

# Gerhard Winkelmann-Oei

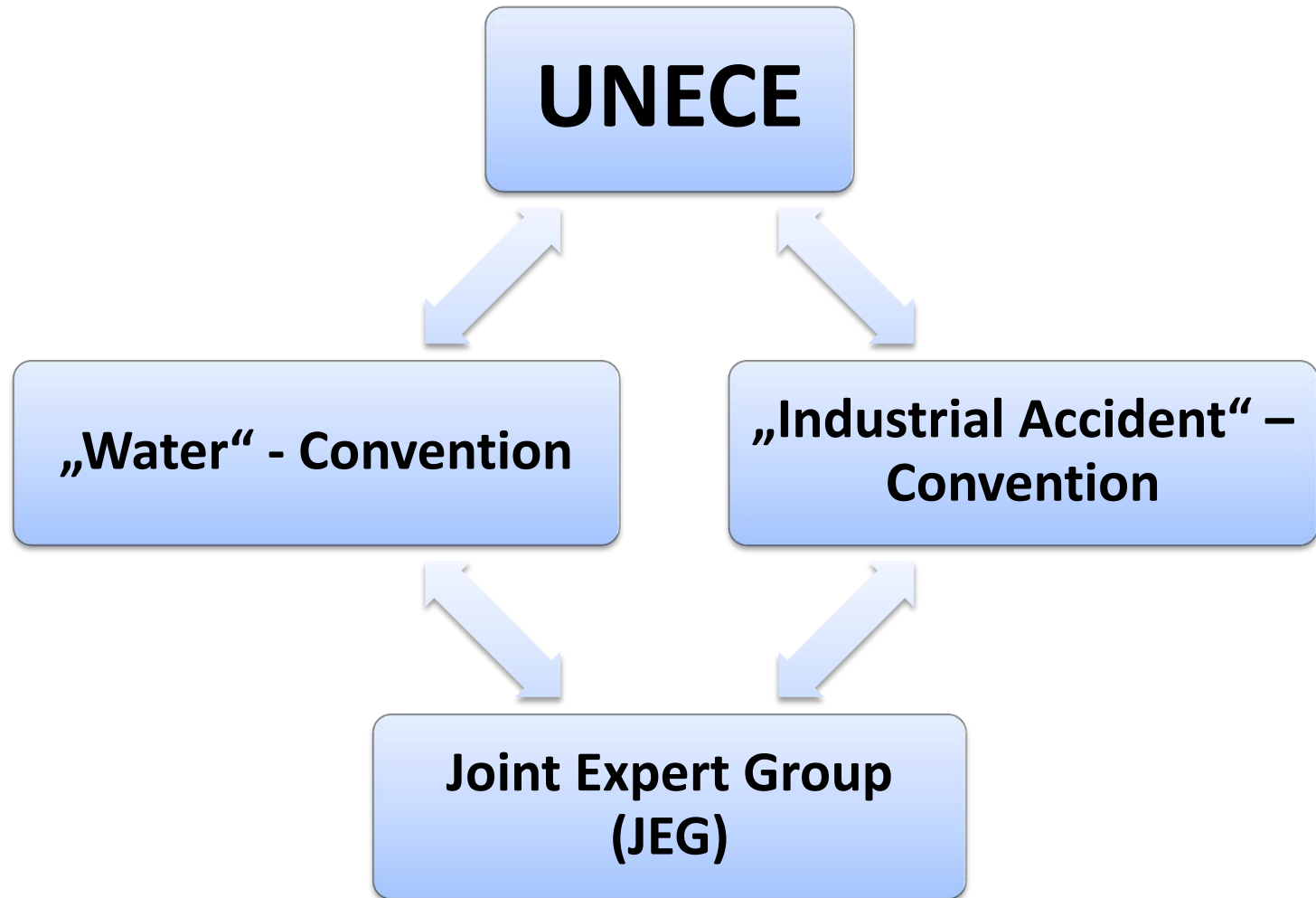
## Federal Environment Agency

### Dessau, Germany



# The UNECE Joint Expert Group (JEG)

## Prevention of accidental water pollution



# Why JEG is important ?

→ **Water Accidents > 95 % of all  
transboundary accidents !!**

Water and IAs Convention provide the legal framework for addressing the risk of transboundary water pollution arising from IAs

# **The UNECE Joint Expert Group (JEG)**

## **Strategy for risk reduction to prevent accidental water pollution**

- A. Sources of Risk**
- B. JEG-Strategy for Risk Reduction**
- C. Workplan**
- D. Future Activities**

# UNECE Seminar

## 25<sup>th</sup> anniversary of the Sandoz-Accident

Bonn, 8/9 November 2011

### Objective:

- Where do we stand with our efforts in preventing accidental water pollution?
- Where are still deficits?
- What can be the way forward?
- What are the Sources of Risk



# Sources of Risk

## 1986: Sandoz-Accident

**Fire at a storage facility for chemicals/pesticides without any Fire Water Retention System**



→ 30-40 tons of highly toxic pesticides flowed into the river



→ causing the death of the aquatic ecosystem 700 km downstream (e.g. eels)

# Sources of Risk

## - Transport Means -

The **transport of hazardous goods** by ships, but also by other means of transportation (i.e. railway, pipelines), poses a high risk potential for water pollution.



