

Evaluation of the success in Great Britain of the Directive on minimum safety and health requirements for work with display screen equipment

A comparative assessment of the 1997 and 2007 evaluations

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This current report involved a comparative evaluation of the impact, including the costs and benefits, of the Display Screen Equipment (DSE) Directive 90/270/EEC in Great Britain, with the previous evaluation of the Regulations that was completed in 1997. The research is based on a structured sample of employers in Great Britain, in which data were collected from 1,241 respondents.

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EXECUTIVE SUMMARY

This current report involved a comparative evaluation of the impact, including the costs and benefits, of the Display Screen Equipment (DSE) Directive 90/270/EEC in Great Britain, with the previous evaluation of the Regulations that was completed in 1997. The research is based on a structured sample of employers in Great Britain, in which data were collected from 1,241 respondents.

Overall, the results showed positive findings across a majority of the analyses. For example, the perceptions of employers of who among their employees is covered by the Regulations increased and suggest that the concept of 'user' is becoming more inclusive.

There is less confusion in 2007, than in 1997, about what constitutes a risk of using DSE. Further, there was an increase among those individuals who obtained five or more correct responses of the eight possible choices. One point to note, however, is that there is still a misperception that DSE can have a permanent detrimental effect on eyes and eyesight and increase also the risk of epilepsy. Further information on these specific risks may help to dispel these misperceptions.

The proportion of establishments stating that they provided eyesight tests increased from one-third in 1997 to 52 per cent in 2007. While this is an improvement, it is necessary to bear in mind that the lack of provision of eyesight tests is not an indication of non-compliance. Further, just under one-quarter of organisations noted that none of their employees had received eyesight tests in 2007, an increase from 1997. Although these findings should be taken in context, it may be necessary to contemplate if more information needs to be provided to businesses about their duty with respect to the Regulations.

There was an improvement among the businesses about their awareness and understanding of the Regulations, and an increase in the proportion of businesses undertaking risk assessments. The HSE has emerged also as the main source for information for firms wanting advice on display screen equipment and the Regulations. The impact is especially noticeable among small sized businesses and suggests they are making efforts to comply with the Regulations.

Finally, while the findings on the taking of breaks and the provision of eyesight tests could be improved, they do not suggest non-compliance with the Regulations. However, there is room for improvement that may be assisted by information dissemination.

1 INTRODUCTION

1.1 BACKGROUND

The development of the European Union (EU) over the last half-century has produced a large body of community legislation. The continuing challenge is to develop better regulation that balances the costs and benefits, so that legislation is effective without constraining economic development.

Germany initiated a working group of government representatives of interested member states, including the United Kingdom (UK) to facilitate this ongoing process. The objectives of this group are to evaluate the DSE Directive and to use this as an example that a cross-country evaluation is possible and provides a useful feedback mechanism for policy making. A set of common terms of reference has been drawn up to ensure consistency in the evaluations. This group agreed that each participating member state should undertake a pilot evaluation of the DSE Directive 90/270/EEC, both to test the methodology and to answer questions about the success of the Directive. The Health and Safety Executive (HSE) contracted the Health and Safety Laboratory (HSL) to conduct the evaluation of the DSE Directive in Great Britain.

Britain has implemented the European Directive 90/270/EEC by the Health and Safety (Display Screen Equipment) Regulations 1992 (as amended in 2002). The HSE has published guidance on the Regulations, notably booklet L26 *Work with display screen equipment*. The aim of the Directive and the Regulations is to reduce the risks of ill health associated with display screen equipment (DSE) work, notably musculoskeletal disorders (MSDs), stress and visual fatigue. Musculoskeletal disorders are the most common type of occupational ill health in Great Britain; currently affecting just over 1 million people a year. In 1995/96, MSDs cost British society £5.7 billion.

An initial evaluation of the effect of the Regulations in Great Britain was made in 1995/96 and the results were published (see HSE CRR 130/1997, available via the HSE's website). A limited amount of further information has been gathered in subsequent years, reflected in the UK's four-yearly reports to the European Commission on practical implementation of the Directive.

1.2 OBJECTIVES FOR THE RESEARCH

The aim of the present research is to conduct an initial evaluation of the impact, including costs and benefits, of Directive 90/270/EEC in Great Britain, in order to provide comparative data for the cross-country evaluation conducted by the working group. The overarching research question is: What is the impact of the DSE directive, as implemented in the Health and Safety (Display Screen Equipment) Regulations 1992 (as amended in 2002) and the guidance provided by HSE (booklets L26, HSG90 and INDG36)?

