



Mons, 11 April 2024

11th Meeting of the Commission Expert Group on the control of major accident hazards involving dangerous substances ("Seveso Expert Group")

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Draft Minutes

1. ADMINISTRATIVE MATTERS

1.1. Welcome

The meeting of the Seveso Expert Group (SEG) was attended by representatives of the Commission (units ENV.C4 and JRC.E.2), representatives of 25 Member States (MS) and observers from Norway, EEA, OECD, UNECE, CEFIC.

The meeting was chaired by ENV.C.4 who thanked the Belgian Presidency for hosting the meeting in Mons and for organising on the previous day a seminar on external emergency planning.

1.2. Adoption of the Agenda

The draft agenda of the meeting was sent to the Seveso Expert Group members on 20 February 2024. An updated version of the draft agenda was sent on 12 March 2024.

The main objectives of this meeting were to present an updated version of the revised Decision establishing the format for communicating information from MS on the implementation of the Seveso-III Directive in view of its discussion before its adoption by the end of the year and to share national, European, and international recent information, and for Member States to provide updates on recent accidents and on challenges for the implementation of the Seveso- III directive. .

Under any other business (AOB), the Commission had received requests to add two items to the agenda to be addressed during the SEG meeting. CEFIC asked to present the main outcome of the Process Safety and Cyber Security seminar of December 2023. FR requested to launch a discussion on the consequences of the new classification of Lead under CLP.

The agenda was adopted accordingly.

1.3. Adoption of the minutes of the 10th Meeting (13th June 2023)

Draft minutes of the 10th SEG meeting held on 13th June 2023 were sent to the SEG members on 22 August 2023 for comments. No comments were received. The final minutes were sent to the SEG members with the invitation for this meeting on 20 February 2024 and uploaded to CIRCABC in the CIRCABC space for the 9th meeting. The SEG members adopted the final minutes of the 10th SEG meeting.

2. MEMBER STATES' ACTIVITIES

2.1. Feedback from the seminar on external emergency planning.

BE presented the main takeaways from the seminar on external emergency planning, organised the previous day in Mons with presentations from DG ECHO and 7 Member States. It was concluded that testing of external emergency plans is crucial but challenging; response on consultation of the public is rather low; more discussion on that topic is needed.

2.2. Information on recent accident in Romania in Terpenia.

RO presented the analysis of the accident that happened in Romania on 12 September 2017. The accident took place in an upper-tier establishment producing and processing essential oils and derived products. It was caused by an unintended ignition process due to an exothermic reaction caused by the contact between pressurised oxygen leaking unintentionally from the plant supplying an UV photo reactor and greasy substances. This initiated an explosive mixture (vapors of flammable substances) which was also the result of the failure of some elements in the installation. As a consequence, a worker was severely injured and the main building of the plant was destroyed, with other facilities destroyed, off site consequences (civil protection actions such as sirens, information of population about intoxication, and evacuation of population) and domino effects (damage to railway line, work schedule disruption, interruption of waste water treatment plant).

The investigation showed that the certification documentation was no longer in force at the time of the event and that the existence of the Photo-UV oxidation plant (reactor) was also not highlighted there whereas it was mentioned in the Safety Report, drawn up in 2014.

The analysis by RO focused on the insufficient training and preparation of the personnel on the evaluation of Major Hazards, on the insufficient monitoring of the condition of the equipment and on the inadequate management of change. Lessons learned from the accident included the need to improve staff training, to provide a detailed risk analysis adapted to the site, to strengthen periodic verification with periodicity of safety measures, to isolate storage spaces from the installation and to save documentation in the cloud.

2.3. Information on accident in Sabina explosives, Italy

IT informed participants of the accident that happened on 13 September 2023 in the establishment Sabino explosives, an upper-tier establishment active in demilitarisation and in disposal of products containing explosives.

The event was triggered by a deflagration due to the explosion of a projective followed by the activation of small fires leading to the activation of an international emergency plan. As a consequence, there were 3 victims and the establishment had to be evacuated. The analysis of recovered fuses showed that some of them had damages, making them sensitive

to pressure and friction. Inspection of the safety management system also highlighted an absence of instructions on how to deal with anomalies, as well as a need for improvement of the training of personnel to identify risks. Legal investigation and SMS inspection are still in progress.

