

Economic Commission for Europe

Inland Transport Committee

Working Party on the Transport of Dangerous Goods

**Joint Meeting of the RID Committee of Experts and the
Working Party on the Transport of Dangerous Goods**

Geneva, 19-29 September 2017

Item 8 of the provisional agenda

Accidents and risk management

21 September 2017

**Overview of the future framework of guides on Inland TDG
Risk management (2017-INF.7)**

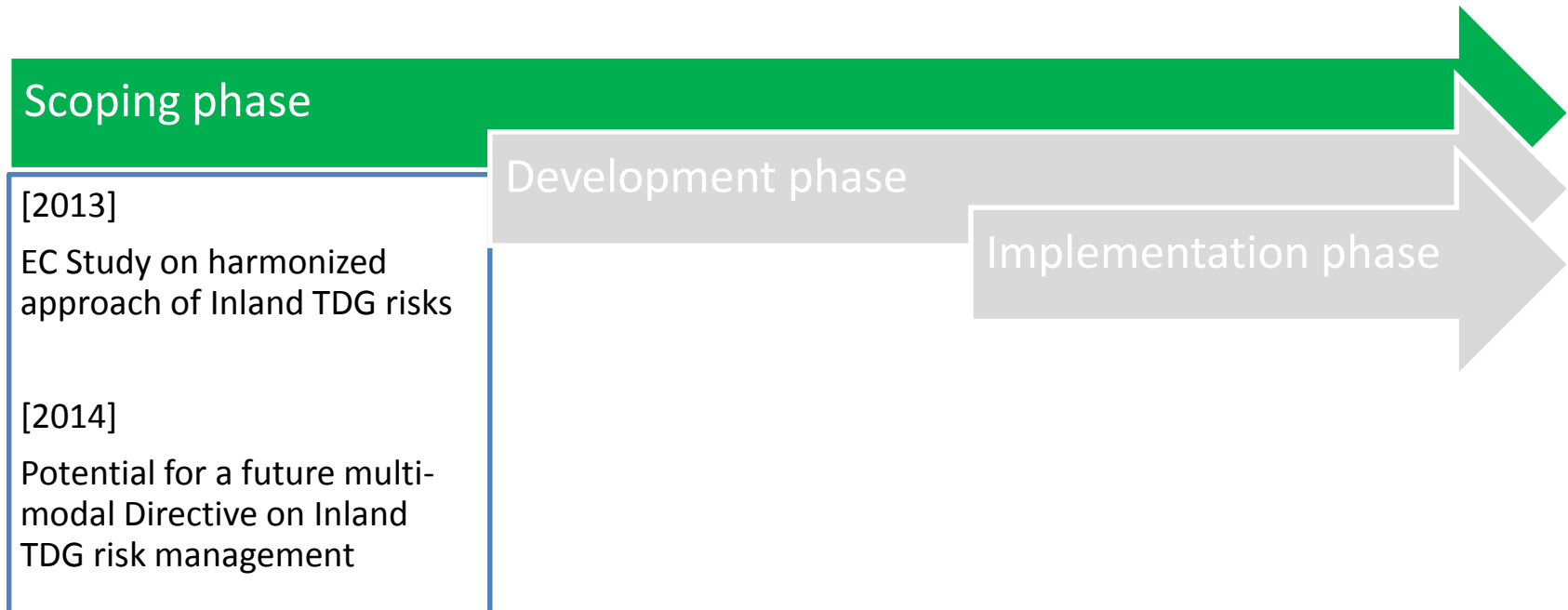
Transmitted by the European Union Agency for Railways (ERA)

European Union Agency for Railways

Overview of the future framework of guides on Inland TDG Risk management (2017-INF.7)

UNECE-OTIF Joint Meeting – September 2017





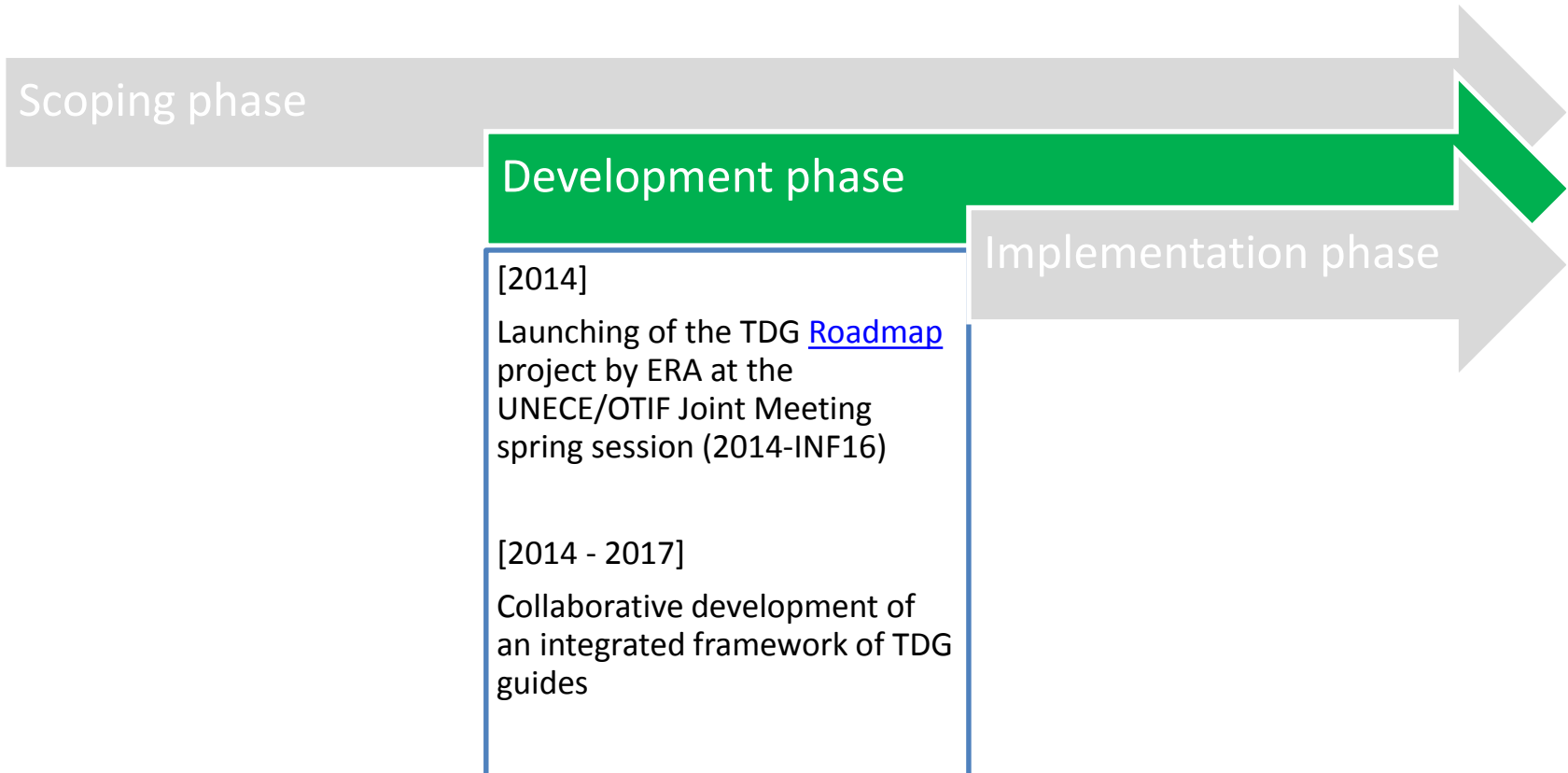
First inputs:

