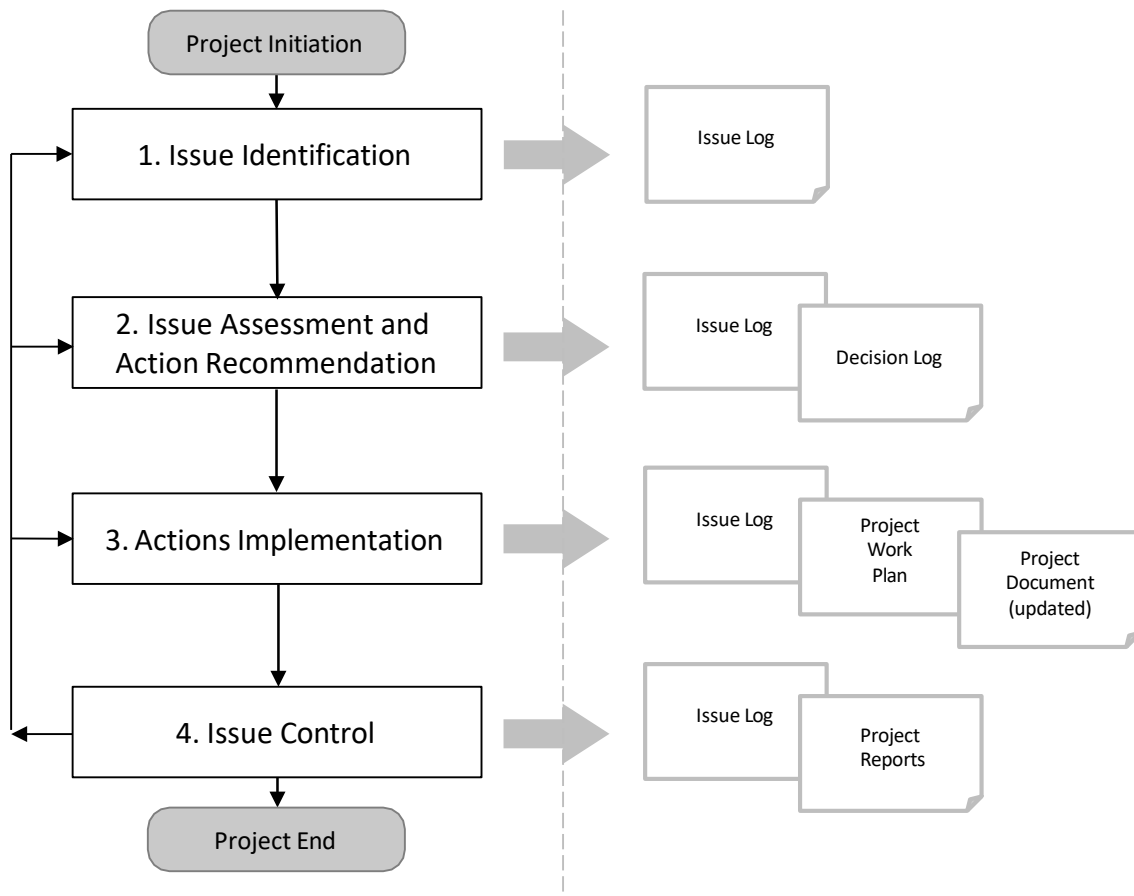
After issues are evaluated and the remediation actions approved, the Project Manager (PM) will incorporate these actions into the *Project Work Plan* and update project related documentation such as project plans and logs (e.g. *Decision Log*, *Resource Plan*, *Change Log*, and *Communications Management Plan*, if applicable).

Step 4: Issue Control:

The purpose of this step is to monitor and control the issues identified during the project, to be able to easily communicate them to the several project decision layers, for remediation action approval or status updates.

Project Status meetings will be performed **weekly** and used to revise the status of issues and related actions, and to identify new issues. The Project Manager (PM) is responsible for updating the *Issue Log*, which can include adding new issues, updating issue status, updating remediation action details, modifying urgency, impact, and/or size levels based on changes in project environment, etc.

Additionally, the Project Manager (PM) will report periodically (**monthly**) the status of the major issues identified for the project to the Project Steering Committee (PSC) and, when adequate, to other project stakeholders (as per the project *Communications Management Plan*).



