





Project DEOS-UD Disruptive Earth Observation Sensing for Urban Developement

Deliverable 2 Scope, Time and Cost Management

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1 | Project scope statement

1.1 Product Scope Description

1.2 Project Deliverables

1.3 Project Acceptance Criteria

1.4 Project Exclusions

There are some facts that are out of the scope of the project which, generally, are designated as exclusions. Hence, in this section, the exclusions of the project are determined and defined.

| Item | Description |
|----------------------|---|
| Satellites design | It is out of the scope of this project to design a new satellite that will use the sensors as payload. |
| Launching | The objective of the project do not include neither the design of the launch system of the satellites nor the costs and scheduling of launching the satellite using the sensors designed. |
| Deployment | No deployment mechanism nor strategy of the satellites that integrate this new technologies are going to be developed. |
| Satellite monitoring | The satellite monitoring system that permits to scan different surfaces and regions of the earth is not included in this project scope. |
| Data transfer | Neither communication between satellites nor between the satellite and the ground station are part of this project. |



| Item | Description |
|------------------|---|
| Final production | The project will only focus on the development of prototype models in order to test the new technologies implemented. Hence, commercial production of these ones will not be carried out. |

Table 1.4.1: Project Exclusions

1.5 Project Constraints



2 | Work Breakdown Structure (WBS)

2.1 Activity list



3 | Sequence activities

- 3.1 Dependencies or logical relationship between activities
- 3.2 Network Diagram (Precedence Diagram Method)



4 Estimate activity resources

4.1 Resource identification

In this section the resources available/needed to perform the project will be exposed. These resources will be classified into three different categories:

- Employees: People needed to achieve the objectives of the project. The employees will be provided by the members of the consortium. As not all employees are in the same point on the learning curve, they will be classified into three sub-groups:
 - Senior: High on the learning curve. Is able to provide guidance on technical and management issues and offers a critical point of view of the actions of the project.
 - Average:Is able to perform activities on its knowledge field and arrive to conclusions without supervision.
 - Junior: Little experience in the field, the work done need to be supervised by an average employee.
- Materials: Hardware and software elements that will be used to achieve the project objectives.
- Facilities: Special places and services (such as the testing room).

The resources are exposed in Table 4.1.1.

| Resource ID | Resource Description | Type of resource |
|-------------|---|------------------|
| PM.M | Project Manager | Employee-Senior |
| PM.S | Project Manager Secretary | Employee-Average |
| F.M | Financial Manager | Employee-Senior |
| F.A | Financial Manager Assessor | Employee-Average |
| SP.M | Stakeholders and Procurement Manager Employee | |
| SP.A | Stakeholders and Procurement Manager Assessor | Employee-Average |



| ST.M | Scope and Time Manager | Employee-Senior |
|------|---|------------------|
| ST.A | Scope and Time Manager Assessor | Employee-Average |
| R.M | Risk Manager | Employee-Senior |
| R.A | Risk Manager Assessor | Employee-Average |
| QM.M | Quality Manager | Employee-Senior |
| QM.A | Quality Manager Assessor | Employee-Senior |
| MC.M | Marketing and Communications Manager | Employee-Senior |
| MC.A | Marketing and Communications Manager Assessor | Employee-Average |
| TM | Tecnhical Manager | Employee-Average |
| RD.A | Research and development assessor | Employee-Average |
| LB.A | Legal and Business Assessor | Employee-Average |
| SD.S | System development engineer | Employee-Senior |
| SD.A | System development engineer | Employee-Average |
| SD.J | System development engineer | Employee-Junior |
| ST.S | System testing engineer | Employee-Senior |
| ST.A | System testing engineer | Employee-Average |
| ST.J | System testing engineer | Employee-Junior |
| AD.S | Application development manager | Employee-Senior |
| AD.A | Application development technician | Employee-Average |
| AD.J | Application development technician | Employee-Junior |

Table 4.1.1: Resources identification

4.2 Activity resource requirement

4.3 Resource Breakdown Structure



5 Estimate activity duration



6 | Project Schedule

Gantt chart



7 | Activity Attributes (at Work Package level)



Table 7.0.1: Activity X attributes

| Table 1.0.1. Activity \(\text{attributes} \) | | | |
|---|--------------------------------|----------------------------------|--|
| WBS-ID: | | Activity: | |
| This identifies where this activity can be found in the | | This is the name of the activity | |
| WBS. | | from the project activity list. | |
| Description of Work: | | | |
| This information includes a | detailed description of the wo | rk to be performed for this | |
| activity and should be consis | stent with what is provided in | the project activity list. | |
| Predecessors: | Relationship: | Lag: | |
| This section lists other | This describes if the | This section describes any | |
| activities which must | predecessor has a | dependencies on predecessor | |
| occur before this activity. | start-start, start-finish or | activities like lead times, lag | |
| | other type of scheduling | times or other requirements. | |
| | relationship. | | |
| Number and Type of | Skill Requirements: | Other Required Resources: | |
| Resources Required: | The level of skill necessary | Any equipment, supplies, or | |
| The number and roles of | to complete the work | other type of resources needed | |
| people to complete the | (expert, average, novice or | to complete the work | |
| work | applicable job level) | | |
| Type of Effort: | | | |
| Indicate if the work is fixed | duration, fixed amount of wor | rk or fixed amount of effort | |
| Location of Performance: | | | |
| If the work is to be completed somewhere other than at the performing organization | | | |
| site, indicate location | | | |
| Constraints: | | | |
| Indicate any fixed delivery dates, milestones or other constrains | | | |
| Assumptions: | | | |
| List any assumption about resources availability, skill sets, or other assumptions that | | | |

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impact activity



8 | Cost estimating

- 8.1 Level of accuracy
- 8.2 Cost estimation worksheet
- 8.3 Activity cost estimation



9 | Cumulative costs

- 9.1 Cumulative cost curve
- 9.2 Budget at completion



10 | Bibliography