- 2013
A background document presenting the scene of the recurring TDG issues
([*Background discussion document*](#))
- 2013
A Study procured by EC on the feasibility to establish harmonised risk acceptance criteria in the context of inland transport of dangerous goods
([*EC Study report by DNV GL*](#))

Identified issues:

- Increasing demand for safety
- Diverse answers developed within EU-MS
- Sub-optimisation and potential risk shifting between states
- Potential un-controlled transfer of risk between modes of transport
- Potential global increase of risks for EU citizens
- Call into questions the effectiveness of TDG risk management system

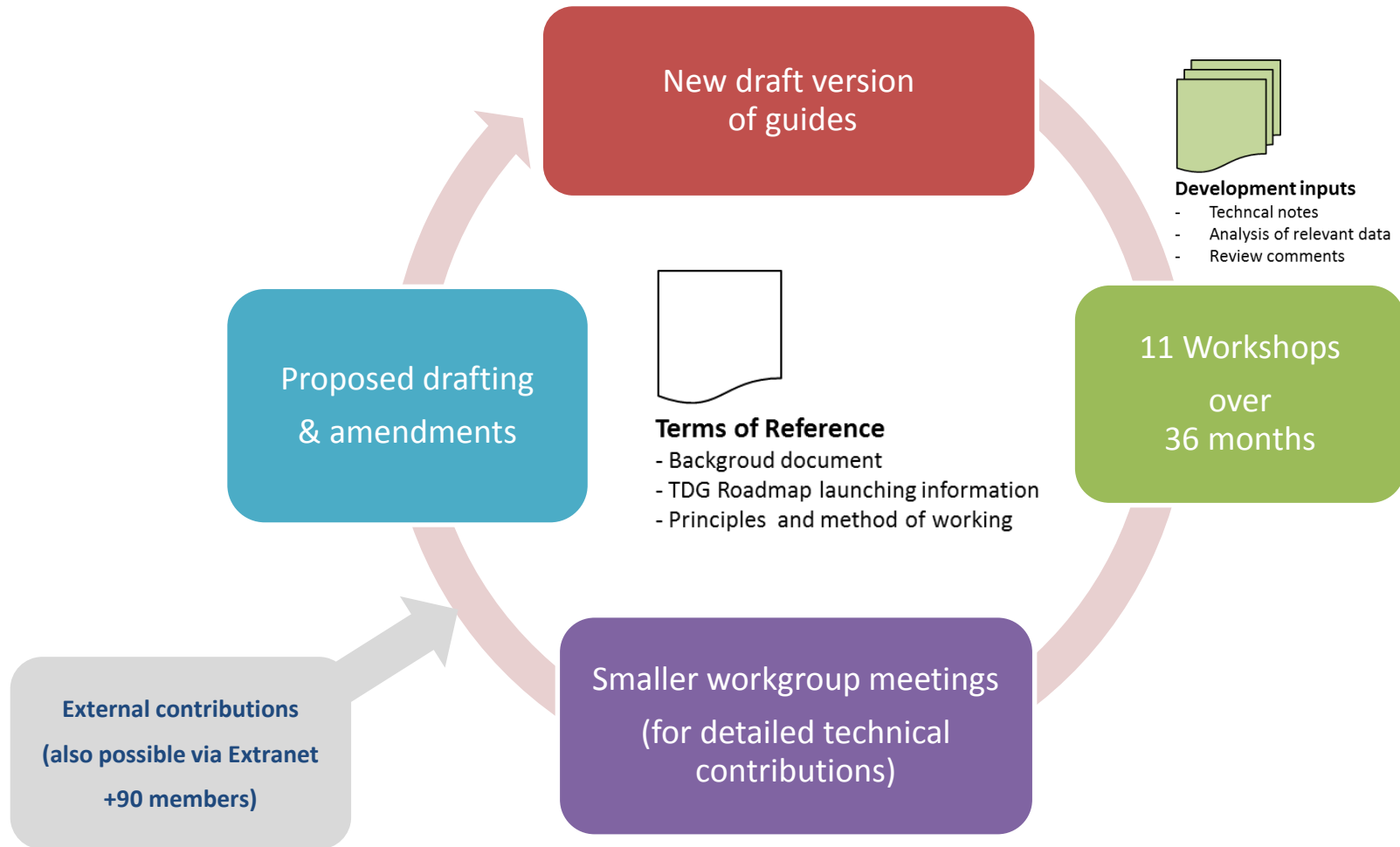
- Policy needs
 - Necessary to establish an harmonised Risk-management framework
 - as a first feasible step, Technical Guides



(one or several participations)

