7th Framework Programme
FP7-SEC-2012.4.3-1

Next Generation Damage and Post-Crisis Needs Assessment Tool for Reconstruction and Recovery Planning

Capability Project

Data fusion and sensor services

Deliverable No.	D5.3		
Workpackage No.	5	**Workpackage Title**	Post Crisis Needs Assessment Tool in regards to Construction Damage and related Needs (PCCDN)
Author(s)	Stephanos Camarinopoulos		
Status	Final		
Version No.	V3		
File Name	RECONASS_RISA_5.3_Data_fusion_and_sensor_services.docx		
Delivery Date	30 04, 2016		
Project First Start and Duration	Dec. 1, 2013; 42 months		

"This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no [312718]"

DOCUMENT CONTROL PAGE

Title	Data fusion and sensor services	
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Format	Text-MS Word	
Language	en-UK	
Work Package	WP5	
Deliverable Number	D5.3	
Due Date of Delivery	04/30/2016	
Actual Date of Delivery	DD/MM/YYYY	
Dissemination Level	PP	
Rights	RECONASS Consortium	
Audience	☒ public ☐ restricted ☐ internal	
Revision	V0.01	
Edited by	Dora Karali(Risa), Stephanos Camarinopoulos (RISA)	
Status	☒ draft ☐ Consortium reviewed ☐ WP leader accepted ☐ Project coordinator accepted	

REVISION LOG

Version	Date	Reason	Name and Company
V1	01/04/2016	First draft	RISA
V2	15/04/2016	Second draft	RISA
V3	30/04/2016	Final	RISA

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ABBREVIATIONS AND ACRONYMS

ABBREVIATION	DESCRIPTION
PCCDN	Post Crisis Needs Assessment Tool in regards to Construction Damage and related Needs
OGC	Open Geospatial Consortium
JDL	Joint Directors of Laboratories
SWE	Sensor Web Enablement
SOS	Sensor Observation Service
SES	Sensor Event Service
SPS	Sensor Planning Service
SensorML	Sensor Model Language
O&M	Observations and Measurements
SOAP	Simple Object Access Protocol

EXECUTIVE SUMMARY

This document is an accompanying report of the Deliverable 5.3, Data fusion and sensor services of Work Package 5 (Post Crisis Needs Assessment Tool in regards to Construction Damage and related Needs (PCCDN)). In the first chapter, the implementations for the Sensor Observation, Sensor Event and Sensor Planning Services are presented. In an effort to help other people better understand how to use our services and make integration of sensors quicker and more cost efficient, the provided sensor services comply with the Open Geospatial Consortium (OGC) standards. The next chapter is about the Sensor Data Fusion services implementation. The services have been developed using the JDL fusion framework. The purpose of using data fusion is to gather reliable information in order to support decision making. Sensor measurements from different data sources and sensor types create the input dataset for the structural assessment of the monitored facilities.