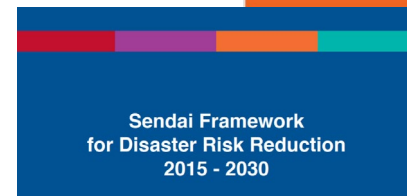


Joint Expert Group on Water and Industrial Accidents (JEG)

Bojan Srđić
Co-Chair of JEG

Joint Expert Group

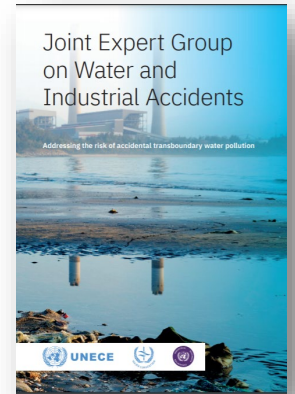
- Established by the UN Water Convention and the UNECE Convention on Transboundary Effects of Industrial Accidents in 1998.
- It deals with issues and common interests of both conventions, and is co-chaired by representatives of both conventions, currently Hungary, on behalf of the Water Convention, and Serbia, on behalf of the Convention on Transboundary Effects of Industrial Accidents.
- The group's work focuses on the prevention of accidental water pollution and its consequences.
- The mission of the Joint Expert Group is to assist countries in drawing up and implementing measures aimed at strengthening the prevention of and preparedness for accidental water pollution, especially in a transboundary context.
- It links integrated water management and industrial safety.
- The work of the group is connected with the goals of sustainable development, namely goals 3 (health), 6 (water) and 9 (industry, innovation and infrastructure, especially disaster resilience), as well as Sendai priorities 1, 2 and 4.



Joint Expert Group

Key activities:

- Disseminates, tests and facilitates the application of UNECE Safety Guidelines (for oil terminals, management and retention of firefighting water, pipelines, tailings management facilities - with methodology, etc.).
- Supports the implementation of UNECE Safety Guidelines and available Checklists in countries with economies in transition and other interested UN member states outside the UNECE region.
- Promotes response exercises to accidents with transboundary consequences.

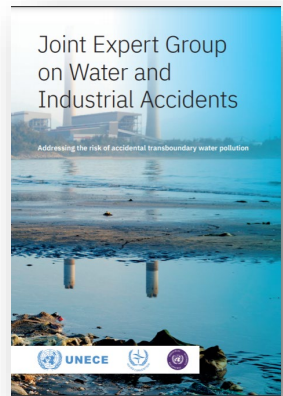


Joint Expert Group



Other activities:

- JEG supports Assistance and Cooperation Programme activities, through participation in project activities of the Convention.
- JEG supports the work of working groups and bodies of both conventions, as needed.
- JEG enables the exchange of information and experiences by organizing seminars on topics indicated by the Parties to the Convention.
- JEG creates Guidelines and Checklists that facilitate the implementation of the Convention.
- In every Convention biennium, we have 1 meeting of the Joint Expert Group, followed by a seminar for the Parties to the Convention and interested parties.
- JEG reports on its work to the Bureau of the Convention and the Conference of the Parties.

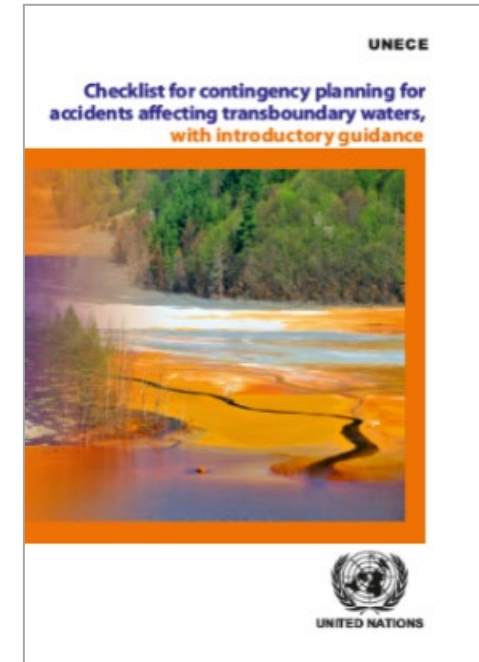


Publications



The latest publications of the Joint Expert Group are:

- Checklist for contingency planning for accidents affecting transboundary waters, intended to contribute to mitigating the severity of the consequences of industrial accidents affecting transboundary watercourses for human health and the environment.
- Safety guidelines and good practices for the management and retention of firefighting water, intended to enhance existing practices and promote harmonized safety standards for firefighting water management and retention, in order to prevent accidental pollution of soil and water, including pollution that could cause transboundary effects.



Seminars



Some of the seminars held in previous years are:

- Seminar on Emergency Planning, Early Warning and Mitigation, held in 2019 in Budapest, co-organized by Hungary and UNECE, with the support of ICPDR and the Joint Expert Group, the aim of which was to exchange experiences, good practices and challenges in (transboundary) emergency planning, early warning systems and prevention of transboundary water pollution.
- Seminar on Emerging risks in accidental water pollution: focus on Natural hazard-triggered accidents (NATECH), held in October 2022 in Budapest (and online), organized by Hungary, supported by the Secretariat and financed by Germany, whose aim was to provide a forum for discussion on how industrial accidents caused by natural hazards (NATECH) can be better understood and to identify good practices and innovative approaches.

