D1.2 Quality Management Plan I

WP1– Coordination and Management

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Executive Summary

This document constitutes the Quality Management Plan of the PARSEC project and is a continuation of the D1.1 – Project Management Plan.
The quality plan assures the quality of the project deliverables and the quality of the processes and procedures used to manage and develop the deliverables. Specifically, the aim of this deliverable is to describe the necessary information required to effectively manage the project quality, from project planning to delivery, and to ensure that the expected quality of the project objectives is achieved.

The sections of the present quality plan are:
Quality Plan Objectives: *Contains the main objectives of the quality plan*
Quality Standards: *Contains the approach, standards and assurance to be followed by the project partners in order to ensure not only the quality of the achieved outputs and results, but also the standards to be applied to deliverables and processes.*
Quality Assurance: *Contains the production workflow of the deliverables with respect to quality control, monitoring of changes, management of records/ files, etc.*
Quality Control: *Includes an introduction on how the quality of the project and its deliverables will be monitored.*

This deliverable is a living document and it will be regularly updated throughout the duration of the project. Officially, a new version of the deliverable will be prepared in the middle of the project to address any new issues and update the quality management strategy (D1.5 – Quality Management Plan II, M15).

1 Introduction

PARSEC aims to establish a new value chains with innovative SMEs that translates the large public investments in the Copernicus programme and numerous sector specific initiatives (related to food, water, energy, climate change, biodiversity, etc.) into applications and services meeting user needs and market demands, for the benefit of the European economy and society.
The advent of the Big Data era, spearheaded by Copernicus' free, full and open data policy but also by the emergence of new EO business models, opens an immense opportunity for the development of innovative services and products. To fully seize this opportunity, start-ups and SMEs need access to capital, knowledge, markets and technology. PARSEC will provide these resources through a holistic acceleration program, enabling the transformation of innovative ideas into market-ready products that bring significant value to users in the food, energy and environment sectors.
In this view, PARSEC will run an innovative "Open Call" scheme where excellent teams of SMEs and start-ups will be selected and subsequently supported in delivering EO-based services with strong business potential. The open calls will provide access to capital to SMEs from the PARSEC cross-border and cross-sectoral ecosystem (EO, food, energy, environment), whilst presenting them with a prime opportunity to jointly develop EO-based services with clear market value and high business success potential. It will entail the implementation of two rounds: the 1st will deploy a peer-to-peer evaluation to select 100 applicants receiving seed capital (10k each); in the 2nd stage, PARSEC will support the most successful consortia, chosen by a jury consisting of Industrial CEOs, opinion leaders, investors, VCs and/or business angels, by providing them additional funds (up to 100K per consortium) and an opportunity to attract venture capital on top of that.
In order to ensure that the final outputs of the project are of high quality, meet the needs of the potential users and the European Commission, and drive to success, a Quality Management Plan was deemed as necessary. The current document comprises the PARSEC quality management plan that summarizes the quality objectives of the project and the means by which quality will be assured and controlled throughout the project.

2 Quality Plan Objectives

The quality management plan ensures that the quality of deliverables meets the stakeholders' requirements and that the work processes and the quality objectives of the project are successfully accomplished. In addition, this plan can be used to assist the project partners monitor if the project's quality policies are always implemented so that the workflow runs smoothly, there is consistency to high-quality services, and the goal of the project is met.
The first milestone in the preparation of the quality management plan is the determination of the partners' expectations when it comes to quality and the needs for improvement. The quality plan determines the way the project's processes are documented and the information delivered, as well as the means to be used for the monitoring of the quality of the project's outputs.
The quality objectives of the project that reflect the overall intentions to be applied with regard to quality throughout the PARSEC project are summarized below:

- Deliverables respond qualitatively to the objectives set in the PARSEC project;
- Deliverables meet the requirements of the PARSEC partners;
- Deliverables are submitted within the time frame set in the PARSEC project;
- Deliverables are approved by the relevant management structure as defined in the current Quality Plan;

- Deliverables satisfy the visual identity requirements, i.e. presented in corresponding templates;
- Deliverables support improved project management proficiency at PARSEC;
- Deliverables are easy to use.