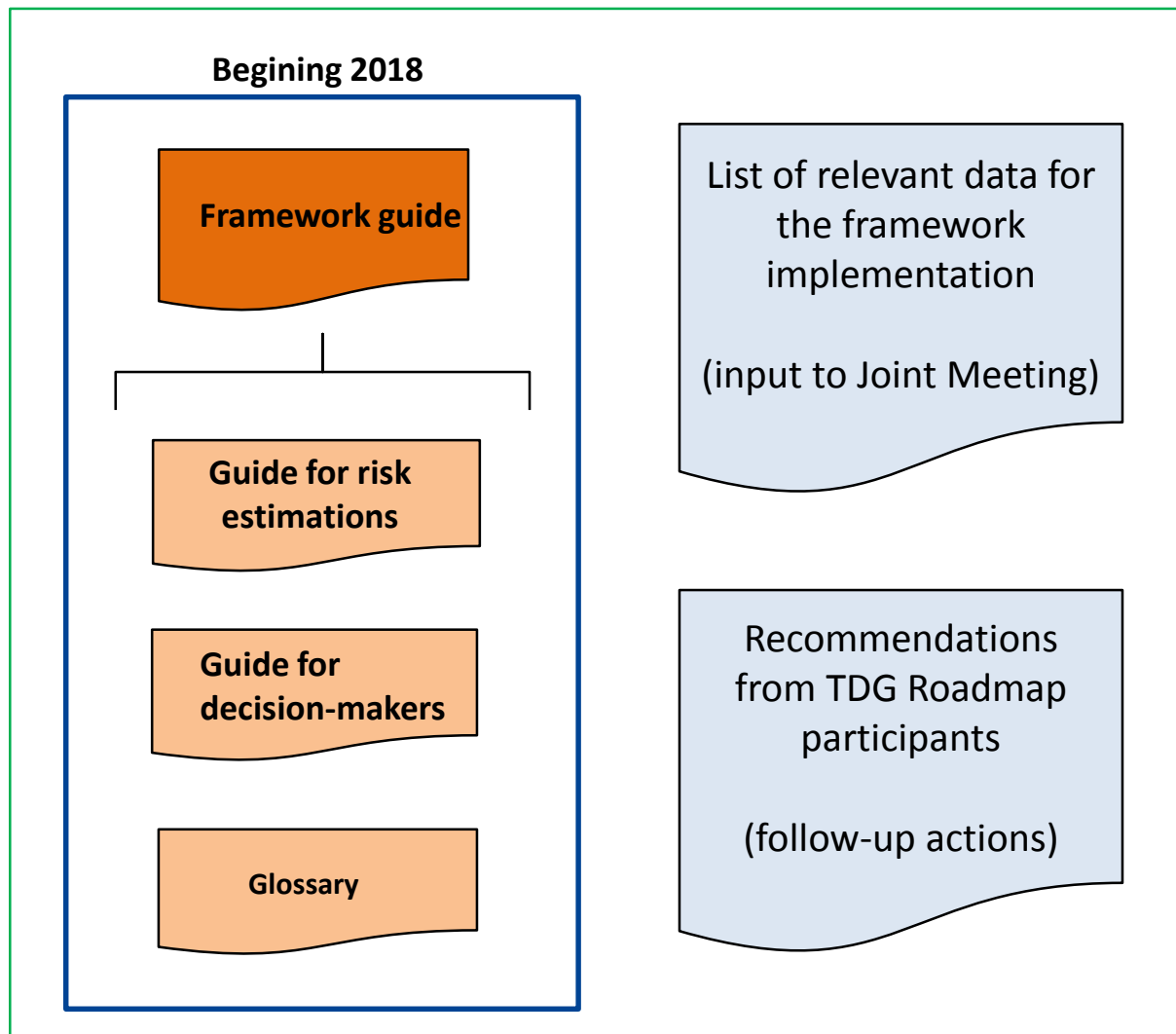
- International institutions
EC/DG-MOVE, ERA, OTIF, UNECE
- Member States, ADR/RID/AND Competent authorities, National authorities & bodies...
AT, BE, DE, ES, FR, HR, IT, LU, LV, NL, RO, SE, SL, UK, CH, NO
+ IPA countries (Albania)
- Operators, Infrastructure managers, concerned companies, followers...
BE, CZ, FR, IT, LT, LU, NL, PL
- Representatives of Transport and Industry associations
AEGPL, CEFIC, CER, ECTA, EIGA, EIM, RSSB, UIC, UIP
- Experts from National scientific/research/consulting organisms
BAM, DNV, INERIS, RIVM, Science Industries

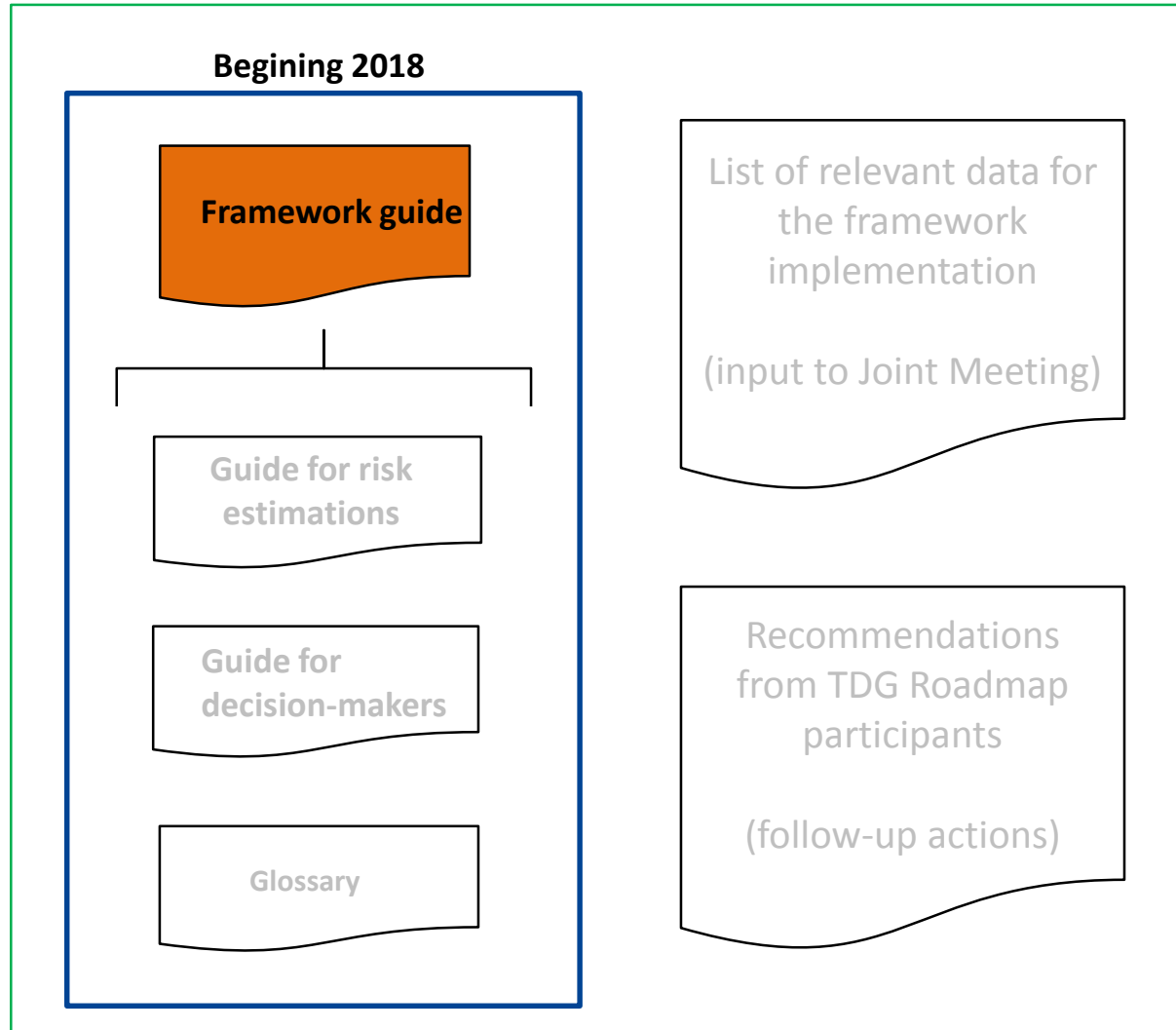
- TDG Roadmap is a multimodal project for railways, roads and inland waterways
- ERA acted as a facilitator in collaboration with all interested parties
 - organising workshops and technical discussions in workgroups
 - reporting progress to relevant Committees (including UNECE/OTIF Joint Meeting)
 - developing guides on the basis of WS contributions and reviews