A Member State asked whether it is allowed for civilians to manipulate war ammunition, indicating that the procedure in that MS is to destroy them immediately. IT answered that ammunition which are considered no longer usable are to be destroyed but this is not systematic.

2.4 Challenges of hazardous waste classification

AT gave a presentation on the challenge of harmonising the procedures for the classification of waste in accordance with the Seveso-III Directive. Under Seveso-III, waste are to be provisionally assigned to the most analogous category under annex I (see note 5). In practice, this classification is problematic for inspectors as the exact composition of waste is unknown and can vary and the hazardous properties criteria defined under the waste legislation do not correspond entirely with those of the Seveso-III Directive. In addition, applicability of analytical methods for categorising waste in terms of Seveso-relevance is not legally clear. Approximately, around 400 sites are concerned in the EU+EEA. AT asked other MS for advice on possible solutions to address this issue, also suggesting the possibility to draft some guidelines in that regard.

Member States agreed to the difficulty linked to such classification. One MS mentioned the publication of an updated national guidance providing recommendations for classification of hazardous substances under Seveso which can but shared on circabc.

Another MS also explained its approach where the operator is responsible to know what is on the site. Several Member States expressed support to work towards establishment of a guideline on that topic and expressed their interest to cooperate to such exercise. The Chair called on Member States to volunteer to take the lead for this work.

2.5 Enforcement challenges in the Netherlands

NL presented a specific legal case concerning several incidents which happened between 2013 and 2016 in an upper-tier Seveso site at the German boarder, producing surfactants, with 215 employees. Following up these incidents, additional inspections were made noting several issues leading to the prohibition of use and the shut down of the site in 2016. The legal case started in a district court in Feb 2016 against the director who was judged for not following the safety rules, not establishing a SMS, not following procedures. Following a complete acquittal, the case was brought to the appeal court in 2021 where the verdict was annulled and the director was found guilty and the company was fined. The verdict was confirmed in December 2023.

The NL used this case to illustrate the issues it encounters to enforce the Seveso legislation and interpret some of the legal requirements of the directive, also mentioning the need for an harmonised interpretation of the articles.

Several Member States agreed that the directive leaves room for implementation. One MS highlighted that divergences of interpretation between MS are normal also due to the differences in transposition.

A representative from industry indicated that for the industry, the Seveso directive is very clear but some MS have sometimes difficulties to understand certain provisions.

The Chair asked the MS to clarify in writing what would be their position and proposals for a way forward on that issue.

2.7 Temporary storage – practices in France

France provided an update on issues related to temporary storage and Seveso, focusing on 3 specific cases for which the French approach was presented for discussion:

1) Issues related to the temporary immobilisation of LNG tankers for maintenance

Under normal conditions, this activity is normally excluded from Seveso and covered by legislation related to transport of dangerous substances. Under maintenance conditions, the carrier may be held in dry dock for some time (from a few days up to a few weeks) depending on the operation and the ship might not be required to completely empty LNG tanks. France asked other MS how they interpret the situation :

- Can the presence of natural gas due to the LNG tanker maintenance be treated as temporary storage directly linked to a transport operation?
- If not so, in case of “hot-gas” temporary storage, should the activity be considered as storage of flammable gases or liquefied flammable gases?

2) Issues related to temporary storage on courier or logistics platform

This activity is normally excluded from the Seveso scope and covered by EU and international rules for transport of dangerous goods, provided that transport documents are available at all time; the place of expedition and destination are known and clearly indicated on these documents and that transported goods are not open (i.e., transport conditions such as packaging, product assembly, etc. remain unchanged). The issue raised by FR focuses on the definition of intermediate temporary storage for courier or logistics platforms handling dangerous substances.

