

THE MUTUAL JOINT VISIT PROGRAMME ON INSPECTIONS UNDER SEVESO II: EXCHANGING LESSONS LEARNED ON INSPECTION BEST PRACTICES

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The Mutual Joint Visit Programme for Inspections under Seveso II was launched by the European Commission's Major Accident Hazards Bureau (MAHB) in spring 1999 in order to foster an exchange of experience among Seveso inspectors during the initial phase of development of inspection programmes. The overriding goal was to establish a system of mutual support that would promote consistency in requirements for operators throughout the Europe Union and help maintain a minimum standard of quality of inspections. In the short term, it was hoped that the programme could stimulate and sustain a spirit of mutual co-operation and interest among competent authorities, and then over time, such ongoing collaboration would lead to the eventual realisation of the broader goals of the programme. After four years of operation it appears that the programme has met this initial expectation. This paper describes the nature of this success, summarising the types of information exchanges that have taken place thus far. It also describes impressions the visits have made on inspectors and other participants, with a view to what might be the expected future of the programme.

BACKGROUND

The Directive 96/82/EC (known as the Seveso II Directive) introduced important changes and new concepts into government requirements for control of major industrial hazards in Europe. The two-tiered approach, the safety report, and concepts such as the safety management system, "demonstrating" safety, and land-use planning, are several elements of the Directive indicative of markedly more sophisticated expectations in regard to major-accident hazard control than in the past. The Directive clearly entailed several new legal obligations for industry, however, the impact on competent authorities was equally profound.

In particular, inspection obligations associated with hazardous installations, a core component of enforcement efforts, changed dramatically as a result of the new Directive, and above all, in terms of competencies required. With a stronger emphasis on emergency response and damage to the environment, for example, as well as a new requirement for land-use planning, it implied a multidisciplinary approach that in many Member States stretched beyond the competency of one particular authority. Moreover, new inspection performance standards were included in the Directive, for example, the obligation to verify that the operator can demonstrate that the site's safety programme is appropriate

for controlling the risk. In addition, the Directive established the requirement to conduct annual inspections of upper-tier installations, or as an alternative the competent authority could institute an inspections programme based on “systematic appraisal.” Therefore, in most Member States proper implementation of the Directive entailed a significant re-organisation of the inspection function, often involving more than one competent authority, and in some cases several authorities.

For this reason the Technical Working Group (TWG) on Inspections was one of the first working groups established by the Committee of the Competent Authorities (CCA)¹ to address the challenges of implementation^[1]. Over the period 1993–1997 this group met several times and drew up a set of recommendations for implementing inspections under the new Directive. However, there was a recognition that significant learning would take place in the field once implementation had actually started. Knowledge concerning good practices in industry would grow substantially with experience and in parallel best practices for inspections would start to emerge. Moreover, in the early stages, it was expected that inspection programmes in Member States would evolve quickly as they gained and built on their experiences. From this eventuality, members of the TWG (managed by MAHB), perceived a danger that profound differences in inspection approaches could become manifest over time and thereby erode much of the Directive’s expected contribution towards achieving a “level playing field” throughout Europe in major-accident hazard control.

To address this concern the Committee of the Competent Authorities approved a recommendation in 1999 to establish a programme of “Mutual Joint Visits” or “MJVs”. The aim of the programme was to encourage the sharing and adoption of best practices for inspections through system of regular information exchange. The visits would be hosted by different Member States (hence visits would be “mutual”) and aimed at working inspectors of other Member States (and thereby “joint” visits) charged with assessing compliance with the Seveso II Directive in industrial installations. The Major Accident Hazards Bureau manages the programme and also provides partial funding for travel expenses of participants. The technique of an MJV programme has been tried with some success in other technical areas, most notably OECD’s programme for good laboratory practice.

DESCRIPTION OF THE PROGRAMME

The Mutual Joint Visit Programme for Inspections under Seveso II was launched by the European Commission in spring 1999 with a visit hosted by the Netherlands. Envisioned as a programme for exchanging technical information among Member State Seveso II inspectors, the programme had completed twelve visits by the end of 2003, including one visit hosted by an EFTA country (Norway). (For a list of all MJVs that have taken place since 1999, see Table 1.) Within that time frame, at least 181 different

¹The Committee of Competent Authorities Responsible for the Implementation of Directive 96/82/EC was established under Article 22 of the Directive to assist in defining implementation measures.