Establishing a harmonised approach allowing:

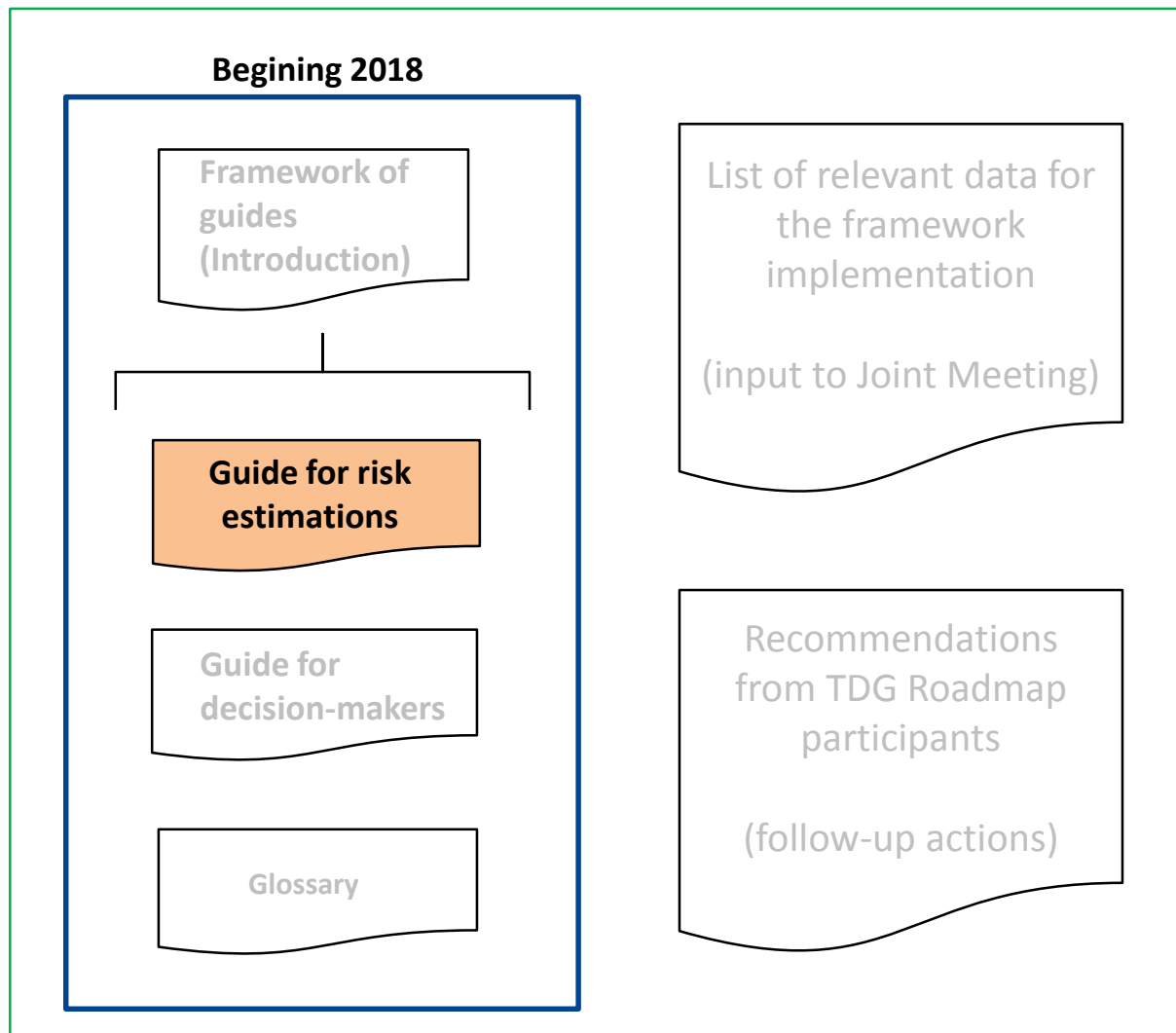
- Transparency of risk-based decision-making (RBDM)
- Harmonise existing Risk Estimation approaches (not a revolution)
- Assistance to decision-makers (not a press-button decision)
- Independence of risk estimation process and decision-making process
- Mutual recognition of RBDM between interested parties
- Harmonised framework scalable to various type of risk situations and actors





Framework guide

- **Overview of the Risk management objectives**
 - > CONTINUOUS RISK REDUCTION AND OPTIMISATION
- **Scope of application**
 - > ALL THE TRANSPORT CHAIN FROM FILLING/LOADING TO UNFILLING/UNLOADING
- **Potential users**
 - > GOVERNMENTS, COMPETENT AUTHORITIES,
 - > AGENCIES,
 - > PARTICIPANTS TO THE TRANSPORT CHAIN
 - > REPRESENTATIVE BODIES
 - > CONSULTANTS
- **Introduction to the technical guides**
 - > GUIDE ON RISK ESTIMATION
 - > GUIDE ON RISK MANAGEMENT AND DECISION MAKING
 - > GLOSSARY
- **Framework maintenance**
 - > PROCESS
 - > USER GROUP