FR presented its own interpretation of this case:

- A facility where parcels of dangerous substances are sorted, re-arranged and dispatched, such as a courier or logistics platform, does not fall under the Seveso directive, provided that
 - the amount of temporarily stored parcels does not exceed a 2-day load equivalent of parcel transit at the facility
 - parcels’ final destination is known, at the latest upon arrival at the facility
- Storage cannot be considered intermediate temporary storage if:
 - parcel’s final destination is not known upon arrival at the facility
 - parcels are stored on more than 2 storage levels (maximum height of 3 m)
 - parcels are stored on pallet racks

3) Issues related to the temporary storage due to loading/unloading operations:
FR presented its own interpretation of how the loading/unloading of dangerous substances should be taken into account regarding Seveso :

- The amount of dangerous substances contained in lorries or other mobile equipment during loading/unloading operations should be taken into account when they happen **frequently and repeatedly throughout the year**
- Typically, 'frequent and repeated' can mean **once every two days**, or half the number of days in a year (i.e. ~180 days)
- In addition, for gas storage facilities, the amount of gas contained in lorries should be taken into account for the Seveso classification when **6 lorries or more** may be simultaneously present within the establishment.

The Chair recognised that temporary storage is a long-standing challenge when it comes to safety and implementation of the Seveso-III Directive and it is now a topical subject considering the large number of LNG carriers operating in Europe. The Commission expressed its satisfaction with the way France has been dealing with this topic so far and indicated that it is a good guidance of how to proceed.

Member States expressed their interest for sharing experience on this issue. NL indicated that the way to proceed in the NL is slightly different as regards the frequency considered, depending also on how the permitting system works. This could be further discussed.

2.7 Feedback from Member States about the workshop organised by Ricardo on temporary storage and future expectations

DG ENV presented the background of this webinar organised by Ricardo in January 2024 on temporary storage challenges as well as a list of 3 remaining topics identified as being of interest for Member States for the next webinars to be organised in support to the implementation of the Seveso-III Directive (interpretation of vicinity of establishments, inspection programmes and natural hazards). The EC is aware of possible overlap with the work of the Technical Working Group by the MAHB but there seemed to be a need for further discussions on some of those topics. The EC asked MS for their views on the list of new priorities proposed for future discussion.

Two MS expressed satisfaction with the work done by Ricardo for the previous webinar and supported the list of topics identified as priorities.

Another MS also expressed appreciation for the webinar organised by Ricardo but mentioned having difficulties with some conclusions of the workshop which tended to present good practices while the webinar initial goal was to exchange on national practices. It was supported by two other MS regarding the need to communicate clearly on the expected objectives of such meetings to avoid any misunderstanding in the future.

It was agreed that the webinar should aim at exchanging practices without concluding on a common understanding and on recommendations which would rather be the competence of the expert group.

2.8 Exchange of views on emerging challenges

DG ENV presented the list of 4 emerging challenges identified as being of interest for future discussions in the SEG based on bilateral exchanges with MS: decarbonisation, Natech, notification of near-misses, cybersecurity. The EC asked the MS for their views on this list and for possible additional topics to be considered for discussion.

Member States agreed to this list and proposed to consider adding the following other topics:

- carbon capture storage (CCS) to address the issue of companies trying to set off export of captured carbon and the issue of enforcement related to financial capacities of Seveso sites in relation to the new environmental crime directive.
- competence of local level,
- of data quality for reporting,
- cybersecurity.
- change of classification related to the change to hydrogen for suppliers of natural gas.
- confidentiality of data, now considered under a new light due to the war in Ukraine.
- neutral investment in particular in regard to hydrogen technology and green transition,
- safety requirements,
- implementation of the directive on resilience of critical entities in relation to Seveso,
- speeding up of environmental permitting procedures,
- digitalisation projects,
- lithium-ion battery storage under the Seveso directive.

One MS expressed its preference for topics directly related to implementation of Seveso, also recalling that CCS is out of its scope.

The Chair took note of these suggestions for future discussions.

3. COMMISSION ACTIVITIES

3.1 Update on Major Accident Hazards Bureau (MAHB) activities

The Commission (DG JRC-MAHB) updated the SEG members on the following:

a) Support and collaboration with different international bodies:

The JRC recalled it has over 35 years collaboration with the OECD Working Group on Chemical Accidents to support improvement in chemical accident prevention and preparedness globally, as well as other international organizations, especially UNECE and UN Environment.

The JRC informed the SEG members on several activities including past and future webinars on lessons learned and the role of inspectors and on webinars on Seveso inspection practices including EU and OECD joint events on Hydrogen fuel risks (September 2023) and on practices for inspecting/monitoring hydrogen sites (2024).