The general research question is broken down into the following questions referenced at employers whose workers use DSE and are subject to the Regulations:

- What is the level of knowledge and awareness of the Regulations and guidance by employers?
- What are the costs of the Regulations as implemented in the UK on employers?
- What are the benefits of the Regulations as implemented in the UK on employers?

This project will be the second evaluation of the DSE Regulations by HSE. The research report for the first evaluation (CRR 130/1997) and the underlying methodology are key references for this project. The first report to be produced from the survey (Gervais, Williamson, Sanders and Hopkinson, 2007) aimed to enable judgements to be made about the success of the Regulations in tackling DSE-related ill health to inform HSE's MSD programme. The secondary objective of the research is to compare the present findings with this first evaluation, and forms the basis of this second report. It is important to note that the results will be comparable as far as the terms of reference prepared by the international group (and any technological change) allow.

2 METHODOLOGY

The principal focus of investigation for the present project was on employers whose workers use DSE and are subject to the Regulations. The research methodology used a questionnaire to collect data from employers concerning their health and safety management practices for risks to employees arising from DSE use. A more detailed account of the research methodology is presented in the first report to be produced from this research (see Gervais *et al.*, 2007).

Questionnaire design

The purpose of the questionnaire was to collect data evaluating Directive 90/270/EEC for the European Working Group and also to provide a point of comparison for other data sources, most notably CRR 130/1997, in order to give insight into the extent of change over time.

The questionnaire used in the research report CRR 130/1997 formed the basis of the terms of reference identified by the European Working Group and so was used as a basis for the current questionnaire. The development of the final questionnaire was subject to 11 iterations, which included cognitive piloting. The final questionnaire is presented in Appendix 1, and covered the following issues:

- Background Information
- Use of Display Screen Equipment
- Perceived Risks
- Alterations to Workstations
- Operator Computer Interface
- Daily Routine of DSE Users
- Information and Training
- Eyes and Eyesight
- The Regulations
- Costs and Benefits

Sample design

The sampling strategy was determined by the requirements to:

- Provide a sufficient number of employers and industrial sectors to reflect the current situation in Great Britain so as to make a contribution to the International Working Group.
- Allow comparison with the sample from CRR 130/1997.
- Adhere to the financial limitations for engaging a sub-contractor to administer the survey to around 1200 respondents.

In order to provide a sample frame that was representative of the spread of employment across a range of industries and size of organisations in Great Britain, a stratified quota sampling frame was devised based upon the 2004 Annual Business Inquiry Workplace Analysis¹ conducted by the Office for National Statistics. This basis for the sample frame to reflect the spread of employment was partly decided as the scope of the research was not able to focus specifically on the responses of employees. Industrial sectors assumed to have a low prevalence of DSE use

¹ <https://www.nomisweb.co.uk/Default.asp>

(i.e. Agriculture, Hunting and Forestry) were not included in the sampling frame. Sole traders and the self-employed were excluded also. The sampling frame is presented in Table 2.1.

Table 2.1: Final sampling frame for respondents according to the employer size and SIC

Industry (SIC 2003 Section Descriptor)	Number of Employees in Organisation			
	One to 24	25 - 99	100 - 299	300 plus
C: Mining and quarrying	34	36	35	43
D: Manufacturing				
E: Electricity, gas and water supply	27	14	11	9
F: Construction				
G: Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	140	78	40	40
H: Hotels and restaurants				
I: Transport, storage and communication	16	16	17	23
J: Financial intermediation	89	47	43	63
K: Real estate, renting and business activities				
L: Public administration and defence; compulsory social security	8	14	18	28
M: Education	13	44	28	25
N: Health and social work	34	40	16	51
O: Other community, social and personal service activities	31	16	8	7
Total respondents by size of organisation	392	305	216	289
Total number of respondents = 1202				

Data collection

A sub-contractor was engaged to administer the questionnaire and collate the data. Sufficient contact details for organisations to guarantee the quotas outlined in the sampling frame were randomly selected from the Inter Departmental Business Register (IDBR) and the Dun and Bradstreet database.

