



# EU policy on industrial safety Synergies with the TEIA Convention

Meeting with Georgia on industrial safety challenges

European Commission DG Environment

*November 2023*

# Overview

- **Origin of the Seveso legislation**
- EU action to prevent industrial accident
- Linkages with the TEIA Convention
- Current challenges

# Where does it come from?



Seveso (1976)

1982 –  
Seveso I



Bhopal  
Mexico City

1996 – Seveso II

2003 – Seveso  
II amendment

2012 –  
Seveso III



Toulouse (2001)  
Enschede (2000)



GHS

1 June 2015 – transposition period for  
Seveso III ended

# Impacts of major accidents

- **Human health and environment**
- **Economic damages**
- **Response and follow-up costs**
- **Socio economic impact**
- **Political impact**



→ Average human and economic cost of an industrial accident: € 150 million

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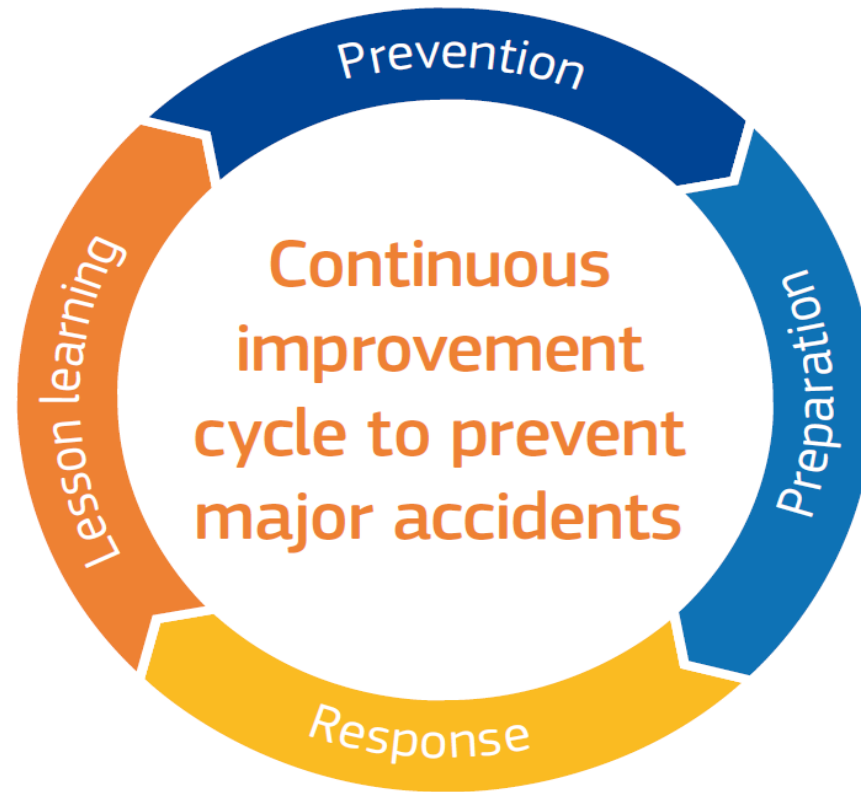
# Seveso-III Directive - Key pillars

## Lessons learnt

Review legislation,  
Share experiences,  
Adjust provisions, permit...

## Response

Inform and act  
Cooperation  
Remediation



## Prevention - Limit risk

Identification,  
Safety management,  
Land-use planning  
Inspection

## Preparation - Limit impact

Emergency plans,  
public participation

# The JRC - MAHB

- More than 3 decades of expertise
- Provides scientific and technical support for policy associated with **chemical safety**
- Organise technical exchanges with Member states
- Develop IT tools for risk assessment
- Share good practices and provide capacity building on risk management in the EU and beyond.
- [Continuously releases useful publications](#)