3 Quality Standards

The main purpose of the Quality standards is to define the policy that is to be followed by the project partners in order to ensure not only the quality of the achieved outputs and results, but also the standards that should be applied to deliverables and processes.
Particularly, the aim of the quality standards is to secure a high-standard of quality in the way the PARSEC partners work, the services that will be delivered and to ensure continuous improvement. The assurance of quality is fundamental for all the tasks undertaken by the project and should be followed by all partners in their implementation. Based on that, the project will:

- Maintain consistency in the implementation and will set procedures and practices in order to avoid significant deviations (described in D1.1 Project Management Plan).
- Ensure that all standards, procedures and practices will be implemented and systematically reviewed in order to reflect the project's values.
- Regularly monitor and measure the quality of its implementation approach, outputs and outcomes with a view to ensure high quality standards and continuous improvement.

For these reasons, every deliverable should be carefully drafted with rich content, a clear structure and a professional presentation. All project deliverables together should comprise a set of informative material with continuity free of information of overlaps or gaps.
The consistency in the format and structure of the deliverables is of high importance. Thus, all deliverables adopt common standards for the development of their content. Meanwhile, the content of each deliverable should be directly linked with the current phase of the project development in order to ensure a continuous sequence among the deliverables and the corresponding reported work. The main aspects of building quality into the project's deliverables are the content, the appearance, the structure, and the prompt supply of information.
Regarding the content it should be highlighted that it depends on the type of the provided information. All deliverables should meet a list of quality criteria based on the three aspects of quality of information, namely completeness, correctness and punctually[1]. In particular, the quality criteria that authors must pay attention to are: completeness, accuracy, relevance, depth, adherence to uniform appearance and structure and punctuality.
The project's results should fulfil a number of quality requirements. It is of great important for quality requirements to be determined, agreed upon and documented during the definition phase. These requirements should never remain implicit. A clear list of requirements can be checked at the end of the implementation phase. Therefore, the consortium can prove that they have carried out the project according to specifications. Additional quality requirements may be specified for various tasks within the project. The following table provides a set of Quality Indicators assigned to each of the criteria.

[1] Bots, J.M., Heck, E. van, Swede, V.van, "Management information", pub. CAP Gemini Publishing BV, Rijswijk, 1990, pp. 550-555.

Basic Aspects	Quality Criteria	Quality Indicators
CONTENT	Completeness	Missing content Redundancy
	Accuracy	Error in content References Insufficient support Ambiguity
	Relevance	Irrelevant information
	Depth	Lacking detail Excessive detail
APPEARANCE & STRUCTURE	Adherence to Standard	Lack of uniformity in presentation
TIMELINESS	Punctuality	Delay

Table 1 Quality Indicators

The Quality Plan identifies the following key components:

Objectives of quality review	Quality Measure	Quality Evaluation
Project deliverables	Deliverable quality standards Completeness and correctness criteria	Quality control activities
Project Processes	Process quality standards Partner expectations	Quality assurance activities
Objectives of quality review	Quality Measure	Quality Evaluation

Table 2 Key components of quality Plan

The following is a brief explanation of each of the components of the PARSEC quality plan.

Project Deliverable and Processes	**The key project deliverables and processes subject to quality review.**
Deliverable Quality Standards and Completeness and Correctness Criteria	The quality standards that are the "measures" used to determine a successful outcome for a deliverable. The completeness and correctness criteria are used to describe when each deliverable is complete and correct. Deliverables are evaluated against these criteria before they are formally approved.
Process Quality Standards and Partner Expectations	The quality standards that are the "measures" used to determine if the project work processes are being followed. Partner expectations describe when a project process is effective as set by the project partners.
Quality control activities	The quality control activities are used to monitor and verify that the project deliverables meet defined quality standards.
Quality assurance activities	The quality assurance activities are used to monitor and verify that the processes used to manage and create the deliverables are followed and are effective.

Table 3 Quality Plan components

4 Quality Assurance

The quality assurance aims to monitor and ensure that the project processes used within the life time of the project produce quality project outputs and results in an effective way, and it encloses standards. Furthermore, it contributes to the continuous improvement of the project's implementation and to the correction of the project deviations, such as:

- The project processes subject to quality assurance;
- The quality standards and partners' expectations;
- The quality assurance activity that is executed to monitor the project processes are properly followed;
- The frequency and schedule of the quality assurance performance are defined.
- The person responsible for carrying out and reporting on the quality assurance activity is defined.

