

Agenda item 10b:
**United Nations/OECD Seminar in
follow-up to the Beirut port explosion**

Twelfth meeting of the Conference of the Parties

Geneva, Switzerland and online, 29 November-1 December 2022

BEIRUT PORT EXPLOSION FOLLOW-UP ACTION

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BEIRUT FOLLOW-UP

- 4th August 2020 explosion of ammonium nitrate in the port area of Beirut/Lebanon
- At COP 11th the European Union proposed to hold a seminar to exchange views and lessons learnt from this accident
- The seminar was organized under the UNECEs lead with partner organizations (OECD, ILO, UNEP, IMO)
- The preparation of the seminar included a survey that brought 628 pages of data from 43 countries worldwide, several authorities, academia and industry representatives
- The seminar program covered a wide range of issues relevant for the topic, such as inspections, risk assessment, labelling or land-use planning
- The seminar was held online on 14th December 2021 and had over 500 participants from 48 countries and 15 international or intergovernmental organizations

BEIRUT FOLLOW-UP

- Some facts about ammonium nitrate: raw material for fertilizers (approximately 100 million tons per year in Europe) BUT together with flammable substances and ignition source it is explosive (mixture with Diesel oil used for mining OR terrorist purposes)
- Pure ammonium nitrate storages are rare, usually it is stored in mixtures to reduce the hazard potential
- Major accidents with ammonium nitrate occur not often but regularly (1921, 1947, 1963, 2013, 2015, 2020)
- Assumption: because accidents with ammonium nitrate happen not often the hazard potential is underestimated
- Tricky: small changes of the composition of ammonium nitrate mixtures (e. g. small parts of organic compounds) lead to critical changes of the properties and the hazard potential

BEIRUT FOLLOW-UP

- In principle many tools for preventing such accidents exist, such as: classification and labelling standards, limitation of quantities, rules for separation of substances, information to the public or safety distance standards
- On the other hand, the Beirut explosion, the survey for the seminar and the seminar itself made evident that there are enforcement deficits, such as:
 - more need of testing because of the specific characteristics of ammonium nitrate
 - insufficient awareness of workers and need for more training
 - lack of coherence in different legal instruments (different responsibilities in port areas)
 - “feedback” of information to the public (= did the public understand the information in order to safeguard proper behavior in case of an accident)

BEIRUT FOLLOW-UP

Follow-up activities could cover a wide range of aspects, such as (with respect to the findings):

- Raise awareness at all government levels and promote cooperation
- Seek to clarify core legal terms (intermediate storage!)
- International cooperation for sharing experience and lessons learnt
- Risk assessment and multi-hazard approach (= man-made and natural disasters)
- Proper tools for the information to the public
- Inspection practices and training methods
- For more details please refer to the summary and conclusions on the UNECE webpage

BEIRUT FOLLOW-UP

Foreseen Activity:

- Workplan and resource requirements for the Convention for 2023–2024
- Table I, item 2.7 “Risk management in relation to the storage, handling and transport of hazardous substances, such as ammonium nitrate, and related accident prevention, preparedness and response”
- Activity:
 - Web page/information repository addressing the risks of ammonium nitrate storage, handling and transport, among other hazardous substances; lessons learned, experiences and good practices or/plus
 - Promotional material, such as video or brochure
 - Seminar to build capacity in one or several countries, e.g. Ukraine



THANK YOU FOR YOUR ATTENTION!