



GLOBAL WORKSHOP
ON BUILDING CLIMATE - RESILIENCE THROUGH
IMPROVING WATER MANAGEMENT AND SANITATION
AT NATIONAL AND TRANSBOUNDARY LEVELS

29 - 31 March 2021, hybrid
Palais des Nations, Geneva and online

**Preventing accidental water pollution: joint action by the Water and Industrial
Accident Conventions**

**Speaker: Mr. Bojan Srdic, co - Chair of the Joint Expert Group on Water and
Industrial Accidents from the Republic of Serbia**



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**Water Convention/
Protocol on Water&Health**



UNECEWater

Joint Expert Group on Water and Industrial Accidents --> Accidental water pollution

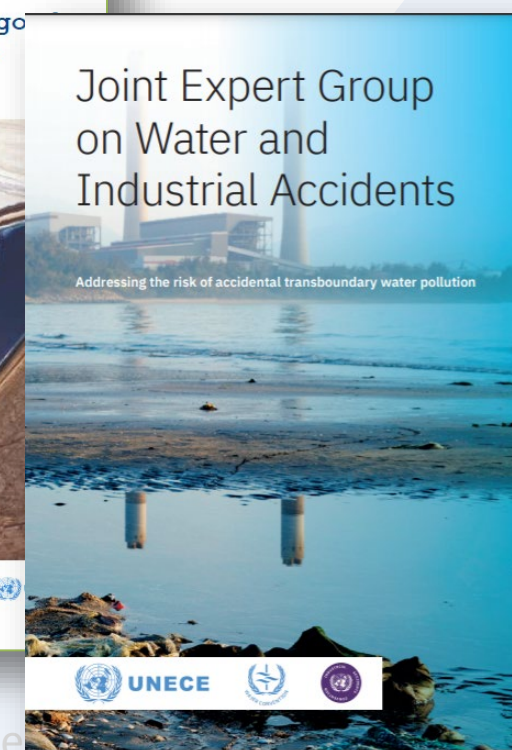
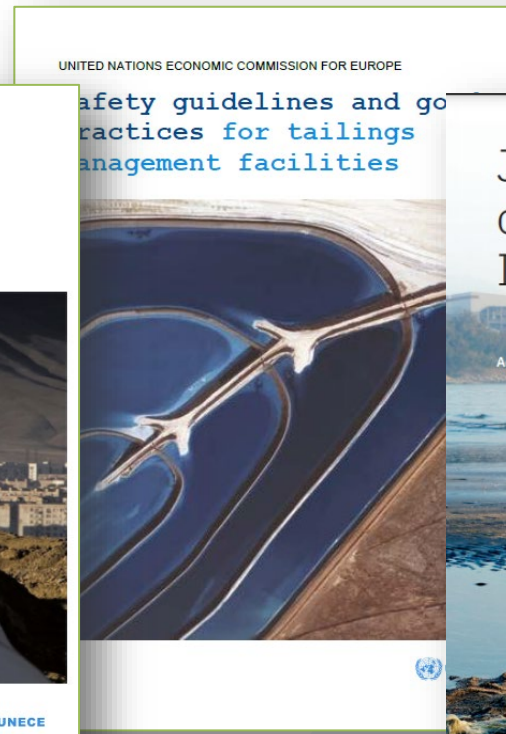
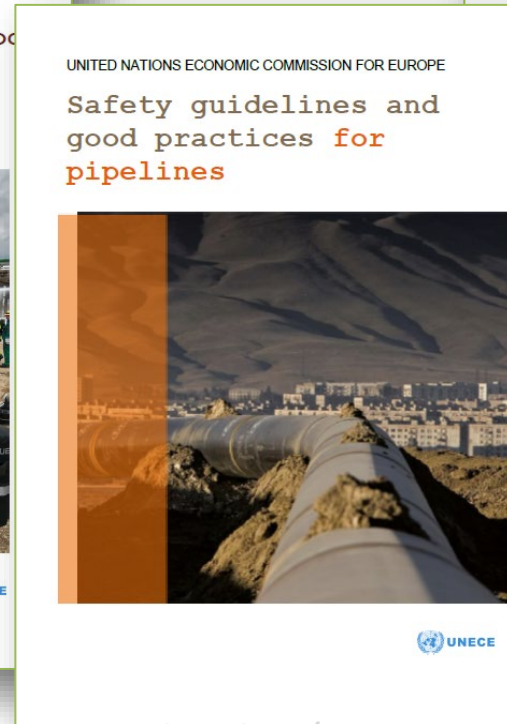
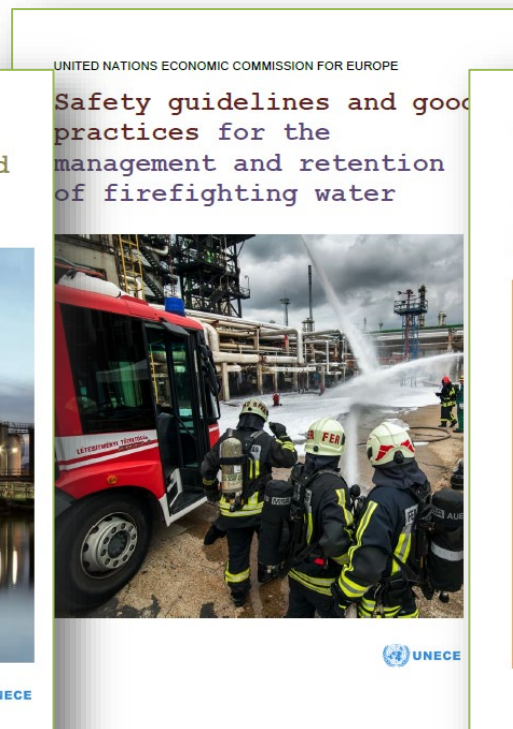
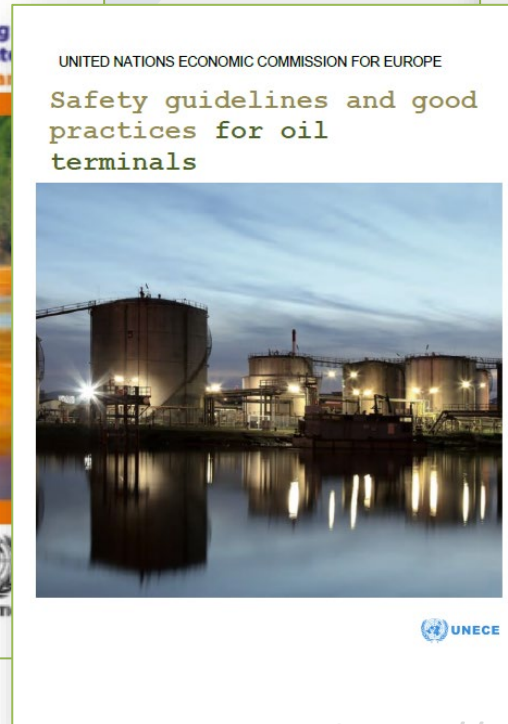
UNECE Water Convention