Table 1. Mutual joint visits on Seveso inspections, 1999–2003

The Hague, The Netherlands	12–13 April 1999
Cork, Ireland	20–22 March 2000
Cologne, Germany	27–29 March 2000
Helsinki, Finland	23–25 August 2000
London, United Kingdom	8–10 Nov 2000
Lyon, France	25–27 April 2001
Vienna region (Lower Austria), Austria	12–14 Sept 2001
Nyköping, Sweden	12–14 June 2002
Brussels, Belgium	23–25 October 2002
Syracuse, Sicily	27–29 Nov 2002
Skien, Norway	4–6 June 2003
Barcelona, Spain	1–3 October 2003

participants were able to take part in a visit, the vast majority of whom have been working inspectors. The MJV has reached over 70 different inspecting authorities, including authorities with different responsibilities on the national level, and also regional and local authorities.

Agenda of a typical visit

The main topic of a typical visit is the inspections programme of the host country. The MJV takes place over the course of $2\frac{1}{2}$ days. The first day is devoted to explaining inspections procedures in the host country, which competent authorities are involved, the regulatory context, and documentation required. Problems encountered are often highlighted as well as best practices that have been developed to address them.

The second day consists of a visit to a Seveso site or sites to talk with site operators about the inspections process from the operator's point of view. The third day is a half day, intended for discussion of information presented over the previous two days.

In practice, despite this uniform structure, there has been considerable variation in approaches and information shared at the different MJVs. For example, the Belgians organised actual inspections for participants to observe and the French and Finnish authorities arranged simulated inspections. The Austrian agenda was also unusual in that it included presentations by guest inspectors on procedures in their countries. The Belgian authorities hosted a discussion on the interpretation of Article 17 of the Seveso II Directive. In addition, some countries have organised very focused programmes, concentrating on a few aspects of their inspections activity; other countries have aimed to provide a broader perspective, and therefore, also touch on other important aspects of Seveso implementation in the Member State, such as land-use planning, emergency planning and information to the public. These disparities in approach are sometimes indicative of differences in perspectives between hosts, in that, the work of some authorities is very

focused on inspections whereas other authorities have a number of diverse Seveso responsibilities in addition to inspections.

Table 2 shows various topics specifically addressed within the MJVs, including sub-topics within the field of inspections as well as other Seveso II requirements. Co-operation among authorities, safety management systems and audits, information management and safety reports were the most commonly selected topics.

Site visits at the different MJVs have covered a number of industries and processes, including producers of commodity chemicals, pharmaceuticals and other specialty chemicals, refineries, and a steel mill. The approach to the site visits can also vary from meeting

Table 2. Central topics of MJVs

Topics Presented	Mutual Joint Visit
Inspections-related	
Inspection procedures	All
Co-ordination between authorities	Austria, Belgium, Germany, Italy, Norway, Sweden, UK
Inspection of safety management systems	Austria, Belgium, Finland, Germany, Italy, Norway, Spain
Information management (database, Internet use)	France, Italy, Netherlands, Norway, Spain
Simulation of inspection	Finland, France
Consistency of inspections across regions	Sweden, UK
Tools for auditing safety management systems	Belgium, Italy, Spain
Participation in actual inspection	Belgium
Seriously deficient measures (Article 17)	Belgium
Inspection of pressure vessels	France
Comparison of best practices between countries	Austria
Cost of inspections	Spain, UK
Other aspects of Seveso implementation	
Safety reports	Austria, Ireland, Netherlands, Spain, Sweden, UK
Domino effects	Austria, Italy, Spain
Land-use planning	France, Italy, Spain
Industrial parks	Italy, UK
Emergency planning	Italy, Spain
Hazard assessment	Ireland
Information to the public	France, Spain

to meeting, dependent on the degree and type of information that the selected installations choose to share with participants, and also dependent on how much the host country has directed the contribution of the installation.

The outcome of the discussion sessions between participants and hosts during the course of the meeting and especially on the last day has taken on various forms, according to the ideas of the host country. Sometimes they are rather formal sessions in which participants are invited to ask questions about the host country's programme and compare it with their own practices. On several visits participants were divided in groups and encouraged to discuss their impressions of the visit amongst each other, draw some group conclusions, and summarise them to the entire assembly. On at least one occasion industry representatives from the sites visited the previous day were invited to the session to allow questions about the industry perspective.

Participation

In the programme's early years, visits were planned for approximately 10 to 15 guests, with the vision of one participant per Member State. The success of early meetings led to a gradual increase in participation, with host countries generally planning visits for 25–30 guests starting with Austria in fall 2001 (see Figure 1). Subsequently, it appears, after numerous visits with places for 25–30 participants, that achieving participation level much higher than 25 participants is not often possible, given the relative frequency of MJVs and the normal workload of most inspection authorities. In any case, a level much higher than 25–30 participants per visit may be less conducive to engendering hearty discussion among participants.