The unit of selection for the contact details was at the local data or unit level, e.g. the individual workplace (as with the 2004 Annual Business Inquiry Workplace Analysis). Respondents were representatives of employers, who in each instance had knowledge and experience of the organisation's management of the health risks associated with DSE. Respondents were asked to reference their responses to the individual workplace of which they had direct experience.

An integrated approach to data collection was used, combining Computer Assisted Telephone Interviews (CATI) and a web-based questionnaire survey. Respondents were initially recruited via the telephone. They were given then the option of completing the survey questionnaire over the telephone, or they were e-mailed a link to the online version of the questionnaire for them to complete. Records were kept of non-respondents. The fieldwork took place between December 2006 and March 2007.

Achieved sample and response rates

Data were collected from 1,241 respondents. In total, 904 interviews were completed using the CATI method, and 337 interviews were completed using the online version of the questionnaire. In total 13,751 individual contacts were made with potential respondents. There were 12,510 non-respondents, giving a response rate of just under 10 per cent. Although it is problematic to gauge the extent that the non-respondents introduce an element of bias into the sample, e.g. through self-selection, the non-responses were in part due to failure to make contact from the

outset or inaccuracies in the contact details. Further information on non-response categories is provided in Appendix 1 of the first report (section 12. 1. 5; Gervais *et al.*, 2007).

The previous report (IES - Honey, Hillage, Frost and La Valle, 1997) used the establishment as the unit of analysis, with an emphasis on generalising on the number of establishments. In the present research, (the first report - Gervais *et al.*, 2007; and this second report), although the establishment was the unit of analysis, the focus was on the number of employees within each unit. The researchers felt that this was necessary, as statistics show that although small businesses account for 99 per cent of businesses, they account for 44 per cent of non-government employment; conversely, while less than one per cent of businesses are classified as large, they account for 45 per cent of non-government employees (SBS, 2001). See Figure 2.1.

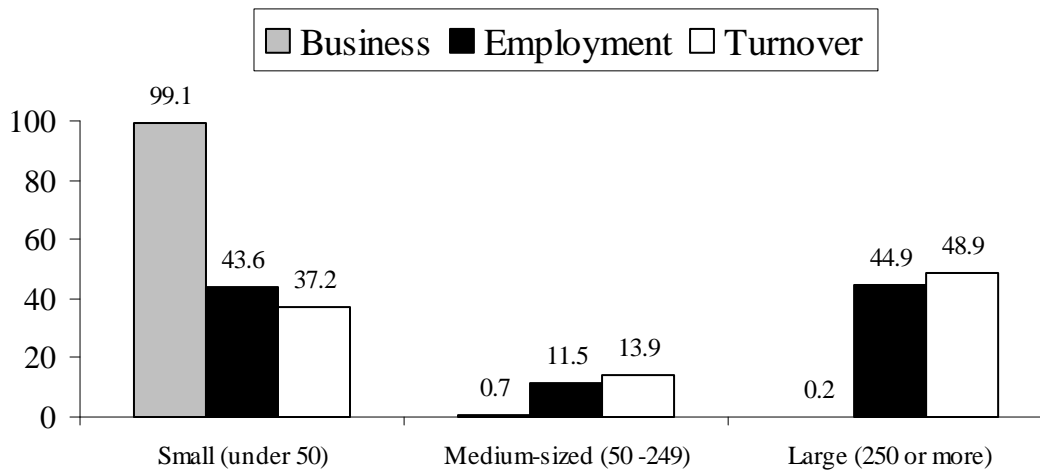


Figure 2.1: Comparison of businesses by size ²

As the present study was not able to focus specifically on the responses of employees through an employee targeted survey, there was an emphasis on obtaining a more representative sample of the number of employees across the respective businesses. The first report (Gervais *et al.*, 2007) to arise from this research provided an assessment of the Regulations with this specific sample. However, in order to compare the present findings with the previous evaluation (IES - Honey *et al.*, 1997) the data needed to be weighted accordingly. Firstly, as described in Honey *et al.* (p.5, 1997) the data used for this second report were recoded to structure the sectors into the closest possible comparison with the sectors from the 1997 research. See Table 2.2.

