



Project DEOS-UD

Disruptive Earth Observation Sensing for Urban Development

Deliverable 6 European Comission Template

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Group: G3-220310-PM-P2018

Delivery date: 07-06-2018

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0 | List of Participants

Participant No.	Participant organisation name	Country

Table 0.0.1: List of Participants

1 | Excellence

1.1 Objectives

Describe the overall and specific objectives for the project¹, which should be clear, measurable, realistic and achievable within the duration of the project. Objectives should be consistent with the expected exploitation and impact of the project (see section 2).

1.2 Relation to the work programme

Indicate the work programme topic to which your proposal relates, and explain how your proposal addresses the specific challenge and scope of that topic, as set out in the work programme.

1.3 Concept and methodology

(a) Concept

Describe and explain the overall concept underpinning the project. Describe the main ideas, models or assumptions involved. Identify any inter-disciplinary considerations and, where relevant, use of stakeholder knowledge. Where relevant, include measures taken for public/societal engagement on issues related to the project. Describe the positioning of the project e.g. where it is situated in the spectrum from 'idea to application', or from 'lab to market'. Refer to Technology Readiness Levels where relevant.

Describe any national or international research and innovation activities which will be linked with the project, especially where the outputs from these will feed into the project;

(b) Methodology

Describe and explain the overall methodology, distinguishing, as appropriate, activities indicated in the relevant section of the work programme, e.g. for research, demonstration, piloting, first market replication, etc.

Where relevant, describe how the gender dimension, i.e. sex and/or gender analysis is taken into account in the project's content.

1.4 Ambition

Describe the advance your proposal would provide beyond the state-of-the-art, and the extent the proposed work is ambitious.

Describe the innovation potential (e.g. ground-breaking objectives, novel concepts and approaches, new products, services or business and organisational models) which the proposal represents. Where relevant, refer to products and services already available on the market. Please refer to the results of any patent search carried out.

2 | Impact

2.1 Expected Impacts

Describe how your project will contribute to: - each of the expected impacts mentioned in the work programme, under the relevant topic; - any substantial impacts not mentioned in the work programme, that would enhance innovation capacity; create new market opportunities, strengthen competitiveness and growth of companies, address issues related to climate change or the environment, or bring other important benefits for society

Describe any barriers/obstacles, and any framework conditions (such as regulation, standards, public acceptance, workforce considerations, financing of follow-up steps, cooperation of other links in the value chain), that may determine whether and to what extent the expected impacts will be achieved. (This should not include any risk factors concerning implementation, as covered in section 3.2.)

2.2 Measures to maximise impact

a) Dissemination and exploitation² of results

Provide a draft 'plan for the dissemination and exploitation of the project's results'. Please note that such a draft plan is an admissibility condition, unless the work programme topic explicitly states that such a plan is not required.

Show how the proposed measures will help to achieve the expected impact of the project.

The plan, should be proportionate to the scale of the project, and should contain measures to be implemented both during and after the end of the project. For innovation actions, in particular, please describe a credible path to deliver these innovations to the market.

Include a business plan where relevant.

As relevant, include information on how the participants will manage the research data generated and/or collected during the project, in particular addressing the following issues:

- o What types of data will the project generate/collect?
- o What standards will be used?
- o How will this data be exploited and/or shared/made accessible for verification and re-use? If data cannot be made available, explain why.
- o How will this data be curated and preserved?
- o How will the costs for data curation and preservation be covered?

Outline the strategy for knowledge management and protection. Include measures to provide open access (free on-line access, such as the 'green' or 'gold' model) to peer-reviewed scientific publications which might result from the project.

b) Communication activities

Describe the proposed communication measures for promoting the project and its findings during the period of the grant. Measures should be proportionate to the scale of the project, with clear objectives. They should be tailored to the needs of different target audiences, including groups beyond the project's own community.