To maximise the practical impact of the information, countries were also encouraged to rotate participation among inspectors and most did so. EFTA and Candidate Country participation was likewise encouraged and places were generally available in

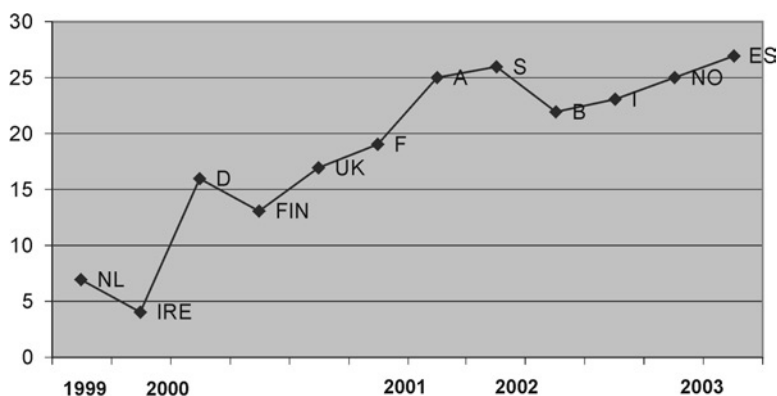


Figure 1. Participation by MJV from 1999–2003

each MJV to accommodate their interests. Industry has also been present (represented by the European Process Safety Centre) at each MJV since the MJV in Lyon, France in April 2001. An OECD representative has also attended an MJV.

PROGRAMME OUTCOMES

This section will describe the project's success in terms of its ability to promote information exchange among a large number of inspectors on a broad number of inspection topics. Then it will discuss the impression made by these exchanges on participants particularly what topics appeared to solicit the most interest and questions.

DISTRIBUTION OF PROGRAMME BENEFITS AMONGST AUTHORITIES AND INSPECTORS

The MJV programme can be considered relatively successful in reaching a wide array of inspectors with various responsibilities and at various levels of administration. This judgement takes into consideration the fact that that only twelve visits have taken place thus far and participation has been limited to less than 30 members per visit (and even less at earlier MJVs). It is reasonably justifiable to consider the programme a success on this score when one considers the limited opportunities available to competent authorities, particularly technical personnel, for exchanging information on major-accident hazard control in the pre-Seveso II period.

On average, 10 different representatives from each Member State (see Figure 2) participated in the programme from 1999 to 2003 (excluding Luxembourg) with a total of 147 different Member State participants during this period (and excluding participation in MJVs they hosted).² Of EFTA Countries, Norway has also sent 10 different participants to MJVs (along with hosting its own MJV) and Iceland and Switzerland have each attended one visit.

Six Candidate Countries have participated from 1999–2003 for a total of 20 times, involving 10 different individuals. Candidate Country attendance has increased slightly in the two years prior to accession but continues to be limited due to language constraints as well as scarcity of travel resources.

As intended the majority of participants in MJVs fit the profile of working inspectors. However, a small portion of participants were policy makers involved in co-ordination at national or regional level. These participants generally viewed the meeting as a benchmarking exercise, a unique opportunity to observe how Seveso implementation worked in practice in different Member States. Often these individuals were in a greater position to influence practices in their own countries than individual

²Although Member States tended to encourage broad inspector participation, some individuals participated in more than one meeting, and a few participated in several meetings. Generally representing only a small proportion of the participation, repeat visitors provided some continuity to the programme and helped to create a relaxed atmosphere and facilitate discussion.

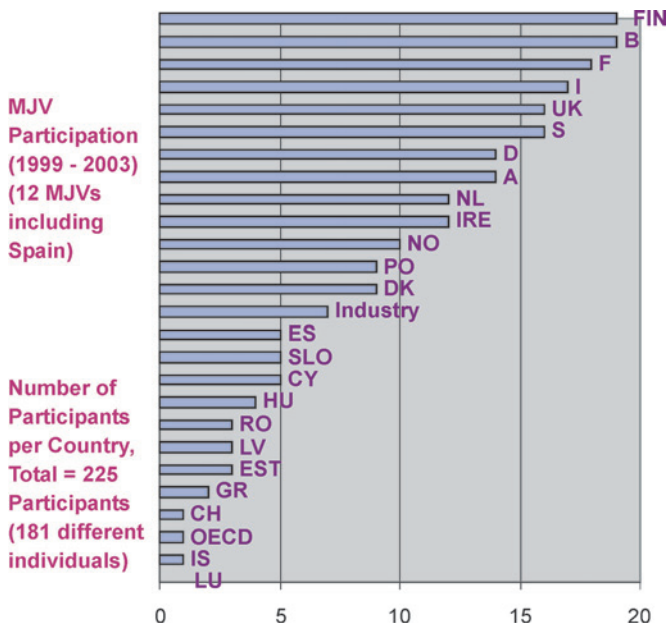


Figure 2. Participation by country/organisation in the MJV programme

inspectors and therefore, it is easily argued that involving these representatives, albeit on a limited basis, was consistent with programme objectives.

