

## **REGULATORY IMPACT ANALYSIS**

**of the introduction of the Directive 89/655/EEC on the minimum safety  
and health requirements for the use of work place equipment by  
workers at work**

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## **Executive Summary**

### Background

This Directive is one of thirteen Directives, which set out specific requirements to protect workers in accordance with the general principles set out in the Framework Directive 89/391/EEC. It was chosen for study because it illustrates virtually all the main issues in the area of health and safety at work. In particular:

- it is industry-wide and not confined to one area of economic activity e.g. mining or agriculture;
- it affects both manufacturing and service industries;
- it relates to both public and private enterprises;
- the activity has been regulated by state agencies both in Western European and Socialist countries for many years. While there is no argument about the general aims of the regulatory regime, there are considerable institutional and legal differences between practice in both Member and applicant States;
- because of long-standing regulation of the area, public inspectorates have a dialled knowledge of industrial behaviour. This is in contrast to the state; of public knowledge in other areas of the Acquis, e.g. the technical requirements for electrical or electronic devices using low voltage, or the extent of problems relating to electro-magnetic compatibility;
- in spite of this, however, it is often difficult to assess the impact of one of the suite of health and safety directives on enterprises, the arbitrary attribution of costs to particular Directives may give spurious precision to the assessment;
- studies of the impact of these regulations, which in general came into force in 1992 have been studied elsewhere in the European Community, notably in the UK. from which relevant inferences may be drawn; and more recently studies have been done in other applicant States, for example Poland, which are also useful, though necessarily they do not relate; to ex-post assessment of the problems of implementation.

### Aim of the Directive

Like most of the other Directives in this suite, this Directive requires an assessment of the risk to employees and others, and practical steps to reduce these risks; and to provide appropriate information, instruction and training. In addition, the equipment used in the workplace must comply with specified good design practice, either by modification or in the last resort by replacement.

### Aim of this Study

The general aim was to show how far a quantitative assessment could be made of the impact of this Directive on the Lithuanian economy as a whole, and on the principal economic operators. More specifically it was hoped to show

- the extent to which current Lithuanian labour law and practice met the EU requirements;
- what problems could be expected in implementing these new regulations, as judged both by the enterprises themselves and by experienced members of the State Inspectorate;
- what would be the likely costs to industrial and commercial organisations and to the State apparatus for health and safety regulation;
- what benefits, if any, might be expected.

### Provisional Conclusions

- The information provided by the excellent (80%) response rate of the State Inspectorate staff gave a valuable additional insight into the problem. Most of the information was qualitative, since by definition there was no empirical experience of adapting the regulatory system or any part of it to a radical change;
- Industry's response was also very good when judged by international experience of similar reviews, (over

40%), The predominant concerns about the costs of either modifying or replacing equipment were increased by uncertainties about the cost and availability of capital, and the future international competitiveness of parts of Lithuanian production industries;

- Good quality, detailed advice to industry is essential if the Directive is to be implemented efficiently, that is in accordance with the agreed timetable and at minimum cost. This advisory service is only a small percentage of full labour costs, but can only be provided at the initiative of the State, either by the staff of the Ministry of Labour, or more probably the State Labour Inspectorate, or possibly by consultancy organisations or on an agency basis. The absence of such a service will, however, both increase the costs of implementing the Directive, and prevent benefits to industry from being realised.
- The conclusion from this is not in itself surprising, The firms that are likely to have the greatest difficulty in implementing this Directive (and indeed a large number of others of a similar type) are those which are relatively capital intensive, but using old and technologically obsolescent equipment. They may also be under-capitalised, and if their future profitability is uncertain because of expected competition from firms in the EU, the cost of capital will be high and its availability low. But their circumstances would be present even without the effect of this Directive. The Directive itself is unlikely to be the main cause for concern, though it will be a contributory factor. But by being a specific charge which will occur on a specific date, and a date moreover which is not (legally) postponible, it assumes an importance greater than its real economic effect.

### Summary

1. The costs to the economy in total of implementing the Directive may be considerable, but widely spread, and (with the exception of necessary equipment modifications) manageable by the enterprises involved. For each individual enterprise the costs are likely to be only a very small fraction of total labour costs;
2. The introduction of a more formal system of risk assessment is likely to lead to productivity improvements in the use of both labour and equipment. Such gains would need to be only small to offset the costs;
3. Introducing the changes following the requirements of this new Directive will be made easier and less costly for individual enterprises if simple, easily understood information and advice is made available. This will need to be done centrally and therefore has a budgetary impact. There will be a policy option whether the cost of such a service should eventually fall in whole or in part on public funds, or whether the costs should be transferred to the enterprises themselves. However it is done, it will not alter the fact that providing such a service will have the same economic cost;
4. Estimating the costs of modifying existing plant and equipment to meet the Directive's requirements is more problematic. Whether it makes sense for enterprises to seek to modify equipment depends on
  - the age of the equipment and its efficiency in use,
  - the market prospects,
  - the ability of the particular enterprise to mobilise the funds to carry out the necessary modifications;
5. The last point may, in most cases, be the significant one. In general, it is true that small and medium-sized enterprises, currently satisfying a home market (often protected at present) have the most difficulty in raising the finance for any changes, whether required to meet regulatory requirements or to exploit future market opportunities. This is a situation, which is not unique to the implementation of this Directive, and would need to be looked at more broadly by Government in the context of future support for this type of enterprise.

## **Regulatory Impact Assessment**

### Introduction

The Directive is one of two selected by the Lithuanian Government for initial study, the work being managed by external consultants with Lithuanian technical assistance under the Phare SE1L programme. These Directives were chosen for study because it was believed that they might exemplify the range of

practical issues involved in making informed objective judgements on the possible impact on the Lithuanian economy as a whole and on the different economic operators within it.

These studies have limited but specific objectives:

- Their principal aim is to identify positive and negative economic impacts (benefits and costs);
- The intention is that the studies should be used to assist administrative and political decisions;
- In this particular case the context is the negotiations with the European Community on the admission of applicant States, of which Lithuania is one, to the Community - the precise timetable is for the existing Member States to determine;
- In order to promote wider understanding of the impact assessment process, more detail is included in this Report than would be required for the decisions to be taken by the competent authorities. When the impact assessment process becomes established as a routine administrative tool, a good deal of the information included in this report might well be summarised and included in appendices. It must always be borne in mind that such assessments should get the attention of the decision-makers within Government, should be no longer than is justified by the importance is being assessed: should be timely; and should include no more detail, economic or technological, than is essential to support the analysis;
- The assessments should not seek to emulate more extensive academic studies of industrial situations, and in particular should make the maximum use of existing sources of information;
- Reports should incorporate recommendations, which have regard to practical constraints, including in particular, the impact on the national budget, the rigidities of the existing institutional framework, and the disproportionate effects on particular types of economic operator.

Work done for particular impact studies may be useful in other policy-making contexts or in academic research. All information should be available without restriction to interested parties, while guaranteeing confidentiality of information supplied by industry where it can be shown that individual commercial interests are likely to be damaged by publication.

### The Directive in its Context

The Directive on Workplace Equipment is one of fourteen Directives, all issued between 1989 and 1993, which deal with the health and safety of workers in a particular domain. The general objectives and philosophy of the safety of workers are set out in the so-called "Framework Directive" (89/39 I/EEC) and the thirteen following Directives deal with specific aspects, but all are governed by the same general objectives, requirements and obligation of the various parties. For example the specific Directives all require the employer to take steps to identify and assess hazards and to provide workers with appropriate information and training to minimise the ensuing risks. Thus it can be assumed that managers will become increasingly familiar with the use of formalised risk assessment techniques in a variety of situations. This learning process will therefore progressively reduce the managerial time needed to carry out future risk assessments, even where in the past they have been carried out in a different part of the health and safety domain. Good management practice will also ensure that where risk assessments are required for the different aspects of health and safety identified in the portfolio of Directives, they are carried out simultaneously or possibly combined.

But it is important to recognise that the fourteen Directives to which reference has been made (for further details see Annex 1) do not constitute a sort of Community Labour Code. The principle of subsidiarity provides that national institutions are responsible for detailed implementation of health and safety rules, in accordance with historical practice in the Member States and the requirements of the thirteen specific Directives.

Indeed one of the principal characteristics of health and safety management in both western and central European countries is the existence over a long period of publicly-funded regulatory bodies, whose broad objectives are similar to those of Directive 89/391/EEC. There are, of course, differences in practice, stemming from differences in political philosophy and legal basis and from consequent differences in the

historical development of the regulatory institutions.

These circumstances sharply distinguish this study from that reviewing the Directive dealing with low voltage. In this case, the long standing involvement of state regulatory bodies in the health and safety of workers means that they provide a continuous flow of information on the behaviour of enterprises under a given set of regulatory conditions, and on the efficacy of the regulations themselves. This information also gives a useful cross-check on the perception of the impact of the regulatory system by the enterprises themselves.

Moreover, because health and safety regulation has been in force in all industrial countries for most of the last century, practical experience in one country may be very relevant in the context of another

## **Outline of Work Programme and Methods**

### 1. Universality

Like the complementary Directive dealing with the health and safety characteristics of the workplace itself (89/654/EEC), this Directive applies, in principle at least, to virtually all activities by workers within the economy, including all service activities, whether carried out in publicly or privately owned institutions. The difference in the likely effects will relate to the types of activity, and in particular the amount (and value) of the equipment needed to allow workers to carry out allotted tasks.

### 2. Main Topics

For the purposes of analysis, it was decided to concentrate on four main activities which management of enterprises would need to consider, in order to ensure that the requirements of the Directive were met. They are:

- risk assessment,
- information and training,
- equipment modification,
- equipment replacement.

### 3. Sources of Information

As stated in the Introduction of this Report, the behaviour of managers and workers in relation to health and safety practice generally has been directly studied in virtually all industrialised countries for many years. This study of industrial behaviour has formed the basis for developing a body of regulation and good industrial practice, which it is the specific responsibility of a public agency to implement. In Lithuania this function is performed by the State Labour Inspectorate. It is vital, therefore, to make the maximum use of this body of knowledge and experience, which by the nature of the regulatory function performed, is being continuously updated.

The second source is industry itself. It does not follow that a well-informed state apparatus automatically ensures that industry is well-informed. There are several reasons for this, including:

- inadequate resources in the public agency,
- other operational priorities,
- commercial pressures on the enterprises, resulting from increasing,
- exposure to market forces, including those in international markets,
- lack of data in readily useful form.

It is important to recognise also that a postponement of the date of implementation of this Directive to 2005 has been negotiated. Given the very short time-horizon for most industrial management decisions, executives may not yet have seriously considered the implications of this Directive for their business. It is undoubtedly true that other Directives which have a bearing on the use of workplace equipment (for

example the Machinery Directive) will have been implemented earlier than 2005 and may have significant effects on equipment costs.

