



Linear infrastructure efficiency improvement by automated learning and optimized predictive maintenance techniques

INFRALERT Deliverable D2.2

Summary Sheet

**DELIVERABLE TITLE:**

**D2.2 Implementation and working prototype, exposing the functionalities via the web**

**WORK PACKAGE:**

**WP2. Data Management**

- **T2.4.** Data access layer: exposing the functionalities via the web.
- **T2.5.** Implementation of the asset Data Farm.

**Deliverable Leader:**

DMA

**Contributing Partners:**

REGENS, Universidad de Sevilla

**EXECUTIVE SUMMARY:**

WP2 – Data Management is one of the pillars of the INFRALERT project. Its final objective is the creation of a Data Farm able to store all types of data coming from linear infrastructures, paying particular attention to railways and roads, on which the INFRALERT platform will be firstly tested.

This document will define the services to supply the eIMS with the data it needs. The possible and available procedures to upload measurement data, and all other types of data collected on the field, into the INFRALERT Data Farm will be described.

The techniques for the clients to ask for data in a cloud computing environment will be explained, evaluating the relative advantages and disadvantages for every method.

Data stored into the relational database can be retrieved by direct sql queries or through appropriate API which will be defined in this document.

In the second part of the document the attention will shift to the implementation of the asset Data Farm.

The focus will be on the code development and the implementation of the distributed database. The structure of the INFRALERT Data Farm has already been described in the Deliverable 2.1 and, in particular, in its annex. However, developments about data needed for feeding the relevant toolkits developed in WPs 3-6 led to slight but important modifications of the Data Farm tables, which will be described in detail into this document.

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