The participation of numerous authorities, as shown in Table 3 is another indicator of the extent of the programme’s impact on competent authorities involved in inspections. Over 70 organisations have sent representatives to MJVs, 52 of them from Member States. This multiplicity of organisations highlights an important feature of Seveso implementation. It is representative of the diverse ways in which Seveso inspections have been structured in Europe, for example, concentration of competency in a small number vs. a large number of authorities, and centralised vs. regionally distributed programmes (and also hybrids). The MJV programme has been instrumental in confronting and raising the profile of this very European aspect of major-accident hazard control. However, one could conjecture that the programme has only reached about half of the many regional and local organisations involved in Seveso inspections, although the principal national authorities with Seveso inspection responsibilities have all been well represented.

It is difficult to judge the programme’s success in facilitating dissemination of information from each visit to inspectors and competent authorities that did not attend the visit. In the first three years, dissemination was largely up to the participants in the

Table 3. Organisations participating in the MJV programme (1999–2003)*

Organisation	Country/ Other	Organisation	Country/ Other	Organisation	Country/ Other
City of Linz	Austria	DRIRE Picardie	France	Environmental State Inspectorate	Latvia
Amt der Salzburger Landesregierung	Austria	INERIS	France	Ministry of Employment and Social Affairs	Netherlands
Austrian Ministry for Agriculture,	Austria	Amt für Immissionsschutz Neuruppin	Germany	Norwegian Pollution Control Authority	Norway
Amt der Tiroler Landesregierung	Austria	Environment and Health Authority	Germany	Labour Inspectorate	Norway
Amt der Niederösterreichischen Landesregierung	Austria	Staatliches Umweltamt Itzehoe	Germany	Directorate for Fire and Electrical Safety	Norway
Amt der Steiermärkischen Lande	Austria	Regionalstelle Gewerbeaufsicht	Germany	OECD	OECD
Leiterin der EU-Koordinationsstelle	Austria	Regional Environment Office of North Rhine-Westphalia	Germany	Inspeccao Geral do Ambiente	Portugal
∞ Bundesministerium für Wirtschaftliche Angelegenheiten	Austria	Landesanstalt für Umweltschutz Baden-Wuerttemberg	Germany	Ministry of Environment	Portugal
Flemish Environmental Inspection Authority	Belgium	Abteilung Staatliches Umweltamt Frankfurt	Germany	General Commissariat of Environmental Protection	Romania
Walloon Environmental Inspection Authority	Belgium	Regierung von Oberbayern	Germany	Ministry of Waters and Environmental Protection	Romania
Federal Ministry of Labour	Belgium	Staatliches Umweltamt Köln	Germany	Inspectorate of Environment and Spatial Planning	Slovenia
AMINAL — Milieu-inspectie – Antwerpen	Belgium	Abteilung Staatliches Umweltamt Wiesbaden	Germany	Ministry of Environment and Spatial Planning	Slovenia
Department of Labour	Cyprus	Regierungspräsidium Darmstadt — Abteilung Staatliches Umweltamt Hanau-	Germany	Inspectorate for the Protection against Natural and Other Disasters	Slovenia
Danish Working Environment Authority	Denmark	Division of Environment, Section of Dangerous Substances	Greece	Catalan Region	Spain

Fire Brigade of Fredericia	Denmark	Ministry of Development	Greece	Swedish Rescue Services Agency	Sweden
Miljøkontrollen, København	Denmark	Ministry of the Interior	Hungary	Swedish Work Environment Authority	Sweden
Odense Region	Denmark	Administration of Occupational Safety and Health	Iceland	County Administrative Board of Kalmar	Sweden
Vejle County	Denmark	European Process Safety Centre	Industry	County Administrative Board of Södermanland	Sweden
Technical Inspectorate, Chemicals Safety	Estonia	Health and Safety Authority	Ireland	County Administrative Board of Västra Götaland	Sweden
Estonian Rescue Board	Estonia	Ministero dell'Intero VVF — IANSPI	Italy	Arbetsmiljöinspektionen i Linköping	Sweden
Safety Technology Authority (TUKES)	Finland	ISPESL	Italy	Kantonales Laboratorium Basel-Stadt	Switzerland
Ministry of Social Affairs and Health	Finland	Agenzia Nazionale per la Protezione Ambiente	Italy	Health and Safety Executive	Uni Kingdom
Occupational Safety and Health Inspectorate of Uusimaa	Finland	Ministero dell'Ambiente e della Tutela del Territorio	Italy	Environment Agency	Uni Kingdom
Ministère de l'Ecologie et du Développement Durable	France	Ispettorato Regionale (Sicilia)	Italy		
DRIRE–Rhône-Alpes	France	Ministry of Environmental Protection and Regional Development	Latvia		