UNECE Industrial Accidents Convention

JEG

Joint Expert Group (JEG)

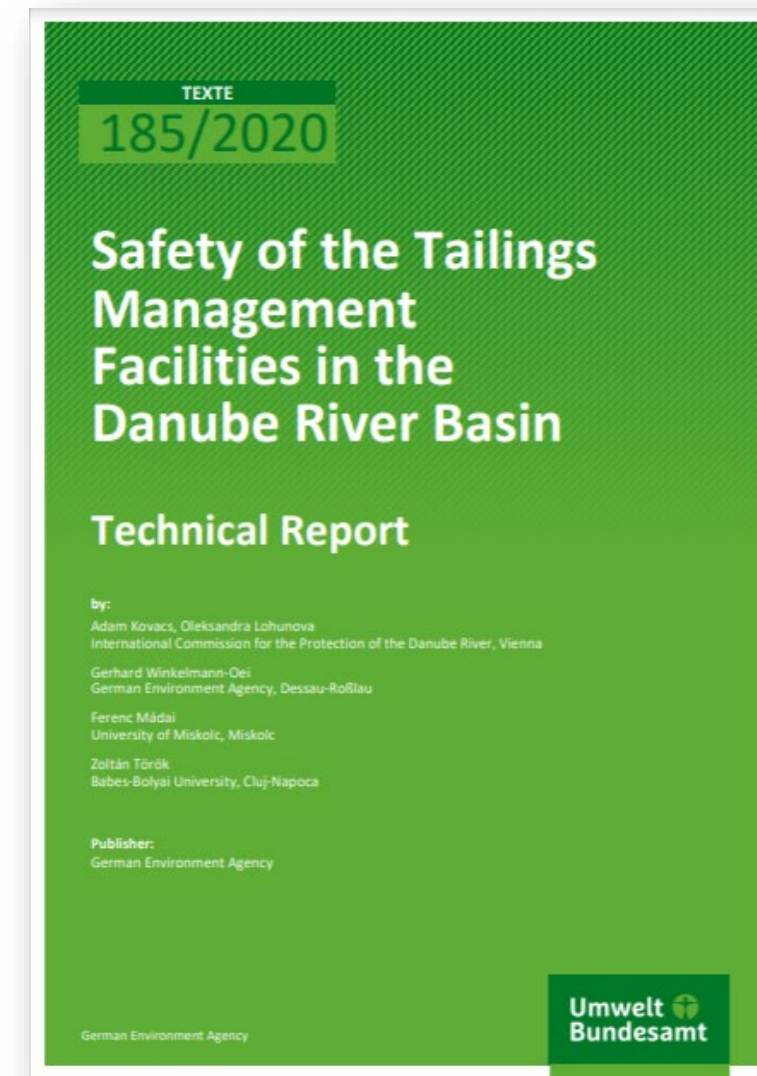
- Established in 1998
- Focus on prevention of accidental water pollution and its consequences
- Linking integrated water resources management to industrial safety



UNECE Safety Guidelines for TMFs and related checklist



Updated in 2020



See UNECE guidelines at <https://unece.org/DAM/env/documents/2014/TEIA/Publications/132/CEE-ECE-TMF-Publication.pdf>
See methodology at https://www.umweltbundesamt.de/sites/default/files/medien/378/publikationen/doku_01_2016_improving_the_safety_of_industrial_tailings_management_facilities.pdf

See the updated methodology at <https://www.umweltbundesamt.de/publikationen/safety-of-the-tailings-management-facilities-in-the-danube-river-basin>



