

Evaluation of the State of OSH in the EU

Pilot Study



A great deal of additional information on the European Union is available on the Internet. It can be accessed through the Europa server (http://europa.eu.int).

Cataloguing data can be found at the end of this publication.

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FOREWORD

The European Agency published the findings of its information project "The State of Occupational Safety and Health in the European Union - Pilot Study" in September 2000. This information project was a first step in the development of a system for monitoring and reporting the state of occupational safety and health across the European Union.

As part of their continual improvement process, the European Agency wanted to capture the experiences of those involved and build upon the valuable lessons learned from the "State of OSH" project. Such information would provide a valuable input in planning and managing future OSH monitoring exercises. For these reasons the European Agency commissioned this Evaluation Project to gather the experiences and views of individuals involved in developing and establishing the data collection scheme, in the production of the national OSH reports, in consolidation of the data and those of the end-users of the published report. We expect that this Evaluation Report will stipulate discussions at the beginning of the preparation phase of the next "State of OSH" exercise.

The European Agency wishes to thank the Focal Points, the Thematic Network Group OSH Monitoring and all other individuals involved in the Evaluation Project for their valuable contributions. We thank Richard Butler and Paul Fewtrell from WS Atkins for their assistance in preparing this report.

Bilbao, November 2001

EUROPEAN AGENCY FOR SAFETY AND HEALTH AT WORK

EXECUTIVE SUMMARY

The European Agency published the findings of its information project "The State of Occupational Safety and Health in the European Union - Pilot Study" in September 2000. This information project was a first step in the development of a system for monitoring and reporting the state of occupational safety and health across the European Union.

As part of their continual improvement process, the European Agency wanted to capture the experiences of those involved and build upon the valuable lessons learned from the "State of OSH" project. Such information would provide a valuable input in planning and managing future OSH monitoring exercises. For these reasons the European Agency commissioned this Evaluation Project to gather the experiences and views of individuals involved in developing and establishing the data collection scheme, in the production of the national OSH reports, in consolidation of the data and those of the end-users of the published report.

The Evaluation Project utilised a series of questionnaires and undertook a number of interviews in order to gather individual experiences and opinions.

The findings presented in this report are a first measurement with respect to the opinions and experiences of those involved with the "State of OSH" report. They represent qualitative opinions and have no statistical significance.

The responses to the questionnaires and interviews conducted were diverse and represent the opinions and experiences of those that participated in the Evaluation Project. This provide valuable feedback for the suggested changes to future OSH monitoring exercises. A number of common points were raised. The most prevalent was the incomparability of data across Member States because of the different collection systems in use and different cultures. Other common comments suggest for improving future OSH monitoring exercises included:

- Revision of the data collection tool/methodology (question sets and risk categories);
- Revision of the scale of the OSH monitoring exercise undertaken;
- Revision of exposure indicators/OSH outcomes selected;
- Exclude the need to compare of data (national/EU);
- Exclude the need to assess trends;
- Include information on best practices on managing workplace risks; and
- Include information on case studies on particular sectors/occupations, workplace hazards and/or safety/health outcomes.

Based on the information gathered and the findings of Evaluation Project a series of recommendations have been presented to improve future OSH monitoring exercises as detailed in the table below.

Management process:

• Establish an OSH monitoring management/steering committee to consider the findings of this project and to plan/oversee the management of future exercises;

- Establish a European OSH monitoring programme plan incorporating objectives both short term and long term;
- In the project definition phase of future OSH monitoring exercises clear objectives should be produced for: end-users, function of the data collection process, function of the national report and function of the consolidating process;
- Any expert group assembled to provide technical input should have full executive powers rather then a purely advisory role;
- Develop an end-user specification from which the objectives and planning of future OSH monitoring exercise can be based; and
- All future OSH monitoring exercises should be tested (piloted) and assessed to determine whether the objectives are both realistic and achievable.

Data/Information collection tool:

- Future OSH monitoring exercises should provide a common description how to collect the relevant data making use of existing experts in this field;
- Revise the method and process adopted for collecting the data/information before commencing with future OSH monitoring exercises;
- Future OSH monitoring exercises require a greater provision of explanations of the terminology used to ensure a common understanding. A glossary of terms should be produced; and
- Standard criteria and guidelines, such as the meaning of "at risk", "identifying emerging risks" etc, should be developed and incorporated into the data collection process.

Size and structure:

- Future OSH monitoring exercises should focus on a smaller number of exposure indicators/OSH outcomes, but to conduct such studies on a more frequent basis; and
- An alternative approach should be considered with the requirement for a selected number of member States to gather and present relevant OSH information rather than a wholesale all do approach.

Content:

- Future OSH monitoring exercises should promote the sharing of practical information and experiences how workplace risks are managed within each Member State;
- Future OSH monitoring exercises should avoid making comparisons between national data and EU data;
- Future OSH/monitoring exercises should consider providing information relating to costs of workplace hazards assessed (lost working time, lost production, medical care and insurance);
- Future OSH monitoring exercises should review policy set against the actual achieved outcomes;
- Future OSH monitoring exercises should consider adopting a theme based approach. This could include a particular industrial sector, occupation, workplace hazard or process; and
- Collect greater information regarding the number of workers considered exposed to particular risks under review (number of workers, duration of exposure etc).
 General points:
- A review should be conducted to detail how each Member State is organised for the collection and analysis of occupational safety and health information.

1. INTRODUCTION

The European Agency undertakes information projects to collect and disseminate relevant information concerning occupational safety and health issues in the Member States. As part of their work programme the European Agency published the findings of its information project "The State of Occupational Safety and Health in the European Union - Pilot Study" in September 2000. Henceforth, referred to as the "State of OSH".

The "State of OSH" project was a first step in the development of a system for monitoring and reporting the state of occupational safety and health across the European Union. The aim was to provide decision-makers at both Member State and European level with an overview of the current occupational safety and health situation in the European Union and in this way support the identification of common challenges and priority areas for preventive actions.

The production of the "State of OSH" report culminated in:

- A national report for each Member State depicting the State of Occupational Safety and Health at national level;
- A consolidated report of the State of Safety and Health at Work in the European Union based on the fifteen national reports; and
- A summary report in all community languages to facilitate the information dissemination in addition a CD-ROM was produced.

To produce the national reports each Member State was requested to:

- Organise the national collection of data through their national network;
- Organise the analysis of the national data derived from both European data sources and national data sources; and
- Submit a national OSH report.

The European Agency distributed to each Focal Point a manual to assist in the gathering of data and the production of their national OSH reports. In addition, each Member State received individual national data on:

- The working environment and health outcomes from the 2nd Survey on Working Conditions conducted by the European Foundation for the Improvement of Living and Working Conditions; and
- The structure of the labour market and accidents at work from the Statistical Office of the European Communities (Eurostat).

The process of gathering the information necessary to produce the "State of OSH" report is illustrated in Figure 1.

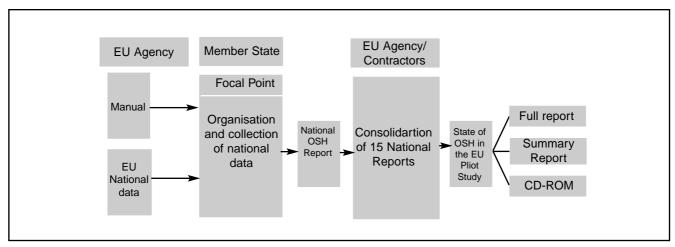


Figure 1 - Data Collection Process in Producing the "State of OSH" Report

In the countries of the European Free Trade Association (EFTA) Iceland, Liechtenstein, Norway and Switzerland a similar information project was carried out to complete the European picture on the state of occupational safety and health at work. The findings are presented in the report "The State of Occupational Safety and Health (OSH) in the EFTA Countries". The EFTA Focal Points were also invited to participate in this Evaluation Project.

As part of their continual improvement process the European Agency wanted to capture the experiences of those involved and build upon the valuable lessons learned from the "State of OSH" project. Such information would provide a valuable input in planning and managing future OSH monitoring exercises. For these reasons the European Agency commissioned this Evaluation Project to gather the experiences and views of individuals involved in developing and establishing the data collection scheme, in the production of the national OSH reports, in consolidation of the data and those of the end-users of the published report.

The value of the "State of OSH" report can be measured on three points:

- 1. From the lessons learned in developing and implementing such an OSH monitoring approach;
- 2. By the added value of the national reports; and
- 3. By the added value of the "State of OSH" report.

All of the above factors were included in the development of the questionnaires used in this project in order to evaluate the "State of OSH" project. This report consists of the following seven Chapters:

Chapter 1 – sets the scene for undertaking the Evaluation Project;

Chapter 2 – presents the aims and objectives of the Evaluation Project;

Chapter 3 – provides details of the methodology adopted;

Chapter 4 – presents the responses received from the completed questionnaires;

Chapter 5 - discusses a review of the manual; and

Chapter 6 – presents a discussion of the future of OSH monitoring exercises together with a number of recommendations based from the findings of this study.

2. OBJECTIVES OF THE EVALUATION PROJECT

The aims and objectives of this Evaluation Project were:

- To evaluate the procedure and methods employed by The European Agency for Safety and Health in undertaking the information project 'The State of Occupational Safety and Health in the European EU Pilot Study'; and
- To make recommendations to improve and facilitate future information gathering by specifying suitable models for the data collection process.

3. METHODOLOGY ADOPTED IN CONDUCTING IN THE **EVALUATION PROJECT**

The Evaluation Project included the following four key parts in its approach:

- 1. A questionnaire to gather experiences from the experts who devised the manual and from the Focal Points and their national networks involved in the production of their national OSH reports;
- 2. Structured interviews with the Focal Points and representative from the European Commission and **European Social Partners**;
- 3. A questionnaire for the end-users as a first measurement of their perception and opinions of the "State of OSH" report; and
- 4. An analysis of the manual and its implementation.

Further details of the above four parts is provided below:

1. Questionnaire for the experts, Focal Points and national networks

Valuable experience had been gained from individuals involved in both the development of the manual and those applying it in order to gather data and prepare their national OSH report. For this reason a three-part electronic questionnaire was developed to capture the experiences and opinions of those involved.

The European Agency and the Focal Points/experts reviewed the questionnaire before a trial was conducted involving four Member States . Following the review and trial the questionnaire was amended and dispatched to the Focal Points and their networks, including the EFTA representatives, for completion. The questionnaire consisted of the following three parts:

Part I - Individual's details (name, organisation, country, job role, role in State of OSH project, email address);

Part II - Preparation of the manual (questions for those who contributed to the development and preparation of the manual;

A total of fifteen questions were developed and posed to both the developers and the technical experts who were involved in the development and production of the manual which would be used for preparing the national OSH reports. The questions set were specific to the following four categories:

- How the contents of the manual was derived (four questions);
- Assessment of completing the manual (five questions);
- Instruction/training how to use the manual (four questions); and
- Further comments on the manual (two questions).

A block diagram has been produced in Figure 2 to illustrate the above four categories and the associated questions asked.

	Q4	90	60	Q11	Q13
Assesment in completing the manual?	സയമ	effort and Did the FOPs assess Did the experts asses equired to the usability of the manual? the process?	Did the experts asses the weaknesses in the process?	Was an assesssment of the information at national level?	Did the experts conduct a preliminary manual usability
	manual assessed? Text	Y/N	N/Y	3 opt	assesment? y/N

Q12	Did the experts provide guiadance what to do if data was not available?
80	Did the experts provide guiadance in relation to the terminology used/\(\text{N}\)
۵۲	Did the experts provide any training for completing the manual? Y/N
92	Did the experts discuss how to use the manual with FOP& networks?
	Instructions / Training how to use the manual
	က

	ny ant Text
Q15	Do you have any additional relevant comments?
	What criteria do you consider should be used to select categories?
Q14	Wh shou
	Comments on the manual
	Ö

In total 15 questions

FIGURE 2 - QUESTIONS FOR THE DEVELOPERS OF THE MANUAL

Part III – Focal Points and national networks contributing to the national OSH reports (questions for the Focal Points and their national networks in the preparation of the national OSH report).

A total of twenty questions were developed and posed to the Focal Points and their networks that contributed in the production of their national OSH report. The questions asked were specific to the following five categories:

- Existing OSH monitoring system (two questions);
- Preparation of the national report (two questions);
- Useability of the manual (four questions);
- Completing the manual (six questions); and
- Opinions/feedback of the whole process (six questions)

Existing OSH system for collecting system Speficic Question Q7 Do you have any experience at national level with respect to OSH information requested in the OSH system?			
Q7 Is there a national system for collecting OSH information requested in the	Speficic Question		
Q7 Is there a national system for collecting OSH information requested in the		Q19	Do you have any experience at national level with respect to OSH system?
Existing OSH monitoring system		۵۲	Is there a national system for collecting OSH information requested in the
Existing OSH monitoring system			
-			Existing OSH monitoring system
			_

	r need to olan?
90	Was there any need to revise the plan?
Q5	Was there a defined plan/process to prepare the national report?
0	
	Preparation of the national report
	7

۵4	Did you ask the Agency to clarify any part of the manual?
03	Did you over/under estimate the effort required?
۵2	Approx. how long did it take to prepare your national report (man/day effort)?
01	How did you manage completing the manual?
	Usability of the manual
	Ф.

Q15 To what extent did you use 2™ Survey on Working Conditions?	
Q15 To wh use Worki	
Where there cases of differences of opinion between experts?	
Mow was the national network used in drafting the national report?	
Q10 How often did you use expert opinion?	
What were the main sources of expert opinion used?	
Q8 Which data sources did you use?	
Completing the manual	
4	

Opinions/ edback of the whole process Q11 exposures/OSH outcome indicators a feedback of the of working hazards? Q12 was the number of each exposure/OHS outcome indicators provided in the manual Q17 was the scheme for each exposure/OHS outcome indicators provide added value? Q18 what were the main provide added value?
Are the exposures/OSH Was the number of outcome indicators a good representation of working hazards? Q12 Was the scheme for each exposure/OHS each exposure/OHS outcome indicator adequate?
Are the exposures/OSH outcome indicators a good representation of working hazards?
Are the exposures/OSH outcome indicators a good representation of working hazards?
Opinions/ feedback of the whole process
5

In total 20 questions

FIGURE 3 - QUESTIONS INDIVIDUALS CONTRIBUTING TO THEIR NATIONAL REPORT

2. Structured interviews

A Focal Point seminar was held over two days, Tuesday 12th and Wednesday 13th December 2000, at Santillana del Mar, Spain. During these two days a schedule was devised to interview each of the Focal Points present for approximately half an hour. An interview questionnaire, consisting of two parts and a total of nine questions was developed in order to conduct the interviews on a consistent basis. This questionnaire has been reproduced in Appendix III.

The interview questionnaire was distributed to each Focal Point prior to the actual interviews taking place so that any preparation work deemed necessary to construct a response could be carried out.

3. Questionnaire for the end-users of the "State of OSH" report

One of the key performance indicators for the "State of OSH" report is in its value expressed by the endusers. These individuals not only need to be able to use the report efficiently and effectively but more importantly they need to be able to extract relevant information to assist them in their job routine. A questionnaire was developed to gather feedback from the end-users. The questionnaire, reproduced in Appendix II, was distributed along with the full "State of OSH" report. As with the questionnaire developed for the experts, Focal Points and their national networks, the end-user questionnaire was subjected to a review and trial process before being distributed.

A total of ten questions were asked in the following three specific categories:

- Intended use of the "State of OSH" report (two questions);
- Opinions on the presentation of information in the "State of OSH" report (two questions); and
- Added value of the "State of OSH" report (six questions).

A block diagram has been produced in Figure 4 to illustrate the above three categories and the associated questions asked.

4. Analysis of the manual and its implementation

A review was undertaken based on the experiences of those concerned regarding the manual and its implementation. This considered the responses received to the questions and the identified problem areas.

			Does the report What was considered missing from the COSH in the EU? 3 opc 4 opc
uc			Would the report provide added value?
Speficic Question			What were considered to be irrelevant chapters?
	How is the information going to be used?	Was the reader interested in the full report or just in the excutive summay.	What were consider to be useful chapters?
	Purpouse of using the information in the report?	How easily presented was the information in the report?	Does the report provide a coprenhensive picture of OSH?
Question Topic	Intended use of the report	Presentation of the report	Value of the report's content
	_	7	က

FIGURE 4 - QUESTIONS FOR END-USERS OF THE REPORT

4. RESULTS OF THE EVALUATION PROJECT

The results presented in this section provide a synopsis of the completed information on the returned qutionnaires. They represent a qualitative overview and have no statistical significance.

In all, thirteen countries completed and returned the questionnaire, some provided multiple responses from their national network.

4.1 Responses from the Experts and Developers of the Manual

A total of nineteen completed questionnaires were returned. These included multiple responses from four Member States (Denmark, Germany, Greece and Spain). With multiple questionnaires from the same Member State all responses were included in the questionnaire analysis.

Of the returned questionnaires everyone completed Part I, i.e. the section on personal information name and organisation as well as Part III, i.e. the section dedicated to the Focal Points and their networks for the production of their national OSH report. Seven of the nineteen returns completed Part II, i.e. those involved in the development of the manual. The number of questionnaires returned was low and some of the responses were poor in that they did not provide supporting information why problems were encountered or what could be implemented to improve the process.

Each question devised for the experts and developers of the manual fell into one of the following four question groups:

- Question Group 1 How the contents of the manual were derived;
- Question Group 2 Assessment in completing the manual;
- Question Group 3 Instructions/training how to use the manual; and
- Question Group 4 Comments on the manual.

The results from the questionnaire have been broken down in accordance with the structure of the question groups as previously illustrated in Figures 2 and 3. The findings are presented in the following report format:

- Summary of the responses to the questions;
- Responses received; and
- Conclusions were appropriate.

Question Group 1	How were the contents of the manual was derived?
Questions	Q1, Q2, Q3, Q10 (Refer to Figure 2)

Summary of findings:

- Questions in the manual were selected on the general basis of risk and availability of data, experiences of national and European monitoring exercises and by considering existing European data sources:
- Criteria was reported to have been used to aid the selection of the risk categories; and
- Those involved in drafting the manual validated and approved its contents before distribution.