² Source: Small Business Service, 2001, p.1

Table 2.2: Recoding of sectors from the studies

	Honey <i>et al.</i> 1997	Gervais <i>et al.</i> 2007	Number of Employees in Organisation (2007)				<i>Total</i>
			<i>2-24</i>	<i>25-99</i>	<i>100-299</i>	<i>300+</i>	
	<i>Sectors (SIC)</i>	<i>Main business activity</i>					
1.	Metal/mineral extraction	Mining and quarrying	3	1	1	0	5
2.	Engineering						
	Other manufacturing	Manufacturing	31	35	35	45	146
3.	Energy/water supply	Electricity, gas and water supply	3	2	0	2	7
4.	Construction	Construction	24	12	11	8	55
5.	Distribution/hotels	Wholesale and retail trade etc.	136	73	33	34	276
		Hotels and restaurants	4	6	8	8	26
6.	Transport/communication	Transport, storage and communication	16	19	17	24	76
7.	Business services	Financial intermediation	54	23	24	24	125
		Real estate, renting and business activities	36	25	19	39	119
8.	Other services	Public administration and defence etc.	8	14	21	32	75
		Education	15	45	29	26	115
		Health and social work	35	42	16	54	147
		Other community, social and personal service activities	31	17	14	7	69
		Total	396	314	228	303	1241

The next step was to weight the data so that it was comparable to the whole population. The weighting of data is an appropriate technique to use when it is necessary to weight some individual responses in the data set more heavily than others. This could be due to wanting the data to be more representative of the wider population or to ensure that all respondents are comparable in respect of the information that they have supplied. Comparable to the 1997 weighting process, the factor difference between the numbers in the cells of the actual population and the random sample gave the required weights.

It is suitable to weight the present data according to the wider population as the total number of participants ($N = 1,241$) would generate a margin of error of 2.8 per cent, and this implies that if the survey were to be administered again that the responses obtained from that administration would be within ± 2.8 points of the percentages of the first set of responses. Table 2.3 reflects the weighted sample that will be used in the present set of analyses.

Table 2.3: Size and sector composition of the weighted sample (2007)

Main business activity	Size of Organisation				Total	%
	2-24	25-99	100-299	300+		
Mining and quarrying	1	0	0	0	1	0.1
Manufacturing	82	9	2	1	94	7.6
Electricity/water	1	0	0	0	1	0.1
Construction	112	3	0	0	115	9.4
Distribution/Hotels	341	21	3	1	366	29.5
Transport/communication	50	4	1	0	55	4.5
Business Services	370	12	3	1	386	31.1
Other Services	184	30	5	1	220	17.8
Total	1141	79	14	4	1238	100.0
% of population	92.0	6.3	1.3	0.4	100	

Table 2.4 provides the size and sector composition of the weighted sample from the 1997 survey. Although the weighted data across both surveys are similar in composition, an exact match is unattainable due to the changes in types and sizes of organisations over the ten-year period of both surveys.

Table 2.4: Size and sector composition of the weighted sample (1997)

SIC	Size of Organisation				Total	%
	1-24	25-99	100-299	300+		
Agriculture	0	0	0	0	0	0.0
Energy/water supply	4	1	1	0	6	0.5
Metal/mineral extraction	11	2	1	0	14	1.1
Engineering	49	9	2	1	61	4.8
Other manufacturing	57	9	3	1	70	5.5
Construction	85	6	1	0	92	7.3
Distribution/hotels	401	26	4	1	432	34.0
Transport/communication	50	6	2	1	59	4.6
Business services	216	16	5	1	238	18.8
Other services	245	41	7	3	296	23.3
Total	1118	116	27	7	1268	100.0
% of population	88.1	9.2	2.1	0.6	100	

Data analysis

The questionnaire data were analysed using the SPSS (Statistics Package for the Social Sciences) software. Due to the nature of the questions, and of the previous analysis, the main analyses focused on providing a descriptive assessment of the data.

Each section provides responses to the questions and the relevant information (numbers and percentages) of the respective respondents. Some of the tables may total either 99 per cent or 101 per cent due to the rounding of the figures.

Structure of the report

The findings from the survey are presented in the following sections, structured according to the Honey *et al.* 1997 report:

- Use of Display Screen Equipment
- Perceived risks
- Alterations to workstations
- Daily routine of users
- Eyes and eyesight tests
- Benefits and costs
- The Regulations

A complete comparison between the two sets of research is unrealistic as the Honey *et al.* (1997) study included also a postal survey of employees and a telephone survey with trade union representatives, which were not replicated in the present research. The comparative analysis of this second report will focus on the employer survey only.

3 USE OF DISPLAY SCREEN EQUIPMENT

Section three looks at the use of display screen equipment in the workplace, the ways in which users are defined and the tasks for which DSE are used.