3 | Implementation

3.1 Work plan — Work packages, deliverables

Brief description of the section

3.1.1 Overall Structure

The DEOS-UD project is composed by 7 different work packages which are interrelated as shown in Figure 3.1.1. WP1 deals with project management and will ensure the proper coordination of project activities and the achievement of project objectives. WP2 is related to the quality and the administration of the project in terms of human resources, documentation management and quality, periodic monitoring and will also establish the financial plan of the project. WP3 will study the current baseline designs for the studied technologies (payload, modular system and urban development application) in the sector and will establish the potential areas of improvement and the requirements needed to achieve the new technologies proposed. WP4 is in charge of designing the output products of the project. This WP is strongly related to WP5 which is in charge of manufacturing and validating the prototype. Good intercommunication between these WPs is needed in order to obtain a final product that meets the requirements imposed by WP3. WP6 aims to create a methodology to enable the future use of the new technologies developed during the project, assuring their continuity. Finally, WP7 will ensure the project results are communicated and disseminated to the appropriate audiences, establishing new knowledge into society.

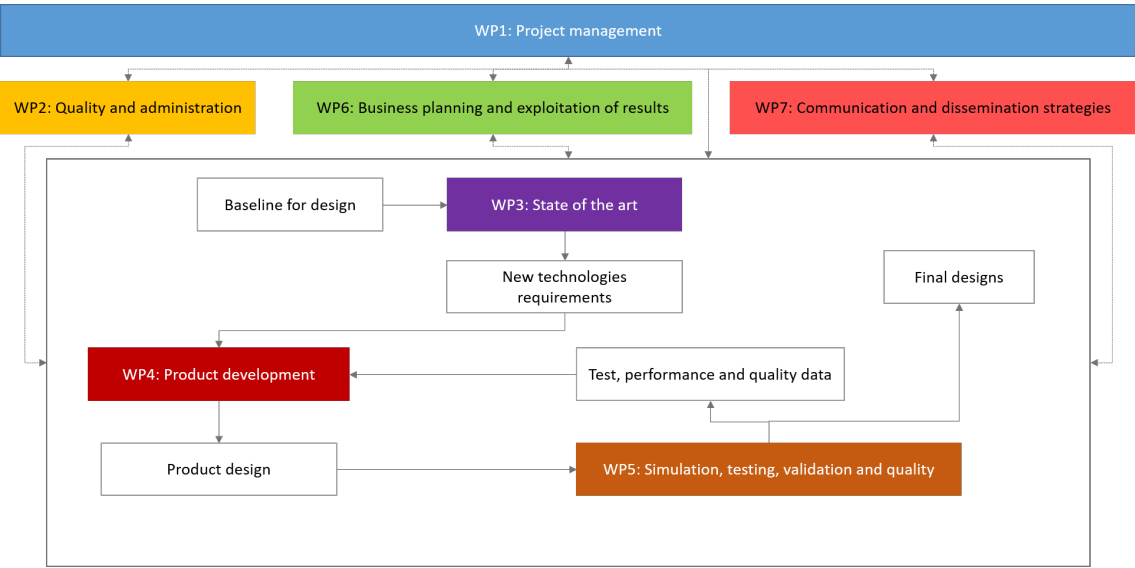


Figure 3.1.1: DEOS-UD overall structure diagram.

3.1.2 Timing of the Work Plan

Timing of the different WP: Gantt chart. D2 Apartado 6

3.1.3 Description of Work Packages

- List of WP. D2 Apartado 2.1 Poner solo WP, no todas las activities. Extraer del D2 también Start Month i End Month
- Description of each WP. Extraer información de D2 sección 2 (Número de participantes, líder, objetivos, etc.) Hay que poner las diferentes tareas dentro de cada WP y quienes participan en cada tarea. Importante: Falta calcular PM por participante. Deliverables asociados a cada WP (también a extraer del D2).

Work Package No.	Work Package Title	Lead Participant No.	Lead Participant Short Name	Person Months	Start Month	End Month

Work Package No.	Work Package Title	Lead Participant No.	Lead Participant Short Name	Person Months	Start Month	End Month
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Table 3.1.1: List of work packages

3.1.4 Deliverables

List of deliverables and milestones. **D2 sección 1.2**

KEY: Deliverable numbers in order of delivery dates. Please use the numbering convention <WP number>.<number of deliverable within that WP>.

For example, deliverable 4.2 would be the second deliverable from work package 4.

Type: Use one of the following codes:

- R: Document, report (excluding the periodic and final reports)
- DEM: Demonstrator, pilot, prototype, plan designs
- DEC: Websites, patents filing, press i media actions, videos, etc.
- OTHER: Software, technical diagram, etc.