#### 4. Resource and timing

The work was planned with specific regard to the resources likely to be available, and the need so far as possible to fit in with the general timetable of work designed to support Lithuania's application to join the European Community. Since this was the first attempt to use a formal impact assessment process in relation to health and safety regulation, the information to be collected and analysed was modest (relative for example to the knowledge and experience of individuals in the Labour Inspectorate). The object was to show that useful information could be collected quickly and analysed, and could, if necessary, and if the time and resources were available, be expanded to provide a more detailed picture. Another advantage of beginning in a modest way was to ensure that no more data collection and analysis was done than the importance of this Directive warranted, as estimated by the possible impact on the economy generally and particularly on business.

#### 5. Information Surveys

The first survey sought to use the experience of the State Labour Inspectorate staff in relation to current Lithuanian practice and to invite their judgement

The Inspectorate is currently working under considerable pressure. The written questionnaire circulated to the staff through the Directorate H.Q. contained only 7 questions, and was designed to be answered in 30 minutes or less. The study timetable required that the questionnaires should be completed within 2 weeks (see Appendix 10).

The second survey was addressed to enterprises, including publicly owned service providers (see Appendix 10). A group of 150 such enterprises was selected, with the advice of the Department of Labour and the State Labour Inspectorate, the principal criteria for selection being the likelihood of their being significantly affected by the Regulation (see Appendix 2). This method of selection seemed right in the circumstances, since the principal objective was not to provide statistically based estimates of the cost of the Regulation to the economy as a whole, but to try to measure the severity of the impact on particular industries.

From the earlier survey responses it was possible to contact a small group of enterprises, which had responded to the general survey and which was willing to provide information on aspects of the Regulation which had been identified as likely to be especially difficult (see Appendix 9). If time had allowed, and the more detailed study had appeared justified, this last group could have been enlarged, using the results of the longer enterprise survey as a guide.

The surveys also illustrated another important point. It is notoriously difficult to persuade potential respondents to give serious attention to telephone enquiries. This was much less of a problem than might have been expected from experience elsewhere in the EU, for example in the UK. There are reasons for this:

- the questionnaires were relatively simple;
- the survey of official past experience not only mobilised a large fund of good quality information, but also was issued with the authority of the responsible public agencies. The result was a response rate of about 80%, even though the period allowed for reply was short;
- as stated earlier, enterprises in industries thought to be likely to be seriously affected were targeted. The survey, therefore, helped to concentrate the attention of those who already believed that they would confront a perhaps serious problem. 40% responded within a month, and enabled some further, more detailed investigative work to be carried out with the resources available, including some quantitative estimates of costs.

A general comment on surveys based on work done in the EU and elsewhere, is relevant:

- Such surveys, particularly those relating to personal evaluation or judgement, have known statistical imperfections, which makes sophisticated statistical procedures difficult to carry out, and the results consequently of great uncertainty;
- In all voluntary surveys, or any with a short cut-off time, there is bias in relation to the actual respondents. This is because larger (or better organised) enterprises have access to better information, staff familiar with survey methods, and more frequently specialists in the area of activity under review. Health and safety managers are a case in point. Such bias may be significant in surveys relating solely to past events, but is further exacerbated when estimates of future outcomes are required. This is because of greater familiarity with forward estimating techniques, based on the availability of more comprehensive and accessible data. - This caveat, however, does not diminish the value of this type of survey work. Indeed this pilot study shows how a focussed picture can be built up from simple information, and the costs of acquiring it are not great. These comments also help to explain the problems, which smaller enterprises have in complying with existing regulations and understanding how significant to them changes in regulation are likely to be. These problems are general, but in the case of regulations in the health and safety field they include
  - a large body of written rules not all of which apply to the particular type of enterprise,
  - absence of routine experience of health and safety procedures; for example, carrying out risk assessments,
  - priority for managers of the business to ensure survival in competitive markets and therefore to down-grade any activity which does not appear to contribute to that objective.

## 6. Further Information

In relation to EU Regulations generally, a good deal of information is publicly available in Member States. Some knowledge of this work can be useful, both by highlighting problems which have been met elsewhere in the E.U. and in providing confirmation of the validity of assumptions which have to be made to interpret data, and to estimate quantitative effects.

Attention is drawn particularly to a study commissioned by the UK Health and Safety Executive (the national regulatory body for this area of activity) in 1997, that is some five years after the detailed national regulations had been introduced.

Relevant conclusions include:

a) Knowledge of the existence of the work equipment regulations

Large organisations	81%
Small organisations	48%
Manufacturing industry	76%
Service industries	64%

The applicability of the regulations to the enterprise surveyed was consistently under-estimated, and especially so in the case of small enterprises in the manufacturing sector

b) Risk assessments

Organisations carrying out risk assessments specifically related to equipment or machinery hazards were recorded	
for 1993 (that is the year after the regulations were introduced)	25%
for 1997	71%

Since virtually all enterprises use workplace equipment, as defined by the Directive, and for the use of such equipment a risk assessment is required, some relevant conclusions were:

- getting the attention of enterprises to do risk assessment is difficult and slow;
- small enterprises, and especially those in traditional non-manufacturing industries, that is agriculture and forestry, may be the most difficult to contact;
- advice on carrying out risk assessments must form part of the information plan;
- simple, standard written records of risk assessments are the least expensive way to demonstrate that this part of the Directive is being implemented.



c) Information and training

Most enterprises surveyed saw this activity as extending over the whole area of industrial health and safety. Though some identified difficulties to organising such training (availability of trainers and of relevant training material and information, making employees available and pressure not to interrupt production processes). But it was not useful to try to make an arbitrary allocation of costs to one Directive, when the activity is actually organised for the function as a whole,

d) The greatest importance in terms of organisation and cost was associated with the elimination of or reduction to acceptable levels of the risks involved in using the equipment. But for the UK at least, the need to replace equipment completely rather than to modify it in order to conform with this Directive, was thought to be unlikely,

A word of caution is necessary in interpreting the UK experience

- the UK economy is much larger than that of Lithuania,
- it has a very different structure (for example Lithuania has 20% of all workers in agriculture, the UK less than 5%),
- there is now long experience of the EU regulatory process in the UK.

This suggests that discussion of these problems with applicant States may be more directly relevant and complementary to the UK studies although fewer in-depth analyses of this, or contiguous areas of activity are currently available.

## Basic Lithuanian data

The structure of Lithuanian industry by percentage employment in economic activities is at Appendix 1. The sectors relatively poorly represented in the questionnaires to enterprises in the pilot study are agriculture, and with that the consequent under representation of small and medium sized enterprises, many of which (and especially the smallest) satisfy specific local markets. This problem is referred to later in the Report. However the State labour Inspectorate did highlight the expected difficulties of the agricultural sector, which correspond with evidence from Member States.

### General Information about the respondents and the enterprises

60 out of 146 questionnaires were received from companies (~41% response rate). The majority of the respondents were representatives of big enterprises, where more than 500 people are employed. This fact might present a subject for bias due poor representation of small and medium enterprises, who are likely carry more burden of compliance costs. Nevertheless only those companies that are capital intensive and consequently constitutes the largest part of the big enterprises are likely to be most affected by the provisions of the Directive and thus appears to be relevant object for studies.

TABLE 1. STRUCTURE OF THE RESPONDENTS BY COMPANY'S SIZE

Number of employees in the company	Number of the respondents
<50	1
50-200	9
200-500	14
> 500	35
<b>Total:</b>	<b>59<sup>1</sup></b>

<sup>1</sup> One of the respondents didn't provide a number of employees in the company.

The biggest number of the respondents representing separate industries were identified in manufacturing of food products and beverages (9 respondents) and manufacture of furniture and manufacture of other goods which was not included in other economic activity classification items (6 respondents).

TABLE 2. STRUCTURE OF THE RESPONDENTS BY ECONOMIC ACTIVITY (FOR THE INDUSTRIAL CLASSIFICATION SEE APPENDIX 3)

Economic activity	1	3	4.1	4.10	4.11	4.12	4.14	4.15	4.17	4.18	4.2	4.21	4.22	4.3	4.4	4.6	4.7	5	6	7	9	14
Number of the respondents	2	2	9	2	2	1	4	1	1	2	1	1	6	4	2	4	4	4	4	1	2	1

23 respondents from the industry answered that they are directly responsible for health and safety at work matters and 36 answered negatively. There were answers in addition explaining who is responsible for health and safety at work (director (1 respondent), the heads of manufacturing departments (5 respondents)). Some respondents claimed that they are responsible for controlling health and safety matters (4 respondents out of 36 who answered negatively) or indirectly responsible (4 respondents out of 36 who answered negatively).

The majority of the respondents' companies are manufacturing enterprises. In addition some manufacturing enterprises besides their major activities are providing services or are involved in retail, wholesale or foreign trade within their main activities. 8 of the respondents are non-manufacturing enterprises.

TABLE 3. STRUCTURE OF THE RESPONDENTS BY TYPE OF ACTIVITY PERFORMED

Type of activity performed by the respondents	Manufacturing	Services	Wholesale	Retail	Import-export
Number of the respondents	51	26	25	23	23

52 out of 56 questionnaires were received from inspectors (~80% response rate).

TABLE 4. STRUCTURE OF THE RESPONDENTS BY THE STATE LABOUR INSPECTORATE'S ORGANIZATIONAL DIVISION

Regional divisions of the State Labour Inspectorate	Questionnaires received	Actual number of labour inspectors in each division	Response rate
Vilnius	13	17	76%
Kaunas	7	9	78%
Klaipėda	6	7	86%
Šiauliai	5	6	83%
Panevėžys	5	7	71%
Utena	3	3	100%
Alytus	2	3	67%
Marijampolė	4	4	100%
Tauragė	1	1	100%
Telšiai	2	2	100%
Division of explosive and combustible technologies	3	5	60%
Railway division	1	1	100%
<b>Total:</b>	<b>52</b>	<b>65</b>	<b>80%</b>

### Analysis of the responses

Response to the questionnaire for enterprises proved that the majority of the respondents in the industry are aware of present and new regulation concerning safety at workplace. All of the respondents answered positively to the question whether they know current regulations on health and safety at work. The majority of the respondents (85%) are familiar with the provision of the Directive regulations, which will come into force in 2005. 90% of the respondents claim that there is a person in the company who is responsible to keeping up to date with regulatory changes.

TABLE 5. ANSWERS TO THE QUESTIONS CONCERNING RESPONDENTS' KNOWLEDGE OF THE PRESENT AND NEW REGULATIONS AS WELL AS RESPONSIBILITY FOR KEEPING UP TO DATE FOR REGULATORY CHANGES

Questions	EQ3		EQ4		EQ5		
	Yes	No	Yes	No	Yes	No	Not answered
Number of the respondents	60	0	50	10	54	5	1
Percentage of the respondents	100%	0%	85%	17%	90%	9%	1%

EQ3. Do you know about regulations currently in force dealing with the safe use of equipment in the work place?