The quality assurance plan described below includes the steps illustrating how the desired quality will be met.

4.1 Deliverables' review and approval

In order to ensure the quality of the project deliverables, all deliverables will be internally reviewed by the Project Coordinator (EARSC), the Work Package Leader, and a pre-defined project partner prior the official submission to the European Commission. The partner responsible for each deliverable is committed to address the comments of the internal reviewers, while the Project Coordinator is responsible for the final approval and submission.
The process of PARSEC deliverables' review, approval, and submission is as follows:
The partner responsible for a deliverable and the reviewer will receive a reminder note from the Project Coordinator team 5 weeks before the delivery date in order to ensure that they are aware of their obligation. At least 4 weeks before the delivery date, the responsible partner should send the table of contents of the deliverable to the WP partners and ask for their contribution, if required. The table of contents should include comments and delegation remarks for the respective WP partners. Having received the input from the respective WP partners the responsible partner generates a first draft that will be sent to the reviewer at least 3 weeks before the delivery date. Within the following 7 days the reviewer should send to the responsible partner their feedback as well as modifications and suggestions. This feedback should be discussed and/or implemented in the next 7 days by the author and they will give the updated version back to the reviewer. During the following 3 days the reviewer and the responsible partner may work jointly to generate the final version of the deliverable. Finally, the Work Package Leader firstly and the Project Coordinator later will have 3 days for the review and final approval of the deliverable. It is possible that for this last stage the responsible partner will work collaboratively with the Work Package Leader and the Project Coordinator. This review procedure (see the Figure below) could be repeated in order to ensure that all the remarks and/or comments have been incorporated. The final version of the deliverable will be sent to all the project partners so that they can express any important objection 3 days before its due date. After the internal approval, the Project Coordinator will submit the deliverable to the REA.