Responses to the questions:

Question 1 - "What was the basis for selecting the questions"

Number of responses = 6

Question one asked individuals involved in the development and preparation of the manual to indicate how the questions were selected for inclusion. Six respondents indicated that the contents of the manual were derived on a number of key factors, including:

- Expert consideration of the existence of workplace hazards;
- Expert consideration of the importance of workplace hazards;
- Use of existing European data (including 1st and 2nd European surveys);
- The questions represent a high burden of ill-health where prevention is possible;
- Experiences with national and European monitoring projects; and
- The likelihood of available national data to provide reliable answers.

Question 2 - "Did the experts use criteria for selecting the risk categories?"

Number of responses = 6

Yes=5 / No=1

Question two asked the developers of the manual whether any criteria were used for selecting the particular risk categories adopted. The responses to this question are given below:

Question 3 – "On what basis was the contents of the manual agreed?"

Number of responses = 6

Question three investigated how the contents of the manual were agreed upon before publication and distribution. The responses to this question are given below:

- From the joint experiences of the expert group;
- From input from EUROSTAT and the Dublin Foundation;
- From general discussion;
- Fro considerations about the importance of risks; and
- From estimations about the availability of data.

Question 10 - "Was there a validation process and approval process before issuing the manual?"

Number of responses = 7

Yes=5 / No=2

Question ten asked whether as part of the manual's development process there was a formal validation and approval process before it was issued and distributed. The responses to this question are given below:

Conclusions/Recommendations

- The responses received were inconclusive to enable any indication to be given whether criteria were used in the selection of the risk categories incorporated into the manual;
- Clear criteria should be established and used to demonstrate and justify the selection of risk categories in future OSH monitoring exercises;
- In determining the contents of the manual justification for the selection process should be transparent, understood and agreed by all parties concerned;
- The responses received indicate that as part of the manual's drafting procedure the experts involved validated and approved the contents before its implementation though no clear explanation was given as to what this entailed or what guidelines were followed in achieving this;
- The responses received did not clearly indicate whether a formal validation and approval process was used before the manual was released and distributed. There was no evidence of common document quality control features such as the issue number, issue date and formal authority/signatures of approval; and
- Any document published/circulated that is associated with any OSH monitoring exercise should be for mally assessed and validated before distribution. There should be clear documented evidence that such a process has occurred.

Question Group 2	Assessment for completing the manual
Questions	Q4, Q6, Q9, Q11, Q13 (Refer to Figure 2)

Summary of findings:

- The responses indicate that an estimation of the time and effort required to compete the manual and answer its questions was not fully undertaken;
- A review and an assessment was undertaken with respect to the usability of the manual as part of the drafting process;
- The Focal Point's review and evaluation of the manual was completed on a national level with national experts and representatives from Social Partners;
- There was no clear indication whether or not an assessment was undertaken to determine any weakness in the application of the manual;
- There was no clear indication whether or not the experts drafting the manual carried out an assessment regarding its usability.

Responses to the questions:

Question 4 – "Did the experts drafting the manual make an assessment to estimate the time and effort required to complete it?"

Number of responses = 6Yes=2 / No=6 Question four was set to establish whether those developing the manual performed an assessment regarding the effort and time required fulfilling the requirements demanded. The responses to this question are given below:

Question 6 – "Did the Focal Points review and assess the usability of the manual and pass comments as part of the overall drafting process?"

Number of responses = 7

Yes=5 / No=2

Question six focused on determining whether the Focal Points conducted an assessment regarding the usability of the manual. The responses to this question are given below:

Question 9 – "Did the experts drafting the manual conduct an assessment to establish the weaknesses in the process?"

Number of responses = 6

Yes=3 / No=3

Question nine asked whether or not the experts developing the manual identified and/or assessed any inherent weaknesses in the process. The responses to this question are given below:

Question 11 – "Did the experts drafting the manual carry out an assessment at national level to establish the following?"

Number of responses = 9

Question eleven asked the experts whether an assessment was conducted at a national level to establish the following three factors:

- 1. How relevant the questions were;
- 2. Whether such information was available at national level to answer the questions; and
- 3. How much effort would be required to answer the questions?

The responses to this question are given below:

"Was an assessment conducted to determine the following:"	Yes	No	
How relevant the questions were?	4	5	
Whether such information was available at national level			
to answer the questions?	4	4	
How much effort would be required to answer the questions?	1	12	

Question 13 – "Did the experts the drafting process conduct a preliminary exercise to establish the usability of the manual?"

Number of responses = 8

Yes=4 / No=4

Question thirteen asked the experts drafting the manual whether they conducted a preliminary assessment of its usability.

Conclusions/Recommendations

- The responses received were inconclusive to draw any firm conclusions regarding whether an assess ment was undertaken to determine time and effort to apply the manual. The lack of a positive response may indicate that at the design stage of the manual a comprehensive assessment of effort required to produce the national OSH reports was not undertaken. Future OSH monitoring exercises should in any case estimate the effort required to enable Member States to plan and co-ordinate their approaches;
- The responses received, though not conclusively, indicate that a review process of the manual was undertaken before its implementation. Such a process should be a fundament part of the planning process particularly to gather the opinions of those directly involved in applying the manual at the national level. Such a review should be incorporated into an overall management plan for the development and intro duction of data collection tools for future OSH monitoring exercises. Additional comments received with question six included the following:
 - The Focal Points agreed upon the analysis of importance and availability of data;
 - It was generally known in some Member States there was a lack of reliable quantitative data on some categories e.g. occupational diseases and exposure to chemical and biological factors; and-
- The responses received were inconclusive to enable any firm conclusions to be made regarding whether an assessment was undertaken during the development of the manual to establish any weaknesses. Such an assessment should have been incorporated into an overall management plan for the development and introduction of the manual;
- Clearly, from the responses submitted no assessment was undertaken by the experts drafting the
 manual to determine how much effort would be required by the Focal Points and their supporting
 networks to complete the manual. It is recommended that such assessments/reviews are undertaken
 as part of a management process in developing future data collection tools before their
 implementation; and
- The responses received were inconclusive to enable any firm conclusions to be made regarding whether a preliminary exercise was undertaken to test the usability of the manual. Such an exercise should have been conducted and the OSH monitoring exercise piloted before being fully rolled out.

Question Group 3	Instructions/training how to use the manual
Questions	Q5, Q7, Q8, Q12 (Refer to Figure 2)

Summary of findings:

- A number of experts reported discussing in detail with their Focal Point and national network how to use the manual although there was no indication that this was common practice;
- A number of experts reported providing training in relation to the contents of the manual and how best to complete the various sections. There was no indication that this training was either common practice across all Member States nor was it on a formal basis;
- A number of experts in drafting the manual reported providing guidance to their Focal Point and national network regarding the terminology used; and

• A number of experts reported providing guidance to their Focal Point regarding action to take if national data was not available.

Responses to the questions:

Question 5 – "Did the experts drafting the manual discuss in detail how to use the manual with their Focal Point and National Network?"

Number of responses = 5

Yes=4 / No=1

Question five focussed on training and any subsequent discussions that may have taken place between the experts and the Focal Points regarding how to use the manual. The responses to the question are given below.

Question 7 – "Did the experts drafting the manual provide training to the Focal Points in relation to what was meant by the manual and how best to complete each of the various sections?

Number of responses = 7

Yes=4 / No=3

Question seven asked the experts whether during the development of the manual they provided training regarding how to use/complete it. The responses to this question are given below:

Question 8 – "Did the experts drafting the manual provide guidance to the Focal Points in relation to the terminology used e.g.: the meaning of: "ESWC question" (noise question excludes/includes wearing of PPE), "highest risk", "significant trend" and "preventive action"?

Number of responses = 7

Yes=5 / No=2

Question eight asked whether the experts provided any guidance regarding the terminology used in the manual. The responses to this question are given below:

Question 12 – "Did the experts drafting the manual provide guidance to the Focal Points on what action to take if national data was not available to answer a particular question?

Number of responses = 6

Yes=3 / No=3

Question twelve asked whether any guidance was provided by the experts drafting the manual regarding what action the Focal Points and their national network should take if data was not available. The responses to this question are given below:

Conclusions/Recommendations

• The responses received were inconclusive to enable any firm conclusions to be made regarding whether any formal discussion between the experts and the Focal Points/national network took place regarding how to use the manual. Some Member States indicated that their experts involved in preparing the manual allocated time to discuss its use with the national network.

- The responses received were inconclusive to enable any firm conclusions to be made regarding whether any formal training was given by the experts to the Focal Points and their national networks. Clearly some training was given but there was no evidence to suggest this universally adopted by all Member States. It is recommended that to ensure consistency of application, formal training is given regarding the use of any data collection tool used in future OSH monitoring exercises;
- The responses received were inconclusive to enable any firm conclusions to be made regarding whether guidance on terminology was provided by the relevant experts. Clearly five Member States indicated that such guidance was provided, however, there was no evidence to suggest this was universally adopted by all Member States. Comments received on completed questionnaires and from the face-to-face interviewees indicate that there was a distinct lack of guidance provided with respect to the terminology used in the manual.
- The responses received were inconclusive to enable any firm conclusions to be made regarding whether guidance was provided on action to take in the event of national data not being available. Three Member States indicated that such guidance was provided, however, this was not universal across all Member States. It is recommended that to ensure consistency of application, formal training and guidance is provided in future OSH monitoring exercises and such training made available to all Member States and their respective networks.

Question Group 4	Comments on the manual
Questions	Q14, Q15 (Refer to Figure 2

Summary of findings:

- A number of experts identified particular criterion that should be used for the selection of risk categories for future OSH monitoring exercises; and
- A number of additional comments were given by the experts mainly related to data issues. Responses to the questions:

Question 14 – "What criteria do you consider should be used in selecting the risk categories in any future project aiming at monitoring the State of OSH in the European Union?"

Number of responses = 5

Question fourteen asked the experts drafting the manual what criteria they consider should be used to select the risk categories for inclusion in future OSH monitoring exercises. The responses to this question are given below:

- Concentrate on those factors where reasonably "strong" national data is available;
- Existence of health risks at working environment;
- Consideration of the exposed population to the risk indicator;
- Consideration of the most heavily exposed professions;
- The economical losses caused by particular health risks; and
- Reliability and validity of existing national data.

Question 15 (final question) - "Do you have any additional relevant comments?"

Number of responses = 2

The final question, question fifteen, asked the experts for any additional and relevant comments, those received included the following:

- The decision-making power of the expert group assembled was initially an advisory role with little influence to revise the process;
- The manual was too complex and too long; and
- A restriction to fewer indicators would increase its acceptability.

Conclusions/Recommendations

Clear criteria should be developed for future OSH monitoring exercises to identify and include risk cate
gories of common concern or interest across all Member States.

4.2 Responses from the Focal Points and National Networks Contributing to the National Reports

Question Group 1	Existing OSH monitoring system
Questions	Q7, Q19 (Refer to Figure 3)

Summary of findings:

Some Member States operate a national system similar to the process set out in the manual for collecting occupational safety and health information; and

A number of Focal Points and their supporting national networks contributing to their national OSH report had relevant experience with their national OSH system.

Responses to the questions:

Question 7 – "Is there a national system for collecting health and safety information such as that requested by the manual?"

Number of responses = 16

Yes=8 / No=8

Question seven asked the Focal Points and their national networks whether there was a national system for collecting occupational safety and health information, similar to the information requested by the manual in the "State of OSH" "project. The responses to this question are given below:

Question 19 – "Do you have any experience at a national level with respect to the necessary programmes for monitoring the "State of OSH"?

Number of responses = 13

Yes=7 / No=6

Question nineteen asked whether the Focal Points and their national networks had any experience with respect to their national OSH system. The responses to this question are given below:

Conclusions/Recommendations

- Eight Member States indicated that they did not operate a national system for the collection of occupational safety and health information. Any future OSH monitoring exercise should recognise these deficiencies and provide clear guidance how OSH information could be collected; and
- Seven respondents involved in providing an input to their national report indicated both an understanding and experience with their national OSH systems. Six responders reported not having any relevant experience. To avoid any possible ambiguity of information the Focal Points and their national networks should have an understanding of their national OSH system.

2. Preparation of the national report

Questions Q5, Q6 (Refer to Figure 3)

Summary of findings:

Most respondents indicated that they had developed a defined plan/process to assist in the preparation of the national OSH report.

Over half of respondents that said they had devised a plan/process reported it was necessary to revise and make amendments to it during the course of preparing the national OSH report.

Responses to the questions:

Question 5 - "Was there a defined plan and process for preparing your national report?"

Number of responses = 14 Yes11 / No=3

Question 6 - "Was there any need to revise your plan and/or the process adopted?"

Number of responses = 15

Yes=8 / No=7

Question six asked those that had devised a plan/process to prepare their national OSH report whether there was any need to revise it. The responses to this question are given below:

Conclusions/Recommendations

- Although eleven out of the fourteen responses indicated they had developed a plan for the
 preparation of their national reports some had not. Consideration should be given to provide
 guidance on planning as part of the overall awareness and training programme in future OSH
 monitoring exercises;
- Based on the number of responses stating that it was necessary to make amendments to the programme plan for preparing the national OSH report the planning process was not as successful as it could have been and possibly lacked initial guidance.
- Just over half (eight out of fifteen) of the respondents found it necessary to review and amend their programme plan. Some of the reasons stated for the revising the plan/process included:
- Under estimation of effort;
- Parts of the plan were not well defined
- Development of additional questionnaires at the national level to clarify and ensure data was collected;
- For a number of safety outcomes that did not match the national data;
- For occasional misinterpretations; and
- As a greater understanding was developed as to the possible meaning of the questions.

3. Usability of the manual

Questions

Q1, Q2, Q3, Q4 (Refer to Figure 3)

Summary of findings:

- Most Focal Points and their national networks experienced some difficulties in completing the manual;
- An estimation of the number of days spent in preparing the national OSH reports was provided though the accuracy of the figures submitted are questionable and may indicated that accurate project management records were not maintained;
- Nearly all respondents (12 out of 14) indicated that they underestimated the effort required to produce the national OSH report. No responses indicated an over estimation of effort; and
- On a number of occasions the Focal Points and their national networks requested clarification from the European Agency regarding the use of the manual.

Responses to the questions:

Question 1 – "How did you manage completing the manual?"

Number of responses = 16

The manual was self explanatory and easy to follow
A little guidance was required
Some guidance was required
Manual was difficult to follow and understand and much guidance was required
3

Question one asked the Focal Points and their national networks how they managed to complete the manual in terms of meeting its requirements.

Question 2 – "Approximately how much effort was utilised in preparing your national report? (number of days)

Number of responses = 14

Question two asked the Focal Points and their national networks to provide an approximation of time taken (number of days) in preparing their national OSH report.

The estimated numbers of project days displayed in the above table are those directly reported by the respondents. No calculations have been undertaken with this data other than to add up the total values in the case of multiple responses.

RESPONSE N	○ FOCAL POINT IN	NATIONAL NETWORK NCLUDING NATIONAL SOCIAL PARTNERS	EXPERTS OF TNG OSH MONITORING	OTHER GROUPS
1	10	3	10	ND
2	25	5	3	5
3	3	3	167	ND
4	30	15	120	ND
5	180	2	ND	ND
6	30	5	ND	ND
7	27	50	ND	ND
8	ND	50	20	20
9	0.5	5	ND	ND
10	5	15	35	ND
11	20	180	10	ND
12	ND	ND	ND	10
13	ND	ND	1	30
14	120	60	30	ND

Question 3 – "Did you under/over estimate the effort required to produce the national report?"

Number of responses = 14 Correctly estimated the number of days required= 2 Under estimated the number of days required=12 Over estimated the number of days required=0

Question three asked whether the effort required in producing the national OSH report was over or under estimated value.

Question 4 - "Did you ask the European Agency to provide assistance to clarify any part of the manual?"

Number of responses = 14

Question four asked whether the Focal Points or their national networks contacted the European Agency in order to clarify any part of the manual. The responses to this question are given below:

No=5

Yes; only one occasion=3

Yes; on several occasions, but not more than five=6

Yes; on a regular basis, more than five occasions=0

Conclusions/Recommendations

- Clearly the responses to question one indicate that further work is required to reorganise the manual into a more user friendly data collection tool/process;
- The estimated number of project days spent varied widely between the responses and indicates that accurate project time records were not maintained. This may not have been required. Future exercises must balance the effort undertaken against the added value (cost v benefit). One measure of this would be the project time spent in preparing the national OSH reports;
- Nearly all respondents (12 out of 14) under estimated the effort required to produce their national OSH report. If this is not to be repeated in future OSH monitoring exercises then clear guidance, appropriate planning and project management will be necessary;
- Almost all of the responses received (9 out of 14) reported that a degree of assistance was required from the European Agency in interpreting the contents of the manual; and
- The number of times the European Agency was contacted is an indication that further work is required to refine the format of the data collection tool and that a formal training scheme may have provided added value and a forum to answer any questions.

4. Completing the manual

Questions Q8, Q9, Q10, Q13, Q14, Q15 (Refer to Figure 3)

Summary of findings:

- A range of data sources were used by the Focal Points and their national networks in preparation of their national OSH report;
- A number of sections in the manual could not be completed because of a lack of data or an appropriate data source;
- A high use was made of national expertise in answering the manual;

- A diverse source of expert opinion was used by the Focal Points and their networks in answering the manual;
- The national networks were mainly involved in two areas, providing contributions to and commenting on the national OSH report;
- During the application of expert opinion almost half of the responses received (6 out of 14) experienced differences of opinion requiring arbitration to arrive at an agreed answer;
- The ESWC data supplied to each Member State was used but to a varying degree. Two responses ind cated the data was used all the time. Nearly all responses (9 out of 14) fell into the occasional use/limited used categories;

Responses to the questions:

Question 8 – "Which data source did you mainly use in answering the sections of the manual?"

Number of responses = 14

Question eight asked the Focal Points and their national networks to identify the data sources they used in the production of their national OSH reports. The responses to this question are given below:

DATA SOURCES AND THE NUMBER OF RESPONSES					
SECTION OF THE MANUAL	ESWC*	NATIONAL DATA	EXPERT DATA	COULD NOT COMPLETE THIS PART OF THE MANUAL	
Working Enviroment-"Carrying out comparison of national and EU data	7	6	6	6	
Working Enviroment-"Identifiying risk categories"		9	6	6	
Working Enviroment-"Identifying the trends in the workplace"		6	9	2	
Working Enviroment-"Evaluating the present sate of exposure in the workplace"		4	11	2	
Changing Workplace		5	9	1	
Context of Work	3	7	11	2	
Occupational Safety and Health Outcomes	1	12	5	1	
Preventive Capacity of the OSH System for Each Member State		12	5	1	
Totals	11	60	64	16	

^{* 2&}lt;sup>nd</sup> European Survey on Living Conditions data from the European Foundation for the Improvement of Living and Working Conditions

Question 9 - "What were the main sources of expert opinion used in preparing your national report?"