The JRC also outlined its work with OECD Working Party on Chemical Accidents on a seminar on safety of hazardous chemicals handling in ports, promoting more advanced approaches to lessons learning, raising awareness of chemical safety risks associated with the energy transition.

b) Accident and establishment statistics

The JRC provided an overview of 2022-2023 preliminary findings of recent chemical accidents with high significance reported in the global media. It updated the SEG members on the accident and establishment statistics (42 accidents/year : 36 upper tier and 6 lower tier) and emphasised that the annual eMARS major accident statistics are not representative of any trend but serves only for comparative purposes (patterns of causality, sectors involved, etc.).

c) Lessons learned analyses

The JRC shared with the SEG members additional information related to the release of the following lessons learned bulletins and handbooks available on the [Minerva platform](#):

- Lessons learned from chemical accidents involving power failures (2021)
- Lessons learned from chemical accidents in warehouses (2022)
- Lessons learned from chemical accidents in waste management sites (2024)
- Lessons learned handbook (final draft 2024) – in collaboration with the Accident Analysis Benchmarking Exercise (AABE) Group
- Definition of common inspection criteria.

d) Development of software tools

The JRC presented its new database “[CAPRI](#)” launched in 2023, a one-stop shop portal for information on recent and historical chemical disasters, influential investigation reports, and eMARS statistics.

A new Seveso module will be launched in 2024 under project ISMI - Industrial safety measurement indices for Seveso and TEIA, as well as a 3.0 version of ADAM Consequence Assessment Tool.

e) New initiatives of the Technical Working Group on inspections (TWG) :

- Development of common inspection criteria (on warehouses, accident investigation, power failure, etc)
- Organisation of mutual join visit workshops on inspection of Seveso Lower Tier Sites (2023, Portugal), coordination of External Emergency Plans (2024, Italy)

f) Support to EU policy development and implementation on crisis management, public health, peace & stability (CBRN) 2023-24

Finally, the JRC presented the Technical support to the EU CBRN Centers of Excellence Initiative:

- Development of a reference emergency response scenario involving an ammonia release
- Estimate of potential impacts in case of an explosion of a chemical plant in Crimea
- Analysis of emerging risks from the energy transition
- Advice on list of chemicals (using Seveso criteria) for Early Warning System for cross-border health threats
- Capacity building in third countries for chemical safety and security under the EU CBRN Centres of Excellence initiative
- Bilateral JRC-Ukraine workshop on Seveso Directive implementation and civil protection

The Chair thanked the MAHB for the excellent work done and for the support to Seveso implementation.

3.2 Information on the 4 years implementation report template review

DG ENV presented the legal context regarding the review of the Decision establishing the format for communicating information from MS on the implementation of the Seveso-III Directive and outlined that this revision is enshrined in the broader context of the overarching commitment announced by the Commission's President to reduce administrative burden by 25% by 2030. DG ENV also presented the main comments received on the last draft of this reporting format, mostly focused on data related to public participation, inspection, domino effect and on the entry into force of this template.

Member States were asked to send their final comments rapidly before formal consultation of the committee, in view of an adoption by the end of the year. DG ENV has a preference for an entry into force of this new decision for the next reporting round.

MS provided full support to this review and to the new draft, with some elements to be further considered such as the definition of domino effects, definition of people involved in question 6.1, data requested on public participation.

3.3 Questions and answers process : way forward

DG ENV presented the proposed way forward for handling of Q and A, the last version being of 2018. DG ENV recalled that the objective of the Q and A is to have a harmonised understanding of the Seveso-III Directive and to solve technical issues at EU level on common issues. Member States were invited to send written comments by 3 May on the proposed way forward which aims to clarify the process with common guidelines to complete the Q and A and agree on the list of pending questions.

3.4 Update about the redevelopment of eSPIRS/eMARS

The EEA presented the current redevelopment of the eSPIRS and eMARS databases, and recalled the background of this project aimed at transferring the responsibility of these databases and their management from the JRC to the EEA.

The EEA also highlighted the next steps in redeveloping the two databases and the planned activities concerning the preparation of the reporting platform and of the guidance documents for reporting: definition of data models, implementation in the reporting infrastructure, testing and feedbacks from MS, creation of manuals and guidance documents, extraction and transfer of existing data. The new databases will be operational in 2026.

