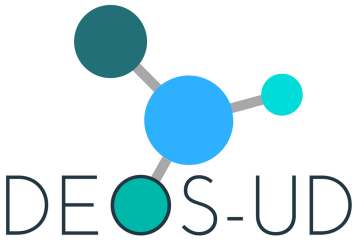

Project DEOS-UD

Disruptive Earth Observation Sensing for Urban Developement

Deliverable 2
Scope, Time and Cost Management

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2.3 Quality Improvement Approach

Quality improvement (QI) is a formal analysis of practice performance and efforts done in order to improve the performance of the project with the main objective of increasing its efficiency. The information shown here about QI models and tools has been extracted from [1] and [2]. A proper QI process requires of some basics to success. These basics are the following ones:

- Establish a culture of quality in the project: Creation of QI teams, QI meetings and QI goals.
- Determine and prioritize potential areas of improvement: Define, according to the acceptance criteria of the project, the main areas of improvement.
- Collect and analyse data: Determine the type of data to be collect and analyse it properly according to the project objectives.
- Communication of results: Quality improvements should be transparent to the stakeholders in order to keep them satisfy.

In this project the six-sigma working philosophy will be implemented in order to improve quality. The objective of this philosophy is to adjust the existing processes in order to improve the quality and minimizing variability by reducing defects and irregularities. The model related with six-sigma philosophy that will be used is DMAIC. This model includes the following steps:

- Define: Set the objective of the problem or the existent defect. In this project this definition will be done according to the acceptance criteria. The improvement of the quality plan is one of the objectives that will need to be taken into account.
- Measurement: Measures are needed in order to have values for the problem or defect. In this project the measurements according to the effectiveness of the quality plan are:
  - Number of iterations of a document to be approved.
  - Stakeholders satisfaction
  - Time needed to approve a document.
  - Number of defects detected by the quality department
- Analyse: Figure out the causes of the problem or defect and propose solutions.
- Improve: Implement the solution approved.
- Control: Control the implementation of the improvement, assure continuity and success.

2.4 Quality Roles and Responsibilities

TABLA

3 | Risk management plan

3.1 Definitions of Probability

Probability	Description	Probability Score
Very High		
High		
Medium		
Low		
Very Low		

Table 3.1.1: Definitions of probability

3.2 Definitions of impacts by objective

Scope/Quality Impact	Description	Scope Impact Score
Very High		
High		
Medium		
Low		
Very Low		

Table 3.2.1: Scope/Quality imacts

Schedule Impact	Description	Schedule Impact Score
Very High		
High		
Medium		
Low		
Very Low		

Table 3.2.2: Schedule imapcts

Cost Impact	Description	Cost Impact Score
Very High		
High		
Medium		
Low		
Very Low		

Table 3.2.3: Cost impacts

3.3 Probability and impact matrix

MATRIZ

3.4 Risk rating

TEXTO

3.5 Risk identification and assessment

Risk ID	Risk Statement	Probability	Impact			Score	Response
			Scope/Quality	Schedule	Cost		
Identifier	Description of the risk event or circumstance	Likelihood of occurrence				Probab. x Impact	Description of the planned response strategy to the risk event

Table 3.5.1: Risk identification and assessment

Risk ID	Revised Probability	Revised Impact			Revised Score	Owner	Response
		Scope/Quality	Schedule	Cost			
Identifier	Likelihood after the response strategy				Revised probability x Impact	Person who will manage the risk	Actions to be taken to address the risk

Table 3.5.2: Revised risk identification and assessment

3.6 Risk data sheet

<table>
<tr><td colspan="2">Risk-ID:
1.1.</td><td colspan="5">Risk Description:
Detailed description of the risk</td></tr>
<tr><td colspan="2">Status:
Open or Closed</td><td colspan="5">Risk Cause:
Description of the circumstances or drivers that are the source of the risk</td></tr>
<tr><td rowspan="2">Probability</td><td colspan="3">Impact</td><td rowspan="2">Score</td><td colspan="2" rowspan="2">Responses</td></tr>
<tr><td>Scope/Quality</td><td>Schedule</td><td>Cost</td></tr>
<tr><td>Qualitative or quantitative</td><td>Qualitative or quantitative assessment of the impact on each objective</td><td></td><td></td><td>Probab. x Impact</td><td colspan="2">Response strategies for the event. Use multiple strategies where appropriate</td></tr>
<tr><td rowspan="2">Revised Probability</td><td colspan="3">Revised Impact</td><td rowspan="2">Revised Score</td><td rowspan="2">Owner</td><td rowspan="2">Actions</td></tr>
<tr><td>Scope/Quality</td><td>Schedule</td><td>Cost</td></tr>
<tr><td>Qualitative or quantitative</td><td></td><td></td><td></td><td></td><td>Person who will manage the risk</td><td>Actions needed to implement responses</td></tr>
<tr><td colspan="7">Type of Effort:
Fixed amount of work.</td></tr>
<tr><td colspan="7">Location of Performance:
Facilities of: HIRO</td></tr>
</table>

Table 3.6.1: Risk 1.1 data sheet

4 Plan communication management

This section stands for an accurate description of the communication management inside the DEOS-UD Project, as communication is one of the keys to a successful development of any project. In the first insight, the different roles and responsibilities will be described as well as the different relations between people, teams and committees inside DEOS-UD. Along with the detailed roles and responsibilities of teams and committees, every member's specific task inside them will be mentioned. Secondly, the different communication procedures will be carefully detailed to provide the maximum information possible in order to allow a correct development of meetings and communications between people and departments, thus increasing the overall project efficiency. The section will end with a communication management plan matrix, which will summarize all the previously descripted procedures by mapping all the communication requirements of the project.