Number of responses = 14

Question nine looked more closely at the precise source of expert opinion used by asking what were the main sources of expert opinion. The responses to this question are given below:

SOURCE OF EXPERT OPINION AND NUMBER OS RESPONSES	
FOCAL POINT	8
NATIONAL NETWORK INCLUDING NATIONAL SOCIAL PARTNER	9
MINISTRIES' DEPARTMENTS	4
INSTITUTIONS ORGANISATIONS LINKED TO MINISTRIE	8
UNIVERSITIES, RESEARCH INSTITUTION	4
PROFESSIONAL ORGANISATIONS	3
OFFICIAL PUBLISHED NATIONAL REPORTS	4
OTHER PUBLISHED SOURCES& REPORTS	4

Question 10 - "How often did you need to use expert judgement to answer the questions in the manual?"

Number of responses = 14

Question ten asked for an estimation of the number of occasions when it was necessary to apply expert opinion during the development of the national OSH report. The responses to this question are given below:

SECTION OF THE MANUAL RARELY ON SOME OCCASIONS REQUENTLY ON A REGULAR BASIS OF THE TIME "IDENTIFYING SECTORS AT RISK" "IDENTIFYING OCCUPATIONS OF THE TIME OCCASIONS OCCASIONS OF THE TIME OCCASIONS OCC						
"IDENTIFYING SECTORS AT 2 6 2 2 5 SAT RISK"		USE OF E	EXPERT OPINION	AND NUMBER	OF RESPONSES	
#IDENTIFYING OCCUPATIONS 0 6 2 2 5 #IDENTIFYING COMPANY SIZE 2 2 2 4 5 #IDENTIFYING GENDER AT 2 3 1 4 5	SECTION OF THE MANUAL	RARELY				
AT RISK" "IDENTIFYING COMPANY SIZE 2 2 2 4 5 "IDENTIFYING GENDER AT 2 3 1 4 5		2	6	2	2	5
AT RISK" 2 2 4 5 "IDENTIFYING GENDER AT 2 3 1 4 5		0	6	2	2	5
		2	2	2	4	5
KION	"IDENTIFYING GENDER AT RISK"	2	3	1	4	5
"IDENTIFYING AGE AT RISK" 1 3 1 3 6	"IDENTIFYING AGE AT RISK"	1	3	1	3	6
"IDENTIFYING EMPLOYMENT 0 3 1 4 6 STATUS AT RISK"		0	3	1	4	6
"IDENTIFYING TRENDS" 2 3 1 1 8	"IDENTIFYING TRENDS"	2	3	1	1	8
"IDENTIFYING PREVENTIVE 1 2 0 3 8 MEASURES"		1	2	0	3	8
TOTALS 10 26 10 22	TOTALS	10	26	10	22	

Question 13 – "How was the national network involved in drafting the national report?" Number of responses = 14

Question thirteen asked for information describing how the national networks were utilised in drafting the national OSH report. The responses to this question are given below:

INVOLVEMENT OF NATIONAL NETWORK AND NUMBER OF	
GIVING CONTRIBUTIONS TO PART OF THE REPORT	7
AS MEMBER OF EXPERT PANESL	3
DID NOT CONTRIBUTE TO THE NATIONAL REPORT	2
COMMENTING ON DRAFT REPORT	9

Question 14 - "Were there any cases of difference of opinion between the experts?"

Number of responses = 14

Yes=6 / No=6 / No response=1

Question fourteen asked whether during the application of expert opinion there were any differences of opinion. The responses to this question are given below.

Question 15 – "To what extent did you use the European data (2nd Survey Dublin, Eurostat) in preparing the national report?"

Number of responses = 14
Did not use the data 5
Some limited use 6
Used occasionally 2
Used all the time 2

Question fifteen asked whether the ESWC data made available to each Focal Point and national networks was used in the production of the national OSH reports. The responses to this question are given below.

Conclusions/Recommendations

- The responses received indicate that the Focal Points and their national networks could not complete a number of sections in the manual. Also, expert judgement was by far the most used source indicating either a lack of available data or a difficulty in matching the available national data with the requirements of the manual;
- The information on the completed questionnaires indicated that a wide verity of expert opinion was utilised in the national programmes and the extent to which expert opinion used indicated a lack of available data;
- The responses received clearly shows that there was a high reliance upon expert opinion in producing the national OSH reports;
- As indicated by the responses received the national networks were involved in the following two
 areas:
 - Providing a contribution to the national OSH reports; and
 - Providing comments on the final national OSH report.
- For some Member States the national networks also provided expert opinion;

- The responses received indicated that on a number of occasions there were differences of opinion between the experts, which required a degree of arbitration between the parties to arrive at an agreed solution. Use of expert opinion may be subject to different approaches. An attempt should be made in any future OSH monitoring exercises to provide guidance on the use of expert opinion to promote a consistent approach; and
- As indicated by the responses received the ESWC data was used but to a varying degree. Five countries reported that the data was not used at all, six reported it was of limited use, two reported using it occasionally and two reported using the data all the time. On the basis of its relatively low usage and the indications that the majority of national OSH reports were built on existing/new national data such data should be omitted from future OSH monitoring exercises.

Question Group 5	Opinions/feedback of the whole process
Questions	Q11, Q12, Q16, Q17, Q18, Q20 (Refer to Figure 3)

Summary of findings:

- The "State of OSH" project included a wide range of occupational safety and health indicators and outcomes. These were primarily selected on the basis that national data existed for these and that they were also common workplace concerns;
- The exposure/OSH indicators used in the State of OSH study were considered to be a good representation of relevant workplace hazards;
- A number of exposure indicators were identified as being absent from the study;
- A number of risk categories included in the manual were considered to be irrelevant and should not be included in future OSH monitoring exercises. Although, these categories were not clearly identified in the responses it will be necessary to review, discuss and omit categories that provide no added value in future exercises;
- The number of exposure/OSH outcomes included in the "State of OSH" project was considered to be sufficient (8 out of 14). Four responses reported more indicators were necessary;
- Overall, the scheme supplied by the European Agency in the manual for each exposure/OSH outcome indicator was considered useful (8 out of 14 responses). Five responses reported that it was not useful;
- The national OSH reports were considered to provide added value (11 out of 14 responses);
- The Focal Points and their networks in answering the questions in the manual experienced problems. A main problem being the ESWC question was different to that asked at national level;
- Comparing national data and EU data presented major difficulties for the Focal Points and their net works;
- A number of common problems were encountered by the Focal Points and their networks in identifying the risk categories; and
- The Focal Points and their networks encountered a number of common problems in identifying trends within their data

Responses to the questions:

Question 11 – "Are the exposure/OSH outcome indicators a good representation of relevant workplace hazards to ensure a broad approach to OSH at work?"

Number of responses = 14

Yes=10 / No=1

Some indicators were missing 4

Some indicators were irrelevant 3

Question eleven asked whether or not the exposure indicators and OSH outcomes included in the "State of OSH" project reflected relevant workplace hazards to ensure a broad approach.

Question 12 – "The number of exposure/OSH outcome indicators used in the manual were considered to be?"

Number of responses = 14

Not enough= 4

Sufficient =8

Too many =2

No response =1

Question twelve asked whether or not the number of exposure indicators/OSH outcomes included were relevant to the "State of OSH" project.

Question 16 – "Was the scheme for each exposure/OSH outcome indicator provided in the manual useful?"

Number of reponses = 14

Yes=8 / No=5 / No response=1

Question sixteen was set to determine whether the Focal Points and their national networks found the scheme adopted for each exposure indicator/OSH outcome to be useful or not during the production of the national OSH report.

Question 17 – "Does the national report provide added value?"

Number of responses = 15

Yes=11 / No=3 / No response=1

Question seventeen was included to determine whether or not the national OSH reports were considered to provide added value. Producing the national OSH reports in line with the manual required a substantial amount of effort and co-ordination. For this reason it was important to understand whether or not such effort was considered worthwhile and whether the national report provided added value at the national level.

Question 18 - "Please identify the main problem areas in preparing your national report"

Number of responses = 16

Did not understand the question=2

Different question to that asked at the national level 8

Question too broad, not clearly defined

A series of questions were formulated in question eighteen to gather information from the Focal Points and their national networks to identify the main problem areas experienced in the course of the producing the national OSH reports. The responses to this group of questions are given below.

Question 18 (part 1)

The questions in the manual were based on the ESWC questions. As such, question 18 (part 1) asked what relevance these questions had at the national level. The responses to this question are given below.

Did not understand the question2

Different question to that asked at the national level 8

Question too broad, not clearly defined5

Question 18 (part 2)

If, in the course of the preparing the national report, national data was included, the manual required a comparison to be made between EU-data and this national data. Questionnaire 18 (part 2) asked whether there were any problems associated with making such a comparison. The responses to this question are given below:

No national data available to compare with the EU-data	6
Different question asked at national level	7
Different methodology (sample size) at national level	8
Different occupation codes to ISCO-1998	3
Different sector codes to NACE-1993	3

NACE-code: sectors statistical classification of economic activity in the European Union

ISCO-code: international standard classification of occupations

Question 18 (part 3)

ISCO-1998

Asked the Focal Points and their national networks to identify the problem areas they experienced when identifying the risk categories. The responses to this question are given below:

3

No national data available to identify those most at risk including (22 total):

Sectors	4
Occupations	2
Age categories	2
Gender	5
Company size	5
Employment status	1
Different classification codes compared to(5 total):	
NACE-1993	2

Different categories used at the national level than those in the manual for (11 total):

Age	3
Company size	4
Employment	4
Common understanding or risk was absent	2
No readiness within the national network	
to provide appropriate data	1

Question 18 (part 4)

Question 18 (part 4) was set to identify the problems both the Focal Points and their national networks experienced in establishing trends within their data. The responses to this question are given below:

Question 18 (part 5)

Question 18 (part 5) asked the Focal Points and their national networks to identify the problems they experienced in evaluating the risk categories. The responses to this question are given below:

The above responses indicate two main problem areas in evaluating the risk indicators these included:

- Lack of criteria to judge national trend; and
- The trend evaluation question was too broad.

Conclusions/Recommendations

- Overall, the responses received indicated that the exposure indicators and OSH outcomes used in the "State of OSH" project were a fair representation of the workplace hazards;
- Five responses indicated that some factors were missing from the "State of OSH" study, these included:
 - Psycho-social indicators: workloads, workers participation, communication, sedentary tasks, workplace tasks dictated by social demands, work on fixed term basis ("hire and fire" approach), training on self-initiative, musculoskeletal disorders and psychosocial risks (stress related disorders, bullying related disorders and violence); and
 - Physical indicators: radiation, ergonomic aspects: design of workplace station, thermal comfort/climate change, exposure to humidity, storage of chemicals, identification of chemicals and top five allergens;
- One respondent commented that there were a number of workplace hazards that could not be suffi ciently expressed. These included work pressure, repetitive strain injury (RSI), noise induced hearing loss, sexual harassment and intimidation;
- Another contributor commented that some indicators should be explained in greater detail, particularly those relating to psycho-social issues and that it was not always clear what was meant by the question, for example with the terms "bullying" and "high speed work", as no supporting definitions were provided;
- A number of the risk categories included in the manual were considered to be irrelevant in the opinion of some experts and Social Partners; and
- Problems experienced by the Focal Points and their networks included, the lack of available national
 data together with the use of different class boundaries and descriptions. The categories considered
 irrelevant were not clearly identified in the responses and therefore it will be necessary to review,
 discuss and omit categories that provide no added value in the planning stage of any future OSH
 exercises;
- The responses received indicated that eight out of the fourteen considered the number of exposure indicators/OSH outcomes included in the "State of OSH" study to be sufficient. Four indicated the number of indicators were insufficient with a further two indicating there were too many;

- Eight respondents reported a "yes", indicating that the scheme provided was useful, and five respondents reported a "No", the scheme was not useful. Additional comments supporting the responses included:
 - Adopted scheme was useful with the exception of "evaluation";
 - It was helpful to have a structured scheme, however, some clear definitions for some risks and a standard definition of "high risk" (e.g. Number of workers exposed or higher level of risk) are required;
 - 2-digit sector/occupation data makes it difficult to arrive at an overview of actual sectors and occupations at risk; and
 - Data on company size and employment status were frequently missing.
- There were clear indications (eleven out of fourteen respondents) that the national reports provided added value. Three responses said that no added value was obtained from producing their national OSH reports. Additional comments received in support of the responses to this question are included below:

Additional comments received in relation to the question 17 -

"Does the national report provide added value?"

RESPONSE "YES"

- Provides a systematic overview of occupational health and shows where there is insufficient data.
 - It provides added value compared to European data as the larger number in the national statisticspermits breakdown on gender and sector/occupation without invalidating otherwise too low figures
- It gives global information on safety and health at the national level and where to centralise efforts. In spite of its limitations, the national report provides a comprehensive vision of the national situation.
- Only in the context with the reports from the other Member States. It is a good compendium indicating what data is available. Little, variability of the interpretation of items between the various Focal Points seems very high.
- By highlighting that the main data sources until now is a closed box.
- The report demonstrates where the gaps are in our knowledge.

RESPONSE "No"

- Annually the Ministry publishes the 'OSH-BALANCE'; from this publication the 'major' OSH-risks for sectors are evident. The national 'State of OSH' provides more (and detailed) data, but lacks the overview.
- Clearly, the responses received indicate that the Focal Points and their networks found the questions
 in the manual difficult to answer. Eight respondents reported a different question to those asked at
 the national level. A further five considered the questions too broad and not clearly defined and two
 did not understand the question in the manual. This signifies that question sets used in future OSH
 monitoring exercises must be carefully developed and tested before being implemented;
 - The responses received indicate that the Focal Points and their national networks experienced problems in comparing national and EU data for several key reasons, including the following:
 - Different question asked at national level;
 - Different methodology used at the national level; and
 - Lack of national data.

- Other problems encountered were associated with the ISCO and NACE codes were different to the clasification groups used at the national level;
- The responses received indicate a lack of available national data for identifying the following risk categories:
 - Sectors at risk;
 - Occupations at risk;
 - Age;
 - Gender;
 - Employment status; and
 - Company size;
- The Focal Points and their networks reported several problem areas associated with identifying trends, including:
 - Lack of national data to identify trends; and
 - The trend categories defined in the manual were too general.
- As a conclusion to the questionnaire aimed at the Focal Points and their national networks, a general
 question was included to invite feedback regarding what measures could be taken to improve the
 process in establishing an OSH monitoring system. The responses to this question are summarised in
 the following table:

Responses to question 20 -

"What do you consider are the main improvements that could be made to the process of establishing a monitoring system with regard to the State of OSH in the European Union?"

- National descriptive documents addressing at least a number of agreed topics to be collected

Methodology:

- Introduce formal mechanisms for obtaining the sort of data required by the OSH report;
- Establishing common data selection methods across the Member States;
- Member States without quantitative national studies should begin to collate such data;
- By comparing the conditions in different countries the best methodologies can be selected to obtain results:
- The scheme provided in the manual contained too little differentiation between conditions for men and women respectively;
- If it is considered suitable to develop qualitative studies, a methodology for obtaining comparable information has to be developed; and
- Establish a common system of EU-wide indicators and statistic categories.

Question:

- More specific/better questions on risk and trends;
- The questions posed in the ESWC could be refined and elaborated;
- The question regarding evaluation of present state was very difficult to answer since it might be said that preventive measures are always incomplete if individuals are injured at work;
- When is the consideration of preventive measures considered to be sufficient? There could be no definite answer to this question and the question may need to be rephrased; and
- The categories of occupations and sectors on the two-digit level generally were to broad to satisfy the expert's opinions as to make a meaningful order.

Time:

• More timely data (closer in time to the Dublin Survey) so that the data is newer;

- Early planning of next exercise is necessary to include all experience gained from the pilot study; and
- Member States should be given sufficient time to incorporate in their national systems.

Trends:

• Comparable quantitative data on trends should be obtained from Eurostat and the European Foundation.

Future OSH monitoring exercises:

- Set focus in future OSH studies on information systems and programmes at the national level;
- A mixture of in-depth studies with a broader overview data;
- Identifying the reported deficiencies and make the respective amendments;
- Establish an agreement on a limited set of quantitative and comparable data to be collected periodically in the future (e.g. every 4 or 5 years);
- It would have been more useful if substances of concern had been selected so that a report could be given indicating controls are currently in place
- Make it more concise, limited and comparable; and
- Give definitions and guidelines so that all Focal Point understand the questions in the same manner

Clearly the above table indicates a wide verity of responses that will need full consideration as part of the planning stage in any future OSH monitoring exercises.

4.3 Results of the structured interviews

In planning the Evaluation Project it was identified that valuable information could be gathered from the personal experiences, which would be unlikely to be captured via the questionnaire approach. For this reason the Evaluation Project set out to conduct a series of structured face-to-face interviews of European Agency staff, Focal Points as well as representatives from the European Commission and Social Partners.

A structured questionnaire was developed to allow a consistency of approach during each interview. This questionnaire consisted of two sections. The first section asked six questions relating to the data collection and the production of the "State of OSH" report. The second section, asked a further three questions focusing on future initiatives for similar OSH monitoring exercises. The interview questionnaire has been reproduced in Appendix III.

The majority of interviews were conducted during the two-day Focal Point meeting, 12th and 13th December 2000. These interviews were of thirty minutes duration and followed the questions detailed in Appendix III. The Greek Focal Point provided a written submission in response to the questions. Those interviewed are also listed in Appendix III. In addition, representatives from the European Commission and from Social Partners were interviewed (20th February 2001) to gather feedback.

Sometime before conducting the interviews the questionnaire was distributed to enable preparation work to be undertaken by the Focal Points and those attending.

The results of the interviews are discussed below and it must be emphasised that the information represents both the collective and individual views of those concerned in the "State of OSH" project with

no statistical significance. The aim was to obtain direct verbal feedback that is often lost by the application of a written questionnaire.