3.1 DSE IN THE WORKPLACE

The question to assess the use of DSE in the workplace was different across both surveys, in the 1997 survey the respondents were asked, “Does anyone use display screen equipment at your workplace?” See Appendix 2 for the questionnaire used in the 1997 research. In the 2007 survey, the respondents were asked i.e., “Do any staff in your organisation routinely use display screen equipment as a significant part of their normal work?” The participants were provided with a definition of *significant part*. However, as participants were screened for the use of DSE in the 2007 survey, with those answering in the negative not included as part of the sample, the percentages across all the establishments, regardless of size, were all 100 percent. See Table 3.1.

Table 3.1: Use of DSE in the workplace by size of establishment

Size	Use of DSE					
	2007	1997	2007	1997	2007	2007
	Use DSE (%)		No DSE (%)		Total (N = weighted data)	Total (N = un-weighted data)
2-24	100	90.0	0.0	10.0	1142	396
25-99	100	94.7	0.0	5.3	79	314
100-299	100	99.7	0.0	0.3	15	228
300+	100	99.1	0.0	0.9	5	303
Total	100	90.7	0.0	9.3	1241	1241

Similarly with the assessment across size of establishment, all of the responses were in the affirmative across sectors. See Table 3.2

Table 3.2: Use of DSE in the workplace by sector

Main Business Activity	Use of DSE					
	2007	1997	2007	1997	2007	2007
	Use DSE (%)		No DSE (%)		Total (N = weighted data)	Total (N = un-weighted data)
Metals/minerals (mining)	100	85.6	0.0	14.4	1	5
Manufacturing	100	73.4	0.0	26.6	94	146
Energy/water	100	89.8	0.0	10.2	1	7
Construction	100	82.4	0.0	17.6	116	55
Distribution/Hotels	100	91.4	0.0	8.6	366	302
Transport/Communications	100	71.7	0.0	28.3	56	76
Businesses services	100	97.0	0.0	3.0	386	244
Other services	100	95.2	0.0	4.8	220	406
Total	100	90.7	0.0	9.3	1240	1241

3.1.1 Defining usage

The question used to assess the ‘constant’ use of DSE in the workplace differed across surveys. In the 1997 research, the businesses were asked to account for those members of staff who *habitually* use display screen equipment, with three responses of *Yes*, *No* and *Don’t know*. In the present research, the businesses were asked to estimate the percentage of employees who *always*, *occasionally*, and *never* work with a display screen. The responses to employees *always* using DSE was used as the comparative variable, as either the employees used DSE to a great extent or they did not.

The results showed that overall there was a very slight decrease in the number of businesses stating that their employees used DSE equipment, from 91 per cent in 1997 to 90 per cent in 2007. The single category to show very slight increases were those organisations with over 300 employees. Small-sized businesses remained the group to use DSE the least. See Table 3.3

Table 3.3: Habitual use of DSE in the workplace *by size of establishment*

<i>Size</i>	Habitual Use of DSE					
	<i>2007</i>	<i>1997</i>	<i>2007</i>	<i>1997</i>	<i>2007</i>	<i>2007</i>
	<i>Use DSE (%)</i>		<i>No DSE (%)</i>		<i>Total (N = weighted data)</i>	<i>Total (N = un-weighted data)</i>
2-24	89.2	90.2	10.8	9.8	1142	396
25-99	94.9	95.8	5.1	4.2	79	314
100-299	93.8	96.3	6.3	3.7	16	228
300+	100	98.9	0	1.1	5	303
Total	89.7	90.9	10.3	9.1	1242	1241

Due to the changes in the coding of businesses by the Standard Industrial Classification (SIC), the percentages for manufacturing would not be fully comparable, and this is applicable for the entire report. However, there has been an increase in DSE use among those businesses in the construction sector, from 83 per cent to 96 percent, and those in the transport/communications sector, from 89 per cent in 1997 to 95 per cent in 2007. Interestingly, two of the sectors with fewer numbers of establishments increased their usage. Those businesses in metals/minerals (mining; $n = 5$ un-weighted) increased from 93 per cent to 100 per cent, while those in energy/water ($n = 7$ un-weighted) increased from 99 to 100 per cent. See Table 3.4.