EQ4. Are you familiar with the provisions of the Directive 89/655/EEC?

EQ5. Is there a person in your company who would be responsible for keeping up to date with regulatory changes?

The answers prove that enterprises are already aware of the changes in regulations, which makes their estimations of possible costs more reliable. Moreover, approximately 67% of the respondents keep record about the costs, which are attributable to ensuring safety at workplace including safe use of workplace equipment (see Table 6).

TABLE 6. ANSWERS TO THE QUESTION CONCERNING COMPANIES' RECORDS OF THE COSTS OF COMPLYING WITH PRESENT REGULATION IN RESPECT OF CERTAIN SAFETY AT WORK ASPECTS

Answers to the questions	EQ7(a)		EQ7(b)		
	Yes	No	Yes	No	Not answered
Number of the respondents	39,	21,	37,	21,	2
Percentage of the respondents	65%	35%	62%	35%	3%

EQ7(a) Does your company keep a record of the costs of complying with present regulation about safety in the work place generally?

EQ7(b) Does your company keep a record of the costs of complying with present regulation about the safe use of workplace equipment?

While dealing with present regulation enterprises find the most difficulties in coping with equipment replacement. Assessing risk and modifying equipment causes medium difficulties. Informing and training staff is considered as the aspect causing least difficulties for companies while dealing with present regulation.

TABLE 7. ANSWERS TO THE QUESTION CONCERNING DIFFICULTIES WHILE DEALING WITH CERTAIN ASPECTS IN RELATION TO PRESENT REGULATION

EQ6 / Number of the respondents	Large	Medium	Small	None	Don't know
1. Assessing risks	2,	<b>27,</b>	19,	8,	3,
2. Informing and training staff	1,	10,	<b>30,</b>	18,	0,
3. Modifying equipment	18,	<b>23,</b>	12,	0,	3,
4. Replacing equipment	<b>38,</b>	12,	4,	1,	1,

EQ6. The following aspects of safety of workplace equipment are frequently mentioned by the enterprises in the EU member states as having caused difficulties. Please assess the difficulty (if any) of dealing with these aspects in your company in relation to present regulation.

Among other problems appearing while dealing with present regulations the following were mentioned:

1. A representative from the furniture manufacturing industry mentioned difficulties in assessing the present particular requirements for workplace equipment;
2. A representative of manufacturing of wood and wood products emphasised that problems in replacing equipment are also related with the new products or product modifications that will be introduced due to change in technology because of introduction of the new machinery. The introduction of the new products is a case for maintaining competitiveness and modification of other business functions;
3. Some of the respondents mentioned having financial difficulties in dealing with present regulations due to lack of financial resources for replacing or modifying workplace equipment;
4. Some companies still lack knowledge of the EU practice in maintaining and regulating workplace equipment since the majority of the rules applied to the workplace equipment at present originate from the Soviet time regulations.

According to the State Labour inspectors the difficulties due to assessing risk, informing and training staff, and modifying equipment are considered as having medium impact on the enterprises, while the majority agree that replacement of the workplace equipment is the most profound difficulty for enterprises.

TABLE 8. SUMMARY OF THE STATE LABOUR INSPECTORS' ANSWERS CONCERNING THE DIFFICULTIES IN THE INDUSTRIES OF WHICH THE RESPONDENTS HAVE EXPERIENCE IN RESPECT OF PRESENT REGULATION (FOR MORE DETAILED LISTING OF THE ANSWERS FOR THE PARTICULAR ECONOMIC ACTIVITIES SEE APPENDIX 4)

IQ3	Large	Medium	Small	None	Don't know
1. Assessing risks	72	<b>148</b>	81	1	5
2. Informing and training staff	5	<b>179</b>	85	26	2
3. Modifying equipment	136	<b>141</b>	1	15	3
4. Replacing equipment	<b>237</b>	45	18	6	3

IQ3. The following topics which are frequently mentioned in the EU Member States as having caused difficulty. Please assess difficulties in the industries of which you have knowledge in implementing present regulations.

Changes that will be introduced in 2005 due to implementation of the Directive 89/655/EEC, which is transposed into Lithuanian Law by the Resolution of the Minister of Social Protection and Labour No. 102 of 22 December 1999 would cause difficulties in the respect of the same aspects as dealing with present regulations. The majority of the enterprises found the most difficulties in replacing equipment, which is arduous task at present due to lack of necessary financial resources.

TABLE 9. ANSWERS TO THE QUESTION CONCERNING DIFFICULTIES FOR COMPANIES DUE TO CHANGE IN REGULATION IN RESPECT OF CERTAIN ASPECTS

EQ9 / Number of the respondents	Large	Medium	Small	None	Don't know
1. Assessing risks	2,	<b>25,</b>	22,	5,	4,
2. Informing and training staff	1,	16,	<b>28,</b>	12,	1,
3. Modifying equipment	21,	<b>29,</b>	1,	0,	6,
4. Replacing equipment	<b>38,</b>	12,	3,	0,	3,

EQ9. As summarized in the introduction the EU Directive on workplace equipment, transposed into Lithuanian law by the Resolution of the Minister of Social Security and Labour No. 102 of 22 December 1999 will introduce changes. (For specific details see Directive 89/655/EEC). Please consider whether the changes are likely to have significant difficulties for your company.

Among other difficulties in dealing with the Directive 89/655/EEC requirements the following in addition were mentioned:

Some enterprises found the provisions of the Directive too general leaving place for more specific rules of which companies are unaware and thus unable to measure the impact;

A representative from chemical industry claimed that all the requirements provided for in the Directive are already in place and valid in present regulations and there are no big changes in terms of cost and compliance for chemical industry to occur;

Many respondents face financial problems in dealing with the change in regulations.

The majority of State Labour inspectors think that both assessing and training staff will cause medium difficulties for enterprises while modification and replacements are the most difficult tasks.

TABLE 10. SUMMARY OF THE STATE LABOUR INSPECTORS' ANSWERS CONCERNING THE DIFFICULTIES IN THE INDUSTRIES OF WHICH THE RESPONDENTS HAVE EXPERIENCED IN RESPECT OF THE CHANGE IN REGULATION (FOR MORE DETAILED LISTING OF THE ANSWERS FOR THE PARTICULAR ECONOMIC ACTIVITIES SEE APPENDIX 5)

IQ4	Large	Medium	Small	None	Don't know
1. Assessing risks	83	<b>136</b>	81	8	0
2. Informing and training staff	12	<b>153</b>	85	59	0
3. Modifying equipment	<b>137</b>	124	31	3	3
4. Replacing equipment	<b>239</b>	37	15	6	3

IQ4. The new requirements, which are provided for in the Directive 89/655/EEC, states that enterprises themselves will have to carry out risk assessment of virtually all uses of workplace equipment. Note: that a long transition period to 2005 is provided and that much equipment will become worn out or obsolete during that period. Replacement of such equipment will not therefore be direct consequence of introducing new regulation in 2005.

Enterprises will incur additional costs in dealing with the difficulties arising because of the change in regulations. The largest costs will arise while dealing with the replacement of the equipment. Medium costs are likely to be faced while modifying the equipment, small costs are addressed according to the enterprises while dealing with risk assessments and informing and training staff.

TABLE 11. ANSWERS TO THE QUESTION EVALUATING COSTS ARISING DUE TO INTRODUCTION OF THE DIRECTIVE REQUIREMENTS IN LITHUANIA

EQ11 / Number of the respondents	Large	Medium	Small	None	Don't know
1. Assessing risks	1,	18,	<b>21,</b>	4,	4,
2. Informing and training staff	0,	18,	<b>24,</b>	5,	2,
3. Modifying equipment	19,	<b>20,</b>	5,	1,	2,
4. Replacing equipment	<b>38,</b>	6,	1,	0,	3,

EQ11. Please estimate a magnitude of the change in compliance costs.

State Labour inspectors perceive that assessing risks, training staff and modifying equipment will cause medium amount costs, while replacement again is the most problematic area in terms of costs.

TABLE 12. SUMMARY OF THE ANSWERS CONCERNING THE MAGNITUDE OF THE COSTS FOR ENTERPRISES DUE TO THE CHANGE IN REGULATION CONCERNING THE SAFETY OF WORKPLACE EQUIPMENT (FOR MORE DETAILED LISTING OF THE ANSWERS FOR THE PARTICULAR ECONOMIC ACTIVITIES SEE APPENDIX 6)

IQ5	Large	Medium	Small	None	Don't know
1. Assessing risks	22	<b>99</b>	53	35	1
2. Informing and training staff	5	<b>114</b>	54	24	0
3. Modifying equipment	60	<b>79</b>	22	11	2
4. Replacing equipment	<b>112</b>	41	15	8	2

IQ5. How large do you think the compliance costs are likely to be for a typical company under your supervision field?

Enterprises also were asked to give an estimate of the costs of dealing with safety in the work place generally and safe use of workplace equipment based on the best information available in LTL on annual basis. It is difficult to aggregate the compliance costs for the whole economy due to large differences in activities of features of different sectors and size of the company. Nevertheless the enterprises were asked to estimate likely costs in dealing with four aspects and the figures in respect of separate sectors are presented in the Appendix 8.

Due to the fact that modification and replacement of the work place equipment are the issues that might

cause biggest difficulties additional data was acquired by carrying out brief interviews with six industry representatives. The number of employees in the interviewed companies was ~650 per company. The average number of the equipment which are older than 10 years and of which replacement costs constitute more than 75 000 LTL per equipment in the interview companies appear to be 9. The answers proved that cost for modifying and replacing equipment provided in the first questionnaire are overestimated. Actual costs for modifying and replacing equipment might be ten times less than identified initially. In this case the competitiveness and survival problems might arise for some companies which inevitably will impose some additional costs to the society and might in total result in the costs amount as identified above.

Note that the estimations presented in the Appendix 8 stand for the maximum costs that might be expected at fixed present moment. Reasonable impact assessment needs more intricate estimations with respect to industry sectors differences that was not possible under the scope of this study. Therefore for estimating the overall impact more complex model based calculations as well as variance factors should be considered. Among these considerations should be assumed that not all industries and economic activities are so heavily connected with workplace equipment.

The industries, which are likely to bear greater costs due to complying with workplace equipment safety requirements in comparison with other sectors, were indicated by the State Labour inspectors. The results of the answers are provided in the Appendix 7. It could be seen that the majority of the inspectors in many cases identified agriculture, wholesale and retail, manufacture of wood and wood products, construction and other sectors as those of which many of the respondents have experience. In terms of employed population and inspectors estimations agriculture and manufacturing sectors are those who are likely to be affected by the new workplace equipment safety regulations utmost. The sectors within manufacturing as likely to bear the higher costs are related to machinery intensive industries. The manufacture of refined petroleum, manufacture of rubber and plastic, manufacture of wood and wood products, manufacture of basic metals, mining and quarrying, construction and others were rated as likely to have higher costs compared to other sectors.