Summary of findings:

- For a number of reasons, nine interviewees believed that the aim of the "State of OSH" project was not achieved;
- A number of strengths and weaknesses were reported by those interviewed;
- A number of external organisations were identified as the direct beneficiaries from the "State of OSH" report;
- A number of key problems previously identified from the questionnaires were also reported at the interviews, including, question format, lack of data, missing link between OSH performance at the Member State level problems is determining comparisons, trends and evaluation;
- A number of national initiatives have been instigated following the production of the national OSH reports and the consolidated "State of OSH" report;
- The interviewees identified a range of national and European audiences for receipt the national OSH reports and the consolidated "State of OSH" report; and
- A fairly diverse range of suggestions were made by the interviewees regarding suggestions for the aims and objectives of future OSH monitoring exercises.

Part 1 – Data Collection and the Production of the "State of OSH" Report

The aim of the information gathering exercise which culminated in the production of the report was 'to determine the State of OSH in the EU.

Do you feel this aim was met? If not, why?

Methodology:

- Lack of a European monitoring OSH system;
- Lack of data:
- Incomparability of data across Member States;
- Methodologies in each Member State do not allow data comparisons to be made;
- Differences between national cultures;
- Differences in both the structure and the approaches adopted by Member States;
- Some missing risk categories (electromagnetic fields, radiation);
- Inadequate health care information; and
- Inadequate health outcome information.

Analysis:

- Incomplete qualitative overview; and
- Conclusions based on subjective expert opinion.

Definitions:

- Problems with definitions; and
- Need for a common comparable OSH language/understanding.

Which is the most important

Strength/weakness of this information project/report?

It is evident from the results from the questionnaires and from conducting the interviews that the State of OSH project has culminated not only in a report but the process itself has provoked much discussion regarding the lessons learned. These are reflected by the strengths and weaknesses reported below:

Strengths

By identifying a lack of national data Member States have instigated their own national surveys to gather such information

- Moved forward at the national level
- First time complete European evaluation
- Information highlighting weaknesses at the national level
- Fact that a manual was devised to collect European data
- First time a European report depicting the State of OSH has been produced
- Identification of the need to share best practice information between Member States
- Valuable lessons learned in the project proces
- Qualitative awareness/overview regarding the State of OSH in the EU

Weaknesses

- Lack of comparable data
- Qualitative data
- Not based on a thorough analytical approach
- Lack of national data in some Member States
- "State of OSH" report not easily readable because of its size. Have to know how to read the report in order to extract relevant information
- Lack of certain data (trends, age etc)
- Report requires more supporting text
- A pilot study should have been conducted prior to commencing the main study
- Inadequate health care information
- Questions asked were too board and Member States put their own interpretations to them
- Large manual and difficult to use

Who do you feel will gain most benefit from the information project?

When asked who is likely to gain most benefit from the information project a number of organisations and interest groups were quoted, including:

- National authorities;
- Labour Ministries;
- Social Partners;
- Trade unions;
- Employee organisations;
- EU Agency;
- Policy/decisions makers;
- National Networks;
- Employees in the long term;
- Automonious committees;
- EU Parliament officials;
- OSH practitioners.

Please rank the underneath main problem areas related to the preparation of your national report:

- Questions of manual too broad, not clearly defined
- No national data available for risk categories such as sectors, occupations, company size, age, gender and employment status
- On national level different methodology used to monitor state of occupational safety and health
- Link to OSH performance in Member States missing
- Experts unable to identify trends/give evaluation

Have any national initiatives been undertaken as a result of:

- i) your national report?
- ii) the European report?

A number of interviewees reported that as a result of their national report some initiatives have been instigated through the identification of weaknesses, including:

- Psycho-social survey;
- Identification of available national data;
- Continued evaluation at the national level; and
- Formalising the national OSH system.

Several comments were made stating that was too early to comment on initiatives taken as a result of the findings contained in the "State of OSH" report because it had not been fully distributed. Other comments stated that currently the report's findings have drawn attention to areas such as stress and musculoskeletal disorders.

Part 2 - Future Initiatives

What should be the aims and objectives of such a European monitoring system?

A summary of comments received regarding the aims and objectives of future OSH monitoring exercises are presented below:

OSH monitoring system:

- Assess the potential for a harmonised OSH monitoring system;
- Develop European OSH objectives/goals;
- Establish an OSH model that can be universally applied in each Member State;
- Provide framework for OSH issues;
- Encourage information exchange, best practice;
- Identify key issues before undertaking the monitoring exercise;
- Achieve agreement on what is to be monitored, this could include prevention measures, compliance with legislation etc;

Methodology:

- Establish what individual Member States want to achieve from the OSH exercises.
- Start with a smaller scaled project;
- Develop common terminology;
- Ability to make valid comparisons; and
- Provide more analytical information.

Time:

- Too soon to answer this question as the full report has not been digested;
- Time is needed to communicate with colleagues and to discuss the issues; and
- Give Member States the opportunity to collect data.

Data:

- Review current European data sources to see if they can be integrated into the OSH programme;
- Provide a clear overview of each Member State's OSH management system, how each collects and analyses data;
- Expand upon labour force survey to promote a new system;
- Availability of data to answer specific questions;
- Establish a voluntary agreement and code of practice for collecting data; and
- Improve information systems, sample surveys, a more standardised approach.

Question sets:

- Need to have a common group of questions; and
- More time spent on the development of the questions in conjunction with Eurostat and the Dublin Foundation.

General points:

- Respect OSH differences and avoid a lowering/loosing cultural excellence;
- Include more scientific/expert institutions;
- Make use of information and target resources;
- Member States to make their own recommendations from the results; and
- Compare policy with outcomes.

What will be the benefits of the European monitoring system? Who will benefit from it?

The above question had a limited response, which included the following:

- Provision of information to policy makers and OSH experts; and
- Decisions makers will have an important reference document;

How do you think the European Agency should process further in the development of a European monitoring system on the State of OSH?

The final question asked each Focal Point to consider how the European Agency should further develop the European monitoring system on three fronts:

- 1) Availability of data on national/European level;
- 2) Methodology for data collection; and
- 3) Tools for data collection.

The responses to this question are summarised below:

Availability of data on national/European level:

How to improve data availability regarding risk categories such as gender, company size, age and employment status?

Methodology:

- EU funding for building up data in Member States lacking this information;
- More time spent on development of the manual/questionnaire;
- Harmonised data collection is utopia, a theoretical concept;
- Greater involvement at the company level;
- Initially select a limited number of risks to focus on before going for a full scale study;
- Adopt micro studies of workplace risks to determine the way forward; and
- Target a few key areas.

Data/question sets:

- Clear description how to collect the data;
- European Agency could provide a foundation for data collection;
- Improve resources at national level;
- Second OSH exercise should not be attempted without the existing data schemes being improved;
- Consult with experts on data collection and interpreting existing systems; and
- Consult views of Focal Points and Experts regarding perception and planning the way forward.

How can the Agency keep pace with the changing world of work (how does the Member State?)

- European Agency can show trends from studies such as the "State of OSH";
- Maintain simple criteria and include individuals with the best knowledge;
- Identifying priority areas for closer analysis, e.g. emerging risk through project related work;
- New types of monitoring systems, new indicators through project related work;
- Through liaison with the Focal Points; and
- Introduce experts at the European Agency to work across the Member State boundaries.

Throughout the Member States, how do we obtain more comparable/standardised data on the state of OSH?

- Definitions being defined early on in the project planning;
- Closed methodology;
- Attempt to introduce new quantitative data each time the exercise is undertaken; and
- Build upon existing arrangements, common approaches adopted by Eurostat and the Dublin foundation.

Methodology for data collection:

To avoid ambiguity, should data/information on exposure/OSH outcome indicators go together with a rating system (scale) to describe their risk/seriousness? If yes, how could be done?

- Considered difficult if not impossible to effectively implement across all Member States;
- Such an approach would not work;
- A rating system should not be considered;
- Feasibility of such an approach should be considered;
- Accident statistics could be useful to prioritise attention for OSH exercises;

- Separation of disease by degree of seriousness; and
- This is a problematic area, however, some basis for prioritising should be established.

Are there any nationally recognised systems for risk rating?

• None were reported as being available.

How could a link be established between preventive capacity in the Member States and the State of OSH?

- Implementation of European law into the national system;
- Ask national experts how laws are implemented, monitored and controlled;
- Establish what the achievements are at the national level;
- Implementation of legislation against OSH results;
- Functional risk assessments;
- OSH inspectors to conduct sample visits e.g. construction sites to determine compliance with regulations;
- As part of European week for safety and health at work target a particular activity across all Member States and report back on the findings;
- From the level of reported sickness absence;
- Need to measure what is being done and to compare these measures with other Member States; and
- Sharing good practice rather than direct comparisons.

Which indicators regarding exposure/OSH outcome/ OSH performance should be added to the existing manual?

Should any be eliminated?

Not to duplicate existing data collection exercises.

Tools for data collection

Which tool would you prefer? (e.g. manual, electronic data registration system).

• The majority of respondents reported electronic format as the most appropriate. However, consideration should be given to organisations that do not have access the Internet, therefore paper based reporting would be most appropriate.

Should there be supplementary tools to support the data collection? (e.g. performance audits, interviews with enforcement officers, politicians and/or safety professionals to check implementation of OSH systems within Member States?).

- Focus on a number of key issues;
- Consider all data collection methods to maintain flexibility within the system;
- Co-ordinate information through trade associations;
- Important to gather the right information from the right individuals;
- Labour inspectors to use simple interview approach to gather information from selected enterprises;
- Do not attempt to fit data that is clearly incompatible.

The final question of the interview asked each interviewee whether they had any additional comments/issues they would like to raise. A summary of the comments received have been grouped into five categories and presented in the table below:

Methodology:

- Establish the user needs for future OSH exercises;
- Slowly and modestly develop the OSH system to avoid subjectivity;
- Start with output i.e. performance and not inputs;
- It is important to improve the methodology and receive viewpoints from the Member States on the status of the "State of OSH";
- Conduct a greater analysis at the national level;
- Outcome of a five year period should include re-structuring and re-thinking in the evaluation of the OSH exercise (continued improvement);
- The spirit of the Focal Points for the next "State of OSH" exercise is essential. Therefore, they should be involved from the very beginning in the elaboration of the new questionnaire and developing/establishing rules for information collection; and
- Dovetail both OSH efforts and plans and do not treat them in isolation.

Time:

- Earlier distribution of the manual to facilitate data collection.
 Question sets:
- The next monitoring exercise should be narrower and only focus on some indicators and/or topics;
- Provide a clear explanation on how and what the manual is to do;
- Preventive capacity needs much more of a breakdown to establish what is involved before the next OSH exercise is undertaken; and
- Provide clearer information regarding "emerging risks", i.e. the degree of importance, prevalence and priority.

Data collection:

- The national OSH reports currently indicate that the data collection tools are not available;
- Start with TNG members asking if data is available;
- Develop data collection from particular target activities to build up knowledge on particular risks;
- Data must be available at national level;
- Determine the availability of tools for the specific data collection; and
- The data collection exercise should not add additional workload.
 General points:
- The interview questionnaire should be asked in about six months time when organisations and individuals have had time to evaluate fully the "State of OSH" report and its findings, particularly for the end-users;
- Do not to loose the experiences gained from the Pilot Study;
- Include experts from across the Member States and from within the European Agency;
- Provide information about costs/benefits for preventive actions (e.g. prevention of accidents) and an optimum point;
- Include specific modules, e.g. a sector analysis (construction/agriculture) or to look in-depth in the service sector (to get a picture of the situation, e.g. violence/stress at work) or for a particular group of workers (e.g. women or job beginners);
- Establish a link between legislative/monitoring initiatives at Member State level and the "State of OSH", determine if employers and employees understand the philosophy of the EU directives on OSH.

Conclusions

Part 1 - Question 1

Without a clear definition of the meaning "State of OSH" individuals will interpet this differently. There is no doubt that qualitative information can be as valuable as quantitative. The comment was made by several interviewees that the "State of OSH" project represented a baseline overview that should be built upon in future OSH monitoring exercises.

Part 1 - Question 2

A number of strengths and weaknesses were reported at the interviews. Amongst the weaknesses reported were issues previously highlighted on the completed questionnaires, including, question format, lack of data, and problems encountered in determining comparisons, trends and evaluation. This indicates that future OSH monitoring exercises will need to build out such problem areas at the planning/development stage.

Part 1 - Question 3

The interviewees identified a range of group types (policy/decision) makers and external organisations that will directly benefit from the information presented in the "State of OSH" report.

Part 1 — Question 4

Prior to the interviews some Focal Points had ranked the options available in question 4. However, the majority had not and found there was insufficient time to provide an answer during the interview. Therefore, no discussion was included for the responses to Question 4.

Part 1 — Question 5

A number of interviewees reported that as a result of their national OSH report and through the identification of weaknesses in the national system some initiatives have been instigated. However, several comments stated that it was too early to comment on initiatives because the report had not been fully distributed. Others stated that currently the report's findings have drawn attention to particular occupational safety and health concerns such as stress and musculoskeletal disorders.

Part 1 - Question 6

A number of organisations both at the national level and at the European level have been identified as the target audience for receipt for both the national OSH reports and the consolidated "State of OSH" report.

Part 2 — Question 1

The results of the interviews produced a wide range of suggestions regarding the aims and objectives for future OSH monitoring exercises.

Part 2 - Question 2

This question received few responses mainly due to limited time available during the interviews. For this reason no discussion was provided.

Part 2 — Question 3 and Final Question

A number of different suggestions were submitted by those interviewed regarding how the European Agency should further develop the process of developing a European OSH monitoring system. Clearly, the responses to the open questions have produced a number of issues that will need to be reviewed and addressed as part of the preliminarily planning phase of any future OSH monitoring exercise. I forum.

4.4 Responses from the End-Users

As part of the Evaluation Project it was identified that feedback should be obtained from the end-users i.e. those that have a vested interested in applying the findings contained in the "State of OSH" report. To capture this information a short questionnaire was devised. This questionnaire, which is reproduced in Appendix II, consisted of ten questions connected to the following three topic areas:

- Intended use of the report;
- Presentation of the report's contents; and
- Added value of the report.

A total of two hundred and forty three end-users, twenty three at the European level and two hundred and twenty at the national level, were identified and provided with a copy of the "State of OSH" report together with a copy of the questionnaire. In total, twenty-seven end-users completed and returned the questionnaire. The organisations included as part of the end-user survey were:

- European Commission
- Regional inspectorate for occupational safety and health
- National institutions for occupational safety and health at work
- Regional institutions for occupational safety and health
- National safety organisations
- Workers organisations (trade unions)
- Government organisations:
- Ministry for Labour & Social Affairs
- Ministry for Economics and Labour
- Ministry of Labour
- Confederation of industry and employers
- Academic establishments, universities and research organisations
- Insurance organisations specialising in occupational safety and health, industry and public sector
- National Federation for occupational safety and health doctors
- Commission for Local Authority Employers

The responses received are presented in this section. It is emphasised that the information presented is a first attempt to gather the initial opinions from the end-users. The data presents no statistical significance merely the opinions, thoughts and suggestions from individuals after having received the consolidated report.

Question Group 1	Intended use of the "State of OSH" report
Questions	Q1 and Q7 (Refer to Figure 4)

Summary of findings:

• The responses provided by the end-users indicated a wide spectrum of use of the information contained in the "State of OSH" report.

Responses to the questions:

Question 1 - "For what purpose will you be using the information contained in the report?

Number of responses = 27

Question one asked the end-users to declare the purposes to which the information in the "State of OSH" report would be used. The responses indicated a wide application of intended use, including:

Policy/decision making:

- Setting policy;
- Setting standards; and
- To assist in the development of OSH campaigns and research work. Identification:
- To identify high risk sectors;
- To identify risks in public service sectors;
- To identify possible trends across Member States; and
- To identify new ideas/concepts.

Comparisons:

- To compare results with regional data; and
- To compare the "State of OSH" report with regional report.

Information source:

- Information of interested groups and individuals.
- General interest purposes;
- To establish information on standards; and
- To provide a quick overview about the "State of OSH" in the EU.

Information not used:

- Information would not be used; and
- Information would have little impact.

Question 7 - "How would you use the information contained in the report?

Number of responses = 27

Question seven asked the end-users how they intended to use the information presented in the "State of OSH" report. The responses received were varied and included the following descriptions:

Setting policy/decision making:

- To identify root causes;
- In support of discussions/decisions at national level;
- As the basis for discussions; and
- As reference/background information for setting policy.

Information source:

- For information on other Member States;
- As reference material for examining enterprises;
- As reference material for developing research; and
- In lectures.

Data sources:

• To show gaps and differences in the national data.

General points:

- Depends upon the problems in health and safety and the solutions being sort; and
- The report would not be used.

Conclusions/Recommendations

As indicated by the responses the "State of OSH" report was considered to be of general interest to
the end-users closely followed by individuals wishing to use it for the identification of high risk
sectors and for setting policy.

Intended use of the "State of OSH" report	Number of responses
General interest	9
Identify high risk sectors	6
Guide for setting policy	6
Would not be used	2

If the identification of high risk sectors is a common objective of the future OSH monitoring exercises then a clear definition of "high risk" would need to be established and agreed.

Question Group 2	Presentation of the "State of OSH" report
Questions	Q2 and Q10 (Refer to Figure 4)

Summary of findings:

- There was an almost even split (11 responses each) between the end-users reporting that the informa tion in the "State of OSH" report was presented in an easy to understand manner and those that said the layout was fairly easy once they understood the layout and contents; and
- The end-users had a mixed response regarding whether they would prefer to receive the full report of the summary report. The responses indicate that both report formats are required.

Responses to the questions:

Question 2 - "How did you find the presentation of the information in the report?

Number of responses = 27

Question two asked the end-users for their opinions regarding how they considered the information was presented in the "State of OSH" report. End-users received the full "State of OSH" report, which is a fairly large publication of some 478 pages. The responses to this question are given below:

Easy - Information was easy to understand 11

Fairly easy – once the layout and contents were understood 11

Difficult – the information was not clear 14

(Note: 1 no response)

Question 10 – "Are you only interested in reading the executive summary and the overall findings rather than the detailed chapters of the report?"

Number of responses = 27

Yes=10 / No=15 / No response=2

Question ten asked whether the end-users would be more interested in receiving the executive summary rather then the full detailed report.