Seminars



Planned seminars:

- Preparations are underway to hold a workshop within the work of the Joint Expert Group for the biennium 2023-2024.
- An international workshop on increasing the capacity to prevent, prepare and respond to accidental water pollution from tailings management facilities is planned for April 23, 2024, in Bratislava, Slovakia and online.
- The workshop aims to draw attention to environmental threats (e.g. TMFs, sludge ponds) that might pose a high risk to human health and the environment if not adequately dealt with, emphasize the importance of safety inspections and controls as a key to accident prevention, and study lessons learned, TMFs life cycle and the actual remediation of selected hotspots. Additionally, the workshop will provide a forum to identify and exchange good practices and examples of implementation of preventive and contingency measures that aim to minimize risks and the adverse impacts of accidents, as well as to share examples of actual natural hazard-triggered technological (Natech) accidents affecting transboundary waters.

Trends in the focus of the work



In the last few years, the trends in the focus of the work of the Joint Expert Group have been on:

- Natural Hazards Triggering Technological Disasters (NATECH) and
- Safety of Tailings Management Facilities



Natural Hazards Triggering Technological Disasters (NATECH)



Natural hazards (eg floods, earthquakes, etc.) can cause technological/industrial accidents (NATECH accidents) and cause water pollution, and with climate change and more extreme weather events, such accidents will become more frequent and severe.



When considering accidental water pollution risks, critical natural hazards (including their causes and effects), along with technological hazards and risks, need to be identified, considered and incorporated into risk assessment methodologies, as well as legislation that prescribes their use.



Consideration of NATECH accidents, in terms of accidental water pollution, increases the need for Parties to the Convention to act together at the transboundary level. In this sense, warning system tests, simulation exercises and field exercises improve transboundary cooperation.

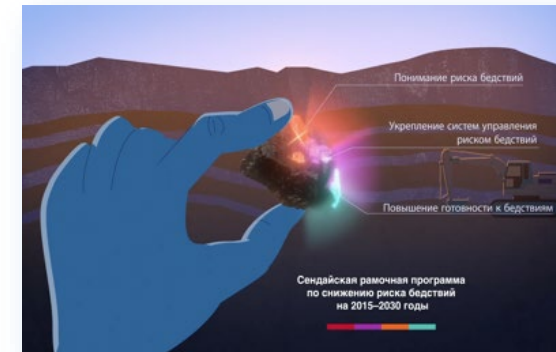
Safety of Tailings Management Facilities



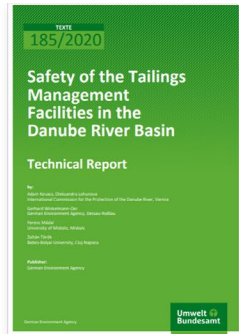
The Joint Expert Group supports the activities of the Convention to increase the safety of tailings management facilities.

It is important to mention several activities from the previous period, which aim to increase the safety of tailings management facilities:

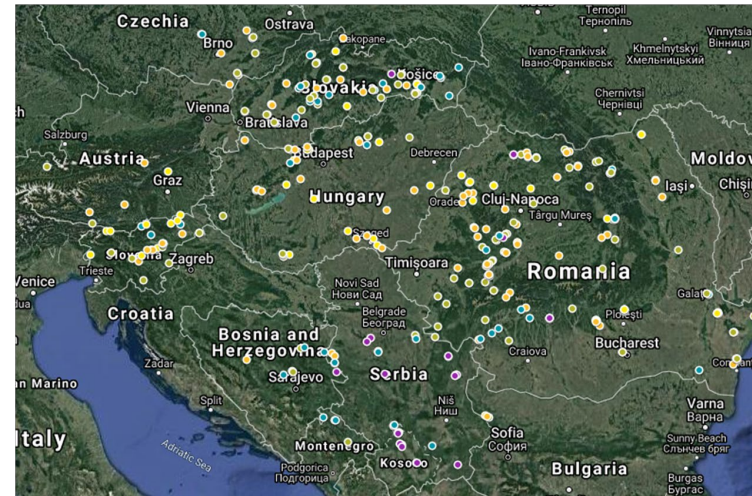
- At the eleventh meeting of the Conference of Parties to the UNECE Convention on Transboundary Effects of Industrial Accidents, 7-9. December 2020, the Decision on strengthening the safety of tailings management facilities in the UNECE region and beyond was adopted.
- In December 2020, an online seminar was held on Strengthening the safety of tailings management facilities in the UNECE region and beyond.
- The UNECE online toolkit and training for strengthening the safety of tailings management facilities has been published.
- JEG, together with the Secretariat of the Convention, participated in numerous projects related to the safety of tailings management facilities, especially in the Danube and Caucasus regions.



An example of the work of the Joint Expert Group - Mapping of tailings management facilities



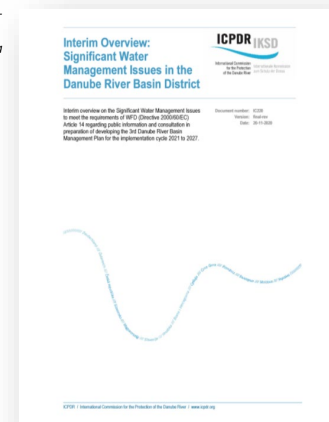
TMF map of the Danube River Basin countries*



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).



Methodology applied in Dniester River Basin



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)

Tailings Risk Index (TRI)

- **Very high** (TRI ≥ 20)
- **Medium** (15 <TRI < 20)
- **Low** (TRI ≤ 15)



Thank you for your attention!



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For more information on the Joint Expert Group and industrial accidents:
<https://unece.org/joint-expert-group-water-and-industrial-accidents>

For more information on Guidelines and good practice:
<https://unece.org/environment-policy/industrial-accidents/overview>

For a brochure on the Joint Expert Group and its work results:
<https://unece.org/environment-policy/publications/brochure-joint-expert-group-water-and-industrial-accidents>

Online Toolkit and Training for strengthening the safety of tailings management facilities, as well as a safety video:
<https://unece.org/environment-policy/industrial-accidents/online-toolkit-and-training-strengthening-mine-tailings>