Ranking of Risk

- Tailings Hazard Index
- Tailings Risk Index

Checklist

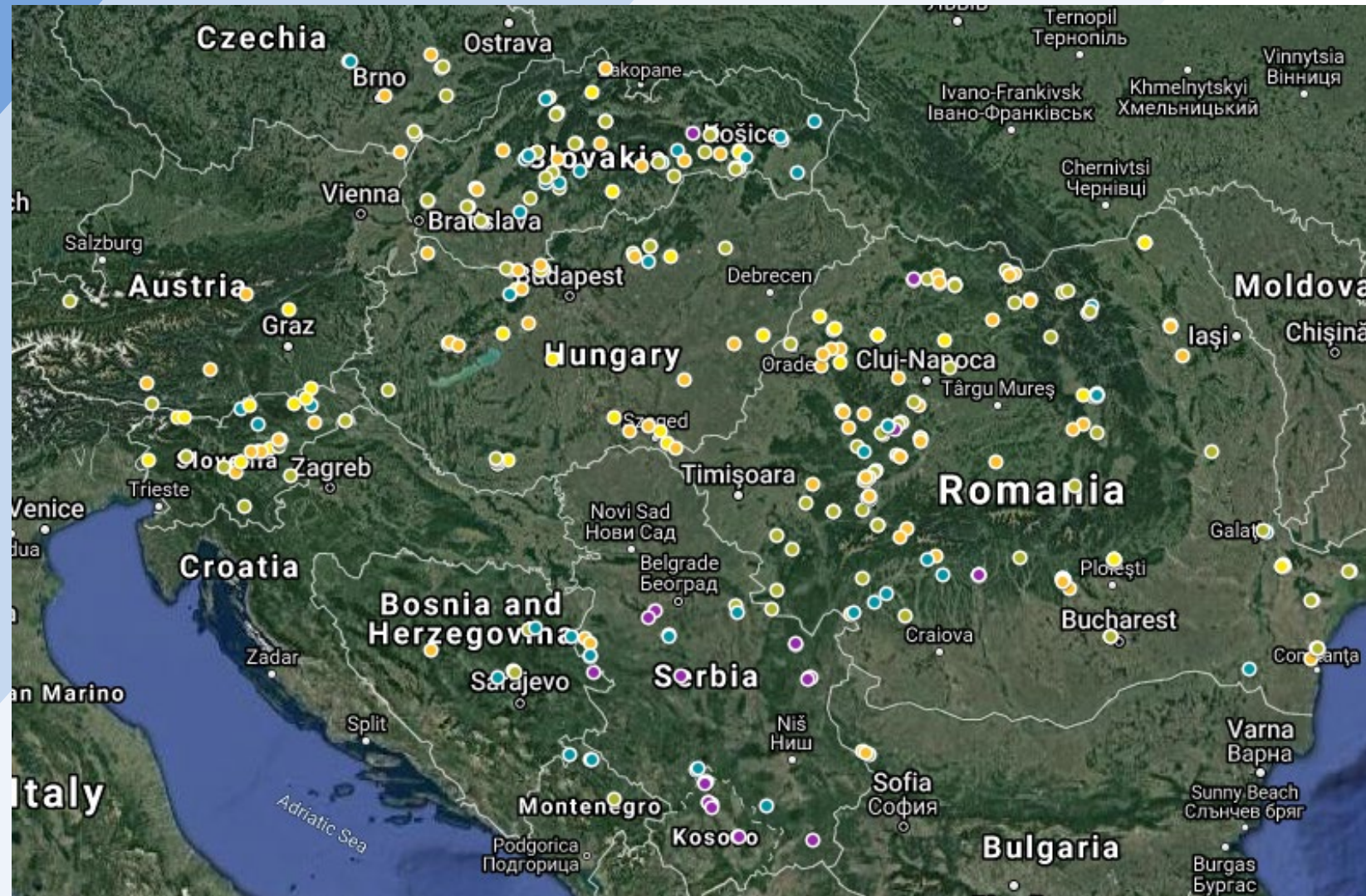
- for individual installations

Measure catalogue

- To address the hazards and risks identified