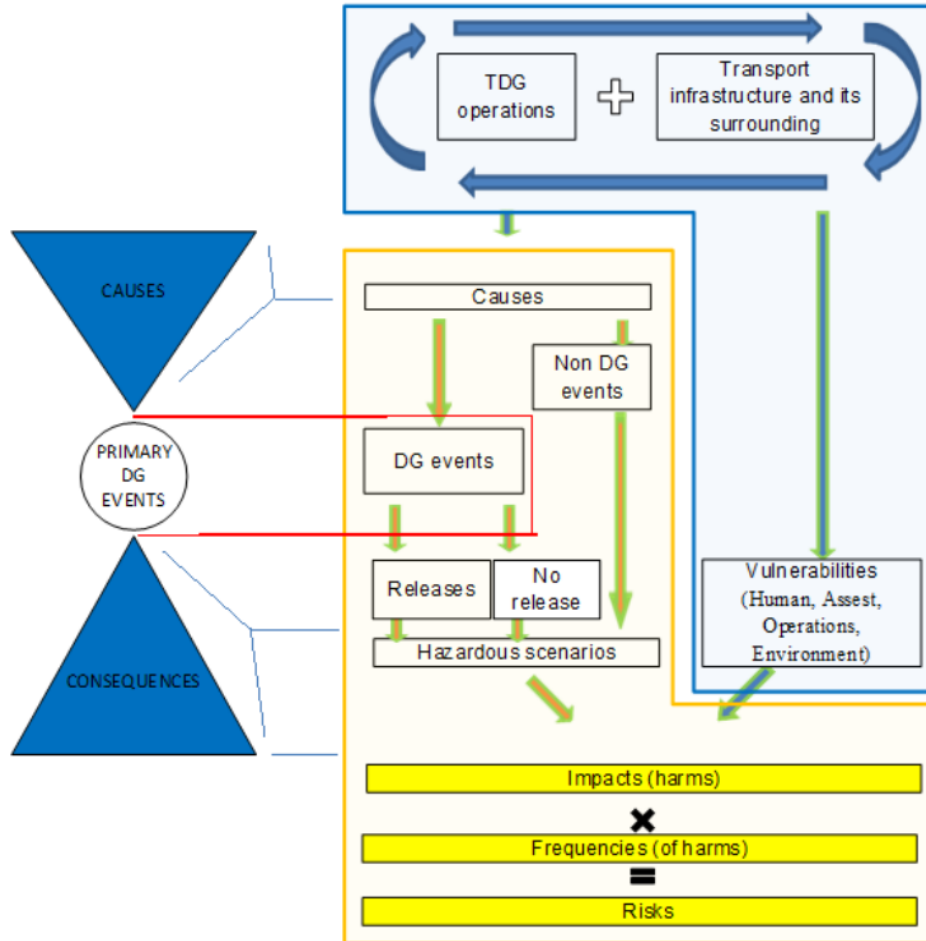
Guide for Risk estimations

- **Compatibility with**
 - > GENERAL GUIDELINE ON THE CALCULATION OF RISKS (RID / ADR – Chap. 1.9)
 - > REGULATION (EU) 2013/402 and 2015/1136 - CSM on RISK EVALUATION AND ASSESSMENT
 - > EXISTING PRACTICES
- **Scope of application**
 - > PRACTICAL ASSISTANCE TO HARMONISED RISK ESTIMATIONS
- **Input**
 - > DESCRIPTION OF A RISK SITUATION
- **Output**
 - > HARMONISED DESCRIPTION OF A RISK SITUATION
 - > HARMONISED METHOD OF RISK ESTIMATION – STEP BY STEP

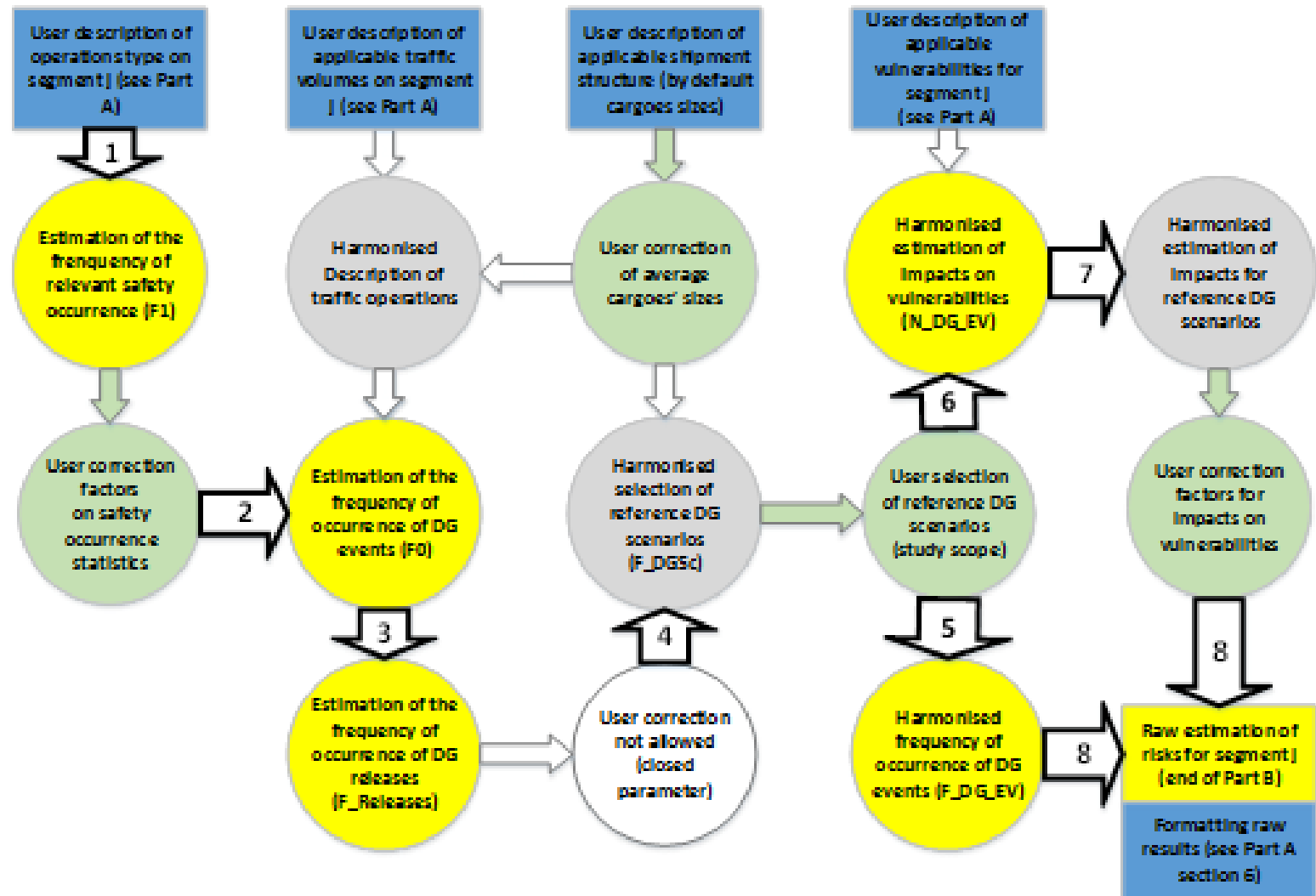
(CONDITIONNED TO THE DEVELOPEMENT OF A RISK ESTIMATION ENGINE)