Table 3.4: Habitual use of DSE in the workplace *by sector*

<i>Main Business Activity</i>	Habitual Use of DSE					
	<i>2007</i>	<i>1997</i>	<i>2007</i>	<i>1997</i>	<i>2007</i>	<i>2007</i>
	<i>Use DSE (%)</i>		<i>No DSE (%)</i>		<i>Total (N = weighted data)</i>	<i>Total (N = un-weighted data)</i>
Metals/minerals (mining)	100.0	92.8	0.0	7.2	1	5
Manufacturing	90.5	87.1	9.5	12.9	95	146
Energy/water	100.0	98.5	0.0	1.5	1	7
Construction	95.7	83.4	4.3	16.6	116	55
Distribution/Hotels	89.9	93.6	10.1	6.4	366	302
Transport/Communications	94.6	89.4	5.4	10.6	56	76
Businesses services	89.4	88.7	10.6	11.3	386	244
Other services	85.9	91.0	14.1	9.0	220	406
Total	89.8	90.9	10.2	9.1	1241	1241

The 1997 report stated that on average, establishments considered that 46 per cent of their employees were DSE users, with a median of 43 per cent. In 2007, the mean had increased to 57 per cent with a median of 50 per cent. Comparable with the 1997 data, the proportion was influenced by the number of small firms in the sample. In 1997, the median showed that 44 per cent of employees were reported to be DSE users, compared to less than one-quarter in medium sized firms and 15 per cent in large firms. See Figure 3.2. In 2007, the proportions had increased but the trend remained the same, with 60 per cent of employees in small firms reported to be DSE users compared to 45 per cent in medium sized businesses and 31 per cent in large firms. See Figure 3.1.

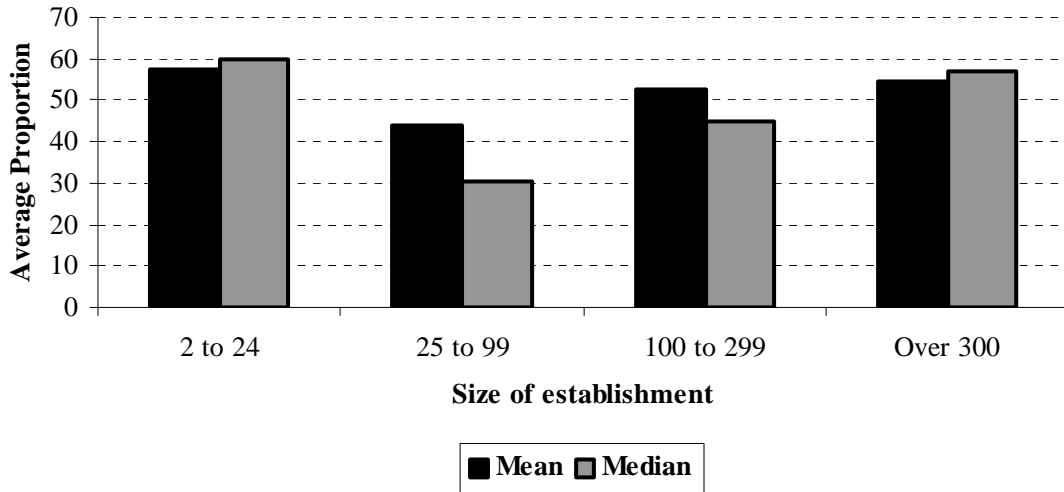


Figure 3.1: Proportion of employees who are DSE users *by* size of establishment (2007)