As was indicated by the State Labour inspectors there will be no considerable difference in expenses for ensuring safety of workplace equipment for SME and big enterprises, nevertheless the experience of the EU Member countries prove that burden on SME is likely to be more bigger that on bigger enterprises.

TABLE 13. SUMMARY OF THE ANSWERS TO THE QUESTION WHETHER SMES WOULD FIND ENSURING SAFETY OF WORKPLACE EQUIPMENT MORE EXPENSIVE THAN BIG ENTERPRISES

<b>IQ6</b>	<b>More</b>	<b>Same</b>	<b>Less</b>	<b>Don't know</b>	<b>Not answered</b>
<b>Number of the respondents</b>	17	19	9	2	13

**IQ6.** Are small and medium enterprises (< 50 employees) likely to find it more difficult and more expensive to deal with the following activities than large enterprises.

Concluding the analysis of empirical data it is important to reiterate that impact assessments are not intended to be complete research reports. Their justification is that the assessment is necessary within a short time-scale to assist policy decisions. In these cases, broader judgements may be the most valuable; that is whether the impact of a regulation appears sufficiently important to be investigated in depth or whether there is a good empirical case for specific action, as in this assessment, within the overall context of detailed negotiations on potential EU membership.

## Net costs of implementing the Directive

This is a difficult task, and to aggregate the costs of implementing the 4 main components of the Directive would, it is suggested, produce a useless figure. But some light can be thrown on the major effects of the Directive, and these are discussed separately below.

1. Risk assessment. It is not known how many currently applicable risk assessments are in place and whether they are formally recorded or not. The suggested approach is to make conservative assumptions, to calculate the impact on total labour costs, and to look at the effect on wage costs of the "average" employee, and on total wage costs in the economy. This assessment is based on the following assumptions:

- No formal risk assessments have been carried out. While this is unlikely to be true, it is to be noted that the percentage is probably small, and in other EU contexts has been over estimated,- For example in the UK 23% Of UK organisations (weighted by number of employees) had carried out risk assessments before 1993. (The UK regulations, implementing the Directive, were issued in 1992) The percentage had risen to 70 by 1997. A cautious assumption for Lithuania is therefore taken;
- All employees use some form of workplace equipment, as defined by the Directive;
- On average at least 3 employees use the same type of equipment;
- Risk assessments need to be carried out annually. In practice risk assessments may be valid for several years, depending on the equipment and the extent to which its use may be changed;
- Each assessment takes 0.5 hours plus 0,5 hours of supervising time to record the result. The time taken to carry out assessments depends critically on the type of equipment and the experience of the assessor. Note, however, that more complex equipment is likely to be used by more people and the number of assessments required is reduced pro rata;
- The wage cost of the assessor, and of the providers of training or information, is twice that of average wage costs;
- The working year is 1400 hours net (35 hours x 40 weeks);
- This suggests an annual recurrent cost equal to 1,2 hours at average wage cost;
- Since risk assessments require that employees are informed of the risks, and trained to avoid them, it is reasonable to regard these costs as a necessary part of the risk assessment process. The assumptions made, also on a conservative basis, are
  - information needs to be continuously updated and training carried out regularly. It is therefore an annually recurrent cost,
  - training is carried out solely for this Directive (whereas in practice it is likely to be part of regular health and safety training, with consequent increased efficiency),
  - employee training takes half a day (3.5 hours) annually,
  - trainers take 5 hours to prepare training material and supervise training,
  - their wage cost is twice that of the average employee,
  - they supervise 3 staff at any one training session.
- 

Information and training costs are therefore estimated at 6,8 hours of average staff cost.

Taking all the costs of the two components together therefore, they amount only to 8 hours per year at average wage cost or 0,5 %.

There may well be some benefits as well. Experience suggests that when the tasks are formally reviewed, improvements in working practices are often identified. If wage costs are reduced on average by more than 0.5% as a result, the benefits will more than compensate for the costs. It is worth noting that the current system of distributing health and safety information may need reinforcement. Such an enhanced service should be provided only for industry as a whole and for good practice on health and safety matters generally. A unit of 5-6 professionally qualified staff would be a maximum, supported by fieldwork and contacts made by the State Labour Inspectorate. Whoever provided this service, its cost would represent an additional economic burden to the economy as a whole.



Benefits could be expected These could come not only from better assessment and training procedures but also from advice to enterprises on the timing and technical changes to workplace equipment necessary for compliance with the Directive's specific requirements.

2. Modification and replacement of equipment. The responses to the questionnaires both from the State Labour Inspectorate and from the enterprises themselves indicate that these two items are a major concern, particularly in industries which need substantial capital equipment. Estimates of the economic cost of this part of the Directive are bound to be very uncertain for the following reasons:

- The agreed timetable for the introduction of the so-called 'Stage One' Directives calling for the earlier implementation of Directives other than the Equipment Directive, which nevertheless apply 10 the same activities of the enterprises. Of these, the most important seems to be the Machinery Directive (implementation date 2002) in that it has a potential effect on the largest number of enterprises. But for specific industries, other industry- specific Directives may be equally or more important. The main consequence of adopting these Directives which are primarily concerned with the manufacture and sale of equipment is that for a potential EU entrant it will be in effect illegal to manufacture, import, install or sell equipment which does not comply with EU standards. These standards include, for example, the design features of machinery control systems, which are also dealt with in the Directive under review;
- These equipment-specific Directives are likely to accelerate new capital investment for replacement of existing equipment and systems;
- Costs of EU compliant equipment may also fall, since there will be a strong incentive for manufacturers of EU - compliant equipment to compete for a market which will have been closed to non-EU- compliant equipment;
- In order to maintain competitiveness, enterprises will need to familiarise themselves with EU-compliant equipment, of which existing Member States will by then have had long experience, Existing Members will by then also have replaced non- compliant capital equipment in the ordinary course of plant renewal.

The general conclusions from these arguments must be that the economic cost of implementing this part of the Workplace Equipment Directive is not likely to be as large as the respondents to the questionnaires, including those with the most technical experience of current industrial practice in Lithuania, that is the State Inspectorate, appear to think. These perceptions must not be ignored, however, and a rational explanation must be offered. The main reasons appear to be as follows:

- Decisions to modify or replace capital equipment are identifiable "events" with which senior management of enterprises have been accustomed to deal;
- Much of industry's capital equipment is now in more urgent need of replacement because economic circumstances in the 1990s were unfavourable to new investment;
- Conventional business analysis of investment decision based on notions of 'rate-of-return' would make some - perhaps many - new capital investment proposals hard to justify;
- The Workplace Equipment Directive, in so far as it may require equipment modification, appears to be yet another reason for new capital expenditure. Without any clear idea what quantitative benefits may result from such investment.
- The adverse effect of this Directive will tend to be magnified. It is an explicit requirement externally imposed, about which the enterprise can do nothing. The more subtle long-lasting effects of obsolescent equipment, and of loss of competitiveness may be forgotten or underestimated;
- The economic cost of modifying or replacing equipment is in any case difficult to estimate, particularly several years before the investment decision has to be made;
- This type of regulation is rarely the sole or even the main reason for completely new or additional capital expenditure. This was pointed out by one of the industry respondents to the questionnaire. Arbitrary assignment of the quantitative effects of different impacts is not very useful;
- Even in those cases where a specific regulatory requirement is the main reason for new capital expenditure, the economic cost is smaller than it is generally thought to be. This is because the cost properly attributable to the regulatory effect is not the total replacement cost of the equipment, but only the cost of bringing forward new capital investment. And that new capital investment will have to be justified on normal investment criteria, e.g. as giving a satisfactory rate of return to the business.

Even if it can be demonstrated that the impact of this, or any other regulation, is small in economic terms, it does not address the principal practical reason for industry's concerns. These concerns, particularly worrying to small and medium enterprises, are about getting access to the cash resources necessary to make any new investments at all. For several related macro-economic reasons, in the economies of many applicant states, capital is scarce, cash-flows are not strong, substantial investment is not possible from retained earnings, and external sources provide funds on severe criteria, expensively, and often only to larger enterprises.

It is worth pointing out that there is unlikely to be a critical problem in implementing this Directive, certainly not when compared with the likely costs of implementing EU standards in specific industries, e.g. foodstuffs and agribusiness generally. In these cases for example, which are very important to applicant states, the current level of compliance with EU standards is very low. (1-5 % by number of enterprises according to Commission sources) and full compliance will inevitably mean substantial new investment in buildings and equipment.

Finally, it is worth re-iterating the importance for implementing the whole of this Directive at least net cost, of information and advice on best practice, and of simple demonstrations of acceptable solutions. This advisory service is viable only if it deals with all the related health and safety and related regulations which are being introduced. As stated earlier, its core would be a small cadre of experienced technical staff, for which the State Labour Inspectorate could provide the appropriate technical support and geographical cover. But additional resources would be necessary and would imply an additional economic cost whoever provided the service. All governments find it hard to communicate effectively with small and medium sized enterprises, but because the management of these firms are always preoccupied with immediate matters of running the business. Practical demonstration of the benefits of advice in meeting the regulatory requirements is a vital selling point. The need for specific budgetary provision must not be overlooked, if, as is most likely, public authorities are to provide the resources for this service. While the economic case may be wholly justified, action will not ensue if the relevant part of the State budget does not specifically provide funds for this service.