Dissemination level: Use one of the following codes:

- PU = Public, fully open, e.g. web
- CO = Confidential, restricted under conditions set out in Model Grant Agreement
- CI = Classified, information as referred to in Commission Decision 2001/844/EC.

Deliverable Date: Measured in months from the project start date (month 1)

Deliverable No.	Deliverable Name	Work Package No.	Lead Participant Short Name	Type	Dissemination Level	Deliverable Date

Table 3.1.2: List of Deliverables

3.1.5 Inter-relation between components

Graphical presentation of the components showing how they inter-relate (Per chart or similar)
Algo más sencillo que el network diagram. Podría ser el network diagram.

3.2 Management structure, milestones and procedures

3.2.1 Organisational Structure

Describe the organisational structure and decision-making (including a list of milestones): **D3 Apartado 4. Steering committee, Business, technical. Milestones: D2 apartado 1.3**

A complex organizational structure has been established given the complexity and scale of the project. On top of the organizational chain, a steering committee has been created and it will provide DEOS-UD with strategic command and solutions to problems that affect a significant part of the stakeholders in order to ensure a correct and efficient development of the project. Hand-to-hand with the steering committee, the advisory committee will provide the project leaders with tailored assistance in order to assure time and cost-efficient decisions are taken. There is also a business project team which will be 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 economic performance; the team is also ought to keep the steering committee updated with the latest information on earned value management parameters so that appropriate decisions are taken. Reinforcing the organizational structure of the project, a technical project team has been created as well in order to provide control over technical decisions in the project. An organizational structure directed by a

steering committee is specifically designed to fit such a large-scale and long-term project as this one is. The experience, capacities and diversity of the members it is composed by will play a key role in the outcome of the project while maintaining an efficient use of time and resources. The steering committee will take major decisions involving a significant fraction of the stakeholders. The business project team will be in charge of assessing the decisions involving budget modification or inter-department budget redistribution. Finally, decisions involving a modification or significant change in the technologies used during DEOS-UD progress will be in hands of the technical project team. Smaller affairs along with local inconveniences will be solved by the specific group affected by them. By having such a decision making distribution, DEOS-UD ensures a correct importance of the decision to experience ratio and thus assuring a more efficient time usage by providing every person within DEOS-UD with fitted responsibilities. The milestones to accomplish are detailed in the following section; extracted by the third deliverable.

COPIAR TABLA DE MILESTONES DEL D2 SECCIÓN 1.3

NEW: Explain why the organisational structure and decision-making mechanisms are appropriate to the complexity and scale of the project.

3.2.2 Acceptance Criteria and Milestones

Milestones: D2 apartado 1.3. **Acceptance Criteria:** D2 apartado 1.4 Poner toda la tabla.

Milestone No.	Milestone Name	Related WP	Due Date	Means of Verification

Table 3.2.1: List of milestones

3.2.3 Quality Management

D3 apartado 2

3.2.4 Risk Management Plan

Describe any critical risks, relating to project implementation, that the stated project's objectives may not be achieved. Detail any risk mitigation measures. Please provide a table with critical risks identified and mitigation actions. **D3 Apartado 3**

Description of risk	Work package(s) involved	Proposed risk-mitigation measure

Table 3.2.2: Critical risks for implementation

3.2.5 Communication Management

D3 Apartado 4. Attention, not all of the D3 section 4 must be added here!!!

3.3 Consortium as a whole

The consortium in charge of developing the DEOS-UD project has been chosen accurately in order to assure the capability of developing the project properly. The consortium is made up of 8 different partners distributed in 5 different countries as shown in Figure 3.3.1. The members of the consortium have a wide knowhow and expertise in the areas covered in the project:

- Research in space technology and innovative design: HIRO, Airbus Defence and Space, ICUBE-SERTIT.
- Development, testing and validation of space systems: Airbus Defence and Space, Deimos Space, Thales Alenia Space.
- Data application for urban development: ReSAC and VITO.

Apart from the technical aspects of the project, there are also partners with high expertise in project management, intellectual property management, data protection and exploitation and business plan specialized in space systems and applications (HIRO and BHO Legal

Rechtsanwälte).

