Progress on the development of the Risk Management Platform (RMP)

Transmitted by European Union Agency for Railways (ERA)

Introduction

1. As established by the Risk Management Framework (RMF), the Expert Users and Development Group (EUDG) works on the preparation of reference material and on tools for facilitating the RMF implementation.

2. As indicated in paragraph 54 of the report ECE/TRANS/WP.15/AC.1/156 of the Joint Meeting Autumn session 2019, the prototyping of the Risk Management Platform (RMP), the web application dedicated to help stakeholders in the implementation of the RMF, has started.

3. The EUDG Sub-group on the RMP development regularly meets to review the progress and discuss the functionalities of the future platform.

Overview of the RMP development progress

4. The annex to this document shows the progress of the RMP prototyping which will be presented orally.

Approach to connect sector specific interfaces to the RMP

5. While the RMP will offer a human machine interface allowing the risk management of simple cases, it is also under investigation how the RMP could be digitally connected to facilitate the heavy use cases, in which the amount of data to describe the case would be extracted, for example, from a GIS or other professional/logistic/safety databases.

6. The Agency is studying the possibility to specify a digital interface for the future connection to those type of databases and sector/country specific applications.

7. This interfacing concept is being analysed following the proposal of one EUDG member who volunteered to develop one of the sector specific interfaces for facilitating the future usage of the RMP by the railway sector. The scope of the analysis includes the option to set up the RMP ‘Public interface’ as described in the diagram below.
8. This approach would allow the Agency to offer the same opportunity to any company/RMP user who would like to create its own professional interface connected to the future RMP.

9. At the same time this approach would enable a better comparability of risk studies as those case studies could be processed by the same algorithms for delivering risk estimation and decision-making indicators.

**Conclusion**

10. The Agency will be happy to answer the questions and collect the views of the Joint Meeting delegates on those developments.

**Annex:** Presentation in the form of a PowerPoint document

**Title:** Development of a Risk Management Platform for Transport of Dangerous Goods
Development of a Risk Management Platform for Transport of Dangerous Goods

Progress update for Joint Meeting

16/03/2022
• Introduction
• System architecture and coordination
• Application structure/concept
• Evolution of application
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Agenda

- Introduction
- System architecture and coordination
- Application structure/concept
- Evolution of application
CDE*

User interface

Business logic / Functionality

Database access layer

Test-users

Database access layer

Business logic / Functionality

User interface

End-users

TDG-Dev0: Development environment

TDG-Dev1: Production environment

*CDE: Collaborative Development Environment
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- Introduction
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Application structure/concept

Decision case

Case study

Route

Traffic flow

Vulnerability
Application structure/concept (2)

- Decision case
- Case study
- Traffic flow
- Route
- Vulnerability
• Introduction
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**Evolution of application**

**V1**
- **Prototyping**: (basic functionalities)
  - Setting up CDE for testing
    - (system for bug tracking)
  - Reference manual V0.1

  - Deliverable: Development environment
  - Deliverable: Trello board for coordination of work packages
  - Deliverable: Reference manual V0.1

**V2**
- Extension of prototype to allow for the description and risk calculation of a **simple case**
  - Continued development of user-interfaces (simple case)
  - Development of calculation engine within the RMP (simple case)
  - Testing protocol
  - Testing with key-users

  - Production of V2

**V3**
- Extension of prototype to allow for the description and risk calculation of an **advanced case**
  - Continued development of user-interfaces (advanced case)
  - Development of calculation engine within the RMP (advanced case)
  - Testing with key-users

  - Production of V3

**Deliverables**
- Development environment
- Trello board for coordination of work packages
- Reference manual V0.1
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