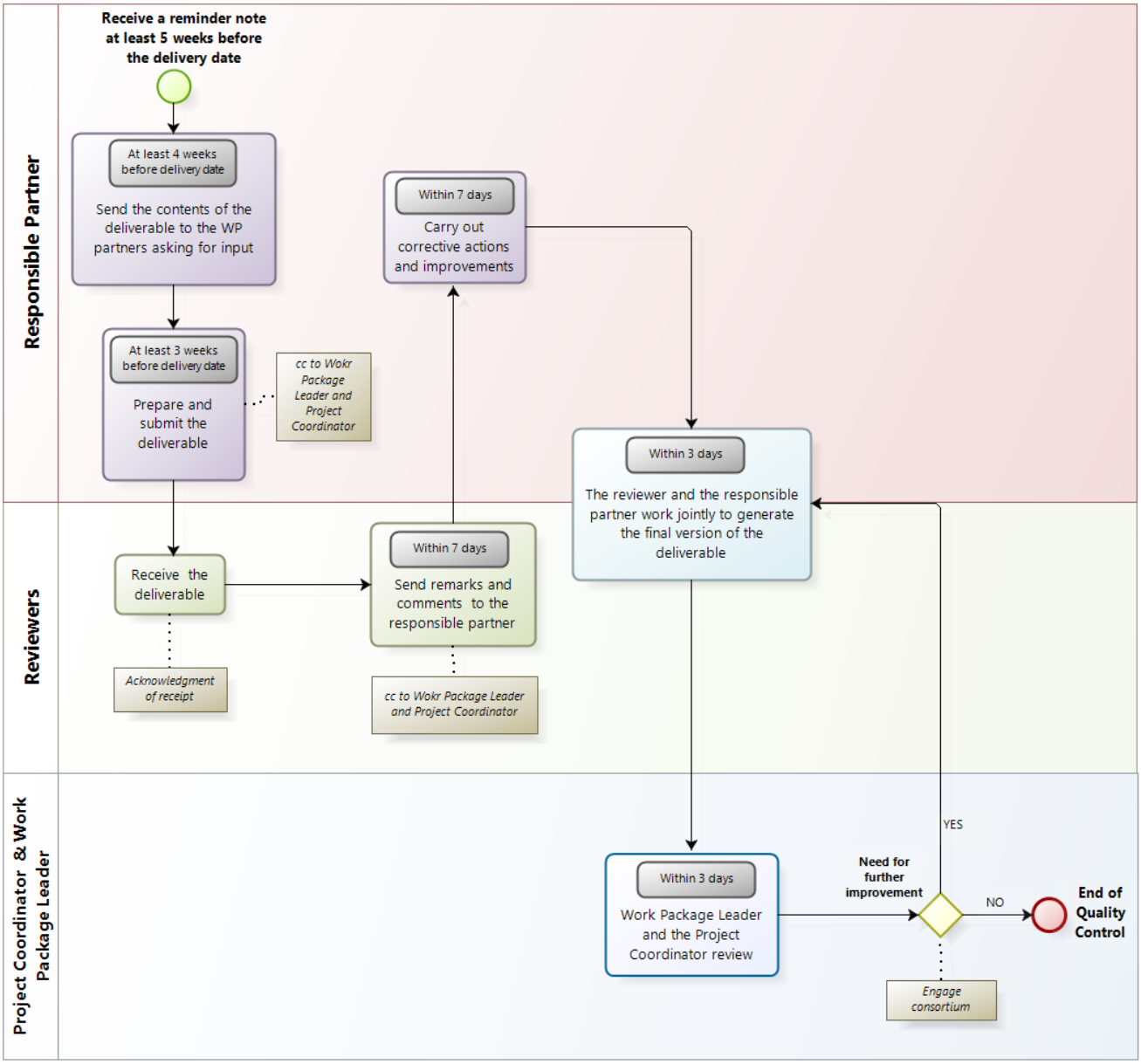

Figure 1. Deliverables' quality control workflow

4.2 Designation of deliverables' internal reviews

The Project Coordinator has the overall responsibility for the technical integrity of the project and therefore a more complete overview of the project's activities, while each partner is responsible for the quality of its assigned deliverables. The deliverable reviewers will normally be members of the consortium; however, the responsible partner with the consent of the Project Coordinator may choose to invite also a member of the Advisory Board to review the deliverable whenever this is considered to be of benefit to the deliverable. In case that the author chooses to invite an external expert to act as a reviewer, a Review Confidentiality Form has to be filled. The designation of a reviewer will be determined by the Coordination team using a compilation of some relevant criteria.

- **Criteria 1:** The number of deliverables to be reviewed by each partner is in accordance with the total person months allocated to each partner and the deliverables' population (62):

Partner	EARSC	BIOS	AVAESEN	BWCON	RASDAMAN	GMX	DRAXIS	EVRS	EVENFLOW
Total person months	46.30	69.50	31.10	27.30	35.50	45	47	30.50	50.80
% of person months	12.1	18.2	8.1	7.1	9.3	11.8	12.3	8.0	13.3
Number of del. to review	9	4	6	6	4	8	8	7	10

Table 4 Total person months per partner

- **Criteria 2:** The reviewer will be assigned by the Coordination team between the partners with the lowest human effort in the current WP, but with experience in the various involved tasks, to maximize the critical review of the document.
- **Criteria 3:** The Project Coordinator will have the capability to assign a specific internal or external reviewer whenever this is considered to be of benefit to the deliverable.

Taking into account the aforementioned criteria, a draft plan that delegates specific deliverables to the project partners for internal review is presented below. This plan is not binding and the Project Coordinator holds the right to change it with the approval of the partners.

No. of Del.	Title	Lead Beneficiary	Type	Diss Level	Due Date	Reviewer
D1.1	Project Management Plan I	EARSC	Report	Confidential	3	DRAXIS
D1.2	Quality Management Plan I	DRAXIS	Report	Public	3	EARSC
D1.3	Data Curation Guide I	EARSC	Report	Public	6	DRAXIS
D1.4	Project Management Plan II	EARSC	Report	Confidential	15	DRAXIS
D1.5	Quality Management Plan II	DRAXIS	Report	Public	15	EARSC
D1.6	Data Curation Guide II	EARSC	Report	Public	24	DRAXIS
D1.7	Progress report	EARSC	Report	Confidential	9	RASDAMAN
D1.8	Monitoring table for the budget allocated to support innovation in SMEs directly-I	EARSC	Report	Confidential	2	EVENFLOW
D1.9	Monitoring table for the budget allocated to support innovation in SMEs directly-II	EARSC	Report	Confidential	9	EVENFLOW