 - > *RISK ESTIMATION RESULTS - QUANTITATIVE/QUALITATIVE*
 - > *RISK PROFILE/PERFORMANCE*
 - > *GROUPED FATALITY RISKS*
 - > *INDIVIDUAL RISKS*

Guide for Risk estimations



Guide for Risk estimations



Guide for Risk estimations

- **Flexibility / Adaptability**

- > USER SETTINGS ALLOW FOR ADAPTATION OF THE MODEL TO SPECIFIC CASE STUDY

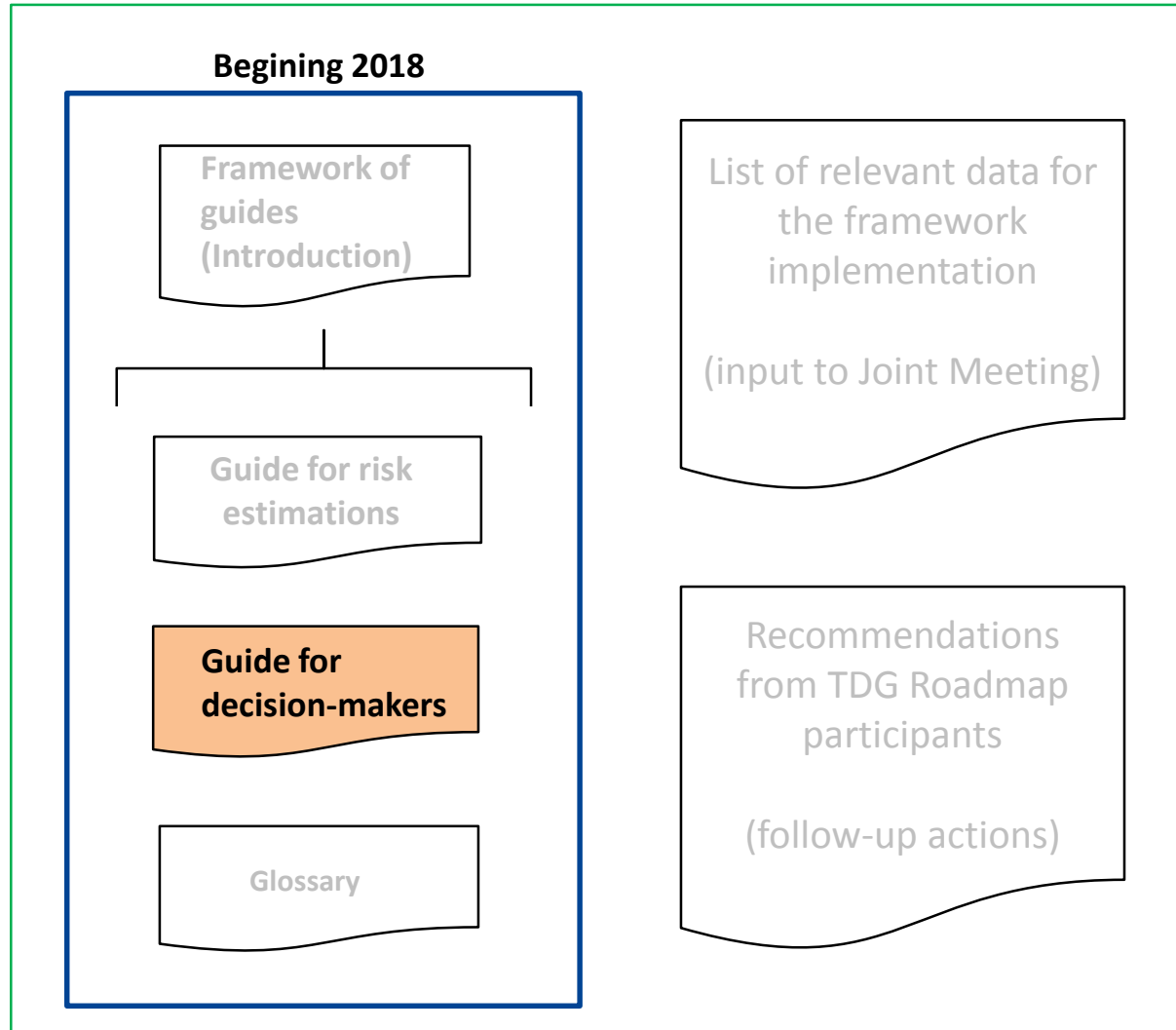
- > FIXED PARAMETERS OF THE MODEL ALLOW FOR MUTUAL RECOGNITION OF RESULTS

- **Maintenance**

- > PERIODIC REVIEW FOR ALIGNMENT WITH RID/ADR/ADN

- > PERIODIC REVIEW OF RISK MODEL PARAMETERS / REFERENCE VALUES SETTINGS

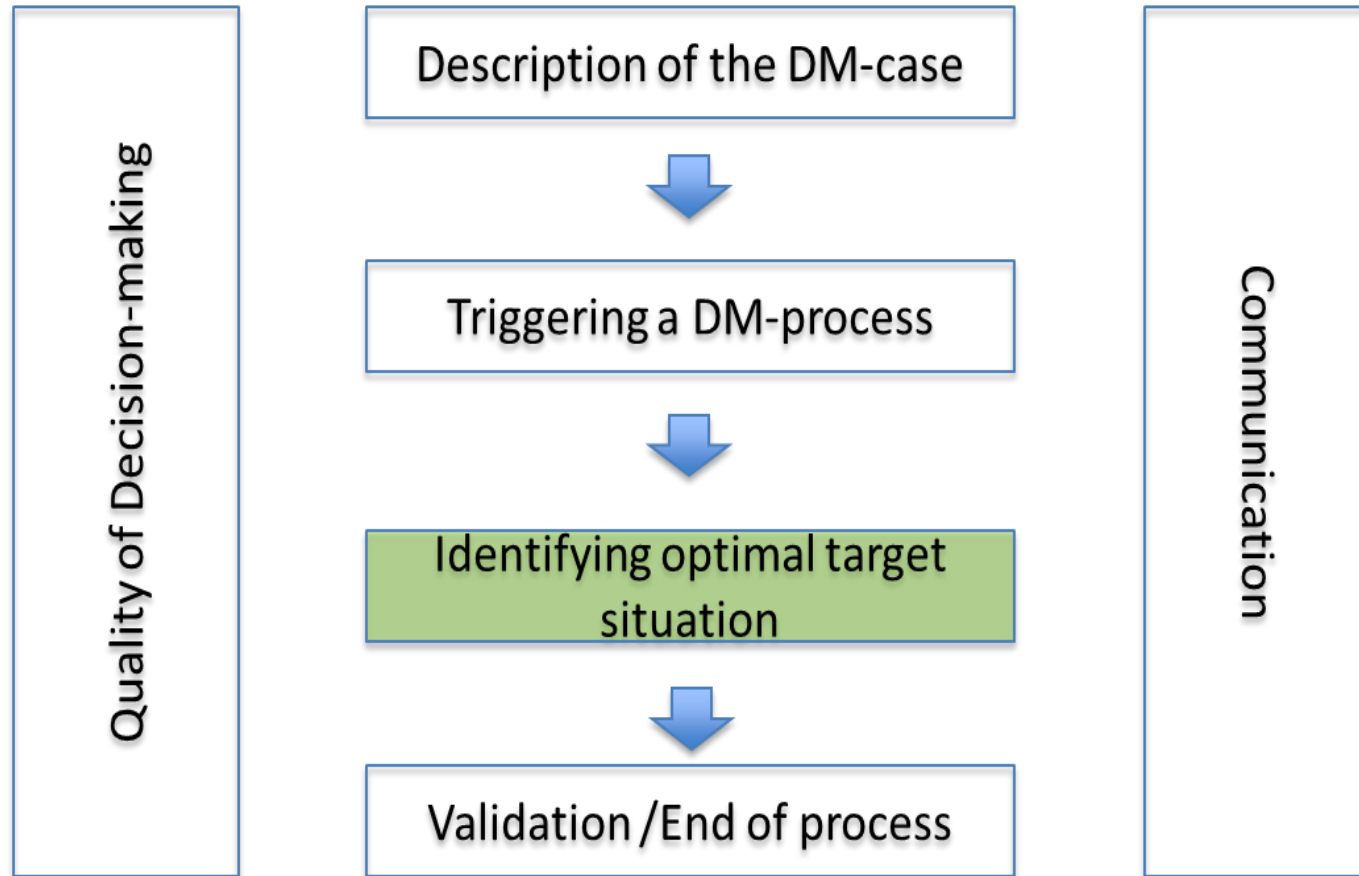
- > PERIODIC REVIEW OF THE GUIDE BY THE USER GROUP



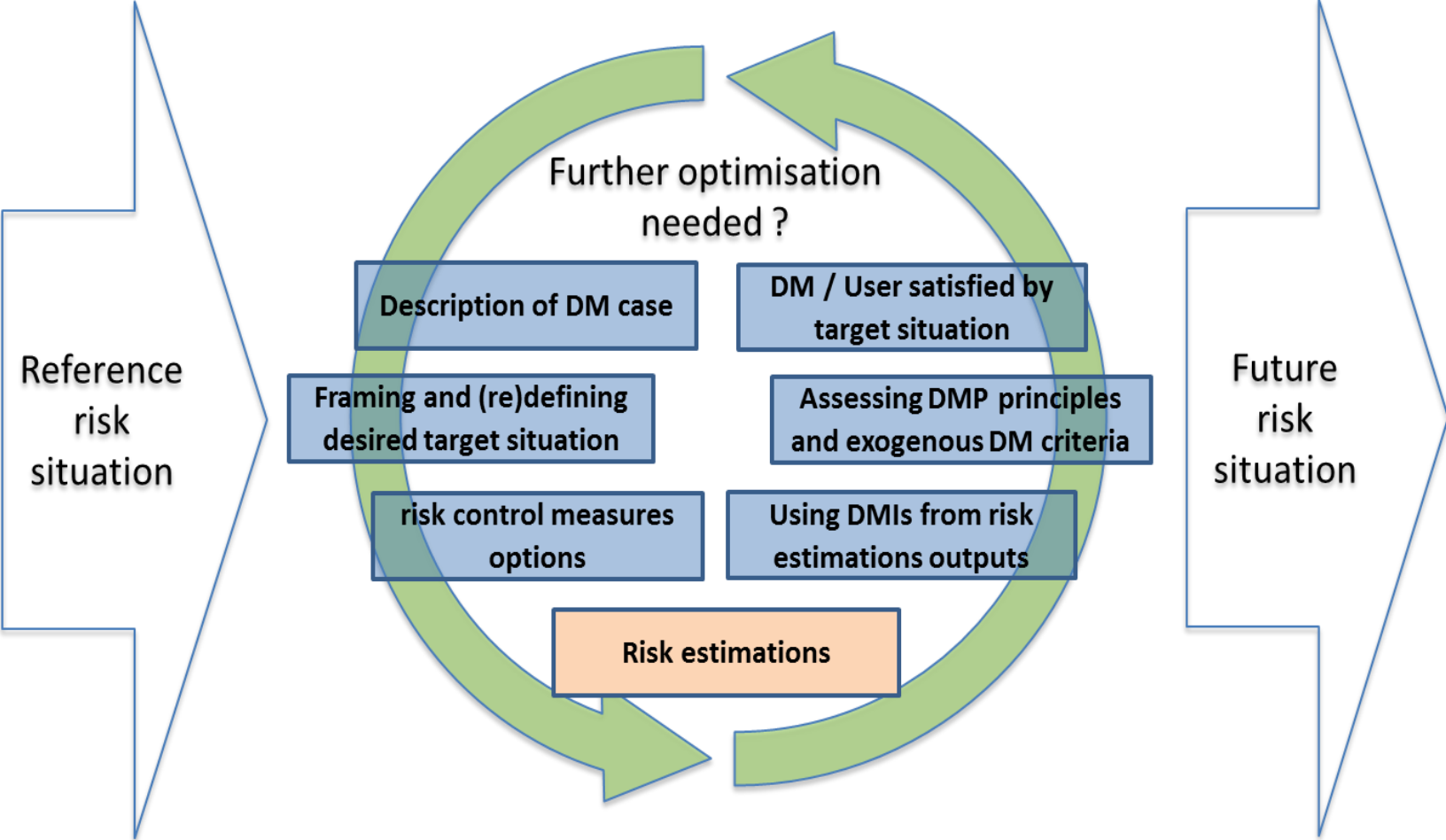
Guide for Decision-makers

- **Compatibility with**
 - > GENERAL GUIDELINE ON THE CALCULATION OF RISKS (RID / ADR – Chap. 1.9)
 - > REGULATION (EU) - CSM on RISK EVALUATION AND ASSESSMENT