4.1 Participants roles and responsabilities

As previously stated, this section will provide the reader with the roles and responsibilities of the different DEOS-UD staff in terms of the Communication Plan. In this section, different committees and teams will also be described.

Steering Committee

The steering committee will provide DEOS-UD with solutions to problems along with strategic command in order to ensure a correct and efficient development of the project. As this team's role is of extreme importance when it comes to the project's success, a careful selection of its representatives must be performed. The steering committee will be composed of the members with key roles in DEOS-UD project; these members are listed in the following table, extracted from the first project charter.

[TABLA]

As described, the team will not only work as a steering committee but also as an advisory committee, for this reason it will be composed by multiple consortium members that will act as advisors in diverse fields. The key roles developed by the steering committee are detailed below.

- Take and implement management decisions that affect a significant part of the stakeholders.
- Take action in important schedule delays as well as cost overruns by modifying resources assigned to departments, staff planning, or anything necessary to redirect situations that endanger a correct development of the project.
- Offer leadership, guidance and support to problems that smaller groups have not been able to solve by themselves.
- Enhance communication skills along with communications procedures in order to avoid communication-related problems.

Project Manager

DEOS-UD Project manager, Pol Fontanes Molina, is the person in charge of assuring that every aspect of the project is functioning as planned. He is ought to detect, communicate and correct any deviations (schedule variances, cost overruns and scope changes) from the original plans. The decisions taken by the PM, will be communicated directly to the steering committee, members of which will communicate to the rest of the staff.

Advisory committee

Participants in the advisory committee are detailed here.

- Research and Development assessors:
  - Matthew Perren (Airbus Defence and Space GmbH)
  - Ismael López (Deimos Space)
- Legal and Business Assessor
  - Oliver Heinrich (BHO Legal)
- Application collaborators
  - Jean François Rapp (ICUBE-SERTIT)

  - Vessela Samoungi (ReSAC)

- Development and Application collaborator
  - Steven Krekels (VITO nv)

The function of this committee will be that of providing tailored assistance in anything related with the project in order to solve issues and avoid risks during DEOS-UD development. Given the importance of this group itself, its participants will meet with the steering group regularly to ensure a correct use and implementation of their know-hoy inside DEOS-UD.

Business Project Team

This team will be directed by Santiago Lopezbarrena Arenas, the financial manager, and is in charge of assuring an economical resources correct management by providing careful tracing in the use of the budget along with a proper staff training in means of economical performance. This team is also ought to communicate the project manager with the latest information on earned value management parameters in order for the latter to know at what point exactly the development of the project is found.

Technical Project Team

The Technical Project Team, conducted by its three leaders David Pérez Sánchez, Hamza Nachett and Laura Pla Olea, will be in charge of analysing and controlling every single technical aspect of the project. The team itself must assure that everything done during DEOS-UD project development meets the requirements of the contract by successfully following all de documentation and activities received from the overall project staff, including contractors and subcontractors as well. As part of its essential activities, the Technical Project Team is expected to resolve and to give advice in any inconveniences or issues that may appear during the course of the project. The Technical Project Team's leaders will be part of the Steering group and will report regularly to the project manager on topics that concern the technical progresses of DEOS-UD project, by having gathered all the information related to this subject from the different departments developing such activities.

Oversight

For the sake of a reliable accomplishment of the project's goals along with a recognized meeting of the contract's specifications, an oversight agency will actively work with DEOS-UD mostly when different milestones are achieved and a certification in the results is needed. The company auditing DEOS-UD results will be Bureau Veritas and its specific responsibilities are detailed here.

- Auditing a correct implementation of the different requirements of the contract regarding

privacy policies with data management.

- Auditing a correct implementation of the different requirements of the contract regarding privacy policies with data management.
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Given that an auditory is an external agency, it has not been included the advisory team; yet its collaboration inside the project is key to a successful accomplishment of the project's goals.

4.2 Communication process

[PONER UNA INTRODUCCION]

Informal

Informal communications consist of e-mail, conversations, or phone calls and serve to supplement and enhance formal communications. Due to the varied types and ad-hoc nature of informal communications, they are not discussed in this plan.

Formal

The DEOS-UD Project will engage in various types of formal communication. The general types and their purpose are described below as "Status Meetings" and "Status Reports".

Status Meetings

There are five basic types of status meetings for the DEOS-UD Project:

Status meetings internal to the DEOS-UD business team to discuss assignments, activities, and to share information; Status meetings and reports between the DEOS-UD business team, and the technical project team; Advisory Committee meetings with the project stakeholders, and project manager to review progress, risks, and issues; Status meetings and reports between the DEOS-UD project manager and the steering committee; and Status meetings and reports to stakeholders, such as oversight agencies.

Status Reports

A variety of status reports will be produced during the project. The status reports will be produced on regular intervals to provide stakeholders project information on the status and progress of the DEOS-UD project. At a minimum the reports will contain:

- Project status on major activities
- Project schedule
- Budget and cost tracking
- Status of issues and risks
- Health status
- Status of action items, if applicable.
- Future or planned activities

The intent of the status reports is to inform stakeholders of the project's progress and keep them actively involved in the project. The information provided will contain enough detail to allow stakeholders to make informed decisions and maintain oversight of the project.

External Communication

If applicable, indicate the types of external communications that may be necessary in this project.

4.3 Communication management plan matrix

MATRIX

5 Bibliography

[1] AAFP. Basics of Quality Improvement – Practice Management.

[2] Lean Solutions. ¿Que es Six Sigma?