D1.10	Monitoring table for the budget allocated to support innovation in SMEs directly-III	EARSC	Report	Confidential	15	EVENFLOW
D1.11	Monitoring table for the budget allocated to support innovation in SMEs directly-IV	EARSC	Report	Confidential	22	EVENFLOW
D1.12	Monitoring table for the budget allocated to support innovation in SMEs directly-V	EARSC	Report	Confidential	30	EVENFLOW
D2.1	User Needs Report	EARSC	Report	Public	4	EVENFLOW
D2.2	PARSEC SME and Stakeholder Database	EARSC	data sets, microdata, etc	Confidential	4	BIOSENSE
D2.3	PARSEC Joint Strategic Vision for EO in Food, Energy & Environment	EARSC	Report	Public	28	BIOSENSE
D2.4	Technology Watch and Future Trends Plan I	AVAESEN	Report	Public	6	GEOMATRIX
D2.5	PARSEC Technology Watch wiki	AVAESEN	Other	Public	10	BIOSENSE
D2.6	PARSEC Market Trends Observatory wiki	EVENFLOW	Other	Public	10	EVERSIS
D2.7	Market Trends Report	EVENFLOW	Report	Public	24	BIOSENSE
D2.8	Investment Landscape Mapping Report	BIOSENSE	Report	Public	15	EVENFLOW
D2.9	Technology Watch and Future Trends Plan II	AVAESEN	Report	Public	24	GEOMATRIX
D3.1	Big Data Toolbox	RASDAMAN	Other	Public	10	EVERSIS
D3.2	Big Data Tools Service Training Manual I	RASDAMAN	Report	Public	10	EARSC
D3.3	Big Data Toolbox Report	RASDAMAN	Report	Confidential	24	GEOMATRIX
D3.4	In situ Data Hub I	DRAXIS	Other	Public	10	RASDAMAN

D3.5	In situ Data Hub Manual I	DRAXIS	Report	Public	10	EVERSIS
D3.6	In situ Data Hub Report	DRAXIS	Report	Confidential	24	EARSC
D3.7	eoMALL Galleries I	EVERSIS	Other	Public	10	EARSC
D3.8	eoMALL Galleries Manual I	EVERSIS	Report	Public	10	GEOMATRIX
D3.9	eoMALL Galleries Report	EVERSIS	Report	Confidential	24	RASDAMAN
D3.10	Big Data Toolbox II	RASDAMAN	Other	Public	15	EVERSIS
D3.11	Big Data Tools Service Training Manual II	RASDAMAN	Report	Public	15	EARSC
D3.12	In situ Data Hub II	DRAXIS	Other	Public	15	RASDAMAN
D3.13	In situ Data Hub Manual II	DRAXIS	Report	Public	15	EVERSIS
D3.14	eoMALL Galleries II	EVERSIS	Other	Public	15	EARSC
D3.15	eoMALL Galleries Manual II	EVERSIS	Report	Public	15	GEOMATRIX
D4.1	PARSEC Call Fiche and accompanying documents	BIOSENSE	Report	Public	4	EVENFLOW
D4.2	PARSEC.eval software platform	BIOSENSE	Other	Confidential	4	BWCON
D4.3	Report on the Open Call 1 and its outcome	BIOSENSE	Report	Confidential	10	AVAESEN
D4.4	Report on the Open Call 2 and its outcome	BIOSENSE	Report	Confidential	16	AVAESEN
D4.5	Report on implementation of winning projects	BIOSENSE	Report	Confidential	30	BWCON