Conclusions/Recommendations

- The response received regarding the layout and presentation of the information in the "State of OSH" report indicates that there is room for improvement. Eleven responses considered the layout to be "fairly easy" understood with four reporting it was "difficult". The format/layout of a future report should be included in the planning phases and with clear objectives set;
- Respondents that indicated "Fairly easy" or "difficult" responses, qualified their replies with the following points:
 - The information was not put in a logical order;
 - The information was a mixture of data;
 - There was too much repetition;
 - First impression was that there was much information, quite difficult to understand and not very user-friendly; and
 - There was too much text and not enough graphs.
- The responses received indicate a slight preference for End-Users to receive the full report rather thenthe summary report. Clearly both documents have a valid role to play in future OSH monitoring exercises. The responses indicate the need to ensure individual preferences are met before distribution of future "State of OSH" reports.

Question Group 3	Value of the "State of OSH" report
Questions	Q3, Q4, Q5, Q6, Q8 and Q9 (Refer to Figure 4)

Summary of findings:

- Over half of the end-users (15 out of 27) considered the information contained in the "State of OSH" report presented a comprehensive picture of the working environment in the EU;
- There was a mixed response from the end-users with respect to the chapters they found most useful in the "State of OSH" report. Most popular were Chapter 4 and the Appendices (12 out of 27 responses);

- Similarly to the most useful chapter, there was a mixed response to the chapters that were considered irrelevant. Sixteen respondents reported that none of the report was irrelevant;
- A greater number of respondents (16 out of 27) indicated that the report would not provide added value to them in their work; and
- A greater number of respondents (16 out of 27) stated that the report only provided "partial" answers to their questions in relation to occupational safety and health in the EU.

Responses to the questions:

Question 3 – "Does the report provide a comprehensive picture of the working environment with respect to the state of occupational health and safety in the EU?"

Number of responses = 27

Yes=15 / No=8 / No response=4

Question three asked the end-users to considered whether the "State of OSH" report presented what they considered to be a comprehensive picture occupational safety and health in the EU. of OSH in the EU?"

Question 4 - "Which Chapters of the report did you find most useful?"

Number of responses = 27

Question four asked the end-users to identify the chapters of the "State of OSH" report they found to be both most useful. The responses to this question are given below. The table shows the number of responses received for each of the six chapters and the appendices of the report.

Question 5 - "Which Chapters did you feel were irrelevant and not useful?"

Number of responses = 27

Question five asked end-users to identify the chapters of the "State of OSH" report they considered were irrelevant. The responses to this question are given below. The table shows the number of responses received for each of the six chapters and the appendices of the report

Question 6 – "Would the report provide added value to your work?"

Number of responses = 27

Yes=10 / No=7 / Not immediately but it would in the near future =9 / No response=1

Question six asked the end-user to indicate whether or not the information contained in the "State of OSH" report would provide added value to their particular work activity.

Question 8 – "Does the report provide answers to your questions in relation to occupation health and safety within the EU?"

Number of responses = 27

Yes=5 / Partially=16/ No=3 / No response=3

Question eight was set to establish whether, as far as the end-users were concerned, the "State of OSH" report provided answers to their questions in relation to occupational health and safety in the EU. The responses to this question are given below:

Question 9 – "If your answer to question (8) was "Partially" or "No" what information do you consider is missing from the report?"

Number of responses = 27

Question nine was associated with question eight in that it encouraged the end-users to report why they considered the "State of OSH" report as not, or only partially, providing answers to their OSH questions. The responses to this question are given below:

Lack of information:

- More information about teleworking;
- More information about the voluntary sector;
- More information about chemical agents, allegens, skin diseases and asthma; and
- More data on occupational diseases.

Methodology/analysis:

- More use of Eurostat/foundation data;
- The diversity of information does not allow for a general judgement to be made;
- More detailed analysis of local activities;
- More numbers to enable comparisons between safety and health outcomes to be made;
- Weighting of data against the number of people exposed.
- Professional opinion as a discussion and conclusion to the report; and
- Professional opinion of the results obtained.

General points:

- More "hard" facts; and
- Less text and more charts.

Question 11 (final questions) - "If you have further comments please provide them below"

Number of responses = 13

Question 11, the final question on the end-user questionnaire was an open invitation for any additional comments the reader may wish to contribute. Fourteen of the end-users did not provide any additional comments, those that did covered the following issues:

General comments:

- Very comprehensive report and useful;
- Good starting contribution towards the development of a monitoring system;
- To increase its acceptability it should be clearly the added value to the ESWC should be clearly explained;
- A good study though too ambitious; and
- The agency should be a service provider and not a political body.

Methodology:

- Clear explanation of aims and objectives of a future study, this could include:
 - establishing an overall picture of well-known and well-documented risks,
 - identification of information/data gaps;

- priority ranking of risks in Member States;
- Identification of the target group, this may need to encompass others than the decision makers (scientists, labour inspectors, occupational professionals, employers, workers;
- It may be necessary to introduce a different methodology for different aims of future OSH monitoring exercises;
- It is essential that the concept of "risk", criteria for estimations (e.g. trends), availability of data is clearly defined in future exercises;
- The data should be weighted with respect to the number of workers exposed to particular workplace hazards:
- Understand the criteria used by each Member State for risk prioritisation and action taken;
- Describe the national OSH systems, policies, regulations and instruments;
- Number of Focal Point answers is no indication as to the state of OSH;
- Future exercises should only be undertaken with a better methodology;
- More focused future exercise rather than attempting to catch all workplace risks; and
- Test future studies.

Data:

- The agency cannot generate new comparable quantitative data. The future should be to use Eurostat/Foundation data; and
- The data is not comparable.

Questions:

• Develop the questionnaire in conjunction with expert advisers.

Report layout:

- Understand the target group of future OSH reports;
- Provide an assessment of practical OSH solutions;
- Provide more hard facts;
- Provide more graphical information and less written text; and
- The executive summary version of the study gives a good overview, however the NACE and ISCO codes are missing.

Conclusions/Recommendations

- Over half (15 out of 27) of the end-user responses reported that they considered the "State of OSH" report as presenting a comprehensive picture of OSH in the European Union;
- The most popular sections of the "State of OSH" report were Chapter 4, "The working environment" and the Appendices each receiving 14 out of 27 responses. Four respondents said that the report was not useful;
- The most frequently identified report chapters (5 out of 27 responses) considered to be irrelevant included: chapter 3 major findings, Chapter 4 the working environment, Chapter 6 changes in working life. Though identified as being irrelevant there was no additional information provided to support the response;

- The responses received show a greater number of end-users (16 out of 27) saying that the report would not provide added value in their work activity, although, nine of these respondents indicated that the report would provide added value in the near future. Unfortunately there was no qualification as to when this would be the case (one month, six months or one year). The assumption is made that the end-users participating in this project representative a good cross section of typical end-users. On this basis the responses received it provides a clear indication that there is a need to produce an end-users' specification in order to match their needs and to produce a report of added value;
- Sixteen out of the twenty-seven responses received indicated that the "State of OSH" report provided only "partial" answers to their questions in relation to occupational safety and health issues in the EU. This high number of responses indicates the end-user requirements were not fully met in the study and further development in this area is required for future OSH monitoring exercises if the end-users are to consider the information useful; and
- The nature of the varied response regarding additional comments made by each respondent indicates that further development work is required to ensure end-user specification meets the actual demand of the readers.

4.5 Workshop with TNG OSH monitoring meeting 4/5th December 2000

At schedule dates throughout the calendar year the European Agency meets with representatives from the TNG OSH monitoring group to discuss related projects and topic issues. During the meeting held 4/5th December 2000 two agenda items included discussing the "State of OSH" report. The findings from these discussions are presented in this section.

The TNG members were divided into three working groups to facilitate in-depth discussions relating to a number of key questions on the following three aspects in relation to the "State of OSH" project:

- Data sources and methodology used in the Pilot Study,
- Major findings on the State of OSH in the European Union; and
- Initial lessons learned.

4.5.1 DATA SOURCES AND METHODOLOGY USED IN THE PILOT STUDY

Main findings from the working group's discussions;

- Information included in the Pilot Study came from different sources and has been mixed up;
- Questions were not always clear and/or precise enough (e.g. more details about objectives of individual questions needed);
- Methodology should undergo a trial before a new "State of OSH" project is undertaken;
- National quantitative information should be translated into qualitative information to facilitate comparisons;
- Comments for each table describing strengths and weaknesses are missing;
- A definition of 'risk' should be added;
- The user group has to be defined;
- The methodology used should be based on available data;
- The exposure indicators related to 'handling chemicals' should be better structured;

- The goal of the next "State of OSH" exercise should be more modest, e.g. focus on a sector and/or on special topics; and
- An analysis of the information in the national reports should be carried out by OSH experts during the consolidation process.

Additional points from the plenary discussion

- In advance of any future 'State of OSH' exercise an identification and a good assessment of the existing national systems in the fifteen Member States should take place;
- It would be essential to undertake weighting of the risk factors. The question is whether it should be a mathematical weighting or a subjective ranking;
- The present report only presents a global picture of the risk level in the individual Member States. But e.g. the contribution of sectors in a country is related to the risk situation. Therefore, in future clear information on the economic situation in each Member State should be added; and
- A proposal was made that Member States together with the European Foundation for the Improvement of Living and Working Conditions should design the next European survey on working conditions, e.g. one option could be to increase the sample size. It would be useful to have a set of common questions for European and national level.

Conclusions

- Analyse which information is available at national level. In general, no new exposure indicators are needed;
- Transfer national quantitative information into qualitative information;
- Trends should be backed up by information from national level (e.g. statistics);
- Clear definitions and clearer questions should be used;
- A weighting for the risk factors should be done in relation to e.g. national economy, population and how important a risk factor is seen;
- Present more information about national economic situation to understand better the situation in the field of occupational safety and health at work; and
- Quality issues should be integrated in a future "State of OSH" exercise.

4.5.2 MAJOR FINDINGS ON THE STATE OF OSH IN THE EUROPEAN UNION

Main findings from the working group's discussions

- Trends are not precise enough;
- It is not possible to give a complete picture because every Member State's OSH system is different;
- The added value of the Pilot Study is limited;
- The gender topic due to an inadequate approach has information gaps. It is proposed also for the risk category 'employment status' to use a sector approach; and
- More complete data on Member States' level regarding OSH provision has to be included.

Additional points from the plenary discussion

• A new generation of the "State of OSH" should focus on topics, e.g. chemical risks, psycho-social risks, sectors, instead of going for a general approach; and

• The contents of next "State of OSH" exercise is restricted to the availability of data at the national level.

Conclusions

- Place more emphasis on gender dimension;
- Focus the next "State of OSH" exercise on a set of OSH problems;
- Before deciding the set of indicators to be used wait for the results of the inventory on the national OSH monitoring systems; and
- Some members of the TNG will look more into details for some used exposure indicators/OSH outcomes.

Proposal:

INDICATOR	INDICATOR TO BE ANALYSED BY:				
HANDLING CHEMICALS LIFTING/MOVING HEAVY LOADS	AUSTRIA, FINLAND GERMANY, SWEDEN				
HIGH SPEED WORK	INTERESTED TNG MEMBERS PLEASE INFORM AGENCY THAT YOU TAKE OVER THIS PART				
OCCUPATIONAL SICKNESS ABSENCE	THE NETHERLANDS, UNITED KINGDOM				
INDUSTRIAL STRUCTURE OF MEMBER STATES	IRELAND				

4.5.3 INITIAL LESSONS LEARNED

Main findings from the working group's discussions

- Spend more time on the planning phase;
- Explain questions properly and test the methodology before the data gathering is started in the Member States;
- Comparable data is missing, e.g. data on preventive OSH capacity in the Member States; and
- A seminar on national OSH monitoring systems is strongly supported and it should be planned to publish a seminar report.

Additional points from the plenary discussion

- It has to be clarified if the "State of OSH" exercise is a report or a survey; and
- The term "preventive capacity" has to be explained and made operational, e.g. by means of examples.

Initial lessons learned from the consolidation process

• Unavailability of data at the national level;

- Different approaches adopted by each Member States;
- Different definitions and interpretations of the manual by each Member State; Member States used different methods for collecting and collating national data;
- National data was not available and answering sections of the manual relied upon expert opinion; Responses presented were often diverse and difficult to extract a true meaning. Responses often deviated from the question because the format of the manual was not explicit enough; and
- Classifications for various groups (sectors, occupations, age etc) were often different at the national level those presented in the manual.

Conclusions

- A trial of the methodology is essential before applying it in all Member States; and
- Basis for future work is a seminar on the existing national OSH monitoring systems including the preventive capacity in the Member States.
- Some members of the TNG will look more into details for some used exposure indicators/OSH outcomes.

5 ANALYSIS OF THE MANUAL AND ITS IMPLEMENTATION

In this Chapter the findings are presented following a review of the manual which took account of the comments received both on the completed questionnaires and during the interviews as well as the experiences of the contractor in undertaking the consolidation process.

5.1 Summary

Summary of findings:

- Any future OSH monitoring exercise would need to re-address several issues one of which would be to revise the data collection process/tool before undertaking a repeat;
- For the exposure indicators/OSH outcomes included in the "State of OSH" study the availability of occupational safety and health data remains fragmented across the EU;
- National data for a number of exposure indicators/OSH outcomes was not available. The lack of data should be used as part of the decision making process to identify what should be included in future exercises;
- Comparisons between EU data and national data was a major problem area and should be excluded from future OSH monitoring studies until a common data collection scheme has been adopted;
- Future "State of OSH" exercises should have fewer exposure indicators/OSH outcomes but with a more indepth focused approach; and
- Questions included in the future data collection process must be unambiguous, clear and provided with supporting documentation.

5.2 Scheme Used for the Exposure Indicators/OSH Outcomes

The manual consisted of five chapters for the collection of national data/information in order to prepare the national OSH reports, these included:

Chapter 1 - Introduction;

Chapter 2 - The working environment;

Chapter 3 - The context of work;

Chapter 4 - OSH outcomes; and

Chapter 5 - Preventive capacity in the Member States.

A structured scheme was included in each chapter of the manual for each exposure indicator and OSH outcome that the Member States were required to report on. This scheme is summarised below for "noise":

Additional quantitative data

Question (ESWC-data):

'Are you in your work exposed to noise so loud that you would have to raise your voice to talk to people?' Each Member State was requested to provide information about the issue mentioned above. Including the exact question posed at the national level.

Evaluation of the exposure indicator/OSH outcome

1. Comparison of ESWC-data and national data: Noise in the Workplace

If the Member State presented quantitative national data on the listed exposure category they were asked to derive some conclusi-ons, particularly in comparison with the ESWC-data, taking account of the following questions:

- Are there differences between the national data and the data from European sources?
- Does the additional national information highlight sectors or occupations that are not evident from ESWC-data?
- Other comments.?

2. Risk category: Noise in the Workplace

The following section requested each Member State to give their assessment of the categories they considered at the highest risk with respect to the listed exposure category. In determining the five sectors and five occupations at the highest risk account should be taken of quantitative information and relevant qualitative considerations.

- Indicate the 5 sectors with the highest risk (indicate them using the 2-digit NACE 1993 code); and
- Indicate the 5 occupations with the highest risk (indicate them using the 2-digit ISCO-1988 code).

If considered relevant, the Member States were then asked to identify the following:

- Which size of companies has the highest risk (small company 1-49, medium size company 50 499 or large company >500).
- Which gender category has a particular high risk;
- Which age category has a particular high risk.
- Which employment status is of importance.

3. Trends: Noise in the Workplace

In relation to trends, the Member States were asked the following questions:

- Is there a significant trend regarding the listed exposure category?
- The number of workers exposed has over the last 3 5 years:
- decreased:
- remained stable; or
- increased; and
- Are there any particular categories in sectors, professions, company size, gender, age or employment status that are expected to deviate from this development?

4. Evaluation of present state: Noise at the Workplace

Finally, each Member State was then asked to evaluate the present state regarding this exposure category and the related health and safety effects taking into consideration national statistics on occupational diseases and other data sources about the health situation of workers. The question included identifying the following:

- Preventive actions taken/planned are sufficient to deal with the existing exposure related problems;
- Development of additional preventive action is necessary; and
- Other.

5.2.1 COMPARISON OF EU DATA AND NATIONAL DATA

Additional quantitative data

As described in Section 5.2 the manual requested each Focal Point to present additional national data in response to the ESWC question. The main problem encountered was the lack of national data. There was no single exposure indicator for which all fifteen Member States presented additional data. Noise received the most with ten Focal Points submitting data. National data for vibration, lifting/moving, repetitive movement, strenuous working postures and occupational sickness absence were presented in nine national reports, the other exposure indicators were not so well populated with data. This highlights the fact that across the European Union occupational health and safety data remains fragmented.

From the national reports and the information provided in the questionnaires there remains a distinct lack of national data, or the ability the match national data with the questions asked in the manual. This is evident from the number of occasions expert opinions were called upon to formulate responses. Whilst expert opinion is a valuable source of qualitative information it does not provide sound statistical data and potentially opens the debate to its credibility and meaningfulness especially when executive decisions are based on such results.

One of the direct benefits of the "State of OSH" project has been to highlight areas where data is clearly unavailable. This has initiated some Member States to develop their own incentives to collect such data. The lack of data also prompts the question "Is such data worth collecting?" This is an important question, which must be fully assessed before a future European OSH monitoring exercise is conducted.

The shortage of occupational safety and health data at the national level is illustrated in the table below:

Legend:

Y Data provided in national reports allowed the European picture to be given.

N Data not provided in the national reports and therefore a European picture could not be given.

The above table provides a clear indicator of the areas where national data is missing. This information should utilised in deciding whether or not such data is worth the expense of collecting. Also, consideration should be given to whether some of the exposure indicators/OSH outcomes used in the Pilot Study have a valid place in future OSH monitoring exercises.

Comparison of EU-data and national data

Having presented national data the next question in the manual asked for a comparison to be made between this and the supplied EU data. This was probably the most controversial element of the whole project.

As detailed in Section 5.2 the first part in the comparison question asked -

"Are there differences between the national data and the data from European sources?"

A total of 66% responses in the national OSH reports could not make the comparison either because there was a lack of data or because of the difficulty in comparing the data. Only 34% of the responses in the national OSH reports made a comparison.

The second part in the question asked -

"Does the additional national information highlight sectors or occupations that are not evident from the EU-data?"