*Note: The number and diversity of competent authorities from any one Member State is not indicative of higher or lower participation in the MJV programme but the distribution of the competency between authorities and regions within the Member State. National authorities with a leadership role in inspections in their Member States participated repeatedly in MJVs, although they normally changed their representatives each meeting to maximise participation of inspections staff.

meeting who were charged with reporting back to their colleagues back home. To reinforce their efforts MAHB established an internal website for the programme, only accessible to Seveso competent authorities, which catalogues the presentations and documentation shared at visits that have already taken place. This website serves more or less as an online reference library for inspectors and in time, if kept current, it could prove to be of some value in their work. However, there is interest in future in identifying other means for capturing important points from the visit and for communicating them easily and efficiently to all Seveso inspectors.

PARTICIPANT IMPRESSIONS OF VISITS AND INFORMATION EXCHANGED

For each MJV participant evaluations were routinely requested in order to assess the individual visit and make improvements in the future. For the first several MJVs, these evaluations were not standardised and comments from the majority of participants were minimal and somewhat random. However, for each of these early MJVs a few participants wrote detailed reports either out of interest or as a requirement by their management. In either case, these reports were sent to MAHB and proved helpful in pinpointing the usefulness of each visit and highlights. Participant impressions from the seven MJVs taking place prior to the Swedish MJV are taken largely from these reports.

Starting with the Swedish MJV in June 2002, a standard questionnaire to each participant was used to solicit a more uniform and comprehensive evaluation of each visit. Participants were asked to identify what they found most interesting about the visit, if they might recommend application of any of the ideas presented in their own Member State, what they would improve about the format and content of the visit, and if they would recommend participation in a future visit to a colleague. Participant impressions from the five MJVs occurring in 2002 and 2003 are mainly taken from these questionnaires. The impressions of 95 participants were collected in this manner, and represented nearly 80% of the total participants.

In all, the views of nearly 110 participants formed the basis of information and conclusions presented in this section.

General impressions

Without question this programme has been welcomed with great enthusiasm by Seveso inspectors and other participants. Of the 95 evaluations received since the Swedish MJV, one hundred percent indicated that they would recommend the programme to a colleague. The words of one participant perhaps express best the typical sentiments of most participants: "I recommend participation to my colleagues. I hope and support that these MJVs will continue after next year. We have many inspectors in many Member States who have not had this possibility yet. I find it important to give this opportunity to every inspector." The completeness and detail of each evaluation submitted by participants were another strong indication of the enthusiasm the visits generated among participants.

Negative comments tended to focus on language issues (the majority recommending English as the meeting language with a few indicating difficulty with all-English meetings); time allowed for discussion (usually not enough); the number of presentations (usually too many); focus (inclusion of topics less relevant to inspections or coverage of too many different topics); minor inconveniences related to practical arrangements (e.g., tight schedules); the site visit (e.g., not focused, not very informative); and advance preparation for participants (i.e., requesting some preparatory materials in advance of the visit).

In terms of format, the unique approach taken by the Belgian authorities in which delegates participated in real-life inspections received by far the most complements. Unfortunately, most other host countries indicated that real inspections were not possible due to various practical (language in particular) or cultural barriers. Visits hosted by France and Finland featured simulated inspections. The site visit in Norway also was particularly noted, due to the high quality of information provided by the company. Other site visits received poor marks because there was either not enough time to talk about inspections with the company or the company provided very little insight about their implementation of the Seveso requirements and their experiences in regard to inspections.

Knowledge obtained and topics of greatest interest

Participants in the last five MJVs were asked to name the three most important things learned at the MJV and whether they obtained any new ideas for their inspection programme (and if so, what were they?). The responses to these two questions are consolidated and summarised in Table 4 by MJV. As this table shows, the information that was found useful either concerned specific implementation tools (e.g., guidance documents, checklists, information management systems), or common problems and tasks including best practices for addressing them.

In terms of tools and guidance, checklists were frequently discussed particularly in the later MJVs of 2003 and 2004 when some Member States began to produce these tools based on their experiences. Procedures for reviewing safety management systems was also a topic highlighted in several MJVs (Belgium, Finland, Italy, Spain) and many participants commented on the apparent usefulness of such guidance documents, and the possibility of borrowing certain tools and practices contained therein or creating similar guidance in their own inspection programmes.