The consortium is well-structured and balanced among different experimented organisation and people who will bring the best expertise for each of the project objectives development. During the project each partner has a well-defined role to play and no overlapping of activities will happen. However, the consortium is strong and would be capable of achieving the project expectations in case one partner leaves the project because another partner might perfectly be in charge of the remaining tasks. The consortium is characterised by a major presence of industrial organisation (3 large and 1 SME) guarantees the succes of the DEOS-UD project development and the presence of research specialized organization (ICUBE-SERTIT, ReSAC, HIRO and VITO) assure the innovation needed will be achieved. The balance between different organisations with different complementary knowledge areas is the most suitable for the development of the purpose of the project.



Figure 3.3.1: Consortium partners.

3.4 Resources to be committed

Mezcla del Budget del D2 apartado 8.2 (coste por WP) con los PM puestos en la descripción de cada WP en este mismo entregable.

4 | Members of the consortium

4.1 Participants

#	Participant legal name	Short name	Country	Type
1	Airbus Defence and Space GmbH		Germany	
2	BHO Legal Rechtsanwälte Partnership		Germany	
3	Deimos Space S.L.U.		Spain	
4	High Innovative Remote Observation	HIRO	Spain	
5	ICUBE-SERTIT		France	
6	Remote Sensing Application Center	ReSAC	Bulgaria	
7	Thales Alenia Space SAS		France	
8	VITO nv		Belgium	

Table 4.1.1: List of participants

Nº1		Organisation name: Airbus Defence and Space GmbH Website: http://www.geo-airbusds.com	Type:
Overall description			

Role within the project
Previous R&D Experience relevant to the project
Key persons assigned to the project
Matthew Perren
Selected publications or products/services relevant to the project
Participation in relevant National or European research projects
Equipment involved

Table 4.1.2: Participant N°1

N°2		Organisation name: BHO Legal Rechtsanwälte Partnership Website: http://www.bho-legal.com	Type:
Overall description			
Role within the project			
Previous R&D Experience relevant to the project			
Key persons assigned to the project			
Oliver Heinrich			
Selected publications or products/services relevant to the project			
Participation in relevant National or European research projects			
Equipment involved			

Table 4.1.3: Participant N°2


Nº3		Organisation name: Deimos Space S.L.U. Website: http://www.deimos-space.com/en/	Type:
Overall description			
Role within the project			
Previous R&D Experience relevant to the project			
Key persons assigned to the project			
Ismael López			
Selected publications or products/services relevant to the project			
Participation in relevant National or European research projects			
Equipment involved			

Table 4.1.4: Participant Nº3

Nº4		Organisation name: High Innovative Remote Observation Website: -	Type:
Overall description			
Role within the project			
Previous R&D Experience relevant to the project			
Key persons assigned to the project			
Selected publications or products/services relevant to the project			
Participation in relevant National or European research projects			

Equipment involved

Table 4.1.5: Participant N°4



N°5		Organisation name: ICUBE-SERTIT Website: http://sertit.u-strasbg.fr/	Type:
Overall description			
Role within the project			
Previous R&D Experience relevant to the project			
Key persons assigned to the project			
Jean-François Rapp			
Selected publications or products/services relevant to the project			
Participation in relevant National or European research projects			
Equipment involved			

Table 4.1.6: Participant N°5

N°6		Organisation name: Remote Sensing Application Center Website: http://www.resac-bg.org/	Type:
Overall description			
Role within the project			
Previous R&D Experience relevant to the project			
Key persons assigned to the project			

Vessela Samoungi
Selected publications or products/services relevant to the project
Participation in relevant National or European research projects
Equipment involved

Table 4.1.7: Participant N°6


N°7		Organisation name: Thales Alenia Space SAS Website: http://www.thalesgroup.com	Type:
Overall description			
Role within the project			
Previous R&D Experience relevant to the project			
Key persons assigned to the project			
Philippe Keryer			
Selected publications or products/services relevant to the project			
Participation in relevant National or European research projects			
Equipment involved			

Table 4.1.8: Participant N°7

N°8		Organisation name: VITO nv Website: https://vito.be/en/land-use	Type:
Overall description			
Role within the project			

Previous R&D Experience relevant to the project
Key persons assigned to the project
Steven Krekels
Selected publications or products/services relevant to the project
Participation in relevant National or European research projects
Equipment involved