EXPOSURES INDICATOR / OSH OUTCOMES	SECTOR	OCCUPATION	COMPANY SIZE	GENDER	AGE	EMPLOYMENT STATUS
Noise	Υ	Υ	Υ	Υ	N	N
Vibration	Υ	Υ	N	Υ	N	N
High temperature	Υ	Y	N	Υ	N	N
Low temperature	Υ	Y	N	Υ	N	N
Lifting/moving heavy loads	Υ	Υ	N	Υ	N	N
Repetitive movements	Υ	Υ	N	Υ	N	N
Strenuous working posture	Υ	Y	N	N	N	N
Handing chemicals	Υ	Υ	N	N	N	N
High speed work	Υ	Y	N	N	N	N
Workplace dictated by social demand	Υ	Y	N	N	N	N
Machine dictated workplace	Υ	Y	N	N	N	N
Physical violence	Υ	Υ	N	N	N	N
Bullying and victimisation	Υ	Υ	N	N	N	N
Monotonous work	Υ	Y	N	Y	N	N
Accidents with more than	Υ	Y	Υ	Υ	Υ	N
three days absence						
Fatal accidents	Y	Υ	N	Υ	Y	N
Occupational diseases	Y	Υ	N	Υ	Y	N
Musculoskeletal disorders	Υ	Υ	N	N	N	N

A total of 76% responses in the national OSH reports could not answer the question, either because there was a lack of data or because of the difficulty in comparing the data. Only 24% of the responses in the national reports were capable of providing a response.

The table below presents all of the exposure indicators/OSH outcomes included in the "State of OSH" study and the number of Focal Points that could not complete the comparison questions.

			NO COMPARISON REPORTED				NO COMPARISON REPORTED		
EXPOSURES INDICATOR / OSH	YES	NO	LACK OF NATIONAL DATA	DIFFICULTY IN COMPARING DATA	YES	NO	LACK OF NATIONAL DATA	DIFFICULTY IN COMPARING DATA	
Phisical exposure									
Noise	4	4	2	5	4	4	3	4	
Vibration	3	4	4	4	3	2	6	4	
High temperature	0	2	9	4	1	2	9	3	
Low temperature									
Postures and Movement Ex	posure	S							
Lifting/moving heavy									
loads	5	2	4	4	4	2	5	4	
Repetitive movements	5	2	4	4	4	2	5	4	
Strenuous working posture	5	2	4	4	3	2	6	4	
Handing chemicals	3	2	6	4	3	2	7	3	
Psycho-Social Working Conditions									
High speed work	6	1	5	3	1	1	9	4	
Workplace dictated by									
social demand	3	1	8	3	2	0	9	4	
Machine dictated									
workplace	3	1	9	2	1	0	11	3	
Physical violence	2	2	7	4	4	0	9	2	
Bullying and									
victimisation	2	2	6	5	1	0	9	5	
Sexual Harassment	3	3	7	2	2	2	10	1	
Monotonous work	4	2	6	3	2	1	9	3	
Context of work									
PPE	1	2	7	5	1	0	11	3	
Information about risk	1	2	8	4	0	0	10	5	
Training	1	2	11	1	1	2	10	2	
OSH Outcomes									
Musculoskeletal	2	1	5	7	2	1	8	4	
disorders									
Stress	3	2	6	4	1	1	8	5	
Occupational sickness	5	1	8	1	5	0	10	0	
Overall totals	60	38	115	72	43	26	154	62	

Clearly the above table illustrates that the Focal Points found comparing the data difficult but more importantly was the concern expressed regarding the unreliability of the results/conclusions made from

comparing data from different collection processes. Because of the differences across Member States such comparisons were considered invalid.

Though much concern was expressed about the validity of comparing national data and EU data the effect on the findings of the consolidated report was negligible as no analysis was carried out regarding the comparison. Information was simply expressed in a table format whether a comparison was made and whether there was any difference between the data sets.

Member States should be on a level playing field to ensure consistency of OSH information collected and analysed. Several comments received stated that at this point in time Member States operate their OSH systems completely differently from one another, therefore making comparisons across national boundaries invalid.

Future OSH monitoring exercises using the existing national systems should avoid making any comparison between national data and European data.

Problems in comparing national and EU-date included:

- · Lack of national data;
- Different question asked at the national level;
- Different sample sizes used;
- Different methodology used at the national level; and
- Different sector and occupational codes used at the national level.

The above problems raise a number of associated questions:

- What national data should be collected?
- What exposure indicators/OSH outcomes should be included? and
- Are comparisons across Member States a valid means of presenting the state of OSH?

5.2.2 IDENTIFICATION OF RISK CATEGORIES

Whether or not national data was presented the Focal Points were asked to provide an assessment for each risk indicator of the categories considered being at the "highest risk". This should include five sectors and five occupations. Within this assessment consideration could be given to qualitative sources e.g. expert opinion, inspection reports, national priorities, research studies etc.

Only if considered relevant by the Focal Point did the manual request the identification of those at risk in the categories of company size, gender, age and employment status.

One of the main problems with the manual was the lack of clear and unambiguous questions. This was evident in the ESWC question as it was frequently reported that this did not match the national question for which data was being presented. The problems identified were basically two fold:

- A different question was asked at national level; and
- The question asked was too board and not clearly defined.

Standardisation of question set needs to be considered in the planning phase of future OSH monitoring exercises.

A clear description of the boundary conditions applied to each question should be included. Consider the ESWC question relating to noise:

"Are you in your work exposed to noise so loud that you have to raise your voice to talk to people"

Such a question will elicit a subjective response based on an individual's understanding and experiences which may not be a true reflection of the working environment across the EU. Raising your voice to talk in a noisy environment would be the case even if hearing protection was worn. Questions, where appropriate, should be qualified to establish whether personal protection is available and worn.

Similarly, with the question "Are you in your work exposed to handling or touching dangerous products or substances", a number of assumptions and a degree of ambiguity exists with such open ended questions:

- What does "exposed" mean (actually exposed or potentially exposed)?;
- Does the question assume that PPE is not worn?;
- Does the question assume that no other protection is afforded (i.e. local exhaust ventilation, controlled exposure, health surveillance)?;
- No definition was provided for "dangerous products"; and
- No definition was provided for "dangerous substances".

In another example, Section 3.3 of the manual, a question was asked relating to the wearing of personal protective equipment (PPE). However, this question was generic and covered all workplace activities and did not lend itself to the identification of the greatest risk areas or particular activities where PPE was not so prevalent.

Another area of ambiguity in the manual was interpreting the phrase "highest risk". Without clear guidance this will have a considerable number of different meanings across each Member State. For example, highest risk can include:

- Greatest number of workers known to be exposed (pro-active);
- Greatest number of reported injuries/ill health occurrences (reactive);
- Consequence based, i.e. the worst outcome (fatality);
- Frequency based, i.e. the number of times a particular hazardous activity is undertaken or an individual is exposed to a hazardous activity;
- Reported number of days off sick;
- Highest number of personal injury claims; and
- Individual perception of risk based on public surveys.

A precise definition of "highest risk" would need to be agreed and included in any future OSH monitoring exercises. The distinction between whether information is based on reported population or exposed population would also need to be included.

Addressing workplace risks should not solely concentrate on magnitude of the perceived risk. It is important to consider the exposed population to the hazard. Traditionally risk is expressed as a function of frequency (i.e. likelihood of occurrence) and severity (i.e. outcome). Selecting risks based purely on their outcome may only draw attention to high hazard activities thereby missing out low risks, which may have an equal if not greater impact on society. For this reason it is important to establish a clear definition of risk. Two possible risk categories are given as an example below:

- Low exposure high consequence (death, serious personal injury); and
- High exposure low consequence (deafness, dermatitis, prolonged illness)

The latter group can have considerable drain on resources with major cost implications not only to the organisations involved (insurance, lost production, lost time etc) but to the Member State for medical welfare. It is very unlikely that somebody will die from dermatitis or repetitive work but their inclusion in future OSH studies could be merited on the basis of their significant overall impact and cost to the Member State.

Identifying sectors/occupations at risk

In identifying the sector categories and occupational categories most at risk some national systems were unable to provide relevant information, either because of a lack of national data or because the NACE-code or the ISCO-code did not match national classifications. It is important to understand how national OSH systems classify sectors/occupations and whether an alternative system is available to ensure consistency of classification.

Identifying company size at risk

Consideration should be given to the categories used for reporting company size at risk. Many enterprises are collective entities comprising of a number of autonomous units. Consider the illustration below with two companies each containing 500 employees. Company "A" has its 500 employees all on one site, Company "B" has its 500 employees on autonomous multiple sites. Would an employee in Company "B" belong to a 500 strong entity or one of the smaller local site numbers?

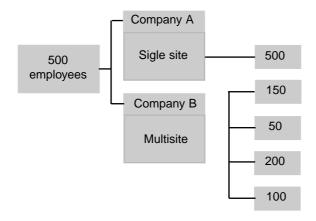
Frequently, the size categories included in the manual did not match those at the national level so consolidating the information across all Member States is unlikely to have provided accurate results.

Identifying gender at risk

Some Member States provided data on gender for noise, vibration, high temperature, low temperature, lifting/moving heavy loads, repetitive movements, sexual harassment, accidents with more then three days absence and occupational diseases. It should be established if there are particular workplace conditions in which one gender category is substantial at more risk than the other. If not, gender should be omitted. The area of interest should be the particular workplace hazard irrespective of who is at risk. The aim being to eliminate or reduce the level of risk.

Identifying age categories at risk

Little data was submitted regarding the age categories of individuals considered at risk. A number of responses stated that national data was not available to identify those at risk by age. Also, categories used in the manual were slightly different from those at the national level so the Focal Points could not easily fit the national data into the model in the manual.



Identifying employment status at risk

Insufficient data was submitted in the national OSH reports regarding those at risk as determined by their employment status. With this lack of information a European consolidated image could not be presented in the "State of OSH" report.

5.3 Trends

The third part in the analysis of each risk category was to establish if there was a significant trend, over the last 3 – 5 years regarding the listed exposure indicator. Two main problems were reported by the Focal Points and their national networks in achieving this:

- Lack of national data to establish trends; and
- Trend categories too general.

The trend categories available to select from in the manual included "decreased", "remained stable" and "increased".

It is implicit in this question that to report on trend, data is available, collected and analysed. However, in the majority of national reports this was not the case and a high use of national experts was made to establish the trend patterns.

There was no definition as to what "significant trend", "increased trend" or "decreased trend" implied. Similarly to risk, trend could be based on a number of factors, fatalities, injuries, exposed workers, insurance claims, lost time, cost, breaches in safety regulations, number of court/legal cases etc. Several comments were made that the trend categories were not well defined and therefore difficult to apply. Some of the national reports indicated how difficult it was to establish changes in trends as the responses frequently included multiple categories (i.e. both stable and increased). This made the task of establishing a consolidated trend pattern extremely difficult. Also, some Member States were only able to report changes in trend overall i.e. male/female workers alike, others presented individual gender data. This indicates that some Member States have more refined data then others.

Twelve questionnaires from the Focal Points and their national networks stated that for trend analysis expert judgement was used on some occasions, eight stating nearly all of the time. On this basis and on the reported difficulties in establishing trends, trend analysis should be omitted from future OSH monitoring exercises until data becomes available that permits such analyses.

5.4 Evaluation

The final question on each exposure indicator centred on providing an evaluation of the present state regarding its related health and safety effects evaluated in the Member State. The aim was to determine if the Member State planned any additional preventive actions to control the risks. The three options available to select from in this evaluation included:

- Preventive actions taken/planned are sufficient to deal with the existing exposure related problems;
- Development of additional preventive action is necessary; and
- Other.

Similarly to establishing trends, a high reliance was placed on expert opinion to derive the answers to the evaluation question. Eight of the returned questionnaires from the Focal Points and their national networks stated that such expert opinion was utilised nearly all of the time in completion of the evaluation question.

Again there was a lack of guidance regarding the terminology, especially what should be considered in the "other" category.

Preventive action taken or planned could encompass a wide range of controls from national legislation through to local inspections of particular enterprises. From a shared best practice point of view it would have been useful to have collected and discussed the particular preventive measures adopted by each Member State for each risk indicator. Many responses to the evaluation question in the national reports only included a tick in one of the above three categories without any further clarification as to what the current control measures were. Where the development of further action was planned to reduce the risks very little information was provided detailing what this action was or on what basis such decisions were made.

One of the weaknesses in the data collected was obtaining a coherent response to the measures that already existed in each Member State to control particular workplace risks. This links in with the implementation/effectiveness of EU Directives. A series of questions could be constructed in future OSH monitoring exercises to collect relevant information to share best practice on controlling workplace risks across each Member State.

5.5 Handling chemicals

The scheme devised in the manual for collecting occupational safety and health information on dangerous substances in the workplace focused on the following four categories:

- Carcinogenic substances;
- Neurotoxic substances;
- Reproductive hazards; and
- Exposures to biological factors (infectious and non-infectious biological factors).

For each of the above categories the manual asked a series of questions in three steps, these included:

STEP 1: Identification of substance

Identify five carcinogens that are considered to be the most important risks for the working population.

STEP 2: Identification of those at risk

For the five carcinogens identified, present Member State data on sectors and number of exposed persons (use 2-digit level for sector data). Give an opinion regarding trends in the exposure situation over the last 3-5 years using the following categories (the number of exposed workers has): decreased, remained stable or increased.

STEP 3: Evaluation of present state

How is the present state regarding this exposure indicator and the related health and safety effects evaluated in your Member State?

- Preventive actions taken/planned are sufficient to deal with the existing exposure related problems;
- Development of additional preventive action is necessary; and
- Other

No guidance or clarification was provided regarding what was meant by "most important risk". It could be possible to base such an interpretation on several factors such as the number of workers exposed, consequence of health effects short term and/or long term or the actual number of industrial injuries reported. It was left to the Focal Points and their national networks to decide how best to interpret what they deemed as "most important risk". Therefore, by combining the top five across all Member States in the consolidated report it is unlikely to provide an accurate picture as they may have been initially measured against different risk criteria.

Careful consideration needs to be given to develop criteria that will assist Focal Points in identifying the key risk areas that are not solely based on the most hazardous outcome.

Possibly the way forward would be to include a combination of:

- Historical records from national sources;
- Promoting a common understudying of "most hazardous" substances;
- Promoting a common understanding of "dangerous substance";
- Understanding how substances are are classified;
- Identifying most exposed populations;
- Identifying level of protection offered to exposed workers;
- Identifying level of occupational exposure standards imposed; and
- Identifying level of health monitoring undertaken.

The most exposed populations should consider factors such as prevention, control and mitigation measures. Workers exposed to hazardous substances in an environment that is well controlled, well monitored and with health surveillance should be at a lower risk than those without such controls.

For each listed dangerous substances national information should have been collected in relation to the current control regimes, i.e. national exposure levels, national legislation, to build up a practical picture of best practice across the European Union.

An alternative to asking for the top five dangerous substances would be to target particular hazardous substances from the start and then review their particular industrial application, control measures and accident/disease profile.

There was a distinct lack of information relating to the requirements of Member States when they conduct health surveillance and health screening of employees exposed to particular hazardous processes and/or substances. Control of risks should include the effectiveness of health surveillance and the associated information gathered. Future OSH monitoring exercises should include information how Member States conduct heath surveillance. For example, requirements to conduct health screening for noise, preemployment, post employment, every six months, every year, i.e. establish what criteria is used.

The amount of information collected in this section of the national reports was insufficient in relation to the importance of the topic issue. Handling/exposure to chemicals merits its own macro OSH study.

5.6 Emerging Risks

The manual contained a section for each Member State to indicate what they considered were the emerging risks. The following definition of an emerging risk was provided:

"emerging risks can be understood as new issues that have a negative impact on safety and health of workers that are expected to be in focus in your Member State"

The above question was considered too broad by the respondents lacking a clear definition. If emerging risks are new issues then there may be several areas of interest to support the information collected in this area:

- How a Member State identifies an emerging risk;
- On what basis does an emerging risk require additional focus;
- When does an emerging risk become a recognised workplace risk;
- Why a particular emerging risk was not considered as a risk initially (why was it missed);
- Whether an emerging risk is identified purely on outcome (historical knowledge); or
- Whether an emerging risk is identified by its hazard potential (what could happen) taking account increased knowledge.

In future OSH monitoring exercises further development of the information required in this area is necessary. If such a question is aimed to identify purely new risk areas, then reported issues such as "young workers", "stress", "repetitive strain" would be excluded from future reports. However, this was not the case and several national OSH reports presented emerging risks that can be considered as well known and documented workplace risks.

Existing national OSH monitoring systems should be capable of capturing and identifying emerging risks. This information should then be fed into the planning of the OSH monitoring exercise to select topic areas for inclusion. Emerging risks could be included as a special topic within the next "State of OSH" exercise.

The report section on Emerging Risks was not as comprehensively completed as other sections of the national OSH reports. Future OSH monitoring exercises will need to establish clear objectives regarding what is to be achieved from any question asked in this area.

5.7 Exposure Indicators/OSH Outcomes Used

A number of comments were received regarding exposure indicators/OSH outcomes that were considered to have been missed out of the "State of OSH" exercise, including:

- Radiation;
- Electromagnetic fields; and
- Exposure to chemical substance and their effects: asthma, dermatitis; allegens.

There was insufficient information from the Evaluation Project to clearly identify the exposure indicators/OSH outcomes that should be excluded from future studies. It would be misleading here to identify which factors should be omitted as such a decision should be part of the planning stage of future OSH exercises and the responsibility of the OSH monitoring management team (steering committee) to undertake on a logical and sound basis which can be communicated to all parties concerned.

5.8 Description of Preventive Capacity in Member States

A number of questions were included in the manual to collect information and data with respect to the preventive capacity of the OSH system within each Member State. The questions were focused on the following:

- The organisational structure of the national Occupational Safety and Health System;
- The Labour Inspection (or other enforcement bodies);
- Preventive Occupational Safety and Health Services in the Member State; and
- Number of workers that receive OSH training.
 Information submitted in the national reports did not do justice to such a valuable and important part of establishing the state of OSH. A greater understanding of how OSH is dealt with in the European Union is a fundamental part in establishing the "State of OSH" and as such requires further research.

A common understanding of each Member State's OSH system and how information/data is collected, handled and processed is required to enhance the planning of future OSH monitoring exercises.

5.9 Consolidation Process (Limitations of the Consolidation Process

Definitions and Interpretations

Each Member State may have had a different understanding and interpretation of the phrases used in the manual. For example, when Focal Points were asked "indicate the five occupations with the highest risk" to a particular hazard, was the highest risk interpreted as "high" because there were known fatalities, high because a large number of the people were exposed, or high because there were a large number of people who had reported suffering minor injuries?