One MS asked who will take over other responsibilities of the MAHB, such as TWG. The Chair indicated that discussions are ongoing to find a solution to ensure continuity of this work in the best and most efficient way possible.

4 INTERNATIONAL CONSIDERATIONS

4.1 UNECE Convention on Transboundary Effects of Industrial Accidents (TEIA)

The TEIA Secretariat recalled the objective of the TEIA to significantly increase industrial safety and reduce technological disaster risks and to promote the prevention and preparedness of industrial accidents through transboundary cooperation.

He provided an update on recent developments and activities under the 2023-2024 work programme. These developments include facilitating implementation in relation to Natech risks and preventing accidental water pollution; risk management of hazardous substances; and assisting countries in Eastern and South-Eastern Europe, the Caucasus and Central Asia in strengthening policy and governance and strengthen transboundary cooperation, such as in the Syr Darya River Basin, among other areas.

The 13th meeting of the conference of the parties to the TEIA convention (COP13) is planned on 27-29/11 in Geneva, back to back with two half days seminars on industrial safety and energy transition and on NATECH.

The TEIA Secretariat also mentioned publication activities, including a risk assessment publication in 2023, joint OECD/JRC/UNECE guidance on managing Natech risk to be issued at COP13.

The Secretariat concluded the presentation by highlighting the increase relevance of the TEIA convention and the need for financial support to implement the Convention workplan, while reflecting on the dynamic environment: climate change, new economic growing tendency to shorten supply chains, and emerging risks associated with the transition to a decarbonized economy.

4.2 OECD Working Group on Chemical Accidents (WGCA)

The representative of the OECD provided the SEG with an update of the OECD Working Group on Chemical Accidents (WGCA) activities. She outlined recent publications such as the OECD decision-recommendation focusing on chemical accident prevention, preparedness, and response¹. This recommendation is accompanied by the third version of the OECD Guiding Principles for Chemical Accident Prevention, Preparedness and Response.

¹ <https://www.oecd.org/chemicalsafety/oecd-guiding-principles-for-chemical-accident-prevention-preparedness-and-response-third-edition-162756bf-en.htm>

She outlined that the WGCA is planning the publication of several reports : a joint guidance with the OECD, UN, and the JRC on Natech risk management for senior leaders in both industry and public authorities, a guidance on the benefits of regulation in preventing chemical accidents and a report on the management of hazardous substance at port.

WGCA is also engaged in capacity-building activities, in the revision of an OECD recommendation on the application of the polluter pay principle and in the organization of several webinars on hydrogen fuel risks.

The next WGCA meeting will take place on 22-24 October 2024 in Paris and online with a thematic session on the Training of Engineers.

The Chair and the MAHB thanked the OECD for this excellent work. The MAHB recommended to participate in presence to the next OECD meeting.

5 ANY OTHER BUSINESS

5.1 Outcome of the CEFIC seminar on process safety and cybersecurity in Seveso plants

CEFIC recalled the background of this webinar, organised in hybrid mode with CCPs with the objective to emphasize the increasing importance of implementing a comprehensive, long-term cybersecurity plan industry, given the evolving landscape of cyber threats in the industrial sector.

The webinar came to the following conclusions :

- There is a strong legislative base on safety with the Seveso-III Directive and EU law on measures for a high common level of cybersecurity across the Union (NIS-2).
- Automatisation / digitalization threats must be managed appropriately ensuring safe and secure management of industrial sites
- A risk based approach is needed for cyber security and process Safety
- Digitalisation and big data will continue to be increasingly important.

A new webinar will be organised on NIS 2 and its transposition in national law in the first half of 2024.

5.2 Possible issues related to the new classification of lead under the CLP regulation.

As per the Commission delegated regulation 2024/197, the harmonised classification of lead for aquatic toxicity was updated: the existing aquatic toxicity classification for lead powder was amended and a different aquatic toxicity classification for lead massive was introduced.

Implementation issues are arising, especially when the distinction between ‘substance’ and ‘article’ cannot be clearly established. FR asked other MS for feedback on this issue if they have faced similar issues.

The Chair invited SEG members to send written comments to DG ENV by 3 May if any.

Closure

PL invited MS to the next SEG meeting in Poland in first half of 2025, probably second half of May but to be confirmed.

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