Short introduction to the Inland TDG Risk Management Framework

In Europe, the Transport of Dangerous Goods (TDG) is regulated by the Directive 2008/68/EC on the Inland Transport of Dangerous Goods and its annexes RID/ADR/ADN.

The transport complying with these legal provisions is authorised for international and domestic journeys on the inland transport networks, combining all types of transport services, and crossing various landscapes and cities.

Harmonised Risk Management Framework for Inland TDG operations

The requirements applicable to the transport of dangerous goods are designed to allow for the safe integration of DG carriages within and between each transport mode. This integration, including the use of harmonised rules and standards, is necessary for developing a consistent and cost-effective development of transport safety in the EU.

The Risk Management Framework (RMF) can support users to achieve a continuous reduction of residual risks within this integrated approach.

The framework is intended to be used by many different types of users, for example by local, regional, national and international authorities and organisations as well as companies, consultants, professional associations and institutions, agencies and regulatory bodies of the European Union.

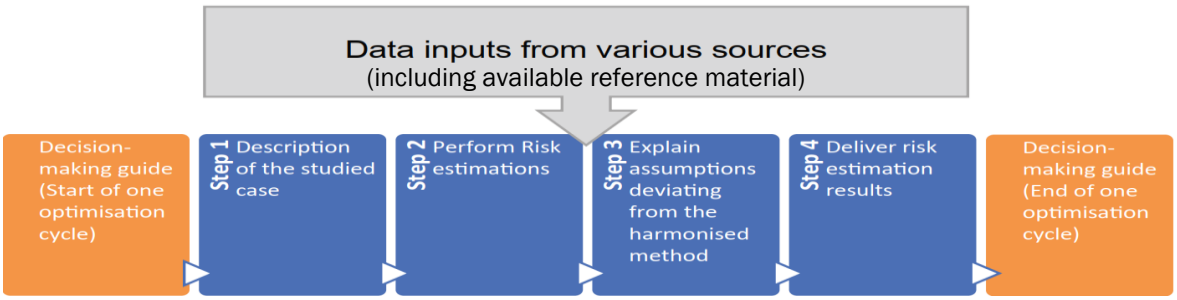
The framework aims to be a comprehensive instrument that can help to build robust decisions for managing residual TDG risks and to share harmonised results between interested parties.

The framework may be applied for:

- *assessing risks related to operations*
- *choosing lower-risk routes*
- *optimising the use of the modes*
- *assessing local risks in specific areas*
- *assessing the impact of potential new harmonised provisions*
- *justifying additional restrictions to RID/ADR/ADN or amending non-efficient ones…*

The framework is published on its dedicated webpage https://www.era.europa.eu/activities/transport-dangerous-goods/inland-tdg_en and regularly supplemented with reference material assisting the users.

The Guide for risk estimation helps the RMF users to describe and study various types of risk situations, including the description of the transport infrastructures and operations, the dangerous goods traffic, the hazards and the relevant TDG scenarios and taking into account existing data inputs.

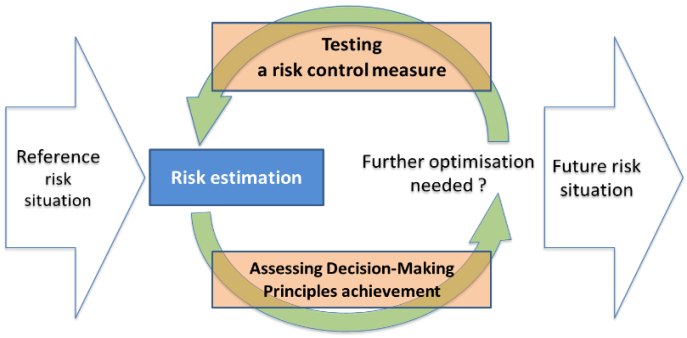


Main steps of the harmonised risk estimation approach (blue boxes)

For every step, this guide assists the user in the harmonised description of the case study and in the estimation of different categories of risks for example for humans, environment and transport systems. With harmonised reference material, it helps for the estimation of frequencies of occurrence and associated severities in accordance with recognised practices. It provides also harmonised formatting of risk results.

The Guide for decision-making describes the main steps to process robust risk management decisions taking into account the results of harmonised risk estimations.

With this guide, the framework allows the testing of potential benefits of risk control measures on reference risk situations. It ensures an equal treatment of the different modes of transport, i.e. road, rail and inland waterways.



Decision-making process

The harmonised Decision-making process helps users to assess the five following harmonised decision-making principles:

- *Changes to transport systems are safe*
- *Continuous risk reduction*
- *Utility for society*
- *Fair treatment of individuals and groups of people*
- *Avoidance of uncontrolled risk transfer*

The role of the **Expert Users and Development Group (Contact: Inland-TDG@era.europa.eu)** is to maintain and continuously improve the **Risk Management Framework**, in particular for supplementing the guides with reference material and users' examples. This role is managed by the European Union Agency for Railways under the auspices of the Directorate General for Mobility and Transport. One of the future possible actions under consideration is the development of a **Risk Management Platform** web application for assisting further the users of the framework.

Example of risk contour mapping (source AVIV B.V.)