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UNECE CONVENTION ON THE TRANSBOUNDARY EFFECTS OF INDUSTRIAL ACCIDENTS

COMMITTEE OF COMPETENT AUTHORITIES DIRECTIVE 96/82/EC (SEVESO II)

WORKSHOP ON COST-EFFECTIVENESS FOR MAJOR ACCIDENT PREVENTION

REPORT

Introduction

The workshop on cost-effectiveness for major accident prevention was held in Warsaw, Poland on 12 October 2011 under the auspices of the Conference of the Parties to the Convention on the Transboundary Effects of Industrial Accidents and the Committee of the Competent Authorities responsible for the implementation of the Directive 96/82/EC (Seveso II).

The workshop offered a unique platform for exchange of views and experience between authorities and the private sector on issues surrounding cost-effectiveness for major accident prevention.

The Government of Poland, Chief Inspectorate of Environmental Protection and National Headquarters of the State Fire Service hosted the workshop.

Objectives

The purpose of the workshop was to facilitate a dialogue at international level aimed at discussing different systems for assuring major accident prevention in view of their costs, in particular at the side of public authorities, and to identify opportunities and possible solutions for cost optimisation.

More specific objectives were as follows:

- (a) To signal potentially unnecessary costs in assuring major accident prevention;
- (b) To initiate discussion on possible solutions for cost optimisation; and
- (c) To attempt to formulate concrete solutions for influencing future developments for achieving better costs-effectiveness.

Participation

The workshop was attended by experts representing authorities dealing with major accident prevention from the following countries: Austria, Azerbaijan, Belarus, Belgium, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Italy, Kyrgyzstan, Lithuania, Malta, Netherlands, Norway, Poland, Portugal, Republic of Moldova, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, United Kingdom of Great Britain and North Ireland and Uzbekistan.

Representatives of CONCAWE, the European Environmental Bureau, the European Process Safety Centre, GCE Group, the German Process Safety Commission, the Joint Research Centre of the European Union, Polski Koncern Naftowy Orlen S.A., Polski Zakład Ubezpieczeń S.A. (PZU), the European Commission and the Convention's secretariat also attended the workshop.

Workshop's highlights

The workshop heard opening addresses by Mr. Andrzej Jagusiewicz, Chief Inspector of Environmental Protection, Mr. Wieslaw Lesniakiewicz, Chief Commandant of the State Fire Service, Mr. Sergiusz Ludwiczak, UNECE secretariat and by Mr. Tobias Biermann, European Commission.

Ms. Jasmina Karba, Vice-chair of the Bureau of the Convention and representative of the Ministry of Environment and Spatial Planning of Slovenia, chaired the workshop. Ms. Karba set the scene for the workshop by making introductory remarks.

Session I

The session I focused on assessing the degree of effectiveness and efficiency for ensuring major accident prevention. The presentations showed the main risks to effective and efficient work of competent authorities and operators of hazardous activities in the area of major accident prevention. Also opportunities and possible solutions for cost optimisation as well as consequences of inadequate major accident prevention were highlighted.

In particular the presentations showed:

- a) The main risks to effective and efficient work of competent authorities, such as:
 - Inspections by incompetent inspectors, overloading of inspectors, lack of sufficient coordination and cooperation between inspectors, poor communication between inspectorates, lack of oversight of management, repeated restructuring of inspectorates, etc. and budget cut-backs leading to such situations;
 - Complicated and dispersed competences;
 - Assessment of safety reports concentrating on 'style of the document' and not on safety of hazardous facility.
- b) The main risks to effective and efficient work of operators of hazardous activities, such as:
 - Complicated, ambiguous in interpretation legislation and procedures;
 - Inconsistent and unclear decision process by competent authorities;
 - Uncoordinated inspection resulting in lack of effective guidance from inspectors.
- c) Opportunities for increasing effectiveness, including cost-effectiveness, such as:
 - Clear requirements and standards from competent authorities for the demonstration of industrial safety, including on the content of safety reports; such solution would allow the elaboration of a 'to the point' safety report by an operator of hazardous facility thus the unnecessary effort for the report preparation could be avoided, this should also limit the required time for report assessment by competent authority;

- Hazard ranking/rating as a basis to plan and prioritise inspections, taking into account the complexity and extent of hazard and the compliance history of a hazardous activity; such solution could lead to targeted inspection system and thus better use of available resources at the side of competent authorities and could also contribute to more efficient use of resources of operators;
 - Encouraging good performance and a high-quality self-audit by operators with the results of self-audit published in form of performance matrix for all aspects of safety; such solution could give the authorities reliable data for hazard rating;
 - Establishing multidisciplinary inspections on process safety, hygiene and occupational safety and on environment; such solution could lead to more effectiveness at the side of authorities and decrease the demonstration costs at the side of operators, in particular for big enterprises;
 - Elaboration of one audit standard (one audit programme and checklist/questionnaire) across countries; such solution would lead to lower maintenance costs of the system by authorities and industry, it should also lead to implementation of similar technical and organizational solutions what in turn should be simpler for evaluation by the authorities;
 - Increased role of insurers in the process safety; such solution could possibly give additional reliable data for hazard rating;
- d) Possible consequences for authorities in case of inadequate major accident prevention, such as: liability for damages resulting from an accident in a hazardous activity under authorities' supervision.

Session II

The session II focused on discussing the future developments for achieving better costs-effectiveness. The following points were noted:

- Hazard rating can be the basis for planning and preparing inspections if a clear methodology is in place for creation of ratings;
- Insurers look in a different way at the losses than authorities (property loss versus environment loss and injuries), therefore increasing insurance role in the process safety (e.g. risk assessment by insurer be linked with that of authorities) requires careful evaluation and may need appropriate development of legal basis, at the same time it might be worthwhile to look into this area especially that:
 - o fire safety or technical checks are covered both by insurers and by authorities, and
 - o insurers are interested to understand all risks and try to hire best experts available on the market;
- The implementation of the same safety standard can differ from country to country, therefore harmonisation of procedures is considered difficult;
- Despite differences in procedures, introducing joint inspection mechanism should be further explored between countries having the same safety standards; a starting point could be establishing a joint team of inspectors by two neighbouring countries with the same safety standards for inspecting enterprises having operations in both countries (consent by the enterprises is suggested);
- The management of change needs to be ensured both by industry and authorities for avoiding any loss of knowledge, competence, capacity, etc;
- Multidisciplinary inspections can be effective if enterprise's capacity allows for it, this might not be the case for small and medium enterprises;
- Field assessment (inspection) should be given priority over desk assessment (safety report assessment), at the same time safety reports should be established in appropriate way and serve as a document to manage safety by operators, clear guidance seems still to be necessary on how a 'to the point' safety report should look like;

- Operators should be given the possibility to use these tools and methods for safety and risks assessments that they understand best;

Workshop's conclusions

The workshop allowed for drawing the following conclusions:

- There are opportunities for increasing effectiveness, including cost-effectiveness, for major accident prevention;
- These opportunities require careful evaluation by competent authorities in countries, so that implementation of potential solution would bring expected effects;
- If demand is confirmed, working out certain solutions should be undertaken at the international level (e.g. elaboration of guidelines for joint inspections, guide on management of change, guide on methodology for hazard rating, study on incorporating insurance into systems for safety assurance, simplification of reporting obligations for both competent authorities and operators of hazardous activities);
- Effectiveness, including cost-effectiveness, is not only linked to the field and desk assessments of safety. The potential lies in other elements of the safety management such as e.g. land use planning and these should be further explored.