UNECE Safety Guidelines for TMFs and related checklist: examples and maps

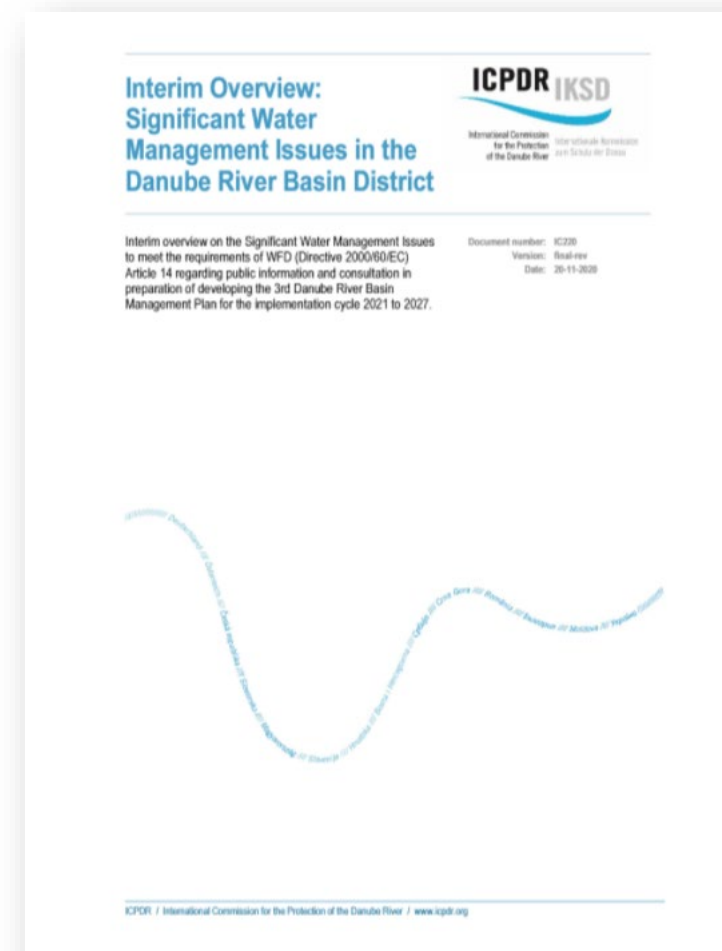
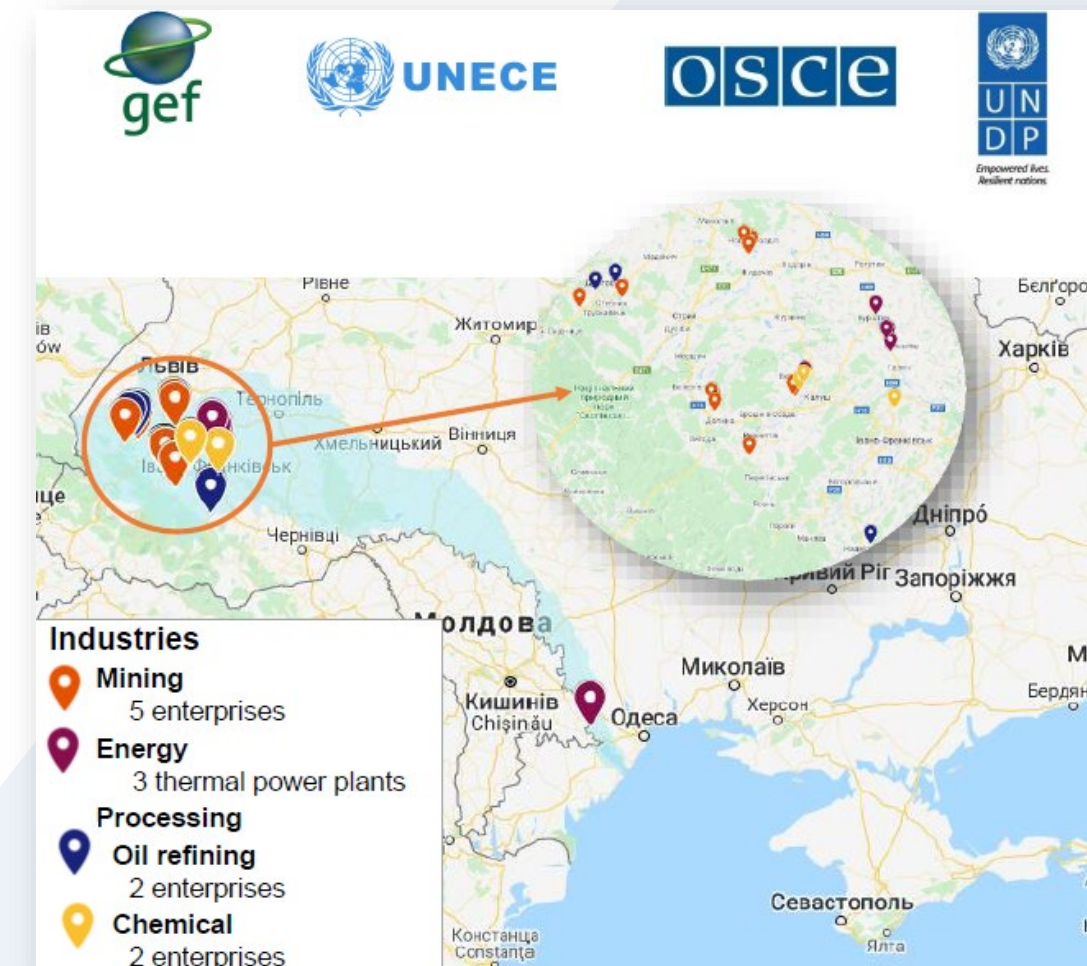
TMF map of the Danube River Basin countries*