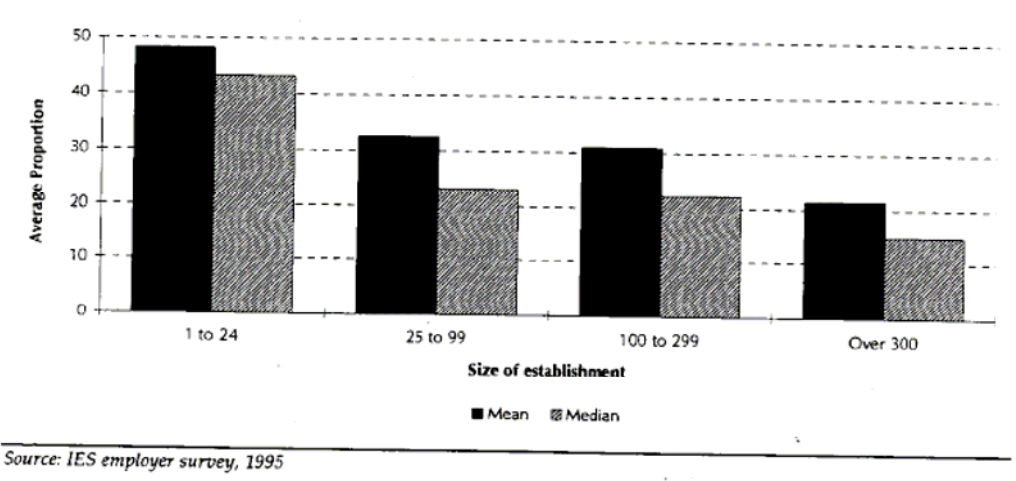


Figure 3.2: Proportion of employees who are DSE users *by* size of establishment (1997)³

³ The charts in respect of the 1997 data are from the IES report (Honey et al., 1997). The data were collected in 1995

3.1.2 Users and the Regulations

Across both surveys employers were asked, “*How have you decided which employees are covered by the Regulations at your workplace?*” They were given five options as well as an ‘other’ category and could select as many of these as were applicable.

In the 1997 survey, the sectors were reduced to three main categories of manufacturing, other production and services, with services inclusive of distribution/hotels, transport/communications, business services and other services. These categories were applied to the 2007 survey.

The results showed that in respect of all the businesses, there was an increase in the perceptions of the employers of who was covered by the Regulations across most of the categories with the exception of the eyesight tests category and the other category, where these decreased for the most part. For example, businesses felt in 1997 that 40 per cent of all their users were covered, and this saw an almost 100 per cent increase to 74 per cent in 2007. Similarly, in 1997, 35 per cent of businesses used HSE guidelines, with 55 per cent stating this reason in 2007. See Table 3.5.

The decrease in the use of eyesight tests, with the exceptions of transport/communications and other services sectors, as a criterion is a positive finding in the present research, as it reflects the development of an inclusive overview of what constitutes a ‘user’. Specifically, this suggests that employers are focusing more on other factors, such as “everybody is covered” and “all work stations”, to account for those individuals who are covered by the Regulations, rather than relying on only those requesting eyesight tests.

With respect to the broad sectors, the findings reflected strong changes in a few of the sectors. For example, with respect to *everybody is covered*, those businesses within production increased from 38 per cent in 1997 to 85 per cent in 2007; those in distribution/hotels increased from 31 per cent to 69 per cent; while businesses services increased from 55 per cent to 88 per cent. Similarly, the category of *over half working time* saw increases among those businesses in production from 13 per cent to 21 per cent, in overall services from 15 per cent to 37 per cent and among those specific enterprises operating within businesses services from 14 per cent to 36 per cent.

However, it is important to note that some of the employers, especially those in the production and services sectors may not have provided ‘clean’ responses to the question. Although employers were provided with five options, the selection of ‘everybody is covered’ should have pre-empted the selection of the other options. Nonetheless, 85 per cent of employers in the production sector and 75 per cent of those in the services sector selected ‘everybody is covered’ and highly selected also other options such as ‘HSE Guidelines’ (Production: 65%; Services: 54%) and ‘all work stations’ (Production: 25%; Services: 46%). The five options may have prompted employers to select those multiple responses that may have been relevant.

Comparable to the 1997 evaluation, the other methods that the companies used in 2007 to define a user were as a result of an assessment (1% of companies) and to set a time criterion of one hour or more of use (1%).

Table 3.5: Coverage of users according to the Regulations by broad sector

<i>Main business activity</i>	Decision of Employers About Who is Covered by the Regulations												<i>2007</i>	<i>2007</i>
	<i>2007</i>	<i>1997</i>	<i>HSE Guidelines (%)</i>		<i>Over half working time (%)</i>		<i>All work stations (%)</i>		<i>Eyesight tests (%)</i>		<i>Other (%)</i>			
Manufacturing	49.3	39.5	48.0	28.4	31.1	26.7	47.3	26.4	0.0	4.8	0.0	8.2	75	136
Other production	84.6	37.6	65.4	50.2	21.2	13.3	24.8	36.5	4.8	20.3	0.0	0.4	104	64
Services	75.1	41.2	54.0	33.9	36.6	15.3	45.9	32.7	7.2	8.7	1.0	2.0	816	930
- Distribution/hotels	68.7	30.5	54.9	31.6	39.9	16.6	37.8	36.9	5.1	13.9	1.0	0.6	294	267
- Transport/communications	72.1	55.5	41.9	13.1	20.9	19.3	41.9	21.1	14.3	1.7	0.0	1.9	43	68
- Business services	87.6	55.3	52.1	34.3	36.1	13.5	54.1	25.5	5.8	5.8	0.0	2.8	290	217
- Other services	67.0	40.3	58.0	36.8	36.0	14.9	46.8	35.0	11.1	5.8	2.1	2.9	188	378
All establishments	74.2	40.4	54.7	34.6	34.6	16.2	43.8	32.4	6.4	9.1	0.8	2.4	995	1130