Table 4.1.9: Participant N°8

4.2 Third parties involved in the project

Airbus Defence and Space GmbH	
Does the participant plan to subcontract certain tasks (please note that core tasks of the project should not be sub-contracted)	N
Does the participant envisage that part of its work is performed by linked third parties	N
Does the participant envisage the use of contributions in kind provided by third parties (Articles 11 and 12 of the General Model Grant Agreement)	N
Does the participant envisage that part of the work is performed by International Partners (Article 14a of the General Model Grant Agreement)	N

Table 4.2.1: Third parties involved with Airbus Defence and Space GmbH

BHO Legal Rechtsanwälte Partnership	
Does the participant plan to subcontract certain tasks (please note that core tasks of the project should not be sub-contracted)	N
Does the participant envisage that part of its work is performed by linked third parties	N
Does the participant envisage the use of contributions in kind provided by third parties (Articles 11 and 12 of the General Model Grant Agreement)	N
Does the participant envisage that part of the work is performed by International Partners (Article 14a of the General Model Grant Agreement)	N

Table 4.2.2: Third parties involved with BHO Legal Rechtsanwälte Partnership

Deimos Space S.L.U.	
Does the participant plan to subcontract certain tasks (please note that core tasks of the project should not be sub-contracted)	N
Does the participant envisage that part of its work is performed by linked third parties	N
Does the participant envisage the use of contributions in kind provided by third parties (Articles 11 and 12 of the General Model Grant Agreement)	N
Does the participant envisage that part of the work is performed by International Partners (Article 14a of the General Model Grant Agreement)	N

Table 4.2.3: Third parties involved with Deimos Space S.L.U.

High Innovative Remote Observation (HIRO)	
Does the participant plan to subcontract certain tasks (please note that core tasks of the project should not be sub-contracted)	Y
<i>If yes, please describe and justify the tasks to be subcontracted</i>	
Does the participant envisage that part of its work is performed by linked third parties	N
Does the participant envisage the use of contributions in kind provided by third parties (Articles 11 and 12 of the General Model Grant Agreement)	N
Does the participant envisage that part of the work is performed by International Partners (Article 14a of the General Model Grant Agreement)	N

Table 4.2.4: Third parties involved with High Innovative Remote Observation (HIRO)

ICUBE-SERTIT	
Does the participant plan to subcontract certain tasks (please note that core tasks of the project should not be sub-contracted)	N
Does the participant envisage that part of its work is performed by linked third parties	N
Does the participant envisage the use of contributions in kind provided by third parties (Articles 11 and 12 of the General Model Grant Agreement)	N
Does the participant envisage that part of the work is performed by International Partners (Article 14a of the General Model Grant Agreement)	N

Table 4.2.5: Third parties involved with ICUBE-SERTIT

Remote Sensing Application Center (ReSAC)	
Does the participant plan to subcontract certain tasks (please note that core tasks of the project should not be sub-contracted)	N
Does the participant envisage that part of its work is performed by linked third parties	N
Does the participant envisage the use of contributions in kind provided by third parties (Articles 11 and 12 of the General Model Grant Agreement)	N
Does the participant envisage that part of the work is performed by International Partners (Article 14a of the General Model Grant Agreement)	N

Table 4.2.6: Third parties involved with Remote Sensing Application Center (ReSAC)

Thales Alenia Space SAS	
Does the participant plan to subcontract certain tasks (please note that core tasks of the project should not be sub-contracted)	Y
<i>If yes, please describe and justify the tasks to be subcontracted</i>	
Does the participant envisage that part of its work is performed by linked third parties	N
Does the participant envisage the use of contributions in kind provided by third parties (Articles 11 and 12 of the General Model Grant Agreement)	N
Does the participant envisage that part of the work is performed by International Partners (Article 14a of the General Model Grant Agreement)	N

Table 4.2.7: Third parties involved with Thales Alenia Space SAS

VITO nv	
Does the participant plan to subcontract certain tasks (please note that core tasks of the project should not be sub-contracted)	N
Does the participant envisage that part of its work is performed by linked third parties	N
Does the participant envisage the use of contributions in kind provided by third parties (Articles 11 and 12 of the General Model Grant Agreement)	N
Does the participant envisage that part of the work is performed by International Partners (Article 14a of the General Model Grant Agreement)	N
s	

Table 4.2.8: Third parties involved with VITO nv

5 | Ethics and Security

5.1 Ethics

5.2 Security

6 | Bibliography