*The structure of Lithuanian industry by percentage of labour force employed in each economic activity*

<b>EMPLOYED POPULATION (TOTAL NUMBER OF EMPLOYEES IN 1997)</b>	<b>1,570.800</b>
<b>STRUCTURE OF THE LABOUR FORCE BY ECONOMIC ACTIVITY (TOTAL, %)</b>	<b>100,00%</b>
1., 2. Agriculture, hunting, forestry, fishing	20,66%
3. Mining and quarrying	0,26%
4. Manufacturing	18,48%
4.1, 4.2 Manufacture of food products and beverages including tobacco	4,03%
4.3 Manufacture of textiles	2,14%
4.4 Manufacture of wearing apparel, dressing and dyeing of fur	2,09%
4.5 Manufacture of leather and leather products	0,44%
4.6 Manufacture of wood and wood products except furniture	1,24%
4.7 Manufacture of pulp, paper and paper products	0,33%
4.8 Publishing, printing and reproduction of recorded media	0,55%
4.9 Manufacture of refined petroleum products	0,31%
4.10 Manufacture of chemicals and chemical products	0,66%
4.11 Manufacture of rubber and plastic products	0,29%
4.12 Manufacture of non-metallic mineral products	1,01%
4.13 Manufacture of basic metals	0,14%
4.14 Manufacture of fabricated metal products, except machinery and equipment	0,51%
4.15 Manufacture of machinery and equipment	1,38%
4.16 Manufacture of office machinery and computers	0,08%
4.17 Manufacturing of electrical machinery and apparatus	0,51%
4.18 Manufacture of radio, television and communication equipment and apparatus	0,80%
4.19 Manufacture of medical, precision and optical instruments	0,27%
4.20 Manufacture of motor-vehicles, trailers and semi trailers	0,12%
4.21 Manufacture of other transport equipment	0,57%
4.22 Manufacture of furniture, manufacture of n.e.c.	0,97%
4.23 Recycling of metal waste and scrap	0,03%
5. Electricity, gas and water supply	2,83%
6. Construction	6,95%
7. Wholesale and retail trade, repair of motor vehicles, motorcycles, personal and household goods	14,92%
8. Hotels and restaurants	1,66%
9. Transport, storage and communication	6,27%
10. Financial intermediation	0,92%
11. Real estate, renting and business activities	3,07%
12. Public administration and defense; compulsory social security	4,69%
13. Education	8,55%
14. Health and social work	6,39%
15. Other community, social and personal service activities	4,35%

Source: Statistical Yearbook of Lithuania 1999

APPENDIX 2  
SAMPLE STRUCTURE

The structure of the industrial sample was defined according to the following factors:

1. Number of employees in economic activities (for reference see Appendix 1);
2. Number of enterprises in economic activities;
3. Number of accidents in the workplace;
4. Frequency coefficient of accidents in the workplace (number of accidents per 10 000 employees);
5. Recommendations of the State Labour Inspectorate.

Economic activity	Number of enterprises in the sample	Number of enterprises according to the size		
		to 50 employees	from 50 to 500 employees	from 500 employees
Agriculture, hunting, forestry and fishing	11	2	4	5
Mining and quarrying	6	1	2	3
Manufacture of food products and beverages	10	2	3	5
Manufacture of tobacco products	1			1
Manufacture of textiles	9	1	4	4
Manufacture of wearing apparel, dressing and dyeing of fur	2			2
Manufacture of wood and wood products except furniture	10	2	3	5
Manufacture of pulp, paper and paper products	3		1	2
Manufacture of refined petroleum products	2		1	1
Manufacture of chemicals and chemical products	4		1	3
Manufacture of rubber and plastic products	2			2
Manufacture of non-metallic mineral products	4	1	1	2
Manufacture of fabricated metal products, except machinery and equipment	5	1	1	3
Manufacture of machinery and equipment	9	1	2	6
Manufacturing of electrical machinery and apparatus	5	1	1	3
Manufacture of radio, television and communication equipment and apparatus	4		1	3
Manufacture of motor-vehicles, trailers and semi trailers	3	1	1	1
Manufacture of other transport equipment	6	1	2	3
Manufacture of furniture, manufacture of n.e.c.	7	1	2	4
Recycling of metal waste and scrap	1			1
Electricity, gas and water supply	9	1	5	3
Construction	12	3	4	5
Wholesale and retail trade, repair of motor vehicles, motorcycles, personal and household goods	5	1	1	3
Transport, storage and communication	12	2	3	7
Public administration and defense; compulsory social security	3	1	1	1
Education	2		1	1
Health and social work	3	1	1	1
<b>Total:</b>	<b>150</b>	<b>24</b>	<b>46</b>	<b>80</b>

## Economic activity

1. Agriculture, hunting, forestry
2. Fishing
3. Mining and quarrying
4. Manufacturing
  - 4.1 Manufacture of food products and beverages
  - 4.2 Manufacture of tobacco products
  - 4.3 Manufacture of textiles
  - 4.4 Manufacture of wearing apparel, dressing and dyeing of fur
  - 4.5 Manufacture of leather and leather products
  - 4.6 Manufacture of wood and wood products except furniture
  - 4.7 Manufacture of pulp, paper and paper products
  - 4.8 Publishing, printing and reproduction of recorded media
  - 4.9 Manufacture of refined petroleum products
  - 4.10 Manufacture of chemicals and chemical products
  - 4.11 Manufacture of rubber and plastic products
  - 4.12 Manufacture of non-metallic mineral products
  - 4.13 Manufacture of basic metals
  - 4.14 Manufacture of fabricated metal products, except machinery and equipment
  - 4.15 Manufacture of machinery and equipment
  - 4.16 Manufacture of office machinery and computers
  - 4.17 Manufacturing of electrical machinery and apparatus
  - 4.18 Manufacture of radio, television and communication equipment and apparatus
  - 4.19 Manufacture of medical, precision and optical instruments
  - 4.20 Manufacture of motor-vehicles, trailers and semi trailers
  - 4.21 Manufacture of other transport equipment
  - 4.22 Manufacture of furniture, manufacture of n.e.c.
  - 4.23 Recycling of metal waste and scrap
5. Electricity, gas and water supply
6. Construction
7. Wholesale and retail trade, repair of motor vehicles, motorcycles, personal and household goods
8. Hotels and restaurants
9. Transport, storage and communication
10. Financial intermediation
11. Real estate, renting and business activities
12. Public administration and defence; compulsory social security
13. Education
14. Health and social work
15. Other community, social and personal service activities

IQ3. Please assess the difficulties in the industries of which you have knowledge in relation to present regulation.	Risk assessment					Informing and training staff					Modifying equipment					Replacing equipment				
	l	m	s	n	d	l	m	s	n	d	l	m	s	n	d	l	m	s	n	d
1. Agriculture, hunting, forestry	11	11	5	0	0	3	17	6	0	0	13	11	0	1	0	23	2	0	0	0
2. Fishing	1	4	0	0	0	0	3	2	0	0	3	1	0	1	0	5	0	0	0	0
3. Mining and quarrying	1	3	0	0	0	0	1	1	1	0	1	1	0	0	0	2	0	0	0	0
4. Manufacturing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.1 Manufacture of food products and beverages	2	6	5	0	1	0	6	5	1	0	6	5	0	1	1	11	1	0	0	1
4.2 Manufacture of tobacco products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.3 Manufacture of textiles	1	3	2	0	0	0	2	2	2	0	2	3	0	1	0	3	1	2	0	0
4.4 Manufacture of wearing apparel, dressing and dyeing of fur	2	4	5	0	2	0	6	4	1	0	4	6	0	1	0	8	2	3	0	0
4.5 Manufacture of leather and leather products	1	0	1	0	0	0	0	0	1	0	1	1	0	0	0	0	1	1	0	0
4.6 Manufacture of wood and wood products except furniture	7	9	6	0	0	1	13	7	0	0	12	10	0	1	0	20	3	0	0	0
4.7 Manufacture of pulp, paper and paper products	2	2	0	0	0	0	3	1	0	0	3	1	0	0	0	4	0	0	0	0
4.8 Publishing, printing and reproduction of recorded media	2	3	2	0	0	0	5	1	1	0	4	3	0	0	0	7	0	0	1	0
4.9 Manufacture of refined petroleum products	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	0
4.10 Manufacture of chemicals and chemical products	1	1	0	0	0	0	0	1	1	0	1	1	0	0	0	2	0	0	0	0
4.11 Manufacture of rubber and plastic products	0	4	1	0	0	0	2	3	0	0	4	2	0	0	0	4	1	1	0	0
4.12 Manufacture of non-metallic mineral products	2	1	1	0	0	0	2	1	1	0	2	2	0	0	0	4	1	1	0	0
4.13 Manufacture of basic metals	0	2	0	0	0	0	3	0	0	0	1	1	0	0	0	2	0	1	0	0
4.14 Manufacture of fabricated metal products, except machinery and equipment	0	5	3	0	0	0	4	3	1	0	4	4	0	0	0	5	3	2	0	0
4.15 Manufacture of machinery and equipment	1	2	1	0	0	0	4	0	0	1	3	1	0	0	0	4	0	0	0	0
4.16 Manufacture of office machinery and computers	1	1	0	0	0	0	1	0	1	0	0	2	0	0	0	1	1	0	0	0
4.17 Manufacturing of electrical machinery and apparatus	1	1	0	0	0	1	0	1	0	0	0	1	0	0	0	1	0	0	0	0
4.18 Manufacture of radio, television and communication equipment and apparatus	1	4	0	0	0	0	2	2	1	0	2	2	0	1	0	4	1	0	0	0
4.19 Manufacture of medical, precision and optical instruments	0	1	0	0	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0
4.20 Manufacture of motor-vehicles, trailers and semi trailers	0	2	0	0	0	0	1	1	0	0	2	0	0	0	0	2	0	0	0	0
4.21 Manufacture of other transport equipment	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.22 Manufacture of furniture, manufacture of n.e.c.	2	5	2	0	0	0	6	3	0	0	7	1	0	1	0	8	1	0	0	0
4.23 Recycling of metal waste and scrap	0	6	0	0	0	0	3	2	0	0	2	3	0	0	0	4	1	2	0	0
5. Electricity, gas and water supply	4	7	4	0	0	0	8	5	2	0	5	8	1	0	0	11	2	1	1	0
6. Construction	4	11	4	0	1	0	11	7	1	0	6	11	0	2	0	15	5	0	0	0
7. Wholesale and retail trade, repair of motor vehicles, motorcycles, personal and household goods	5	7	6	0	1	0	11	6	2	0	8	12	0	0	0	15	4	1	1	0
8. Hotels and restaurants	2	3	4	0	0	0	7	1	0	0	4	5	0	0	0	8	1	0	0	0
9. Transport, storage and communication	1	6	5	0	0	0	5	5	2	0	3	6	0	3	0	8	2	1	1	0
10. Financial intermediation	1	4	4	0	0	0	7	1	1	0	5	3	0	0	1	6	2	0	0	1
11. Real estate, renting and business activities	3	3	2	0	0	0	7	0	1	0	3	5	0	0	0	7	1	0	0	0
12. Public administration and defense; compulsory social security	4	4	4	1	0	0	9	3	1	0	5	7	0	0	1	9	2	1	0	1
13. Education	3	6	6	0	0	0	9	4	1	0	7	5	0	1	0	10	2	0	1	0
14. Health and social work	3	6	3	0	0	0	9	2	1	1	5	6	0	1	0	9	2	0	1	0
15. Other community, social and personal service activities	3	9	5	0	0	0	11	4	2	0	7	10	0	0	0	13	3	1	0	0
<b>Total</b>	<b>72</b>	<b>148</b>	<b>81</b>	<b>1</b>	<b>5</b>	<b>5</b>	<b>179</b>	<b>85</b>	<b>26</b>	<b>2</b>	<b>136</b>	<b>141</b>	<b>1</b>	<b>15</b>	<b>3</b>	<b>237</b>	<b>45</b>	<b>18</b>	<b>6</b>	<b>3</b>