# The JRC - MAHB

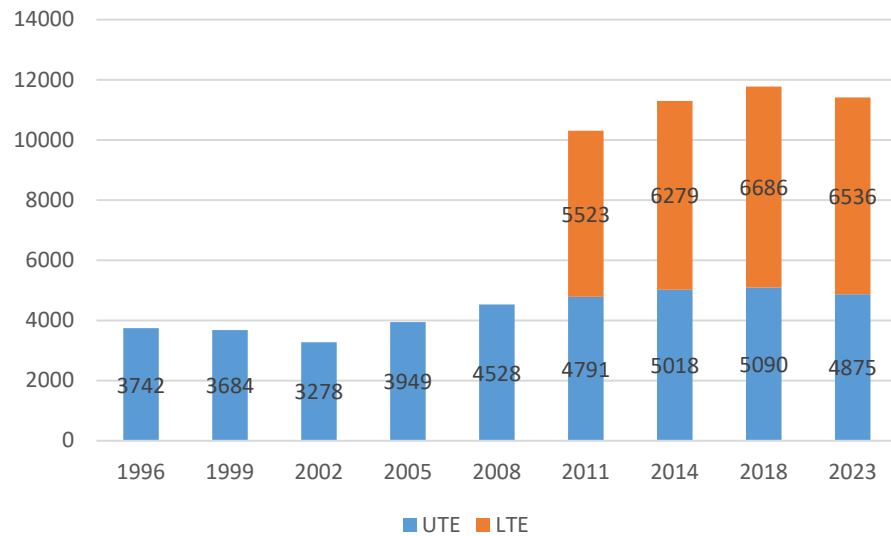
- Collects and makes available to EU Member State **data on chemical accidents to support lessons learning** and also on **EU hazardous (Seveso) sites** ([eMARS](#) and [eSPIRS](#) databases)



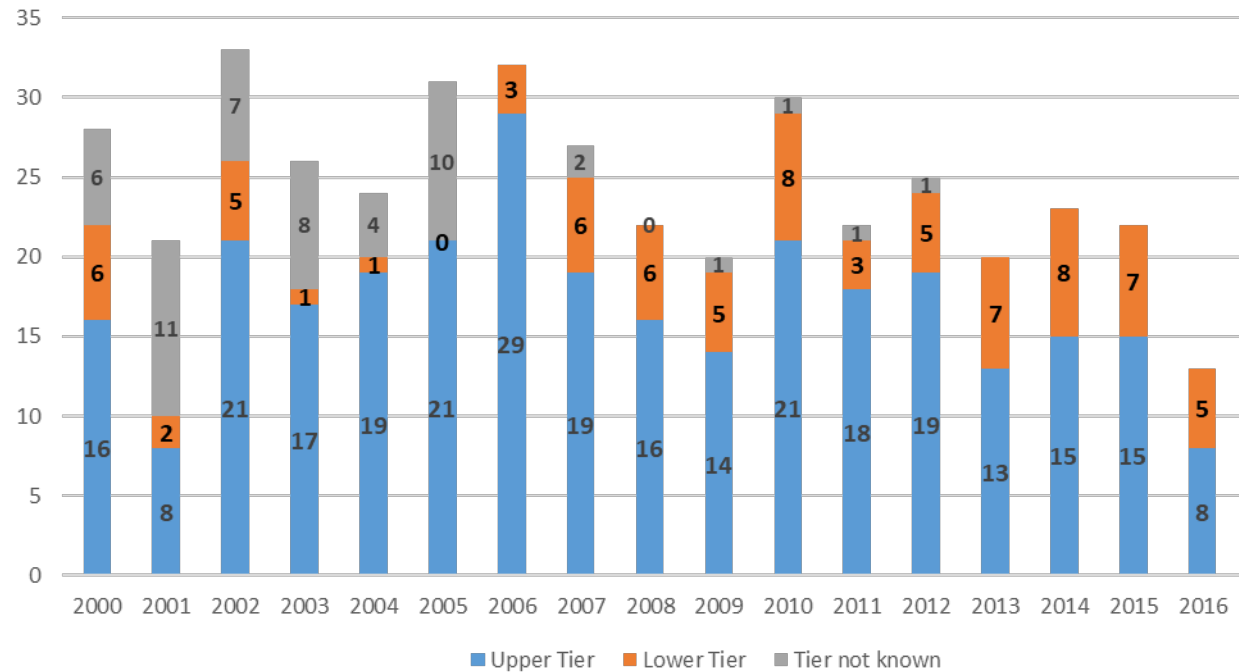


# Results

- 11 450 establishments reported in 2023



- Major accident over time



[Implementation report \(2015-2018\)](#)

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# TEIA as stepping stone towards Seveso-III



