

Study of the Effectiveness of the Seveso II Directive

1. Background

Council Directive 96/82/EC on the control of major accident hazards¹, the so-called Seveso II Directive, is aimed at the prevention of major-accident hazards involving dangerous substances and at the limitation of the consequences of any such accidents in order to protect human health and the environment. The Directive was last amended in 2003, by Directive 2003/105/EC of the European Parliament and of the Council of 16 December 2003². However the basic structure and the main requirements have remained unchanged for over 10 years

Currently, the Directive covers around 8000 large companies using dangerous substances mainly in the chemicals, petrochemicals, storage, and metal refining sectors, where dangerous substances are present in quantities exceeding the thresholds laid down. It covers both industrial "activities" as well as the storage of dangerous chemicals. The Directive does not apply to nuclear safety, the transport of dangerous substances and intermediate temporary storage outside establishments and the transport of dangerous substances by pipelines. There is a tiered approach to the level of controls, with larger quantities of dangerous substances subject to greater controls. The main requirements are that all operators caught by the Directive must notify their activities and establish a major accident prevention policy. In addition, operators of 'upper tier' establishments have to establish a safety report, a safety management system and an internal emergency plan. There are also obligations on public authorities relating to, inter alia, external emergency plans, land-use planning, public information on safety measures, accident reporting and inspections.

Every three years, the Commission publishes a summary of the information provided by the Member States on the implementation of the directive. The latest report, covering the period 2003-2005, is currently under preparation. However this information is essentially quantitative in nature and does not really enable a more qualitative analysis to be made of the Directive's effectiveness.

2. Objectives

Against the above background, the Commission wishes to undertake an assessment of the level and quality of practical implementation of the Directive; and to identify possible problems and weaknesses, best practices, scope for improvements, effective steps towards more harmonisation in implementation, better and more harmonised indicators and their monitoring, etc so that this can be taken into account in a review of the Directive that is expected to start in 2008. The key questions that need to be examined include:

- Are the Directive's requirements successful in meeting the aim of preventing major accidents and mitigating their consequences?

¹ OJ L10, 14.1.1997, p13

² OJ L 345, 31.12.2003, p;97

- Are the requirements proportionate to those aims?
- Do the requirements lead to a recognisable higher level of safety in comparison with industrial sites not covered by the Directive?
- What is the level of compliance? Are there differences in the level of compliance between lower- and upper- tier establishments?
- Do differences in the level of implementation lead to significant market distortions?

As a first step in this exercise, it is proposed that an assessment should be made of the actual implementation of the requirements imposed on operators. It is envisaged that subsequently there will be separate projects to undertake assessments of the requirements imposed on public authorities and other aspects such as the interaction with other measures such as Council Directive 96/61/EC concerning integrated pollution prevention and control³ and Council Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment⁴.

The main **objective** of this study therefore is to provide the Commission with key findings and lessons learned from the practical implementation of the main requirements imposed on operators, focussing in particular on those relating to major accident prevention policy (MAPP), safety reports and internal emergency plans, together with a list of possible improvements if appropriate.

It is important that the project goes beyond general statements or anecdotal comments and provides clear and precise information, illustrated by real examples.

3. Content / Description of the tasks

Throughout this project the contractor shall regularly inform the Commission of the progress of the work and of any important issues that may arise.

The Commission services, probably through a Steering Group, will be responsible for overseeing the evaluation and for the final quality assessment of the work carried out.

This section describes the tasks that shall be undertaken stepwise in the context of the study. Based on this background the contractor is required to provide the results as described under each task and the deliverables within the timetable listed under point 5.

Task 1: Analysis and selection of sectors etc to be investigated

³ OJ L 257, 10.10.1996, p.26, as amended

⁴ OJ L 175, 5.7.1985, p.40, as amended

The contractor will review the information available in the latest triennial reports on implementation of the Directive, together with the information contained in the Major Accident Reporting System (MARS)⁵; and in the Seveso Plants Information Retrieval System (SPIRS)⁶, which contains data on the installations falling under the Directive, their geographic location and the activities performed. MARS and SPIRS are both managed by the Major Accident Hazards Bureau (MAHB) of the Commission's Joint Research Centre (DG JRC). The contractor will need to collaborate with MAHB and will have access to non-confidential information in these databases.

The above review should include an analysis presenting an overview of the situation. The contractor will then develop a methodology to identify a representative sample of industrial sectors and Member States to collect the further data required for the detailed assessment of the impact of the Directive.

The final methodology as well as the selection of the areas of study will be subject to the prior agreement of the Commission services.

The studies should focus on a range of representative industrial sectors (e.g. those in which accidents have been more (or less) frequent in the last 5 years, or whose consequences were of particular significance. They should cover at least 6 - 8 Member States representing the widest range of approaches to implementation (in particular in terms of resources available and size of industries covered). There should also be a balanced geographic coverage (with at least one new Member State).

This also means taking into account of and building upon available information from all possible sources, including in particular Member States Competent Authorities, industry, relevant research projects (e.g. SMART, ARAMIS, Arthemis, etc.), and the European Technology Platform on Industrial Safety (ETPIS – www.industrialsafety-tp.org).

Task 2: Assessment of implementation

It is expected that the methodology for the collection of data will rely primarily on some well focussed and targeted questionnaires addressed to key stakeholders (industry trade associations; workers' representatives; individual companies; SMEs; NGOs), and Competent Authorities, as well as on telephone and face-to-face interviews that may take also place as part of targeted workshops and focus group meetings.

The contractor shall submit the final detailed approach, as well as the draft questionnaires to the Commission Services for comments and approval. Final questionnaires will be circulated by the contractor. The contractor shall follow-up with individual contacts, for example by telephone or

⁵ See <http://mahbsrv.jrc.it/mars/Default.html>

⁶ See <http://mahbsrv.jrc.it/spirs/Default.html>

face-to-face interviews, to gain information on specific issues raised in the questionnaire responses.

As noted under point 2 above, the assessment should focus in particular on the Directive's provisions relating to major accident prevention policy (MAPP), safety reports, safety management systems and internal emergency plans.

The main aspects to be examined include in particular the following:

Concerning MAPP, safety management systems, and safety reports:

- What is the level of compliance with Annexes II and III respectively to the Directive?
- What are the problems (if any) in meeting these requirements?
- Do these requirements bring a significant added value in comparison with general health and safety at work requirements?
- Which, if any, of the information requirements are not useful or unnecessarily burdensome?
- To what extent (if any) is implementation at the national level giving rise to internal market distortions (between industrial sectors or between operators in the same sector)?
- What are the effects, if any, resulting from the distinction between upper- and lower-tier establishments in terms of the achievement of the Directive's aims?
- Whether and to what extent might harmonised approaches and tools be applied to accidents indicator monitoring systems, risk assessment, management and communication, and human factors, including training actions?

Concerning internal emergency plans:

- To what extent is there proper consultation of workers in the establishment of internal emergency plans?
- Is there adequate provision of information to and training of workers and management personnel?

Task 3: Detailed assessment

The contractor will analyse the responses and make an overall assessment together with detailed findings as regards the practical implementation of the current provisions and their effectiveness, timeliness, utility and acceptability. All conclusions must be based on well-documented findings and facts. In the event that any problems or weaknesses are identified that might necessitate possible amendments to the Directive, possible options for these should be also be presented. This should include an assessment of the advantages and disadvantages of the options relative to the current situation and of their economic, social and environmental impacts.