D5.1	Concept of regional workshops "Where ideas and people meet"	BWCON	Report	Public	4	AVAESEN
D5.2	PARSEC regional workshops report	BWCON	Report	Public	11	AVAESEN
D5.3	Methodology for PARSEC training programme	BWCON	Report	Public	9	DRAXIS
D5.4	Concept for the PARSEC online pitches	BWCON	Report	Public	12	AVAESEN
D5.5	Report on training programme for 1st stage beneficiaries	BWCON	Report	Confidential	15	GEOMATRIX
D5.6	Companies business plans	AVAESEN	Report	Confidential	20	BWCON
D5.7	Companies financial plans	AVAESEN	Report	Confidential	22	BWCON
D5.8	Report on investor readiness of 2nd stage beneficiaries	AVAESEN	Report	Confidential	24	EVENFLOW
D5.9	Regional Smart Specialisation Infor Card Deck	EVENFLOW	Other	Public	24	AVAESEN
D5.10	Export Promotion Programme and Material	EARSC	Report	Public	24	EVENFLOW
D5.11	Report on training programme for 2nd stage beneficiaries	EARSC	Report	Confidential	30	BWCON
D6.1	Communication Strategy and Action plan I	EVENFLOW	Report	Public	3	EARSC
D6.2	Website I	EVENFLOW	Websites, patents filling, etc.	Public	3	EVERSIS

D6.3	Report on communication materials I	EVENFLOW	Report	Public	15	DRAXIS
D6.4	Report on events I	EVENFLOW	Report	Public	15	GEOMATRIX
D6.5	Innovation and IPR Report	EVENFLOW	Report	Confidential	24	DRAXIS
D6.6	Sustainability Plan	EVENFLOW	Report	Public	24	BWCON
D6.7	Communication Strategy and Action plan II	EVENFLOW	Report	Public	18	EARSC
D6.8	Website II	EVENFLOW	Websites, patents filling, etc.	Public	12	EVERSIS
D6.9	Report on communication materials II	EVENFLOW	Report	Public	30	DRAXIS
D6.10	Report on events II	EVENFLOW	Report	Public	30	GEOMATRIX

4.3 Reporting

As presented above, specific partners will be responsible to internally review each project deliverable. The reviewers should add their comments and suggestions directly to the concerned document. In order to ensure the high quality of the deliverables, a reporting procedure has been set. According to this, the reviewer, along with the reviewed deliverable, should complete and send to the responsible partner and the Project Coordinator the template for review of deliverables (ANNEX I).

5 Quality control

Quality control monitors whether the deliverables are of acceptable quality and the criteria set are met or not in the duration of the project. Inspection will be a major aspect of the quality control of the PARSEC project and will help the partners ascertain whether the process is in alignment with the project's scope and if it can be completed by the day of the deadline. This section of the quality management plan will be implemented during the project and not afterwards.

6 Conclusions

The current document comprises the first version of the PARSEC Quality Management Plan that sets

the ground for the reassurance that the final outputs of the project will be of high quality and will meet the requirements of all the interested stakeholders.

As agreed between the PARSEC partners, all the project's results should fulfil the following quality requirements:

- Completeness
- Accuracy
- Relevance
- Depth
- Adherence to standard
- Punctuality

These standards will be regularly monitored throughout the duration of the project, and corrective measures will be applied if needed. For that reasons, each project deliverable will be internally reviewed by the Project Coordinator, the Work Package Leader and one more pre-defined partner prior the submission so that we ensure its high quality.

ANNEX 1 – Template for review of deliverables

Deliverable Review

Reviewer Name:		Deliverable No.:		WP:	
Partner Organisation:		Author(s):			

How would you rate the level of implementation in the document according to the following 6 criteria?
*N/A = Not Applicable to the deliverable under review

	YES	NO	N/A*
1. Is the deliverables and the data presented in it easy to comprehend?			
2. Is the data in the Deliverable complete? If not, what is missing? ……			
3. Is it well-structured and clear in its content? If not, explain what is lacking. ……			
4. Is the text grammatically correct to clearly convey the message (free of spelling/grammar mistakes)?			
5. Does it give a fair all-inclusive picture of everybody who has contributed?			
6. Does this Deliverable contain all the information I need for me and my team to continue with our WorkPackage (if applicable)?			
Do you have any further comments or recommendation? ……			

Date:
Reviewer Signature:

PARSEC
ACCELERATOR

Our Partners

La energía NOS transforma avaesen

BioSense INSTITUTE

bwcon

DRAXIS ENVIRONMENTAL TECHNOLOGIES

EARSC European Association of Remote Sensing Companies

evenflow

EVERSIS

GEOMATRIX UAB Extreme GEO-computing

rasdaman raster data management

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