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

Catalogue, workflow orchestration, visualization and user interface

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TABLE OF CONTENTS DOCUMENT CONTROL PAGE 2 TABLE OF CONTENTS.......4 LIST OF FIGURES......5 EXECUTIVE SUMMARY......7 RECONASS CATALOGUE SERVICE IMPLEMENTATION......9 1.1. 1.2. IMPLEMENTATION 9 31 3.2.

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LIST OF FIGURES

Figure 1: Service registry	
Figure 2: UDDI Entities	(
Figure 3: Provided functions in the catalugue service	
Figure 4: Workflow orchestration	
Figure 5: Structural assessment	14
Figure 6: Damage, loss and needs assessment module	
Figure 7: Remote sensing based structural damage assessment module	
Figure 8: Login	
Figure 9: Welcome page	
Figure 10: Data explorer	
Figure 11: Map explorer	
Figure 12: Debris information	
Figure 13: Building editor	
Figure 14: Building 3D model	
Figure 15: Building visualization including structural assessment information	
Figure 16: Structural element properties	
Figure 17: Structural assessment information for a column	
Figure 18: Remote sensing structural assessment	
Figure 19: Sensors attached to elements	
Figure 20: Sensor data graph	

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ABBREVIATIONS AND ACRONYMS

ABBREVIATION	DESCRIPTION
UDDI	Universal Description, Discovery and Integration
SOA	Service Oriented Architecture
ESB	Enterprise Service Bus
SOS	Sensor Observation Service
WSDL	Web Services Description Language
SOAP	Simple Object Access protocol

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EXECUTIVE SUMMARY

This document is an accompanying report of the Deliverable 5.4, Catalogue, workflow orchestration, visualization and user interface of Work Package 5 (Post Crisis Needs Assessment Tool in regards to Construction Damage and related Needs (PCCDN)). In chapter 1, the objectives for the RECONASS catalogue service are presented and UDDI standard that has been adapted along with the implementation are described. The next chapter is about the Service Workflow Orchestration. A self-organizing service and adaptive workflow controller has been created to manage the registration and tasking of sensor observation services and fusion processing services. The flow of information within the PCCDN tool is described, offering an overview of the whole system since the workflow controller combines sensor data available from WP2 along with assessment processes from WP3 and WP4. Finally, the browser-based User Interface created to support the integration of data and the visualization of raw and processed data by the end users is presented. The web application is hosted in a dedicated root server, with IP 178.63.63.251 and is available at https://pccdn.risa.eu. For security reasons, access to the application is restricted to predefined users based on username/password, configured by the system administrator.