Tanker  
Germany, 2011



Railway  
Lviv, 2007



Pipeline  
Dalian, 2008



# Sources of Risk

## Tailing Management Facilities



**Baia Mare, Romania, 2000**

→ **Safety Guidelines for Tailing Management Facilities**



# Lessons!

- **Water accidents can lead to the complete loss of an aquatic ecosystem!**
  - **Accidents are extremely costly!**
  - **Safety is the most cost-effective way to run hazardous activities!**
- **Safe operation of hazardous facilities is economically and ecological a must**

# UNECE JEG Strategy for Risk-Reduction

- A minimum set of requirements to ensure a basic level of safety for hazardous activities throughout the UNECE Region.
- Application of accepted and published good practice procedures to ensure conformity with international standards
- Assistance of national authorities and operators in ensuring and harmonizing an adequate safety level in their countries by means of trainings and seminars.

**→ Tools & Products → Safety Guidelines & Checklists**

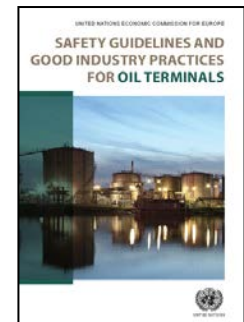
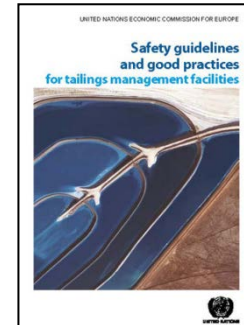
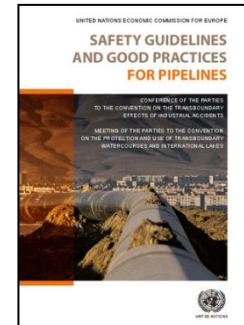
## → Safety Guidelines

Accepted good practice procedures to  
ensure conformity with international standards

### → Pipelines

### → Tailings Management Facilities

### → Oil-Terminals



# JEG - Tools and Products

## → Checklists

Tools for Assistance of national authorities and operators in ensuring an adequate safety level (i.e. Trainings and Seminars)