In addition, participants revealed a marked interest in exploring the differences and similarities between programmes, through comments in meeting discussions, and also in reports and answers to a number of questions on the standard evaluation form. Although coverage of topics across MJVs was not uniform, certain subjects, pointing to sometimes dramatic differences in approach and perspective, emerged time after time as points of discussion in MJVs. These subject areas are summarised in Table 5 along with other topics that came up less frequently at MJVs, but that provoked considerable comment from participants when they did.

Table 4. Knowledge gained by participants from MJVs*

MJV	Most Important Knowledge Obtained
Sweden 12–14 June 2002	<ul style="list-style-type: none"> • Awareness of particular problems associated with having multiple authorities for Seveso implementation • Techniques for improving co-ordination between authorities at the national level • Techniques for improving co-ordination between national, regional and local authorities • Differences and similarities between countries (risk assessment, safety reports, safety management systems were specifically mentioned)
Belgium 25–27 Oct 2002	<ul style="list-style-type: none"> • Maintaining consistency of safety reports, inspections across regions • Example of a comprehensive checklist for a safety management audit • The value of having a set of inspection tools, such as a checklist • Lessons on how to inspect an establishment • Techniques for preparing for an inspection • Applying a team approach to inspections
Italy 27–29 Nov 2002	<ul style="list-style-type: none"> • Approach to assessing domino effects in large industrial areas • Techniques for managing involvement of numerous competent authorities • Example of a checklist for SMS audits • Other useful tools for inspections (use of safety reports, fault trees) • Linking of safety reports, accident history to the safety management system
Norway 4–6 June 2003	<ul style="list-style-type: none"> • Techniques for co-ordinating between authorities • Applying information management tools to improve communication between inspectors and with site operators • Lessons learned from experience in applying a safety management system requirement • Miscellaneous inspection techniques (use of checklists, evaluation of safety reports, planning inspections) • Process safety management from a company perspective
Spain 1–3 October 2004	<ul style="list-style-type: none"> • Tools for managing and conducting inspections (technical guidance, criteria and procedures) • Use of third-parties for inspections and safety report evaluations • Evaluation of safety reports as a separate process from inspections • Application of GIS to management of major industrial hazards • Strategy for communicating risk associated to the public • A practical approach to Seveso II land-use planning

*According to inspector evaluations (on the basis of 15–20 evaluations per MJV).

Table 5. Differences in implementation commonly noted by MJV participants

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- **Inspection culture:** Influence of pre-existing legislation and distribution of competencies on current practices; relationship between inspectors and operators (collegial vs. very formal); key considerations in assessing implementation (philosophical approach); the influence of risk assessment approaches (probabilistic vs. deterministic)
 - **Who performs inspections:** One competent authority vs. multiple competent authorities together vs. third party inspectors; national, regional or local authorities; competent authorities included and not included in the inspections process; training for inspectors
 - **Responsibilities of inspectors:** Seveso specialists only vs. a multi-disciplinary inspections approach; imposition of sanctions and additional requirements (Whether they can be imposed and who can impose them)
 - **Inspection resources:** Man-hours per installation per year; who bears the cost of inspections and how this may affect the inspection process
 - **Frequency and duration of inspections:** Prioritisation of installations (ranking scheme exists vs. no or limited ranking); type of inspections (frequency of global inspections vs. special topic inspections); approach to lower-tier sites
 - **Technical approaches:** Audit of the safety management system (documentation required, checklist); focus on safety management system vs. examination of technical aspects (scenarios, risk assessment process)
 - **Co-ordination between competent authorities of the same Member State:** Frequency of communication between authorities, ease of access to each other's reports, frequency of joint inspections, co-ordination on safety report review, types of communication mechanisms (networks, meetings, websites), use of common inspection tools (e.g., guidance)
 - **Link between inspections and safety reports:** Role of inspectors in safety report review; use of safety report in inspections; Time allowed for safety report assessment
 - **Safety report requirements:** Criteria for evaluating safety reports; uniformity of requirements imposed on each establishment (how does the system encourage or discourage consistency?); Final status of safety reports (dynamic vs. static, i.e., can be revised frequently vs. once every 5 years or for major changes)
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For example, co-ordination between authorities was an area where fresh ideas were particularly appreciated. Some typical comments included:

“We do not have a common database for the two inspection authorities but it is a point to keep in mind or to work on. Especially the possibility to look at all reports is very good.”

“[It could be a good idea] to do an integrated inspection one which all the competent authorities are involved.”

“All different authorities seem to create one common report after inspection . . . Need to have one common voice for all authorities in front of industry.”