l-large, m-medium, s-small, n-none, d-don't know

APPENDIX 5

IQ4. Which of the following activities do you expect to be difficult for enterprises due to the change in regulation?	Risk assessment					Informing and training staff					Modifying equipment					Replacing equipment				
	l	m	s	n	d	l	m	s	n	d	l	m	s	n	d	l	m	s	n	d
1. Agriculture, hunting, forestry	10	11	4	0	0	1	13	6	3	0	13	10	2	0	0	24	1	0	0	0
2. Fishing	1	4	0	0	0	0	2	3	0	0	2	3	0	0	0	5	0	0	0	0
3. Mining and quarrying	0	1	1	0	0	0	2	0	1	0	3	0	0	0	0	2	0	0	0	0
4. Manufacturing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.1 Manufacture of food products and beverages	2	6	5	0	0	0	4	6	3	0	5	6	1	0	0	11	1	0	1	0
4.2 Manufacture of tobacco products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.3 Manufacture of textiles	2	2	2	0	0	1	2	1	2	0	3	3	0	0	0	3	2	1	0	0
4.4 Manufacture of wearing apparel, dressing and dyeing of fur	3	3	7	0	0	1	5	3	4	0	6	5	1	0	0	9	2	2	0	0
4.5 Manufacture of leather and leather products	1	0	1	0	0	1	0	0	1	0	0	2	0	0	0	0	1	1	0	0
4.6 Manufacture of wood and wood products except furniture	4	13	4	0	0	0	9	7	3	0	11	9	2	0	0	19	3	0	0	0
4.7 Manufacture of pulp, paper and paper products	1	3	0	0	0	0	2	2	0	0	2	0	1	0	0	4	0	0	0	0
4.8 Publishing, printing and reproduction of recorded media	2	3	2	1	0	0	3	2	2	0	5	1	1	0	0	6	1	0	0	0
4.9 Manufacture of refined petroleum products	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	0
4.10 Manufacture of chemicals and chemical products	1	1	0	0	0	0	0	1	1	0	1	1	0	0	0	2	0	0	0	0
4.11 Manufacture of rubber and plastic products	2	3	1	0	0	1	2	3	0	0	2	4	0	0	0	4	1	1	0	0
4.12 Manufacture of non-metallic mineral products	3	2	1	0	0	1	2	1	2	0	1	3	1	0	0	3	1	1	0	0
4.13 Manufacture of basic metals	1	2	0	0	0	1	2	0	0	0	1	2	0	0	0	2	0	1	0	0
4.14 Manufacture of fabricated metal products, except machinery and equipment	2	4	3	0	0	1	5	2	2	0	3	5	1	0	0	6	2	2	0	0
4.15 Manufacture of machinery and equipment	1	2	1	0	0	0	4	0	0	0	3	1	0	0	0	4	1	0	0	0
4.16 Manufacture of office machinery and computers	2	0	0	0	0	0	1	0	1	0	0	2	0	0	0	2	0	0	0	0
4.17 Manufacturing of electrical machinery and apparatus	1	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0
4.18 Manufacture of radio, television and communication equipment and apparatus	2	3	0	0	0	0	1	3	1	0	3	2	0	0	0	5	0	0	0	0
4.19 Manufacture of medical, precision and optical instruments	0	1	0	0	0	0	0	1	0	0	1	0	0	0	0	1	0	0	0	0
4.20 Manufacture of motor-vehicles, trailers and semi trailers	0	2	0	0	0	0	1	1	0	0	2	0	0	0	0	2	0	0	0	0
4.21 Manufacture of other transport equipment	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
4.22 Manufacture of furniture, manufacture of n.e.c.	1	7	1	0	0	0	5	3	1	0	5	3	0	0	0	7	3	0	0	0
4.23 Recycling of metal waste and scrap	3	3	1	0	0	1	4	1	1	0	3	3	0	0	0	5	0	1	0	0
5. Electricity, gas and water supply	6	4	4	2	0	1	8	5	2	0	6	6	2	0	0	12	0	1	1	0
6. Construction	3	9	7	1	0	1	10	4	3	0	10	5	4	0	0	15	2	1	0	0
7. Wholesale and retail trade, repair of motor vehicles, motorcycles, personal and household goods	6	6	7	0	0	0	9	6	5	0	7	11	1	0	0	16	2	0	1	0
8. Hotels and restaurants	2	3	3	1	0	0	7	1	1	0	6	2	1	0	0	7	1	0	0	0
9. Transport, storage and communication	1	6	4	1	0	0	4	4	4	0	5	4	3	1	0	9	1	1	1	0
10. Financial intermediation	2	4	3	0	0	0	5	2	2	0	4	3	1	0	0	6	2	0	0	0
11. Real estate, renting and business activities	4	2	2	0	0	0	5	2	1	0	3	4	1	0	0	7	1	0	0	0
12. Public administration and defense; compulsory social security	5	3	4	0	0	0	8	2	3	0	5	5	2	0	0	10	1	1	0	0
13. Education	2	7	4	1	0	0	8	4	3	0	5	5	2	1	1	9	3	0	1	1
14. Health and social work	3	7	4	0	0	0	8	4	3	0	4	5	2	1	1	8	3	0	1	1
15. Other community, social and personal service activities	4	8	5	0	0	0	10	4	4	0	6	8	2	0	1	13	2	1	0	1
<b>Total</b>	<b>83</b>	<b>136</b>	<b>81</b>	<b>8</b>	<b>0</b>	<b>12</b>	<b>153</b>	<b>85</b>	<b>59</b>	<b>0</b>	<b>137</b>	<b>124</b>	<b>31</b>	<b>3</b>	<b>3</b>	<b>239</b>	<b>37</b>	<b>15</b>	<b>6</b>	<b>3</b>

l-large, m-medium, s-small, n-none, d-don't know

APPENDIX 6

IQ5. Please assess the magnitude of costs while dealing with the following difficulties due to the change in regulation.	Risk assessment					Informing and training staff					Modifying equipment					Replacing equipment				
	l	m	s	n	d	l	m	s	n	d	l	m	s	n	d	l	m	s	n	d
1. Agriculture, hunting, forestry	5	10	5	1	0	2	14	2	0	0	8	8	1	0	0	14	1	0	0	0
2. Fishing	0	4	1	0	0	0	4	1	0	0	3	0	0	1	0	3	0	1	0	0
3. Mining and quarrying	0	4	0	0	0	0	4	0	0	0	2	0	0	0	0	3	0	0	0	0
4. Manufacturing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.1 Manufacture of food products and beverages	2	5	2	4	0	0	4	7	0	0	1	7	1	0	0	5	4	1	0	0
4.2 Manufacture of tobacco products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.3 Manufacture of textiles	1	2	1	1	0	0	2	2	0	0	1	3	0	0	0	4	0	0	0	1
4.4 Manufacture of wearing apparel, dressing and dyeing of fur	1	2	3	1	0	0	3	3	1	0	1	4	1	0	0	4	1	1	0	0
4.5 Manufacture of leather and leather products	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0	0
4.6 Manufacture of wood and wood products except furniture	3	10	5	2	0	1	12	5	0	0	10	7	1	0	0	19	2	0	0	0
4.7 Manufacture of pulp, paper and paper products	1	2	0	0	0	0	2	1	0	0	1	0	1	0	0	2	1	1	0	0
4.8 Publishing, printing and reproduction of recorded media	1	3	1	1	0	0	4	1	2	0	1	3	1	0	0	4	0	0	0	0
4.9 Manufacture of refined petroleum products	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	0	0	0	0
4.10 Manufacture of chemicals and chemical products	1	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	0	0
4.11 Manufacture of rubber and plastic products	0	2	0	1	0	0	3	1	0	0	1	0	2	0	0	1	0	1	0	0
4.12 Manufacture of non-metallic mineral products	2	2	0	2	0	0	3	0	0	0	2	1	1	0	0	1	1	1	0	0
4.13 Manufacture of basic metals	0	2	0	0	0	0	2	0	0	0	1	1	0	0	0	1	1	0	0	0
4.14 Manufacture of fabricated metal products, except machinery and equipment	0	3	2	1	0	0	5	2	0	0	1	2	0	1	0	3	3	0	1	0
4.15 Manufacture of machinery and equipment	1	2	0	1	0	0	4	0	0	0	2	1	0	0	0	2	1	0	0	0
4.16 Manufacture of office machinery and computers	0	0	1	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0
4.17 Manufacturing of electrical machinery and apparatus	0	1	0	1	0	0	0	0	1	0	0	1	0	0	0	1	0	0	0	0
4.18 Manufacture of radio, television and communication equipment and apparatus	0	2	0	0	0	0	1	0	0	0	0	3	0	0	0	1	2	0	0	0
4.19 Manufacture of medical, precision and optical instruments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.20 Manufacture of motor-vehicles, trailers and semi trailers	0	1	0	0	0	0	1	0	0	0	1	1	0	0	0	1	1	0	0	0
4.21 Manufacture of other transport equipment	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
4.22 Manufacture of furniture, manufacture of n.e.c.	0	4	2	1	0	0	4	2	1	0	3	2	0	0	0	3	3	0	0	0
4.23 Recycling of metal waste and scrap	0	3	0	0	0	0	2	1	0	0	1	2	0	0	0	3	1	1	0	0
5. Electricity, gas and water supply	1	1	6	4	0	0	2	5	4	0	1	4	1	3	0	3	2	3	2	0
6. Construction	0	11	5	2	0	2	9	7	1	0	5	9	1	0	0	11	3	1	0	0
7. Wholesale and retail trade, repair of motor vehicles, motorcycles, personal and household goods	1	3	3	4	0	0	4	3	3	0	1	3	2	3	1	3	2	1	3	0
8. Hotels and restaurants	0	2	1	1	0	0	3	1	0	0	1	2	0	0	0	3	0	0	0	0
9. Transport, storage and communication	0	4	4	0	0	0	5	1	2	0	2	4	2	1	0	5	3	1	1	0
10. Financial intermediation	0	1	0	1	0	0	2	0	0	0	1	0	1	0	0	1	0	1	0	0
11. Real estate, renting and business activities	0	1	0	1	0	0	2	0	0	0	1	0	0	0	0	1	0	0	0	0
12. Public administration and defense; compulsory social security	1	1	2	1	0	0	3	1	1	0	1	1	2	0	0	2	0	1	0	0
13. Education	0	4	3	2	1	0	3	2	4	0	2	3	2	1	1	2	3	0	1	1
14. Health and social work	0	3	3	1	0	0	3	2	2	0	2	1	1	1	0	2	3	0	0	0
15. Other community, social and personal service activities	0	3	2	1	0	0	3	1	1	0	1	3	1	0	0	1	3	0	0	0
<b>Total</b>	<b>22</b>	<b>99</b>	<b>53</b>	<b>35</b>	<b>1</b>	<b>5</b>	<b>114</b>	<b>54</b>	<b>24</b>	<b>0</b>	<b>60</b>	<b>79</b>	<b>22</b>	<b>11</b>	<b>2</b>	<b>112</b>	<b>41</b>	<b>15</b>	<b>8</b>	<b>2</b>
l-large, m-medium, s-small, n-none, d-don't know																				