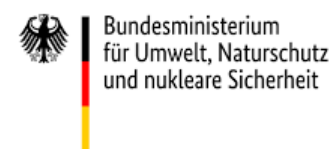
Colour scheme:

- lilac – very high hazard (THI**>14)
- blue – high hazard (12<THI≤14)
- green – medium hazard (10<THI≤12)
- orange – low hazard (8<THI≤10)
- yellow – very low hazard (THI≤8)

Methodology applied in Dniester River Basin



The map was developed in the frame of the project "Capacity development to improve safety conditions of tailings management facilities in the Danube River Basin – Phase I: North-Eastern Danube countries" (Reference number: Z6 - 90 213-51/79, Project number: 118221). The project is funded by the German Federal Environment Ministry's Advisory Assistance Programme (AAP) for environmental protection in the countries of Central and Eastern Europe, the Caucasus and Central Asia and other countries neighbouring the European Union. It was supervised by the German Environment Agency (UBA).



Online Toolkit and Training for Strengthening Mine Tailings Safety

Overview

Industrial accidents at tailings management facilities (TMFs) have led to environmental catastrophes with devastating effects on humans and the environment within and across countries. Major industrial accidents in the UNECE region and beyond have motivated countries to develop and implement tools under the UNECE Convention on the Transboundary Effects of Industrial Accidents to strengthen mine tailings safety and to prevent such accidents in the future.



This online toolkit assists countries in strengthening TMF safety and management practices. It serves as a hub for anyone wishing to learn about the importance of and work and tools on mine tailings safety under the Convention. At the same time, it provides online training for countries, without physically meeting, to improve their knowledge about the impacts and challenges of mine tailings and to apply existing guidelines, including UNECE's tools, to improve tailings safety. Through the drop-down menus below, this online toolkit and training includes four sections: background information on mine tailings safety; a 3-step practical training for countries to enhance safe management practices; a summary of UNECE's mine tailings work and partners; and further reading on key reports and references.

Improving the management and safety of mine tailings increases countries' understanding and governance of disaster risks, including through inter-institutional and cross-sectoral cooperation. As such, the work contributes to accomplishing the objectives of Agenda 2030, with its Sustainable Development Goals and the Sendai Framework for Disaster Risk Reduction. It also strengthens mineral resource governance, sustainable infrastructure and disaster resilience, both within and across countries.

Background information - A call for an urgent action

Practical training (3 steps)