“We must have a better structure for the common training programme for all Seveso inspectors and we must also have regular meetings to discuss experiences from Seveso inspections.”

Another subject of great interest was the frequency and duration of inspections in different Member States. At several MJVs participants discussed the challenges in scheduling inspections at appropriate intervals in accordance with Directive requirements, particularly in connection with upper-tier installations, while at the same time maintaining an adequate level of inspection quality. Participants often noted the differences in approaches to this problem by the different Member States as a source of ideas as well as frustration. As one participant commented after one of the early MJVs,

“The time-scale for inspection varied greatly from country to country — [here in this country it is] three days (one-day preparation, one day on site and one day follow-up) in comparison to [another country] where an SMS inspection could take 3–4 days depending on the size of the site. Other countries also appeared to spend more time on site, but a more in-depth review would be required to ensure that one is comparing like with like, in relation to numbers and types of inspections and the number of people carrying out the inspections.”

The topic of safety reports was also frequently scrutinised. Observations general related to the content of the safety reports, the process of reviewing the safety reports and how the safety reports were used in inspections. Two interesting distinctions in approach became obvious after several visits: first, in some Member States inspectors also have the responsibility of reviewing safety reports, and in other Member States, safety reports are evaluated by a different entity; and second, that some Member States view the safety report as a living document that inspectors and operators are reviewing and revising constantly, and in other Member States the safety report is a static document that will not be touched before the five-year renewal date unless significant changes are required. These two distinctions were often the subject of discussion or written comments particularly in terms of whether these differences do or do not affect how inspections are conducted, and if so, which approaches were more effective.

It should also be mentioned that, despite, much discussion about programme differences, inspectors also found confidence in their work by noting similarities in problems faced by other countries and also some of the approaches taken to address them. Some typical observations included:

“In detail there are differences between the [host country] and [our country/s] inspections; but the aims, principles and the depth of inspections are very similar — so I am encouraged in the way we are going.”

“Just as in our [country] the operators have to come up with all sorts of possibilities of further risk reduction and they have to [explain] why they stopped at the actual level, . . .”

“. . . the competent authorities [here] also have the problem that some ‘operators do not even have a policy and a Safety Management System that even looks like what we expect’ . . .”

“Small regions/countries/organisations may establish a lot if they make clever use of available expertise and resources. This could improve some undesirable situations in my country.”

“Despite great variation in legislation, resources, organisation, inspectors face similar problems.”

SUMMARY EVALUATION

In order to estimate programme performance, MAHB has identified a number of expected programme benefits, either for participants or for programme sponsors (the Commission and the CCA) or both, to create six distinct performance criteria for the programme. These criteria, along with MAHB’s opinion about programme performance against each, are presented in Table 6 below.

Expectation 1, regarding input to programme development, is particularly important in terms of the ability of the MJV programme to appeal to a broad cross-section of Member States, including inspection programmes still in development in the new Member States. Early access to the experiences of the Member States with more mature inspection programmes may allow these countries to learn and build programmes on the experiences of the previous EU 15.

Expectations 2, 3, 4 and 5 are significant in their ability, if met, to contribute to establishing a more level playing field of Seveso implementation across Member States. There is some anecdotal evidence that best practices created in one country have been communicated and subsequently applied, in whole or in part, in different Member States. It is reasonable to expect that that some convergence in best practices and interpretation is taking place if the MJV programme is successful in fostering a rich exchange in these areas. The connection between the MJV programme and the spread of common best practices applied in the Member States could form the basis of an interesting study in the longer term.

In regard to Expectation 6, it is certain from inspector comments that the MJV programme is viewed as contributing significantly to professional development of inspectors. Meeting this expectation increases the probability that the programme may be allowed to continue for some time.

PROGRAMME FUTURE

The Committee of the Competent authorities voiced strong support for continuation of the programme at the CCA meeting held in October 2003 in Cagliari, Italy.

Table 6. Performance of the MJV programme on expectations

Expectation	MJV Performance
1. The programme provides insight into developing an effective inspection programme.	Yes, for both early and mature programme stages
2. Cross-country comparison of programme elements leads to extraction of best practices.	Yes. There is anecdotal evidence that this is now occurring but to what degree is uncertain.
3. MS recognise and correct potentially inferior aspects of programmes.	The potential exists but there is no information suggesting that it has occurred.
4. Joint solutions sought for common problems.	Yes, MJVs are seen as a valuable resource for this.
5. Ideas introduced at MJVs may be adapted elsewhere	Probably. Adaptation of certain ideas has been discussed by various participants but follow-through is not known.
6. The program offers professional development for inspectors	Yes. Inspectors gain access to different approaches and techniques used by other inspectors.