3.1. Issue Management Roles and Responsibilities

The main roles and responsibilities for the issue management process are:

- **Project Steering Committee (PSC):** is consulted for the approval of the remediation actions and **monthly** informed of the status of issues. It can re-assess issues and modify urgency, impact, or size, identify new issues, refine remediation action approach and escalate issues to other stakeholders.
- **Project Owner (PO):** is accountable for all the identified issues and has the responsibility of approving or rejecting the remediation actions related to the major issues, or escalated them according to the escalation procedure.
- **Business Manager (BM):** is consulted for the assessment of issues and to validate the recommended action steps, urgency, impact, size/effort and time estimation. The Business Manager (BM) is also responsible for identifying and evaluating the business related issues and then for communicating these issues to the Project Manager (PM).
- **Solution Provider (SP):** is informed of the issues and of the planned remediation actions for the project. The solution Provider is also consulted for the approval of the recommended action steps, urgency, impact, size/effort and time estimation, from a provider perspective (at the Project Steering Committee).
- **Project Manager (PM):** is responsible for managing, monitoring, controlling and reporting issues and consolidating and documenting them in the *Issue Log*. The PM assigns issues remediation tasks to Project Core Team (PCT) members or to other project stakeholders. The person assigned to the issue will work on it, respective of the given priority and report when the issue can be closed.
- **Project Core Team (PCT):** is consulted for the issue management activities and identifies, assesses and solves issues throughout the project lifecycle.

The following RASCI table defines the responsibilities of those involved in issue management:

RAM (RASCI)	PSC	PO	BM	SP	PM	PCT
Issue Management Plan	I	A	C	I	R	C
Manage Issues & Decisions	I	A	S	I	R	C

*AGB: Appropriate Governance Body. (e.g. for IT projects, this is the IT Steering Committee).

The contact details of each of the above stakeholders are documented in the *Project Stakeholder Matrix*.

4. TOOLS AND TECHNIQUES

The following techniques will be used for issue management:

- Ishikawa diagram;
- Pareto diagram;

The following tools will be used for issue management:

- Issue Log
- Decision Log

Issue Log

The *Issue Log* for the project is using the PM² *Issue Log* template and no changes have been done to the structure, fields or values, as following:

Issue Identification and Description	
ID	The issue identifier. It should be numbered sequentially.
Category	Issue category related to the area affected by the issue (e.g. business, IT, people & organisation, external or legal).
Title	Short title for the issue.
Description	A description of the issue and consequences of doing nothing.
Status	The issue status can be any of the following: Open: the issue has been identified and requires attention and, if possible, a resolution. Postponed: this status is set if resolving the issue is postponed due to other priorities. Resolved: this status indicates that all necessary actions are completed and the issue is resolved. Closed: this status indicates that all work is completed and verified. The issue can then be marked as closed.
Identified By	The name of the person who identifies the issue.
Identification Date	The date on which the issue was raised.
Issue Assessment and Action Description	
Action Details (effort & responsible)	Description of the recommended action, and the steps, deliverables, timescale, resources and effort involved.
Urgency	A numeric value denoting how urgent the issue is. The possible values are: 5=Very high, 4=High, 3=Medium, 2=Low, 1=Very low
Impact	A numeric value denoting the issue’s impact. The possible values are: 5=Very high, 4=High, 3=Medium, 2=Low, 1=Very low

Size	Issue size represents the effort needed to resolve the issue. The possible values are: 5=Very high, 4=High, 3=Medium, 2=Low, 1=Very low
Target Date	The date on which the issue is expected to be resolved.
Issue Owner	The person accountable for resolving the issue.
Escalation	Whether the issue is to be escalated to the Directing or Steering Layers: Yes or No.
Traceability/Comments	The ID(s) of the task (in the Project Work Plan) that implement the issue actions, or/and the IDs of related change, risk or decisions (log entries). Also include any additional information/comments related to the issue.

The location of this artefact is found in the Appendix 1.

Decision Log

The *Decision Log* for the project is using the PM² *Decision Log* template and no changes have been done to the structure, fields or values, as following:

Decision Identification	
ID	The decision identifier. It should be numbered sequentially.
Category	Decision category related to the area affected by the decision (e.g. Business, IT, People & Organisation, External or Legal).
Title	Short title for the decision.
Description	A description of the decision details and impact, if applicable.
Identified by	The name of the person who identified the need for a decision.
People present	Log the names of those present when the decision was made.
Comments	The IDs of related Change, Risk or Issue Log entries, or meeting minutes, and any additional information related to the decision.
Ownership	
Decision Owner	The person accountable for the decision.
Decision Date	Date on which the decision was taken
Escalation	Whether or not the decision is to be escalated to the Directing or Steering Layers: Yes or No.
Decision Implementation	
Date of application	The date on which the decision is applicable.
Decision communicated to:	The group, teams and other audiences to whom the decision should be communicated.

The location of this artefact is found in the Appendix 1.