UNECE's mine tailings work and partners

Further reading - Key reports and references on mine tailings safety

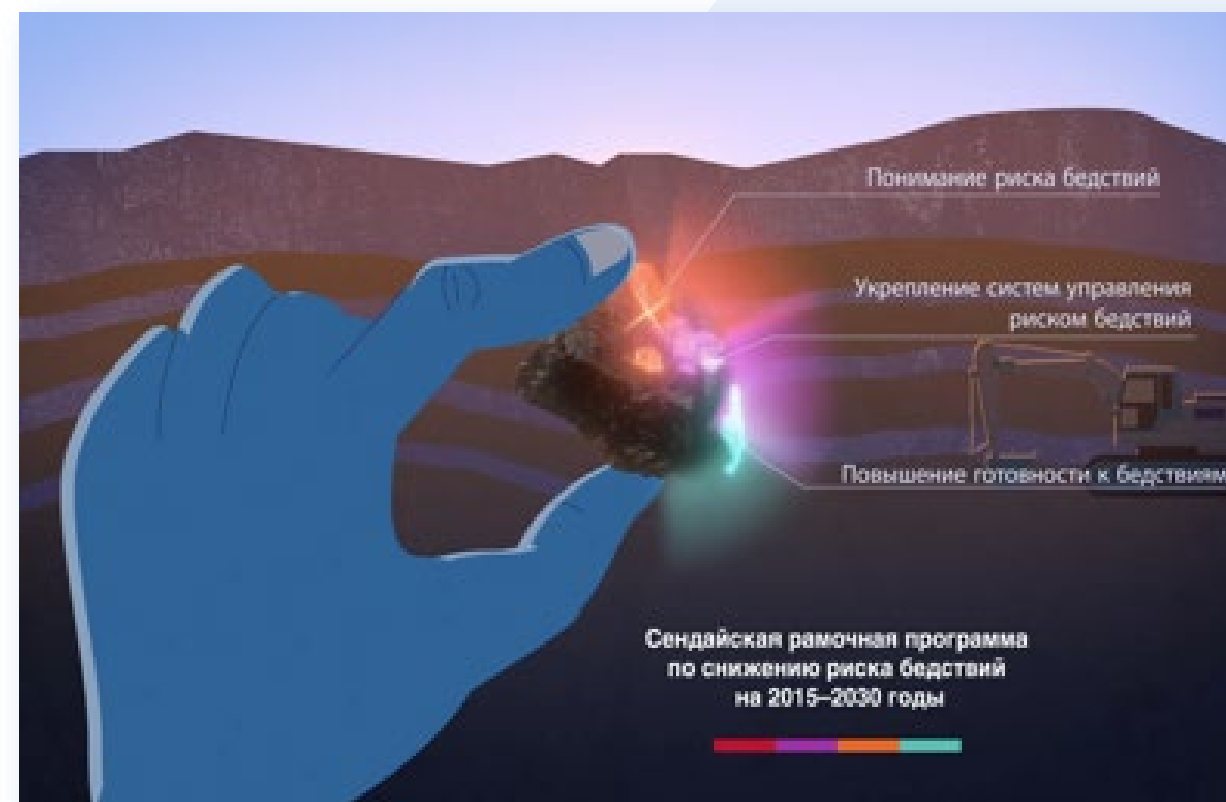
SENDAI FRAMEWORK
FOR DISASTER RISK REDUCTION 2015-2030

SUSTAINABLE DEVELOPMENT GOALS

Online Toolkit and Training for Strengthening Mine Tailings Safety

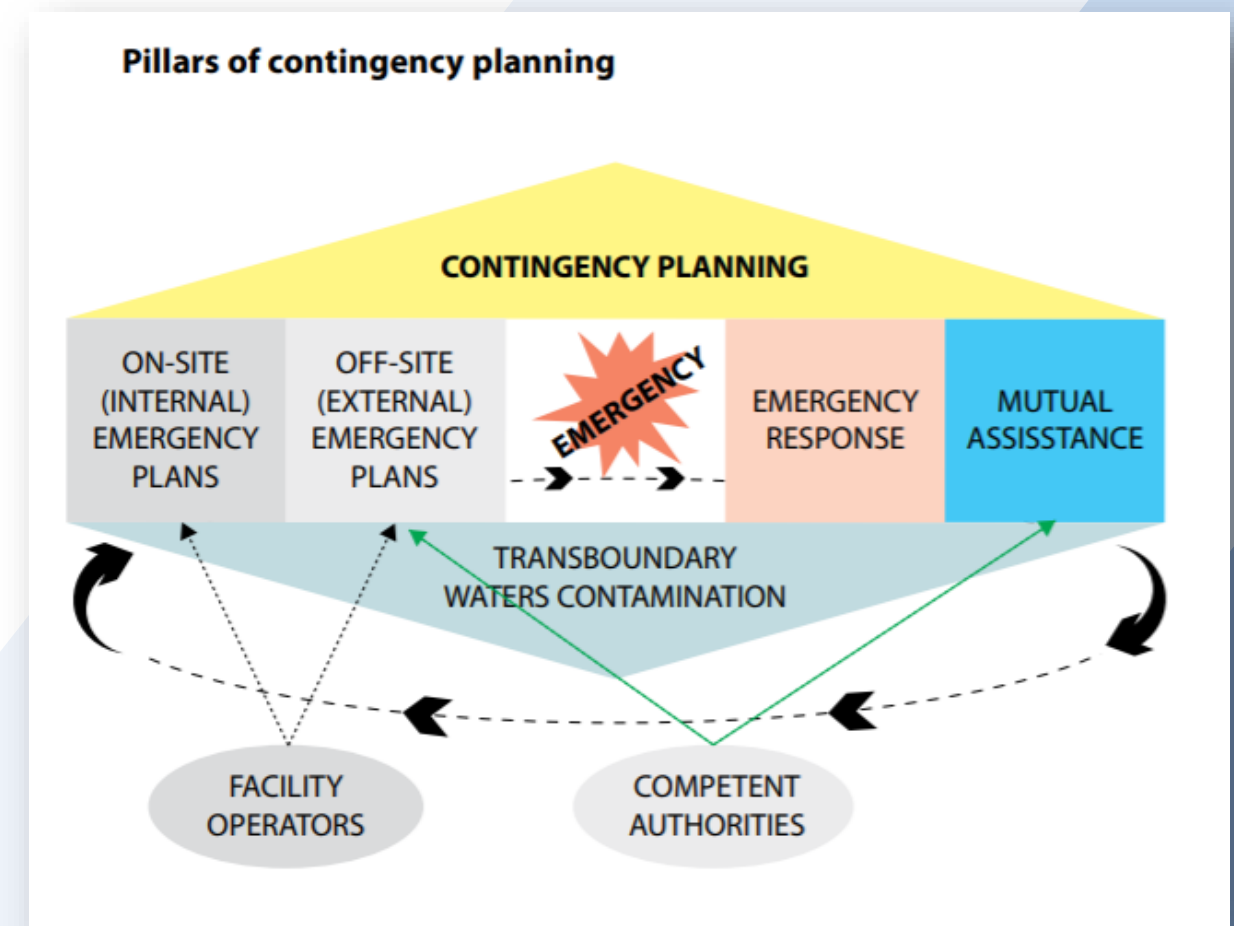
- Practical training → 3-step approach
- Available at <https://unece.org/environment-policy/industrial-accidents/online-toolkit-and-training-strengthening-mine-tailings>

Training Video on Mine Tailings Safety (ENG, RUS)



UNECE checklist for Contingency Planning

- Aims to limit the number of accidents causing water pollution and the severity of their consequences
 - Mitigate consequences of industrial accidents affecting transboundary water courses for human health and the environment
- Tool for harmonized contingency planning between neighbouring or riparian countries (applied in the Danube Delta and Armenia)
- Includes recommendations on legislation, early warning/alarm/notification systems, joint bodies and financial mechanisms in place; exchange of information and consultations between countries



Examples of transboundary response exercises

- 2015 Giurgiulesti, Republic of Moldova
(First ever trilateral exercise between the Republic of Moldova, Romania and Ukraine on the Danube River)
- 2017 Slubice, Poland
(Transboundary response exercise between Germany and Poland on the Oder River)
- 2018 Százhalombatta, Hungary
(Accidental water pollution mitigation exercise on Danube River)
 - Ministry of Interior of Hungary,
 - UNECE Joint Expert Group on Water and Industrial Accidents
 - International commission for the protection of the Danube River (ICPDR)



Thank you

For more information on the Joint Expert Group on Water and Industrial Accidents:

<https://unece.org/joint-expert-group-water-and-industrial-accidents>

For more information on JEG guidance and good practice:

<https://unece.org/environment-policy/industrial-accidents/overview>

A brochure on the Joint Expert Group and its outputs is available at:

<https://unece.org/environment-policy/publications/brochure-joint-expert-group-water-and-industrial-accidents>

Online Toolkit and Training for Strengthening Mine Tailings Safety; Mine tailings video:

<https://unece.org/environment-policy/industrial-accidents/online-toolkit-and-training-strengthening-mine-tailings>