 - > EC GUIDELINES ON IMPACT ASSESSMENT
 - > EXISTING PRACTICES
- **Scope of application**
 - > PRACTICAL ASSISTANCE TO HARMONISED DECISION-MAKING
- **Input**
 - > DESCRIPTION OF A RISK SITUATION
 - > DESCRIPTION OF A DECISION-MAKING CASE
- **Output**
 - > IDENTIFICATION OF STAKEHOLDERS
 - > DEFINITION OF THE TARGET RISK SITUATION
 - > IDENTIFICATION OF RISK MANAGEMENT OPTIONS
 - > **MANDATE FOR USERS OF THE GUIDE ON RISK ESTIMATIONS**
 - > ASSESSMENT OF DECISION MAKING PRINCIPLES
 - > RANKING OF MOST EFFICIENT OPTIONS FOR REACHING THE TARGET SITUATION
 - > QUALITY / JUSTIFICATIONS / COMMUNICATION

Guide for Decision-makers



Guide for Decision-makers



Guide for Decision-makers

- **Flexibility**
 - > APPLICABLE TO VARIOUS CATEGORIES OF USERS
 - > APPLICABLE TO DIFFERENT TYPES OF RISK SITUATIONS
 - > NO FIXED CRITERIA FOR THE DECISIONS
 - > A PROCESS ASSISTING THE DECISION-MAKERS
- **Maintenance**