5. ISSUE IDENTIFICATION ACTIVITIES

This section describes the main tasks involved in detecting and recording the issues, for analysing the nature and extends of the issue, and for implementing of the appropriate corrective actions.

Issues will be identified by any project stakeholder and will be then documented in the *Issue Log*.

Notes:

- Any project activities (e.g. small meeting actions) which do not appear in the Project Work Plan should be logged, assigned and tracked by using the *Issue Log*.

- Any risk that materialises and requires action creates an issue that needs to be dealt with (and should be logged, assessed, assigned and tracked by using the *Issue Log*.)
- Issues of significant size may sometimes lead to project change. Therefore, issues are often linked to project change items (logged, assessed, assigned and tracked by using the *Change Log*.)

6. ISSUE ASSESSMENT AND ACTION RECOMMENDATION ACTIVITIES

The Project Manager (PM) assigns the detailed analysis of the issue to a project stakeholder. This person will assess the issue and identify its root cause. Also, it will recommend a solution and detail the necessary steps, effort and resources involved. This information will be documented in the *Issue Log*.

The methods that may be used to analyse and assess an issue are:

- "Ishikawa" (fishbone) diagram:
 - Describe the issue or symptoms;
 - Identify potential causes and categorize them;
 - Look at detailed explanations for each cause;
 - Look again at the reasons behind the explanation. This will help in arriving at the root cause of the issue;
 - Create an action plan to resolve this.
- Pareto diagram:
 - Categorise issues according to the frequency with which they occur;
 - Focus on the issues with high frequency at first.

Issues that originate project changes will follow the project change management process.

6.1. Escalation

The issue escalation workflow for this project is as following:

- Only issues remediation actions with Very Low and Low Size and Impact can be approved at the Managing Layer (Business Manager (BM) and Project Manager (PM) approval);
- Other actions (with Medium, High and very High Size or Impact) are approved by the Project Steering Committee (PSC);
- When relevant, the PSC has extraordinary meetings for approving remediation actions related to urgent or very urgent issues with considerable impact or size.
- Major Issues (High and very High Size or Impact) are reported yearly in the *Project Progress Report*, to be reviewed and approved by senior management (Business governing layer).

6.2. Decision

Issues are tracked together with the key decisions. These decisions (at Managing, Directing, or Steering Layer) will be documented in the *Decision Log*, which refers to the related issues, risks or changes, describes the decision details, identifies the person/group accountable for the decision and to whom the decision should be communicated. Any other key decision taken can be documented and followed-up through the *decision log*.

7. ACTION IMPLEMENTATION ACTIVITIES

The activities related to the implementation of remediation actions and their status will be documented in:

- Project Work Plan;

8. ISSUE CONTROL ACTIVITIES

New or open issues will be raised / followed-up weekly at Project Status Meetings and assigned to a responsible party. The Project Manager (PM) will then update the *Issue Log* with the results of the analysis / review.

As a general rule, issues cannot be eliminated without an assessment that the issue is no longer occurring. The Project Manager must assess that a closed issue is indeed no longer an issue. If not, the issue can be re-opened.

If an issue is considered closed and validated by the Project Manager (PM), the person responsible for the resolution will update the Lessons Learned for the project in the *Issue log*.

For the Medium, High and very High Size changes, the Project Manager (PM) will monthly report their status to the Project Steering Committee (PSC) and, when adequate, to other project stakeholders (as per the *Communications Management Plan*), e.g. to the Corporate Governance Bodies (yearly *Project Progress Report*).

9. RELATED PM² PLANS

Project Handbook

The *Project Handbook* establishes the high-level approach for implementing the project goals, which includes required documentation, standards to be considered and conflict resolution and escalations procedures. In this project the Project Handbook is considered the set of Management procedures adopted by the management team (BsC, PCh, QM, IM, RM, and CM). In particular, for the last two of them, their meaning is depicted underneath.

Communications Management Plan

The *Communications Management Plan* helps to ensure that all project stakeholders have the information they need to perform their roles throughout the project. It defines and documents the communication items content, format, frequency, the audience and expected results. The location of this artefact is found in the Appendix 1.

Risk Management

The *Risk Management Plan* documents how risks will be identified, who owns this responsibility and how often the risks need to be revisited. It also defines the risk-monitoring approach and determines to whom risks will be escalated. The location of this artefact is found in the Appendix 1.

APPENDIX 1: REFERENCES AND RELATED DOCUMENTS

ID	Reference or Related Document	Source or Link/Location
3	Communications_Management_Plan.AMADIT.pdf	http://grupo.us.es/digest
4	IssueLog.AMADIT.xlsx	http://grupo.us.es/digest
5	DecisionLog. AMADIT.xlsx	http://grupo.us.es/digest