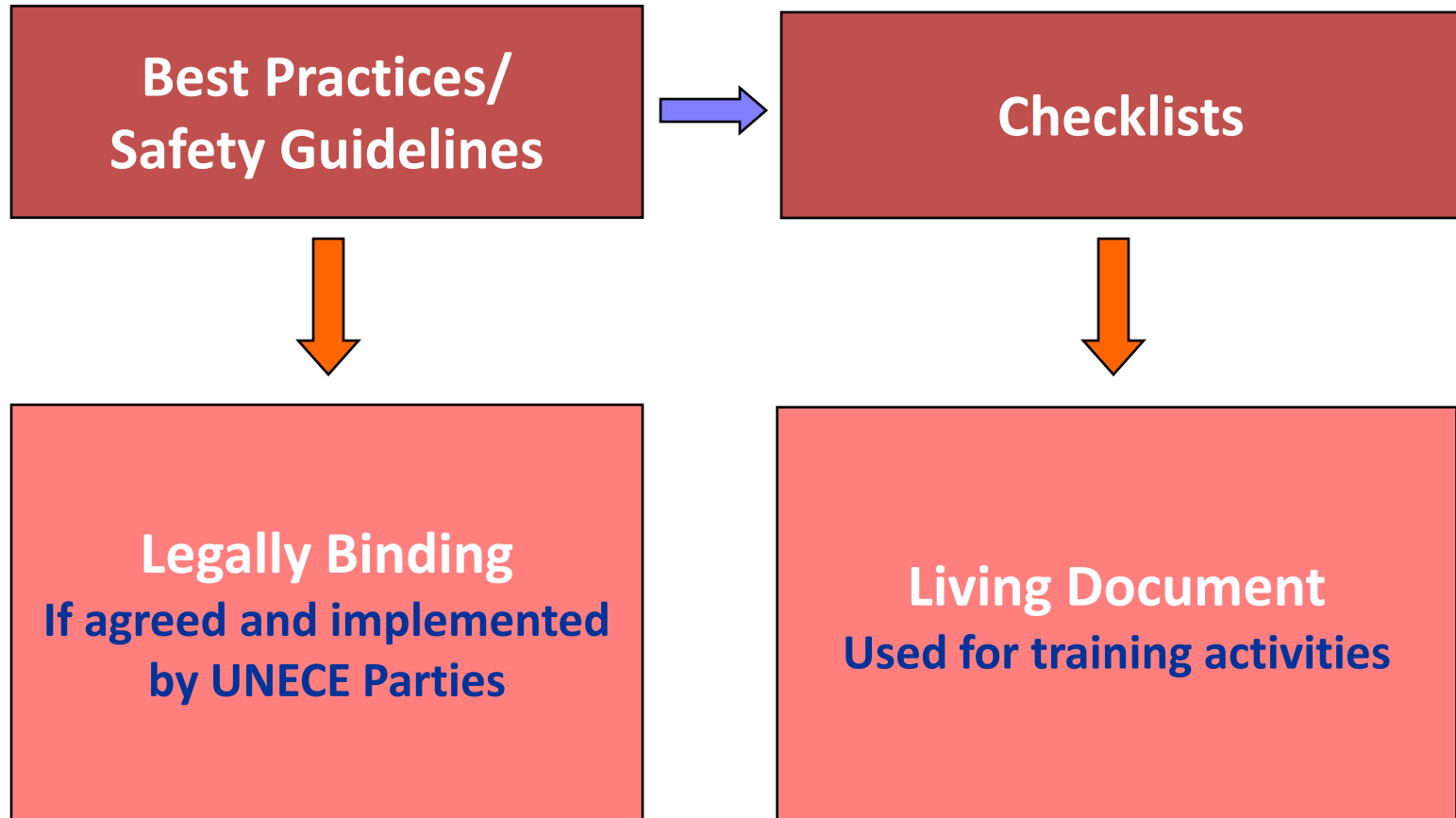
### → Waterendangering Facilities

### → Hazardous Industries (Seveso)

### → Contingency Planning

### → Tailings Management Facilities





# Sources of risk

7<sup>th</sup> CoP: A checklist for Tailing Management Facilities should be considered helping to implement the UNECE Safety Guidelines for Tailing Management Facilities



**Red Sludge Spill, Hungary,  
2010**

# Iron-Ore TMF

## Bento Rodriguez, Brasil, Nov. 2015



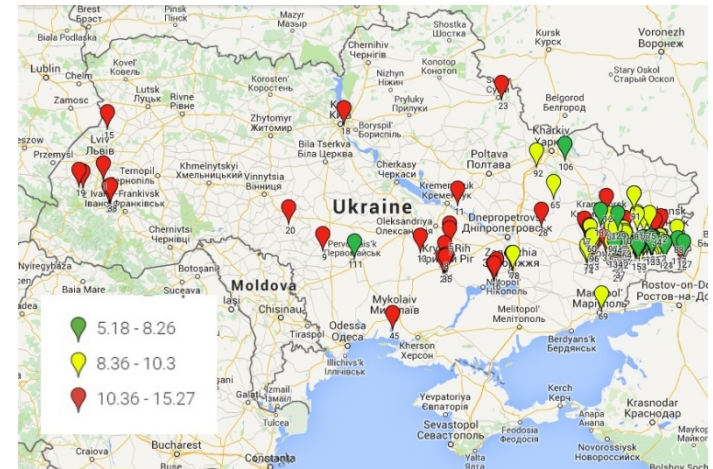
<http://www.faz.net/aktuell/gesellschaft/brasilien-giftige-schlammlawine-begraebt-ein-dorf-13897160.html>



# Pilot Project: TMF in the Ukraine

## Results:

- Inventory of 153 TMF sites
- Checklist for TMF
- Tailing Hazard Index (THI)





# Mission of JEG

- a) Providing assistance to countries with economies in transition (i.e. Pilot-Projects)
- b) Supporting the application/use of materials produced by JEG, i.e. Safety Guidelines and Checklists
- c) Promotion of response exercises in particular in the transboundary context

# Summary ongoing Activities

- ➔ **Response Exercises**
  - Danube, Hungary (May, 2017)
  - Oder, Germany/Poland (September, 2017),
- ➔ **Raising knowledge at Universities**
  - (NMU, Dnipro, – Final Workshop, May, 2017)
  - ➔ On-line training methodology
- ➔ **On-site Trainings (TMF) in Georgia, Armenia, 2017**
  - Caucasus Region (authorities and operators)
- ➔ **Guidance for Fire Water Retention**

# Outlook

## Possible Future Activities

- **Checklist to the Safety Guidelines for Pipelines**  
With special attention to Ageing and Lifetime Extension (Pilot-Project Belarus?)
- **On-site Trainings (TMF) at the Danube River (Serbia Romania, 2018)**  
Cooperation with the ICPDR, National Authorities and Operators
- **Checklist to the Safety Guidelines for Oil Terminals**

# Never again!



# Thank you for Listening!