 - > PERIODIC REVIEW OF PRACTICAL EXAMPLES BY THE USER GROUP
 - > (POTENTIAL FUTURE DEVELOPMENT) RISK ACCEPTANCE CRITERIA

Scoping phase

Development phase

Implementation phase

[beginning 2018]

Publication of TDG framework guides

[2018-2020]

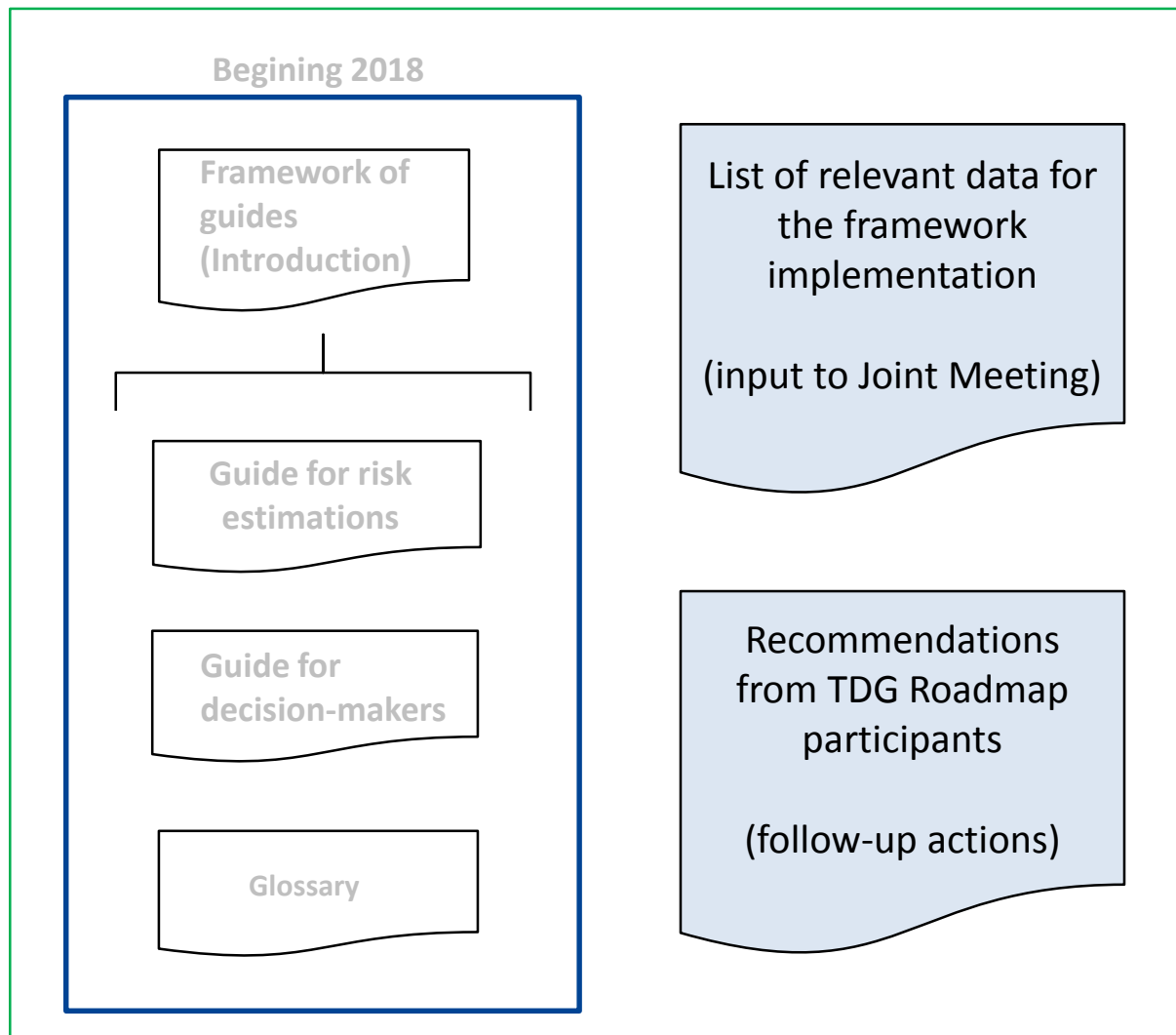
Use case examples (when ready)

Expert users group and TDG website,

Improvement of reporting regimes
(JM)

[2021 - 2025]

Re-evaluation of the relevant risk
management legal framework



List of relevant data for
the framework
implementation

(input to Joint Meeting)

Recommendations
from TDG Roadmap
participants

(follow-up actions)

**2018 – 2020
(Implementation phase)**



Inland TDG Website



Public user feedback



Expert users group



Risk estimation engine

**Re-evaluation of the risk
management legal
framework**



Making the railway system work better for society.

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