## APPENDIX 7

EVALUATION OF ECONOMIC SECTORS, WHICH ARE LIKELY TO HAVE MAJOR IMPACT DUE TO  
THE IMPLEMENTATION OF THE DIRECTIVE. ANSWERS OF THE INSPECTORS

Economic activity	No of respondents	Average mark
4.2 Manufacture of tobacco products	0	0
4.9 Manufacture of refined petroleum products	1	2
4.12 Manufacture of non-metallic mineral products	6	2.17
2. Fishing	5	2.2
4.11 Manufacture of rubber and plastic products	7	2.29
1. Agriculture, hunting, forestry	27	2.3
4.6 Manufacture of wood and wood products except furniture	23	2.3
4.5 Manufacture of leather and leather products	3	2.33
4.13 Manufacture of basic metals	3	2.33
3. Mining and quarrying	4	2.5
4.10 Manufacture of chemicals and chemical products	2	2.5
4.23 Recycling of metal waste and scrap	7	2.57
6. Construction	21	2.59
4.15 Manufacture of machinery and equipment	5	2.6
4.14 Manufacture of fabricated metal products, except machinery and equipment	11	2.82
4.7 Manufacture of pulp, paper and paper products	5	2.83
4.22 Manufacture of furniture, manufacture of n.e.c.	12	2.83
4.4 Manufacture of wearing apparel, dressing and dyeing of fur	16	2.94
15. Other community, social and personal service activities	18	3.19
9. Transport, storage and communication	16	3.22
7. Wholesale and retail trade, repair of motor vehicles, motorcycles, personal and household goods	23	3.23
4.8 Publishing, printing and reproduction of recorded media	9	3.25
13. Education	17	3.31
11. Real estate, renting and business activities	9	3.33
4.1 Manufacture of food products and beverages	16	3.35
12. Public administration and defense; compulsory social security	15	3.42
4.3 Manufacture of textiles	7	3.5
4.16 Manufacture of office machinery and computers	2	3.5
4.20 Manufacture of motor-vehicles, trailers and semi trailers	2	3.5
14. Health and social work	16	3.53
10. Financial intermediation	11	3.73
4.18 Manufacture of radio, television and communication equipment and apparatus	5	3.75
5. Electricity, gas and water supply	17	3.88
8. Hotels and restaurants	11	3.9
4.17 Manufacturing of electrical machinery and apparatus	2	4
4.19 Manufacture of medical, precision and optical instruments	1	4
4.21 Manufacture of other transport equipment	1	4

Marks: 1-large problems; 5-no problems at all

## APPENDIX 8

PRESENTATION OF COSTS COMPLYING WITH PRESENT AND ESTIMATES OF COSTS  
COMPLYING WITH THE PROVISIONS OF THE DIRECTIVE 89/655/EEC BY THE RESPONDENTS

Economic activity	Number of employees	Turnover in LtL	Can you give estimate of costs of the following:		Can you estimate likely costs to your company (current prices) of the following activities due to changes in regulation?			
			(a) ensuring safety in the workplace generally	(b) ensuring the safe use of workplace equipment	Risk assessment	Informing and training staff	Modifying equipment	Replacing equipment
1	944	61 690 000	56 000	63 000		10 000	30 000	40 000
1	800		450 000	900 000	2 000	4 000		2 500 000
3	195	11 000 000	15 000		5 000	10 000		
3	17	329 628				1 300	15 000	
4.1	95	7 600 000	50 000	120 000	3 000	5 000	500 000	3 000 000
4.1	1226	117 327 000	35 000	10 000	3 000	2 000	15 000	
4.1	516	34 000 000						
4.1	287	28 663 000	38 000	17 000		5 000	1 500 000	1 000 000
4.1	1026	340 051 380	1 037 268	11 000 000	500 000	210 000		
4.1	790	95 600 000	100 000	50 000	5 000	5 000	200 000	
4.1	529	40 889 000	128 000	290 365	200 000	50 000	300 000	800 000
4.1	1500	96 000 000	105 000	77 500	22 500	12 500	400 000	1 900 000
4.1	723	72 107 000						
4.1		12 870 000	500 000	200 000	100 000	150 000		10 000 000
4.1	1345	493 000 000	140 000	260 000	22 111	171 926	26 000	893 000
4.11	1120	44 000 000	376 000		11 000	17 500	60 000	3 250 000
4.11	208				10 000	55 000	320 000	1 600 000
4.12	850	112 000 000	180 000	320 000	62 000	16 000	280 000	200 000
4.14	252	8 234 550	70 012	33 403	50 000	14 000	110 000	600 000
4.14	194	5 074 000	8 500	2 000	8 000	8 000	1 500 000	5 000 000
4.14	1170	24 000 000	540 000	400 000	20 000		400 000	10 000 000
4.14	640	24 300 000						
4.15	1920	155 000 000		1 860 000				
4.17	1433	256 000 000						
4.18	2000	81 000 000	1 000 000		350 000			8 500 000
4.18	3475		2 367 300	912 000	24 000	1120 000	1 000 000	5 000 000
4.2	420		350 000	50 000	10 000	5 000	70 000	400 000
4.21	350	8 000 000			20 000	20 000	30 000	50 000
4.22	397	46 100 000	120 000	50 000	15 000	8 000	250 000	1 600 000
4.22	840	29 432 644	36 000	54 000	3 000	5 000	10 000	150 000
4.22	900	60 000 000			10 000	10 000	100 000	2 000 000
4.22	410	2 500 000	60 000	105 000	12 000	10 000	320 000	8 000 000
4.22	488							
4.22	456	14 000 000	25 000	55 000	7 500	5 000	65 000	375 000
4.3	55	1 219 000			100		15 000	5 000
4.3	3940	170 000 000	500 000	200 000	600 000	120 000	100 000 000	820 000 000
4.3	1828	76 000 000	138 000		20 000	55 000		
4.3	630	41 200 000						
4.4	1650	26 600 000	1 670 000	960 000				

4.4	1642	109 000 000	1 230 000	120 000	100 000	30 000	200 000	4 500 000
4.6	132	36 160 000	4 500	11 000	6 000	1 000	150 000	10 000 000
4.6	84	1 600 000				60 000	1 100 000	2 700 000
4.6	170	7 500 000	90 000	100 000	2 000	2 000	650 000	1 400 000
4.6	441	1 509 900	1 200	3 000		2 500	18 000	950 000
4.7	195	24 705 000						
4.7	1040	60 000 000			4 000	6 000	1 000 000	1 500 000
4.7	346	49 100 000			20 000	5 000	50 000	500 000
4.7	550	37 200 000						
5	3570	400 000 000	600 000	300 000	100 000	500 000	5 000 000	18 000 000
5	454	39 000 000	18 000	500	40 000	30 000		4 100 000
5	843	86 359 000	166 947	14 356	25 000	32 547	400 000	4 000 000
5	2660	10 283 500	160 000	100 000	5 400	10 000	100 000	500 000
6	255	31 700 000						
6	425	43 754 000	10 000	180 000	2 000	4 000	200 000	1 000 000
6	630	20 000 000	51 000	97 000	5 000	3 000	600 000	2 500 000
6	800	54 000 000	600 000	180 000	20 000	60 000	400 000	4 600 000
7	94	8 400 000	58 000	25 000	4 000	8 000	10 000	15 000
9	16000		6 200 000	2 100 000	35 000	14 000		
9	1400		500 000	6 000 000				
14	1812	39 567 376						

The questions are narrowly focused. They seek to establish whether, in the light of the changes set out above you expect:

1. To have to modify or replace equipment currently in use
2. What will be the costs of doing so.
3. It is recognized that other costs, e.g. those associated with carrying out risk assessment and providing information and training for workers may be involved. Please exclude them from your replies.

Name and address of the enterprise

Number of employees

Type of activity (using National Classification)

Ownership – subsidiary or affiliate of a foreign company?

**Q1.** How many machines, each having a replacement costs of 75 000 Lt do you have in use at present?

**Q2.** How many are      0-10 years old  
                                 10-20 years old  
                                 over 10 years old

**Q3.** How many of these machines do you expect to be in full use in 5 year's time?

                                 0-10 years old  
                                 10-20 years old  
                                 over 10 years old

**Q4.** How many of the machines currently under 20 years old would you expect to have to modify in order to meet the requirement of this Directive?

**Q5.** Have you in the last 5 years modified any of your machines for safety reasons?  
Yes/No

**Q6.** Do you know what the modification actually cost and the date on which they were done?  
Yes/ No

How many machines were modified?  
What was the average cost?

**Q7.** Even if you don't know of any modification made in the past 5 years, do you think that modifications will have to be made in the next 5 years to meet the provisions of the Directive?

Yes/No

**Q8.** If the answer to Q7 is Yes

How many machines will need modifying?

What might be the costs of the modification?

**Q9.** Have you in the last 5 years had to stop using a machine permanently solely because it did not meet national safety requirements?

How many machines?

What was the average replacement costs of the machines?

**Q10.** Do you expect in the next 5 years to have to take out of use permanently any machine you are currently using solely because it is unlikely to comply with the new EU Directive?

How many machines?

Average replacement costs?

## **Pilot Study: Workplace Equipment Safety**

### **Questionnaire for enterprises**

#### Introduction

The Governmental Integration Commission of Lithuania and Lithuanian European Membership Negotiation Delegation by the Decisions of 24<sup>th</sup> December 1999 and 2<sup>nd</sup> March 2000 have authorised the introduction of the system of regulatory impact assessment, initially to estimate the probable magnitude of the costs and benefits associated with the application of the EU legislation to the Lithuanian regulatory system. The aim is to identify the economic impact on the economy as the whole and on the different economic agents within it. The most important of these agents are the enterprises themselves whose views will be carefully take into account.

This process of assessment relies heavily on information about costs and related matters which only industry can supply. In most cases, the efficient way of collecting the information is by an appropriate form of industrial survey, as in the present case, and your co-operation will be most welcome. We will disclose no information, which could be attributable to the company except with explicit consent, and will in return provide you with the copy of the assessment report.

In fact regulatory impact assessment is new in Lithuania that has been developed over the number of years both in the EU member states and elsewhere, particularly in OECD countries. We are trying to build on that experience by running pilot studies. One of these studies, undertaken under the EU PHARE SEIL Program, and with the full co-operation of European Committee under the Lithuanian Government, Ministry of Social Security and Labour, State Labour Inspectorate and support of Lithuanian Industrial Confederation, is examining one of a number of related directives dealing with aspects of health and safety at work. This Directive 89/655/EEC deals specifically with the safe use equipment in the workplace.