The accuracy and interpretation of quantitative data

Member States used different method for collecting and collating national data. Therefore, it must be realised that the data presented by each Focal Point has been collected by different methods and, therefore, the consolidation cannot be interpreted as accurate quantitative data. Any quantitative data can only be interpreted as providing an qualitative overview of expert opinion.

Trends

A number of questions required the Focal Points to decide on a trend or to list what they considered to be the most frequently occurring risks. In most cases accurate quantitative data was not available. Therefore, in presenting a trend or highlighting a particular risk, it must be realised that the Focal Points made an informed professional judgement based on their knowledge and experience of the situation within their Member State. Therefore, the trends and commonly occurring risks presented in this consolidation report present the collation of the expert opinions of the Focal Points and are not based upon statistically sound quantitative data.

Diverse opinions

In a number of cases the contractor had to consider all responses given by the Focal Points and interpret them to present a European perspective. When this task was undertaken a fully qualified and registered safety practitioner was employed to undertake the task.

'No' and 'Other Response'

During the consolidation exercise a fourth category was introduced, 'No Response'. This was introduced to quantify data supplied by the Focal Points that deviated from the required response. To distinguish between a 'No Response' and a situation where the Focal Point had information which could not easily be categorised in the categories provided in the manual, the 'Other Response' was introduced.

Examples of deviations that occurred included:

- Data from the Focal Points who indicated more than one possible response;
- Data from Focal Points who did not indicate any of the three possible response types; and
- Data from the Focal Points who provided a qualitative response which did not fit into one of the predetermined categories.

Sectors and categories

In number of cases Focal Points were asked to provide data about sectors and occupations. However, the national data was not categorised as per the agreed list distributed along with the manual. Also, in some national reports Focal Points gave categories different to those listed. When this occurred, the contractor made a professional judgement as to which category to place the data.

Unavailability of information

In some cases, information that was required to complete the manual was unavailable. Wherever possible, this has been indicated within the consolidation report.

The question was not always answered

When the Focal Point gave a reason for not answering a particular question this has been given in the consolidation report. Where a reason has not been given a no response has been entered into the consolidation report.

Lack of response

In a number of cases the Focal Points failed to answer the question that was being asked. This could have been due to a number of reasons including:

- Insufficient data to form an opinion;
- A complete lack of data; or
- An oversight on the Focal Point in completing the manual.

5.10 Missing Exposure Indicators/OSH Outcomes and other information

There are a number of risk indicators and OSH outcomes that were not included in the pilot study, including:

- Exposure to radiation;
- Exposure to electromagnetic fields;
- Skin disorders (dermatitis); and
- Health care information

The balance between gathering information that is either hazard based (i.e. noise, vibration, heat etc) or consequence based (white finger vibration, dust disorders of the lung, lead toxicity etc), requires consideration for future studies. The Pilot Study included the following OSH outcomes:

- Fatal accidents;
- Accident with more than 3-days absence;
- Occupational sickness absence;
- Stress; and
- Work-induced musculoskeletal disorders.

A review of the effectiveness of health and safety legislation would provide valuable feedback whether or not the OSH policy matches the actual outcomes and whether enterprises are aware and comply with the legal requirements in order to control, minimise or eliminate workplace hazards.

An important part of any OSH data collection exercise would be to establish whether there are specific or general requirements to control workplace risks and how these have been implemented at the national level. The existing questions in the manual could be enhanced to determine how risks are currently managed. For example, consider noise, the question could be structured to gather relevant information and share best practice approaches, as detailed:

- Exposure indicator Noise;
- Specific EU legislation;
- Member State regulations;
- Member State controls (regular site visits/audits, annual review of reported incidents);
- Member State guidance how to control the specific risk;
- Member State controls limiting noise levels, limiting exposure times, mandatory wearing of PPE, requirement to carry out health monitoring etc.; and
- Risk Categories (i.e. those exposed sector and occupation).

5.11 Conclusions

Following the review of the manual the following conclusions are presented:

- A positive outcome from Focal Points and their national networks using the manual was highlighting areas where there is a shortage of national OSH data;
- The state of OSH monitoring programme needs to develop a programme plan for setting goals and objectives one of which should be the agreed identification and collection of relevant national data;
- The lack of data for a number of exposure indicators/OSH outcomes should be used to decide whether such data is worth the expense of collecting. Also, whether these indicators have a valid place in future OSH monitoring exercises;
- Due to the lack of available national data future OSH exercises should have a reduced number of exposure indicators/OSH outcomes but with a more focused approach enabling Member States to collect relevant information;
- A number of respondents commented the need to include other exposure indicators, e.g. dermatitis and exposure to radiation etc in future "OSH monitoring" exercises. Whilst this is a valid point what is important is to ensure a transparent selection basis for their inclusion. This may well be on the grounds that little is know on a particular workplace hazard but such criteria must be built into the planning phase of the exercise;

- Planning for future OSH exercises needs to consider what risk categories are of relevance. Because
 of the lack of data for the risk categories age, gender, employment status these factors should be
 excluded from the OSH monitoring exercise as it currently stands. It may be feasible to initiate
 schemes to collect relevant data particularly if targeted at a smaller number of selected sectors or
 occupations but as proven in the "State of OSH" project this is not possible on a European scale;
- Comparisons of data across Member States will only be possible with a more harmonised data collection scheme. However, this is unlikely to be achieved in the immediate future during which time another OSH monitoring exercise may be undertaken. Therefore, it is recommended that future OSH monitoring exercises excludes the requirement to compare Member State data with

European data;

- Clear definitions and guidance will be required for future exercises. This will need to cover question sets and definitions;
- It should be determined if the size of an enterprise can be a reliable indicator of risk. With the general lack of data on company size and the problems with the size categories, the risk category "company size" should be omitted from future studies;
- Handling chemicals and exposure to dangerous substances is an important workplace hazard. The level of information collected in the "State of OSH" is insufficient for such an important issue. Rather then tag it onto an overall OSH monitoring exercise it should be allocated a macro-study on its own merits to focus attention and gather information regarding the current levels of risk;
- If data is available the distinction between the total number of workers exposed to hazardous substances with proper controls and protection and those without should be made;
- Emerging risks could be included as a special topic area within the next "State of OSH" exercise to assist in future planning programmes; and
- A greater understanding of how each Member State operates it national OSH system is needed to assist the planning of future OSH monitoring exercises.

6 FUTURE OF "STATE OF OSH" EXERCISES

This chapter discuses the future of "State of OSH" exercises by considering necessary changes to the management structure, content, size, complexity and planning. A series of recommendations are presented based on the findings of the Evaluation Project to improve the existing OSH monitoring system.

There is no doubt that the information presented in the "State of OSH" report represents a valid "snap-shot" in relation to the exposure indicators and OSH outcomes analysed. However, it does not provide a means to selectively compare one Member State against another primarily because of the differences in cultures and data collection methods. This must be clearly documented in any future exercise.

The information in the "State of OSH" report is not based, nor was it intended to be, on sound statistical data. Any statistical data/analysis should have been conducted by the Member States in identifying the key risk categories. The "State of OSH" report represents the overall national findings from the fifteen Member States.

From interviewing the Focal Points, 9 out of 14 believed that the aim of the "State of OSH" project was not achieved for a number of reasons. Some of which relate to the unavailability of information, differences between the OSH systems across Member States and not least the definition of "State of OSH". This indicates a need to revise the data collection process and to clarify terms and definitions used within.

The "State of OSH" project collected and analysed historical data, i.e. it was reactive (i.e. events that have occurred) and contained little information regarding proactive issues with the exception of the question regarding the use and implementation of personal protective equipment (PPE). Consideration should be given to include pro-active measures, such as, introduction of appropriate control measures, implementation and effectiveness of EU Directives, health monitoring/screening, site visits/checks and cost factors.

Further consultation is needed to determine whether a qualitative approach meets the objectives of the project. Comments received consider the "State of OSH" report as presenting only a qualitative overview, which was not based on a thorough analytical approach. This may necessitate the need for a more structured approach to identify high risk or vulnerable work groups.

6.1 Managing the Process

It has been recognised that the "State of OSH" project was a study of considerable size and complexity. The success of which relied upon the efforts of the Focal Points and their national networks. Future exercises could be improved by changing the management arrangements/structure.

The reporting structure adopted for the "State of OSH" project was to use the nominated Focal Points in each Member State to facilitate the information gathering process and to prepare their national reports. Each Focal Point was instrumental in the reporting process. Such a process was effective in ensuring that fifteen national OSH reports were produced. However, it was vulnerable to the application of different interpretations and data collection processes. Consideration should be given to the introduction of a OSH monitoring management group (consortium or a steering group) to support the information gathering

exercise. As such, the management group would comprise of competent organisations using recognised experts.

There are a number of possible arrangements that could be introduced to oversee the management of future OSH monitoring exercises. Whatever management structure is chosen it is important to include relevant members within this team to oversee the successful implementation of future exercises. A number of possible management approaches are discussed below:

Steering Committee

The European Agency sets up a Steering Committee to

- Set objectives for the exercise;
- Develop the data/information collection methodology;
- Test/review the methodology; and
- Manage the implementation of the exercise.

Each member of the steering committee being nominated by the Focal Points and by the European partners.

Consortium (comprising of a limited number of competent organisations)

A consortium of professional organisations under the supervision of the European Agency is set up to manage the OSH exercise. Members of the consortium will:

- Prepare data/information methodology;
- Manage the implementation of the OSH exercise in all Member States; and
- Report on the findings.

The Focal Points will provide relevant access to national information and check/comment on the results obtained.

Task Force Group

The European Agency sets up a Steering Group to:

- Set objectives for the exercise;
- Develop the data/information collection methodology;
- Test/review the methodology; and
- Implement the exercise in a limited number of Member States;

A limited number of Focal Points will be requested to participate in a particular element of the OSH exercise. This will be a departure from the original exercise in which all Member States participated in its entirety.

The creation of an OSH monitoring management group should see one its objectives to debate the approach adopted. Particularly, whether a qualitative approach supported by a sharing of information how risks are managed across the European Union would be the way forward. The contribution of the European Agency should be to provide added value in addition and support of activities undertaken by Eurostat and the Dublin Foundation.

6.2 Content of Future Exercises

The intended management structure must decide on the contents of future OSH monitoring exercises based on the requirements of the end-users through the development of an end-user specification. Following this, consultation with the national experts would confirm whether or not the requirements are achievable before conducting the actual exercise.

It was obvious from the information gathered in this Evaluation Project that considerable use was made of expert opinion at the Member State level. Predominantly, the data has been based on reactive issues and concentrated on the outcomes i.e. the effects experienced. Consideration should be given to include pro-active measures in the models to learn how workplace risks are currently controlled and monitored. Therefore, additional surveys and site visits may be included as case studies to provide a complete picture regarding a particular workplace hazard.

One of the frequently reported deficiencies of the "State of OSH" report was the inability to provide any feedback regarding the implementation and effectiveness of European and national regulations. The OSH monitoring exercise should focus on a number of key issues such as:

- Understanding the workplace hazard, its effects and outcome;
- Understanding who is exposed to the hazard;
- Understanding what the current controls are protecting the workforce; and
- Identifying residual risk areas that require additional controls.

As such the method adopted to gather the information should reflect these areas of interest. Firstly, the EU and national legislative controls will indicate whether or not all Member States operate to the same standards. Secondly, national data and records will provide details of who is exposed to the particular hazard under review. This should be based on two fronts, actual number of reported injuries/illnesses and those currently exposed. A wider scope of published literature and involvement of national bodies may be required, possibly including data/records from the medical profession and insurance organisations. Future OSH monitoring exercises should include a series of relevant questions to determine how EU and Member State safety and health regulations are implemented and how there effectiveness is measured and understood in the way it was intended. This could include:

- The means by which laws are made and reviewed;
- Relevant laws;
- Enforcement practices and compliance strategies in terms of:
 - enforcement activities, history and penalties (number of prosecutions, enforcement/improvement notices served);
 - self assessment/regulation regime in operation;
 - role of (if appropriate) the Member State OSH regulator;
 - OSH promotional campaigns in operation; and
 - the means of measuring performance of enterprises and of the implementation of the OSH laws.

To further support the OSH information collected a case study could be included which may take the form of a survey and/or a series of site visits of a particular occupational sector as a snapshot of that working environment. The revised data collection process for collecting the information could then include

Workplace hazard:	<hazard review="" theme="" under="" workplace=""></hazard>
EU legislation:	<details of=""></details>
Member State legislation:	<details of=""></details>
Member State objectives:	<objectives goals="" reduce="" risks="" to=""></objectives>
Comparison of policy with outcome	<pre><policy effective="" not="" or=""></policy></pre>
Member State controls:	Occupational exposure limit Mandatory PPE requirements Health surveillance requirement
At risk: Costs:	Sector/Occupation Number of workers exposed nationally Reported illnesses Reported industrial injury claims Estimation of costs associated with the hazard
Case study:	Sample survey/interviews of workers Sample inspection by OSH authority
Continued improvement:	Initiatives for improvement

6.3 Size and Structure of Future Exercises

One of the key findings from the Evaluation Project is that any future OSH monitoring exercises should first be piloted before being implemented. The question about what should be included in such an exercise needs to be considered and should be one of the first areas the OSH monitoring management team tackles. There was a mixed response to the question "Should the next exercise include all the indicators or just a selection" and no unanimous answer can be provided. It may be feasible to conduct a preliminary exercise to establish the key indicators from each Member State, which could then be included in the monitoring exercise.

There are a number of possible formats under which the next OSH monitoring exercise could be undertaken. Consideration should be given to undertaking smaller scaled exercises with fewer indicators but on a more frequent basis. Such an exercise could be associated with a particular European initiative on workplace hazards, a so called "theme-week", possibly based on the existing structure of the manual:

- Physical risks;
- Posture and movement;
- Handling chemicals;
- Psycho-social working conditions; and
- OSH outcomes.

Other possible formats include:

Part 1 - for a selected number of Member States

- Identify and focus on a particular workplace hazard (e.g. RSI, Stress);
- Initial set of questions to Member States in relation to the hazard;
- Inspectors carry out sample visits to collect relevant information;

Part II – for a selected number of Member States

• Member States collected relevant information on sector/occupation basis;

Part III - for a selected number of all Member States

• Member States details how particular workplace risks are managed;

Part IV - for all Member States

Particular topic areas are addressed and reported (emerging risks, new workers, young workers etc)
 Future OSH monitoring exercises may not require all Member States to simultaneously produce a comprehensive national state of OSH report. A basic understanding may be all that is required and not such a detailed snapshot as produced in the Pilot Study. A sampling process may be more practical and provide additional benefits such as practical information how particular risks are managed across Member States.

6.4 Tool for Information/Data Collection

The responses from the questionnaires and the interviews conducted clearly show that further development work of the data/information process would be necessary if a similar approach was to be adopted. Such development work would need to include:

- Clearer descriptions on how to collect the data;
- Guidance on how much effort would be required;
- Clear format/structure of the questions;
- Exclusion of questions requesting comparisons; and
- Exclusion of questions asking for trend analysis.

An indication was provided by the responses from the end-users that their interest was in the identification of "high risk" work groups/work activities. This further supports the need to produce clear guidance on definitions such as "highest risk" and how such groups could be identified.

The use of questionnaires must be conducted on a trial basis first to enable those completing it to establish how it works, to allow questions to be asked and to provide feedback if necessary to refine the process before implementation.

Electronic models provide a faster method for recording and analysing data, which can be structured to provide, built in technical help and error traps to limit/prevent certain types of responses thereby ensuring consistency in the submissions. Therefore, future OSH exercises should consider employing questionnaires in an electronic format.

With the development of a comprehensive data/information collection process it is important that resource is given to provide training and a transfer of information to those who are required to follow its requirements. This is supported by the number of occasions where Focal Points and their networks required assistance from the European Agency to clarify particular elements of the manual. Such training could also be the forum for discussing terminology and other relevant issues. The inclusion of a glossary of terms should be included in future exercises.

Comparison of national and EU data

The results from the questionnaires clearly show that there were problems comparing national data with the European data for a number of reasons namely:

- Lack of national data available to compare with the EU-data;
- Different question asked at national level;
- Different methodology (sample size) at national level;
- Different occupation codes to ISCO-1998; and
- Different sector codes to NACE-1993.

Without the similarity between national OSH systems drawing statistical results from such comparisons would be unsound. Until there is a common data collection and analysis scheme across the EU future OSH monitoring exercises should avoid asking for comparisons of national and EU data.

Number of Exposure Indicators and OSH Outcomes

There was a mixed response with the question regarding the adequacy of the number of indicators/outcomes used in the study. The majority of responses indicated that they were sufficient. The findings of this Evaluation Project shows that for many factors included in the "State of OSH" project data was simply not available. The number of exposure indicators/OSH outcomes will be directly related to the depth of future OSH monitoring exercises.

Some of the exposure indicators/OSH outcomes can present difficulties in identifying the underlying root causes because the interrelationships. Care has to be taken to clearly distinguish between reported problems and their root cause as there may be significant differences between the two. Workers may have the tendency to report the OSH outcome rather than the root causes. If effective controls are to be introduced then these should be targeted at the root causes.

Illustrated below is an example to demonstrate the possible interrelations with stress, which may have several contributing factors some of which themselves being exposure indicators. Future OSH monitoring exercises would need to carefully plan for factors such as stress if the root causes are to be identified and assessed.

Clear criteria should be established for selecting which exposure indicators/OSH outcomes should be included in future OSH monitoring exercises.

National OSH Systems

Clearly a major reinforcement of the findings from the "State of OSH" project are the differences across the Member States with respect to their national OSH system. As the responses indicate some Member States have a national system for collection OSH data and some do not.

Individuals with expertise and experiences of their national OSH system should be consulted to provide a greater understanding of these systems and to facilitate best practice in the development of future OSH monitoring exercises.

Before future OSH monitoring exercises are undertaken it would be prudent to conduct a high level review of the national OSH systems to understand their role and function. This should be a prerequisite in developing the data collection process. Such a review would also assist in determining whether in the long term a harmonised OSH monitoring scheme across each Member State is a feasible option.

6.5 Planning/Project days

Future OSH monitoring exercises should include an estimation of the effort and time required. This will allow adequate resource planning to be undertaken by each Member State prior to conducting the exercise.