- **Focus on high and transboundary risk**
- **Less sophisticated requirements**
- **Fewer resources needed**

→ *Insufficient for EU but easier to achieve*

# Seveso-III Directive to implement TEIA



- **More holistic risk management**
- **More requirements**
- **Some TEIA aspects not covered**

→ *Two steps in one go, but more demanding*

# Considerations for non-EU countries

## The Seveso-III Directive:

- was developed to work in the EU context
  - it presumes some aspects which are granted in the EU but not necessarily given outside the EU, e.g. the Aarhus principles, UCPM
  - self-evident cross border cooperation between EU Member States
  - burden sharing & subsidiarity (EU vs. Member State competence)

# Considerations for non-EU countries

## The Seveso-III Directive:

- does not cover all risks to be addressed
  - facilities under the lower threshold
  - industry sectors/activities covered by other legislation
  - some kind of chemical hazards
- does not apply beyond EU borders

# In a whole

Seveso-III-Directive is stricter and more specific compared to the TEIA Convention:

- Not only transboundary effects
- Applies as of lower thresholds
- Mandatory inspections
- More descriptive on all requirements

Seveso-III does not cover all aspects:

- Accident notification
- Mutual assistance
- Research and development
- Technology exchange
- Mining, landfills, pipelines

# Cooperation within the Commission

*Implementation of Seveso-III contribute to other policy areas (examples):*

- [Classification, labelling and packaging of chemicals](#)
- [Union's Civil Protection Mechanism](#)
- [Environmental liability and protection of the environment through criminal law](#)
- [Protection and resilience of critical entities](#) (+ cybersecurity)
- [CBRN risk mitigation](#)
- [Safety of offshore oil and gas operations](#)



# Cooperation with Member States

- Fostering knowledge, experience and information exchanges between EU Member States via [SEG](#) and implementation support project (2023-2025).
  - Ensuring harmonization, coherence and streamlining of the Seveso-III Directive with other EU policies such as:
    - The Union's civil protection mechanism (incl. preparedness and response to disasters)
    - Security policies such as the CBRN-E action plan and the Directive on European Critical entity resilience
- ➔ Working towards a shared and harmonised approach.

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# Challenges

1. Maintain adequate safety culture
2. Maintain expertise on industrial safety
3. New risks with decarbonation
4. Natech risk
5. Cybersecurity
6. Environmental and long-term consequences of industrial accident
7. Polluter pays principle application
8. Enhance consideration under the IED and IEPR

# Summary

- Major accidents pose a threat to environment, human health and economic growth
- TEIA and Seveso are complementary
- Contribution to other policy to prevent and reduce the consequences of major industrial accident.

# Thank you for your attention

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[https://environment.ec.europa.eu/topics/industrial-emissions-and-safety/industrial-accidents\\_en](https://environment.ec.europa.eu/topics/industrial-emissions-and-safety/industrial-accidents_en)

## Major accident hazards



### The Seveso Directive - Technological Disaster Risk Reduction

#### Protecting the environment, health and our economy

Major accidents involving dangerous chemicals pose a significant threat to humans and the environment. Furthermore such accidents cause huge economic losses and disrupt sustainable growth. However, the use of large amounts of dangerous chemicals is unavoidable in some industry sectors which are vital for a modern industrialised society. To minimise the associated risks, measures are necessary to prevent major accidents and to ensure appropriate preparedness and response should such accidents nevertheless happen.

#### From disasters to success

In Europe, the catastrophic accident in the Italian town of Seveso in 1976 prompted the adoption of legislation on the prevention and control of such accidents. The so-called Seveso-Directive ([Directive 82/501/EEC](#)) was later amended in view of the lessons learned from later accidents such as Bhopal, Toulouse or Enschede resulting into Seveso-II ([Directive 96/82/EC](#)). In 2012 Seveso-III ([Directive 2012/18/EU](#)) was adopted taking into account, amongst others, the changes in the Union legislation on the classification of chemicals and increased rights for citizens to access information and justice.

The Directive applies to more than 12 000 industrial establishments in the European Union where dangerous substances are used or stored in large quantities, mainly in the chemical and petrochemical industry, as well as in fuel wholesale and storage (incl. LPG and LNG) sectors.



Major Accident Hazards