At present the safety of workplace equipment in all its aspects, from initial design through manufacture, certification, operation and maintenance is regulated principally by number of equipment - specific regulations. The changes consequent upon adopting the EU Directive include:

Having a regulation dealing only with the use of equipment of the workplace. The design and safety certification of equipment will be dealt with separately and largely in the Machinery Directive 98/37/EEC;

An increased emphasis on risk assessment, which will need to be considered for all

significant equipment usage;  
Specific minimum safety provisions principally related to:

controls for starting and stopping machinery  
provision of guards against mechanical and other hazards  
safe maintenance procedures  
protection against fire and explosion.

This is the brief summary of the provisions and for more detail you should refer to the Directive 89/6655/EEC, which has been transposed into Lithuanian legislation by the Resolution of the Minister of Social Security and Labour No. 102 of 22 December 1999. In the light of your managerial experience and taking into account the operations in which you company is principally engaged, could you please respond to the attached questionnaire. If you think that you are not the most appropriate person in the organisation to deal with the detail questions, please pass it to the competent manager for action.

Thank you for your co-operation.

THE SURVEY IS CARRIED OUT BY THE FOLLOWING INSTITUTIONS:

European Committee under the Government of Lithuania, Gedimino str. 56, LT-2685 Vilnius. Contact person Agnė Šešelgytė tel.: (8 22) 61 19 85, fax.: (8 22) 61 21 78

Ministry of Social Security and Labour, Department of Workplace Conditions, A. Vivulskio str. 11, LT-2693 Vilnius, tel.: (8 22) 60 38 13

State Labour Inspectorate, Algirdo str. 19, LT-2693 Vilnius, tel.: (8 22) 65 01 93

*Please return the filled in questionnaire by the **31 of May** to A. Šešelgytė, European Committee, Gedimino str. 56, LT-2685 Vilnius by post or by fax, no. (8 22) 61 21 78*

Questions for enterprises

**Q1.** Details of the company

Industrial classification (please specify according to the annex 1)	
Point number of employees	
Turnover (or other measure of output)	
Main type of activity (indicate)	

Manufacturing Services Wholesale Retail Import-export	
Any major subsidiary activity (additional to any other major activity)	

**Q2.** Personal details of the respondent:

Name \_\_\_\_\_

Job title, description \_\_\_\_\_

Enterprise's address, your telephone and e-mail (if available) \_\_\_\_\_

Has / has not personal responsibility for health and safety matters \_\_\_\_\_

Experience in past 10 years of other industries (please specify according to the annex 1) \_\_\_\_\_

**Q3.** Do you know about regulations currently in force dealing with the safe use of equipment in the work place?

Yes  No

**Q4.** Do you know that these regulations will change as the result of Lithuania's application to join the EU?

Yes  No

**Q5.** Is another official in your organisation responsible for keeping up to date with regulatory changes?

Yes  No

**Q6.** The following aspects of safety of workplace equipment are frequently mentioned by the enterprises in the EU member states as having caused difficulties. Please asses the difficulty (if any) of dealing with these aspects in your company in relation to present regulation.

	Large	Medium	Small	None	Don't
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					know
1. Assessing risks					
2. Informing and training staff					
3. Modifying equipment					
4. Replacing equipment					
5. Other (please specify)					

**Q7.** Does the company keep a record of the costs of complying with present regulation?

- a) about safety in the work place generally  Yes  No  
b) about the safe use of workplace equipment  Yes  No

**Q8.** Can you give an estimate of the costs of question 7 (a) and 7 (b), based on the best information you have in LTL on annual basis

- a) safety in the work place generally \_\_\_\_\_ Lt  
b) the safe use of workplace equipment \_\_\_\_\_ Lt

**Q9.** As summarised in the introduction the EU Directive on workplace equipment, transposed into Lithuanian law by the Resolution of the Minister of Social Security and Labour No. 102 of 22 December 1999 will introduce changes. (For specific details see Directive 89/655/EEC). Please consider whether the changes are likely to have significant difficulties for your company.

	Large	Medium	Small	None	Don't know
1. Assessing risks					
2. Informing and training staff					
3. Modifying equipment					
4. Replacing equipment					
5. Other (please specify)					

**Q10.** Can you estimate the likely cost to your company (current prices) of:

- carrying out a risk assessment \_\_\_\_\_ Lt  
additional staff training \_\_\_\_\_ Lt  
typical equipment modification \_\_\_\_\_ Lt  
replacing equipment \_\_\_\_\_ Lt  
others (please indicate) \_\_\_\_\_ Lt  
\_\_\_\_\_ Lt  
\_\_\_\_\_ Lt

**Q11.** Please consider whether this likely to be a change in the cost of compliance by the

company with the Directive?

	Large	Medium	Small	None	Don't know
1. Assessing risks					
2. Informing and training staff					
3. Modifying equipment					
4. Replacing equipment					
5. Other (please specify)					

Thank you for the answers

*Please return the filled in questionnaire by the **31 of May** to A. Šešelgytė, European Committee, Gedimino str. 56, LT-2685 Vilnius by post or by fax, no. (8 22) 61 21 78*

### **Pilot Study: Workplace Equipment Safety**

#### **Questionnaire for inspectors**

##### Introduction

##### The safe use of workplace equipment

The present regulation systems deals with all aspects of the safety of equipment in the workplace, which is design, manufacture and certification as well as safe use, largely by means of equipment-specific regulations.

New arrangements based on the EU Directives will come into effect progressively from now on. There is a separate Directive dealing with the safe use of equipment (of whatever sort) in the workplace it will be in full operation in 2005. This is Directive 89/655/EEC, which has been transposed into Lithuanian legislation by the Resolution of the Minister of Social Security and Labour No. 102 of 22 December 1999.

The possible impact, expressed in terms of this change is currently being assessed and this questionnaire being agreed with and authorised by the Department is designed to records your views, which will be based on your professional experience. The members of the State Labour Inspectorate are a unique source of information about effects on industry generally. And it is therefore important that you respond promptly and with care.

Thank you for your co-operation.

THE SURVEY IS CARRIED OUT BY THE FOLLOWING INSTITUTIONS:

European Committee under the Government of Lithuania, Gedimino str. 56, LT-2685 Vilnius. Contact person Agnė Šešelgytė tel.: (8 22) 61 19 85, fax.: (8 22) 61 21 78

Ministry of Social Security and Labour, Department of Workplace Conditions, A. Vivulskio str. 11, LT-2693 Vilnius, tel.: (8 22) 60 38 13

State Labour Inspectorate, Algirdo str. 19, LT-2693 Vilnius, tel.: (8 22) 65 01 93

*Please return the filled in questionnaire by the 7 of May to A. Šešelgytė, European Committee, Gedimino str. 56, LT-2685 Vilnius by post or by fax, no. (8 22) 61 21 78*

## Questionnaire

Name, Surname

Positions, title:

Work address:

Tel. No. / Fax. / E-mail:

**Q1.** Please indicate the industries of which you have had personal experience in the last 5 years

**Q2.** Please assess those industries in which you have experience industries, which you saw had difficulties in complying with existing regulations on safe use of workplace equipment. Mark 1 when you consider the industry as having major difficulties and 5-no problems in complying with present regulation)

List of industrial activities	Question 1 Tick	Question 2 (Mark 1-5)
1. Agriculture, hunting, forestry		
2. Fishing		
3. Mining and quarrying		
4. Manufacturing		
4.1 Manufacture of food products and beverages		
4.2 Manufacture of tobacco products		
4.3 Manufacture of textiles		
4.4 Manufacture of wearing apparel, dressing and dyeing of fur		
4.5 Manufacture of leather and leather products		
4.6 Manufacture of wood and wood products except furniture		
4.7 Manufacture of pulp, paper and paper products		
4.8 Publishing, printing and reproduction of recorded media		
4.9 Manufacture of refined petroleum products		
4.10 Manufacture of chemicals and chemical products		
4.11 Manufacture of rubber and plastic products		
4.12 Manufacture of non-metallic mineral products		
4.13 Manufacture of basic metals		
4.14 Manufacture of fabricated metal products, except machinery and equipment		
4.15 Manufacture of machinery and equipment		
4.16 Manufacture of office machinery and computers		
4.17 Manufacturing of electrical machinery and apparatus		

- 4.18 Manufacture of radio, television and communication equipment and apparatus
- 4.19 Manufacture of medical, precision and optical instruments
- 4.20 Manufacture of motor-vehicles, trailers and semi trailers
- 4.21 Manufacture of other transport equipment
- 4.22 Manufacture of furniture, manufacture of n.e.c.
- 4.23 Recycling of metal waste and scrap
- 5. Electricity, gas and water supply
- 6. Construction
- 7. Wholesale and retail trade, repair of motor vehicles, motorcycles, personal and household goods
- 8. Hotels and restaurants
- 9. Transport, storage and communication
- 10. Financial intermediation
- 11. Real estate, renting and business activities
- 12. Public administration and defence; compulsory social security
- 13. Education
- 14. Health and social work
- 15. Other community, social and personal service activities

**Q3.** The following topics which are frequently mentioned in the EU Member states and as having caused difficulty. Please assess difficulties in the industries of which you have knowledge in implementing present regulations.

	Large	Medium	Small	None	Don't know
1. Assessing risks					
2. Informing and training staff					
3. Modifying equipment					
4. Replacing equipment					
5. Other (please specify)					

**Q4.** The new Directive will require enterprises themselves to carry out risk assessment of virtually all uses of workplace equipment. It also requires “fail safe” arrangements for powered equipment and tools. Note that a long transition period to 2005 is provided and that much equipment will become worn out or obsolete during that period. Replacement of such equipment will not therefore be direct consequence of introducing new regulation in 2005.

Which of the following activities do you expect to be difficult for enterprises?

	Large	Medium	Small	None	Don't know
1. Assessing risks					
2. Informing and training staff					
3. Modifying equipment					
4. Replacing equipment					
5. Other (please specify)					

**Q5.** Enterprises will incur additional costs in dealing with these difficulties. How large do you think they are likely to be?

	Large	Medium	Small	None	Don't know
1. Assessing risks					
2. Informing and training staff					
3. Modifying equipment					
4. Replacing equipment					
5. Other (please specify)					

**Q6.** Please consider whether this likely to be a change in the cost of compliance by the company with the Directive and to what amount?

	Large	Medium	Small	None	Don't know
1. Assessing risks					
2. Informing and training staff					
3. Modifying equipment					
4. Replacing equipment					
5. Other (please specify)					

**Q7.** Are small and medium enterprises (< 50 employees) likely to find it more expensive to deal with the following activities than large enterprises?

	More	Same	Less	Don't know
For SMEs				