Moreover, the CCA asked for the re-activation of its Technical Working Group on Inspections³ to provide direction and suggest improvements for the programme. As a first step, a small task force (consisting of MAHB and a few competent authorities) generated a proposal for the future direction of the programme. This proposal will then be reviewed and elaborated by the Technical Working Group to produce a final set of recommendations in early 2005.

Primarily, the proposal recommends that, in the next phase, MJVs should focus on special topics of common interest to most Member States. Evaluation responses from past MJVs included many suggestions for future topics (see Table 7). The diversity of topics suggested is illustrative of the complexity associated with conducting effective inspections for enforcement of Seveso II implementation. It also is a strong indication that some important areas of Seveso inspection are still undergoing a process of maturation and experimentation.

³In addition, the Technical Working Group on Inspections is expected to provide general guidance for joint CCA projects on Seveso inspections over the long term. The re-activated TWG is expected to consist primarily of competent authority experts, but some industry representation will also be included.

Table 7. Topics suggested by participants for in-depth focus at future MJVs

General Themes	Specific Topics Suggested
Inspection process	Duration and frequency • Inspection procedures, preparation, methods applied on-site, follow-up, reporting system • Planning the inspections schedule • Influence of pre-existing regulations on inspections approach on consistency and co-ordination • Cost of inspections • Time management • Inspection of lower tier sites • Inspection of industrial parks • Inspection results
Specific Legal aspects	Inspections and law enforcement • Practical definition and application of “systematic appraisal” clause (Article 18) • Practical definition and application of “serious deficiency” clause (Article 17)
Specific Technical aspects	Management of change • Contractors • Consistency of technical standards being applied by operators • Technical standards required by operators
Safety reports	The role of the safety report in inspections • How are the risk assessments reviewed by different inspectors? • Contents of the safety report • Elaboration of the reports after inspection • How does one measure that a safety report is adequate? • How do different Member States co-ordinate safety report evaluation between multiple competent authorities? • Technical information that should be included in safety reports • Minimum information required in terms of Article 6/7 for SMS and use of inspections
Safety Management Systems	Review of different methodologies • Comparison of audit approaches • Auditing in facilities following quality standards (ISO, etc.) • SMS in lower-tier sites
Other	Information to the public • Risk assessment, selection of scenarios, definition of worst case, quantitative methods • Land-use planning • Domino effects

The proposal identifies three general thematic areas, as follows (the TWG may further detail specific topics within these themes as higher or lower priority):

- **Practices and problems associated with inspection of installations with similar profiles** (e.g., inspections of installations using common processes or substances, lower-tier installations, installations in industrial parks);
- **Inspections strategy and management of resources** (e.g., co-ordination between authorities, prioritisation of inspections, managing documentation, etc.)
- **Inspecting against Seveso requirements** (i.e., particular elements of Seveso compliance, such as safety management systems and safety reports).

Other specific recommendations within the proposal aim to improve the usefulness of MJV programme results, for example, improving the format of the visits to increase information exchanged during and after the meetings. It is expected that, following CCA approval of the TWG’s recommendations, Seveso inspectors will have the opportunity to participate in second-phase special topic Mutual Joint Visits in 2005.

CONCLUSIONS

This programme is still in its early stages but shows signs of promise in terms of helping to achieve consistency in overall Seveso implementation and spreading best practices. It also reveals that there are many ways to implement Seveso effectively; for many aspects of implementation, there may not be just one best practice, but several best practices. This perspective of a variety of options is important in view of the many cultural and historical differences that influence implementation patterns. It is apparent that Europe, although moving towards greater unity, will continue to need to accommodate these differences for many years to come. The MJV programme helps reinforce the reality that these differences will persist and also provides participants with a better understanding of what motivates these differences in various Member States and their regions.

To a certain extent the differences within Europe are also a source of creativity and there have been a number of times when ideas shared during a Mutual Joint Visit have solicited genuine admiration from other inspectors. Moreover, the MJV programme offers Member States the opportunity to develop together a more sophisticated understanding of what constitutes Seveso compliance and acceptable safety in an inspection context. Indeed, it is rooted in the belief that Member States can learn from each other and by doing so increase their technical proficiency and the effectiveness of their respective inspection programmes. The past five years' experience with the programme indicate that these goals are achievable over time and for this reason the programme's continuation has been widely supported.

REFERENCES

1. Mitchison, N. and Wood, M., 2001, Seveso II inspections "mutual joint visits" programme. *Conference on Seveso Implementation organised by the Organisation for Economic Co-operation and Development (OECD)*. Madrid, Spain. March 2001.