



D4.1: Technical specifications of the in-situ soil scanning system (SSS), data processing system and farmer's geo-tagged photos framework

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Abstract:	The deliverable constitutes a report describing the technical specifications of the DIONE WP4 components aiming to establish a complete ecosystem of low-cost and easy to use smart tools and techniques for the accumulation of the in-situ information. In particular the report focuses on (i) the technical specifications of the microelectromechanical systems (MEMS) based sensor, the measurement protocol, the smartphone application, and the security protocols, (ii) technical specifications of the data pre-processing system, including how the server ensures data integration and validity, which techniques will be used for outlier detection and the DBMS to be used, (iii) the technical specifications of the geo-tagged photos framework, including how the framework ensures photo and metadata integrity, data quality and user-friendliness and the techniques used for image forensics.

Document Revision History			
Date	Version	Author/Contributor/ Reviewer	Summary of main changes
15/07/2020	V0.2	i-BEC	Initial ToC; Introduction and literature review
07/08/2020	V0.4	i-BEC	Smartphone application for MEMS devices and data processing and storage system
07/09/2020	V0.6	I-BEC, ICCS	MEMS measurement protocol; Geotagged photos framework
09/09/2020	V0.7	i-BEC	Submitted for internal review
25/09/2020	V0.9	i-BEC	Modifications according to reviewers' feedback
30/09/2020	V1.0	ICCS	Approved, final version submitted

Dissemination Level		
PU	Public	
CO	Confidential, only for members of the consortium (including the EC)	x

DIONE Consortium			
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4	CORE INNOVATION AND TECHNOLOGY OE	CI	EL
5	NATIONAL PAYING AGENCY	NMA	LT
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7	GILAB doo Beograd-Palilula	GILAB	RS
8	Cyprus Agricultural Payments Organisation (CAPO)	CAPO	EL

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