Planning and estimating the resources to carry out a comprehensive project as the "State of OSH", can be helped by maintaining accurate records of the project days spent. The existing data does not provide this and future studies should aim at capturing such valuable data. Of the twelve Member States that returned the questionnaire, eleven underestimated the effort required to produce their national OSH reports.

6.6 Overall Recommendations

A number of overall recommendations have emerged from information gathered during the evaluation of the "State of OSH" project, these have been grouped and summarised below:

Management process:

- Establish an OSH monitoring management/steering committee to consider the findings of this project and to plan/oversee the management of future exercises;
- Establish a European OSH monitoring programme plan incorporating objectives both short term and long term;
- In the project definition phase of future OSH monitoring exercises clear objectives should be produced for: end-users, function of the data collection process, function of the national report and function of the consolidating process;
- Any expert group assembled to provide technical input should have full executive powers rather then a purely advisory role;
- Develop an end-user specification from which the objectives and planning of future OSH monitoring exercise can be based; and
- All future OSH monitoring exercises should be tested (piloted) and assessed to determine whether the objectives are both realistic and achievable.

Data/Information collection tool:

• Future OSH monitoring exercises should provide a common description how to collect the relevant data making use of existing experts in this field;

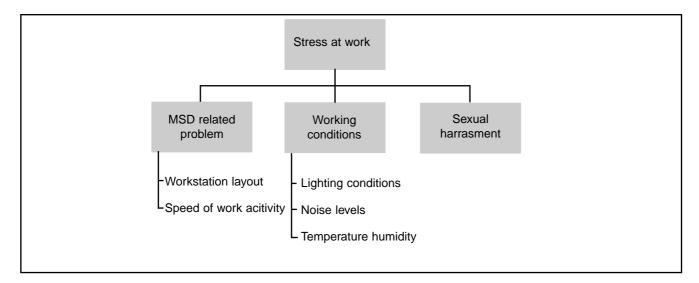
- Revise the method and process adopted for collecting the data/information before commencing with future OSH monitoring exercises;
- Future OSH monitoring exercises require a greater provision of explanations of the terminology used to ensure a common understanding. A glossary of terms should be produced; and
- Standard criteria and guidelines, such as the meaning of "at risk", "identifying emerging risks" etc, should be developed and incorporated into the data collection process.

Size and structure:

- Future OSH monitoring exercises should focus on a smaller number of exposure indicators/OSH outcomes, but to conduct such studies on a more frequent basis; and
- An alternative approach should be considered with the requirement for a selected number of Member States to gather and present relevant OSH information rather than a wholesale all do approach.

Content:

- Future OSH monitoring exercises should promote the sharing of practical information and experiences how workplace risks are managed within each Member State;
- Future OSH monitoring exercises should avoid making comparisons between national data and EU data;
- Future OSH/monitoring exercises should consider providing information relating to costs of workplace hazards assessed (lost working time, lost production, medical care and insurance);



Future OSH monitoring exercises should review policy set against the actual achieved outcomes;

- Future OSH monitoring exercises should consider adopting a theme based approach. This could include a particular industrial sector, occupation, workplace hazard or process; and
- Collect greater information regarding the number of workers considered exposed to particular risks under review (number of workers, duration of exposure etc).
 General points:
- A review should be conducted to detail how each Member State is organised for the collection and analysis of occupational safety and health information.

APPENDIX 1/ QUESTIONNAIRE 1

Feedback from Experts, Focal Points and their National Networks

The questionnaire is in three parts. Please complete in any case Part I and then only the part relevant to yourself.

Part I

Individual's details (name, organisation, country, position, email, ...)

Part II

Experts who were involved in drafting and producing the manual for the data collection.

Part III

Focal Points and their National Networks including national Social Partners & TNG OSH Monitoring experts who were involved in preparing the answers to the questions in the manual and production of the national report.

PART I - INDIVIDUAL'S DETAILS

Name:

Organisation:

Country:

Please state your role

a) within your organisation:

b) regarding the European Agency's network:

Date:

Email:

Can the European Agency contact you to clarify any issue? Yes/No

Part II - PREPARATION OF THE MANUAL

Answer all Questions if you contributed to the Development and Preparation of the Manual

- 1) What was the basis for selecting the questions used in the manual? Comment:
- 2) Did the experts drafting the manual use criteria for selecting the particular risk categories included in the manual?

Yes/No

Comment:

3) On what basis were the contents of the manual agreed? Comment:

4) Did the experts drafting the manual make an assessment to estimate the time and effort required to complete it?

Yes/No

Comment:

5) Did the experts drafting the manual discuss in detail how to use the manual with their Focal Point and National Network?

Yes/No

Comment:

6) Did the Focal Points review and assess the useability of the manual and pass comments as part of the overall drafting process?

Yes/No

Comment:

7) Did the experts drafting the manual provide training to the Focal Points in relation to what was meant by the manual and how best to complete each of the various sections?

Yes/No

If yes, please specify how:

8) Did the experts drafting the manual provide guidance to the Focal Points in relation to the terminology used e.g.: the meaning of: "ESWC question" (noise question excludes/includes wearing of PPE), "highest risk", "significant trend" and "preventive action"?

Yes/No

Comment:

9) Did the experts drafting the manual conduct an assessment to establish the weaknesses in the process? Yes/No

Comment:

10) As part of the drafting procedure was there a validation and approval process before issuing the manual to the Focal Points?

Yes/No

Comment:

11) Did the experts drafting the manual carry out an assessment at national level to establish the following?

How relevant the questions were?

Yes/No

Whether such information was available at national level to answer the questions?

Yes/No

How much effort would be required to answer the questions?

Yes/No

Comment:

12) Did the experts drafting the manual provide guidance to the Focal Points on what action to take if national data was not available to answer a particular question? Yes/No

Comment:	
13) Did the experts in the drafting process conduct a prelimi manual? Yes/No Comment:	nary exercise to establish the useability of the
14) What criteria do you consider should be used in select aiming at monitoring the State of OSH in the European Unit Please comment	
15) Do you have any additional relevant comments? Please comment	
Thank you for completing the questionnaire	
PART III - FOCAL POINTS AND THEIR NATIONAL THE NATIONAL REPORT	NETWORKS CONTRIBUTING TO
Answer all questions if you contributed to the preparation of	of the national report
1) How did you manage completing the manual? The manual was self explanatory and easy to follow: A little guidance was required: Some guidance was required: Manual was difficult to follow and understand and much gu	□ □ □ Iidance was required: □
2) Approximately how much effort was utilised in preparing Focal Point (number of days): National Network including national Social Partners (number Experts of TNG OSH Monitoring (number of days): Others Groups(please specify)	
3) Did you under/over estimate the effort required to produ Correctly estimated the number of days required: Under estimated the number of days required: Over estimated the number of days required:	uce the national report?
4) Did you ask the Agency to provide assistance to clarify an No: Yes; only one occasion: Yes; on several occasions, but not more than five: Yes; on a regular basis, more than five occasions:	
5) Was there a defined plan and process for preparing your	national report?

Yes/No Comment:

6) Was there any need to revise your plan Yes/No Why?:	and/or the process	adopted?		
7) Is there a national system for collectin manual?	g health and safety	information	n such as th	at requested by the
8) Which data source did you mainly use i	n answering the fol	lowing secti	ons of the r	manual?
		DATA SO	OURCE	
SECTION IN THE MANUAL	EUROPEAN DATA (2ND SURVEY DUBLIN, EUROSTAT)	NATIONAL DATA	EXPERT OPINION	COULD NOT COMPLETE THIS PART OF THE MANUAL
WORKING ENVIRONMENT (SECTION 2)				
CARRYING OUT THE COMPARISONS OF				
NATIONAL AND EU DATA				
IDENTIFYING THE RISK CATEGORIES				
IDENTIFYING THE TRENDS IN THE WORKPLA	CE			
EVALUATING THE PRESENT STATE OF				
EXPOSURE IN THE WORKPLACE				
CHANGING WORKPLACE (SECTIONS 3.1 & 3.	2) 🗆			
CONTEXT OF WORK (SECTIONS 3.3, 3.4 & 3.	.5)			
OCCUPATIONAL SAFETY & HEALTH OUTCOM (SECTION 4)	IES			
PREVENTIVE CAPACITY OF THE OCCUPATIO SAFETY & HEALTH SYSTEMS FOR EACH MEMBER STATE (SECTION 5)	NAL			
Please specify the national data sources us	ed:			
Comment:				
9) What were the main sources of expert of	opinion used in prep	oaring your r	national rep	oort?
Focal Point: National Network including national Social Ministries' departments (others than Focal Institutions/ organisations linked to Minist Universities, research institutions: Professional organisations: Official published national reports (e.g. re) Other published sources/reports: Other (please specify):	Point): ries:			

10) How often did you need to use expert judgement to answer the questions in the manual?

	TIME SPENT USING EXPERT JUDGEMENT			
QUESTIONS IN THE MANUAL	RARELY	ON SOME OCCASIONS	ON A REGULAR BASIS	NEARLY ALL THE TIME
IDENTIFYING SECTORS AT RISK				
IDENTIFYING OCCUPATIONS AT RISK				
IDENTIFYING COMPANY SIZE AT RISK				
IDENTIFYING GENDER AT RISK				
IDENTIFYING AGE AT RISK				
IDENTIFYING EMPLOYMENT STATUS AT RISK				
IDENTIFYING TREND				
EVALUATION OF PREVENTIVE MEASURES				
11) Are the exposure/OSH outcome indicator ensure a broad approach to OSH at work? Yes/No Some key risk indicators were missing: Please state which indicators were considered Some risk indicators were considered irrelevant Please state which indicators were considered 12) The number of exposure/ OSH outcome in	missing: nt to be irreleva	□ □ nt:		kpiace nazarus to
Not enough:		П		
Sufficient:				
Too many:				
Comment:		_		
13) How was the national network involved in	n drafting the	national report	?	
Giving contributions to parts of the report:	3	Π΄		
As members of expert panels:		П		
Did not contribute to the national report:				
Commenting on draft report: Comment:				
14) Were there any cases of difference of opin Yes/No	nion between	the experts?		
In cases of different opinions what approach of Comment:	did you use to	resolve the issu	es?	
15) To what extent did you use the European report?	data (2nd Sur	vey Dublin, Euros	stat) in prep	paring the national
Did not use				
Some limited use				
Used as occasionally				

Some limited use	
Used as occasionally	
Used all the time:	
Comment:	
16) Was the scheme for each exposure/OSH ou	stcome indicator provided in the manual useful?
If "Yes" please give details:	
If "No" please give details:	
17) Does the national report provide added va	lue?
Yes/No	
If "Yes" How?	
If "No" why not?	

18) Please identify the main problem areas in preparing your national report.

Manual Section	Problem Area	
Questions asked (ESWC)	Did not understand the question Different question to that asked at the national level Question too broad, not clearly defined	
Comparison of EU-data and national data	No national data available to compare with the EU-data Different question asked at national level Different methodology (sample size) at national level Different occupation codes to ISCO-1998 Different sector codes to NACE-1993	
Identifying the risk categories	No national data available to identify sectors most at risk Different sector codes used compared to NACE-1993 No national data available to identify occupations most at risk Different occupation codes used compared to ISCO-1998 c No national data to identify age categories of those most at risk Different age categorises used at national level than those in the manual Experts unable to identify risk categories using national data. No national data for gender available No national data for company size available Different company size categories used at national level than those in the manual No national data for employment status available. Different categories for employment status at national level than those in the manual No readiness within national network to provide appropriate data Common understanding of risk missing	

Manual Section	Problem Area	
Identifying trends	No national data available to establish trends in the risk indicators	
	No other national information sources available to determine trends	
	Experts unable to identify trends in risk indicators using current national data	
	Unable to compare other national information sources to establish trends	
	Categorisation of trends too general	Ш
Evaluation of the risk indicator		
	No criteria available to judge whether national trend is acceptable or not	
	Experts could not determine whether trend was good or bad	П
	No trends could be determined therefore no evaluation	
	could take place Evaluation question was too general	

19) Do you have any experience at a national level with respect to the necessary programmes for monitoring the "State of OSH"?

Yes/No

If yes, please give a short description of your approach (method, procedure, indicators, time period etc) and experiences you found:

Please comment....

20) What do you consider are the main improvements that could be made to the process of establishing a monitoring system with regard to the State of OSH in the European Union? Please comment......

THANK YOU FOR COMPLETING THE QUESTIONNAIRE

APPENDIX 2/ QUESTIONNAIRE 2

Feedback from End Users

Please complete all Sections and all questions.							
Name: Organisation Please state y Date:		ition and reaso	n for us	ing the consolic	dated st	ate of OSH info	ormation:
	policy/sta	=	_	information co gh risks sectors/		-	neral interest etc).
Information Fairly easy - o	Information was easy to understand: Fairly easy - once the layout and contents were understood: Difficult - the information was not clear:						
	No:						
4) Which cl Chapter 1 Chapter 4 Chapter 8	napters o	of the report di Chapter 2 Chapter 5 Chapter 9	id you fi	ind most useful Chapter 3 Chapter 6 Chapter 10	?	Chapter 3 Chapter 7 None	
5) Which cl Chapter 1 Chapter 4 Chapter 8	napters o	lid you feel we Chapter 2 Chapter 5 Chapter 9	ere irrele	evant and not use Chapter 3 Chapter 6 Chapter 10	seful?	Chapter 3 Chapter 7 None	
Yes: No:	·	provide added		•			
7) How woul (Please comn	-	e the informat	ion cont	tained in the re	port?		

8) Does the report provide answers to your questions in relation to occupational health and safety within the EU?

Yes:
Partially, it provided some answers:
No, it did not answer my questions:

9) If your answer to question (8) was "Partially" or "No" what information do you consider is missing from the report?
(Please comment....)

10) Are you only interested in reading the Executive Summary and the overall findings rather than the detailed chapters of the report?
Yes:

No:

European Agency for Safety and Health at Work

THANK YOU FOR COMPLETING THE QUESTIONNAIRE

(Please comment....)

If you have any further comments please provide them below.

APPENDIX 3/ QUESTIONNAIRE 3

Questionnaire from the structured interviews with the Focal Points, European Commission and Social Partners

Evaluation of the European Agency Information Project 'The State of Occupational Safety and Health (OSH) in the European Union - Pilot Study' - Brief for Interviews

Introduction

After the production of the report the European Agency commissioned an evaluation of the whole process to identify strengths and weaknesses of the information project. To date all Focal Points have been asked to complete an electronic questionnaire and return it to the European Agency.

To progress with the evaluation and to get more in-depth information about experiences/ viewpoints of involved people, interviews will be arranged with the Focal Points and European Social Partners' representatives. The aim of the interviews will be to explore various aspects of the information project and to consider how best to proceed within future similar projects. The interviewer will NOT be asking for elaboration of the completed questionnaires.

To assist you in preparing for the interviews (one interview will last ~ 45-60 minutes), please find below a list of questions which will be leading for the interview. However, please appreciate the aim is to use the questions as the basis for discussions and not to provide a rigid framework.

Furthermore, if you feel that there is a particular point about the information project or the production of the report, which has not been considered in the questionnaire or detailed below, please feel free to raise it during the interview. Alternatively you may like to send your comments directly to the responsible project manager within the European Agency, Ms. Anette Rückert (mailto:ruckert@osha.eu.int).

Leading Questions for the Interview

Data collection and the Production of the 'State of OSH' Report

- 1. The aim of the information gathering exercise which culminated in the production of the report was 'to determine the State of OSH in the EU.
 - Do you feel this aim was met? If not, why? (e.g. insufficient exposure/ OSH outcome indicators, complexity of the manual, information gaps for several risk categories on European/national level, incomparability of national OSH systems)
- 2. Which is the most important strength/weakness of this information project/ report?
- 3. Who do you feel will gain most benefit from the information project?
- 4. Please rank the underneath main problem areas related to the preparation of your national report:
 - Questions of manual too broad, not clearly defined
 - No national data available for risk categories such as sectors, occupations, company size, age, gender and employment status

- On national level different methodology used to monitor state of occupational safety and health
- Link to OSH performance in Member States missing
- Experts unable to identify trends/ give evaluation (reasons?)
- 5. Have any national initiatives been undertaken as a result of:
 - i) your national report?
 - ii) the European report?
- 6. Who is the target audience for:
 - i) your national report?
 - ii) the European consolidated report?

FUTURE INITIATIVES

Based on the experiences and evaluation results of the Pilot Study the European Agency aims at developing a European monitoring system for structural OSH information in close co-operation with the Member States and the European Commission (part of Work Programme 2001).

With this in mind, please consider the following questions:

- 1. What should be the aims and objectives of such a European monitoring system?
- 2. What will be the benefits of the European monitoring system? Who will benefit from it?
- 3. How do you think the European Agency should process further in the development of a European monitoring system on the State of OSH?

In answering this question consideration needs to be given to the following:

Availability of data on national/European level:

- How to improve data availability regarding risk categories such as gender, company size, age and employment status? (e.g. use of other data sources, additional surveys, interviews)
- How can the Agency keep pace with the changing world of work (e.g. new types of employment, work organisation, growing service sector) and the need for other OSH data describing this impact?
- Throughout the Member States, how do we obtain more comparable/ standardised data on the state
 of OSH? (e.g. develop a set of standardised questions for European survey and national surveys on
 working conditions)

Methodology for data collection:

- To avoid ambiguity, should data/information on exposure/OSH outcome indicators go together with a rating system (scale) to describe their risk/seriousness? If yes, do you have any thoughts on the way this could be done? (e.g. are there within your Member State any nationally recognised system for risk rating?)
- How could a link be established between preventive capacity in the Member States and the state of OSH? (Preventive capacity is understood as all elements of resources that are used in a Member State to improve safety and health of employees e.g. legislation, enforcement, training)
- Which indicators regarding exposure/ OSH outcome/ OSH performance should be added to the existing manual? Should any be eliminated?

Tools for data collection

- Which tool would you prefer? (e.g. manual, electronic data registration system).
- Should there be supplementary tools to support the data collection? (e.g. performance audits, inter views with enforcement officers, politicians and/or safety professionals to check implementation of OSH systems within Member States?).

Any comments/ additional issues to be mentioned:

Thank you for your help and co-operation.

European Agency for Safety and Health at Work

Evaluation of the State of OSH in the EU — Pilot Study

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