Horizon 2020
European Union Funding
for Research & Innovation

Deliverable D 5.8

Data Management Plan

Project acronym:	GoSAFE RAIL
Starting date:	01/10/2016
Duration (in months):	36
Call (part) identifier:	H2020-S2R-OC-CCA-2015-04
Grant agreement no:	730817
Due date of deliverable:	Month 06
Actual submission date:	26-07-2017
Responsible/Author:	Kenneth Gavin, GDG
Dissemination level:	PU
Status:	Issued

Reviewed: yes

Document history		
Revision	*Date*	*Description*
1	20/07/2017	First issue
2	26/07/2017	Final

Report contributors		
Name	Beneficiary Short Name	Details of contribution
Kenneth Gavin, Julie Clarke	GDG	First draft
Irina Stipanovic	IF	Review

Table of Contents

Executive Summary

The aim of the Data Management Plan (DMP) is to detail what data the GoSAFE RAIL project will generate, whether and how it will be exploited or made accessible for verification and re-use, and how it will be curated and preserved. Examples of the form of data collected in the GoSAFE RAIL project and the outputs are given in Table 1.

Table 1 GoSAFE RAIL data sources and form

Data Source	Format	Outputs
Experimental measurements made in pilot and demonstration projects	Measurements in csv and other numerical data storage formats, data on experiments (e.g. object detection), location, nature of structure etc. in pdf, Photographs	Data stored in University Archives. Access rights controlled by individual identified on GoSAFE RAIL website. Data made publically available for use by other researchers.
Input data on cost, depreciation etc. from LCA model	Database in csv format	Data made publically available in open archive to allow for use by other researchers
Scientific Papers	Pdf format of papers in post-print format	Open-Access archive

The following document will provide an update in relation to the project is managing the data that will be produced. The document will follow the principles for open access to Scientific Publication and Research Data in Horizon 2020 (2013).

1. Data Collection

1.1. Existing Data

Partners with knowledge prior to commencement of the project made this known to the GoSAFE RAIL consortium in writing prior to the kick-off meeting. This information is contained in the GoSAFE RAIL Consortium Agreement. Knowledge generated following the start of the project is deemed to have been developed in the GoSAFE RAIL project.

1.2. Data Types

The list below shows some of the data that is being used in the GoSAFE RAIL project. It should be noted that not all of the data has been collected during the project; some of the data has been reused from archives or from data depositories available to the public.

- Infrastructure problems experienced by European rail operators
- The monitoring system for object detection developed by the University of Zagreb contains digital images.
- Measurements from geophones used as a landslide detection system in Norway.
- Instrumentation output (strain gauges, accelerometers) from the Boyne Bridge demonstration project –Courtesy of the Destination Rail project.
- Data from 10 year monitoring programme on a road tunnel in Rijeka, Croatia.
- Micro-Simulation data for the track between Zagreb and Rijeka in Croatia.
- Details of the Irish Rail network in the vicinity of Connolly Station, Dublin.
- Data from a range of open sources will be stored in the Information Management System created by Virtus.
- Data for the Whole Life Cycle Analysis Model (cost and environmental data)

Graphical visualisation files will be stored by Contecht

In cases where there has been a need for data collection, qualitative and quantitative methods have been employed to date, such as: Observation methods, Document review; Experiments/Trials, and Scientific Research.

2. Quality Assurance

It is recognised that the GoSAFE RAIL project requires procedures for ensuring the sustained high quality of its results to be in place, particularly since the results are being generated in a collaborative manner. High quality results are a key factor to ensure the success of the project, particularly in relation to the acceptance of the results by relevant stakeholders. GoSAFE RAIL has adopted a peer-review process for ensuring sustained quality of its results:

- All deliverables have been assigned to an internal reviewer representing different partners, who are not (directly) involved in the drafting of the respective deliverable. Their task is to ensure the overall technical quality and presentation reflects a high standard. In the case where the person designated as a reviewer has been involved in the preparation of the deliverable, an alternative independent reviewer should be agreed by the person responsible for the deliverable and the reviewer.

- Each deliverable has a due date, which is stated in the list of deliverables. The internal deadline for each deliverable draft is 30 days before the external date. Partners responsible for the deliverable are to communicate directly with the assigned internal reviewers whilst including the Project Coordinator in the dialogue.

- The document is sent to its internal reviewer who will review the document. This procedure ensures that enough time is available to address reviewers' comments and allow for high quality deliverables.

- The content must reflect the state of the art research. Internal Reviewers should also ensure that the use of language is correct and the document is free of typographical errors and the formatting is proper and consistent throughout the document.

3. Research Findings

3.1. Backup and Security

Participants in the GoSAFE RAIL project are required to publish their research findings in journals that support open access publication. In addition to encouraging participants to use their own institution archiving mechanisms, all publications arising from the project will be stored online using the project website www.gosaferail.eu.

3.2. Copyright / IP Rights

The GoSAFE RAIL Executive Board handles intellectual property rights management and decisions regarding interpretations of the roles and regulations stated in the Consortium Agreement. The following basic principles have been included in the Consortium Agreement:

- Confidentiality: partners should not disclose information to third parties.
- Ownership of knowledge: knowledge is owned by the partner or the group of partners who carried out the work to create the knowledge or on whose behalf such work was carried out.
- Patents & Copyright: partners who own patentable knowledge may at their own expense make applications for patent(s) or similar forms of protection and shall supply details of such application to the other partners.
- Software may be protected by copyright.
- Access rights: partners grant to each of the other partners' royalty-free access rights to knowledge generated in the project to the extent needed to perform the project.

The standard DESCA consortium agreement (CA) has been adopted for the project, noting that important changes with relationship to IPR have been made since FP7. These changes specifically relate to:

- Joint ownership in order to recognise the difference between commercially exploitable and non-commercial IPR.
- An explicit background list of IPR brought to the project by each partner forms an annex for the CA.
- The introduction of a suggested one-year limit (after the project) for the requirement for approval from project partners for the publication of results, clear rules on the procedures for requesting exclusive licenses.

3.3. Data Sharing and Archiving

The consortium is conversant with the Guidelines on Data Management in Horizon 2020 projects (2013) and the Guidelines for open access to Scientific Publication and Research Data in Horizon 2020 (2013). In addition to the use of the Zenodo and institutional archives for storing, data generated has been made available through links in the GoSAFE RAIL website.

4. Summary and Conclusions

This Data Management Plan describes the process currently being employed by the GoSAFE RAIL project in relation to data collection, generation and research findings. The document provides guidance in relation to data management during the project and following the project completion.

5.   References

Guidelines on Data Management Plan, University of Twente. URL:
http://www.utwente.nl/igs/datalab/datamanagement/
GoSAFE RAIL Grant Agreement, number 636285.

Data Management Plan template, 3TU Datacentrum. URL:
http://www.utwente.nl/igs/datalab/datamanagement/guidelinesdmp/

Guidelines on Data Management in Horizon 2020 Version 1.0 11, December 2013. URL:
http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/oa_pilot/h2020-hi-oa-data-mgt_en.pdf