The differences, in respect of employees covered by the Regulations, found by size of organisation in the 1997 survey remained in the 2007 survey. These differences included smaller organisations stating that all employees were covered by the Regulations and being less likely to follow HSE guidelines than larger ones. See Figures 3.3 and 3.4. However, the differences in response between the groups have been reduced in 2007. For example, in 1997 close to one-third of small businesses were guided by the HSE compared to just under two-thirds of large businesses. In 2007, the proportion of small businesses guided by HSE had increased to 55 per cent, with the proportion of large businesses only slightly higher at 60 per cent. Small businesses seem to have increased their communication with the HSE in order to comply with the Regulations.

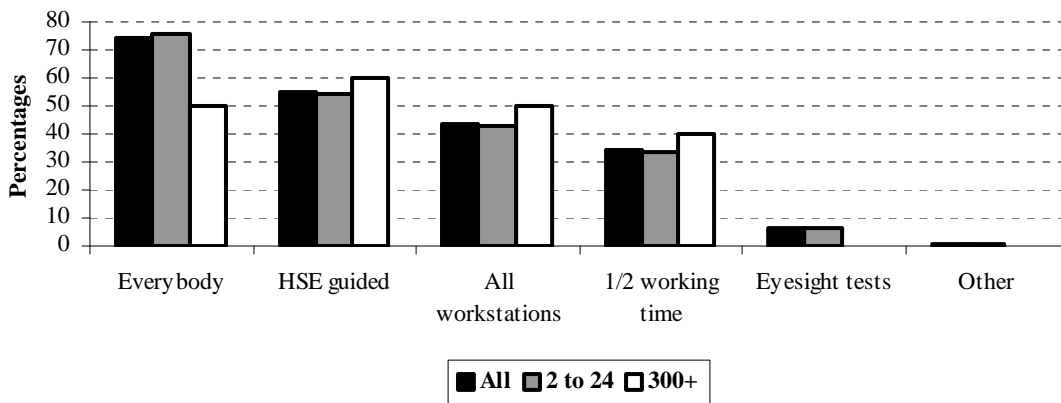


Figure 3.3: Defining a 'user' by size band (2007)

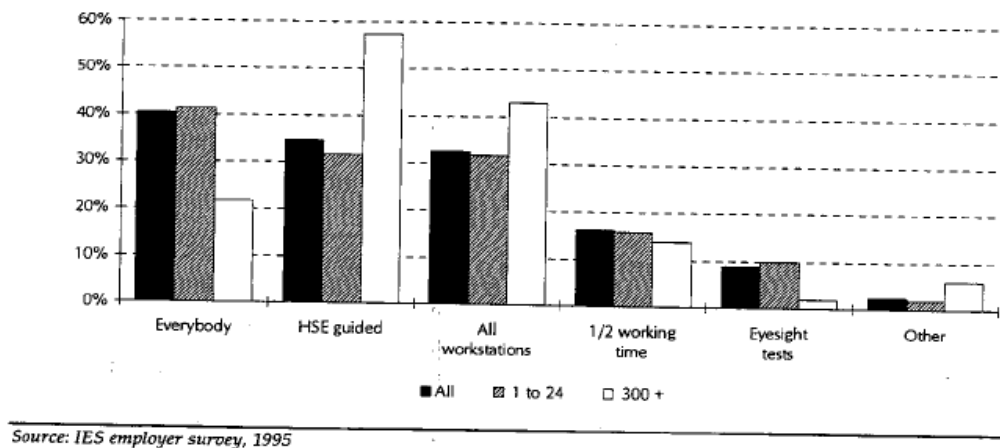


Figure 3.4: Defining a 'user' by size band (1997)

3.1.3 Users or 'operators'?

The 1997 report noted that the Regulations differentiated between users and operators. A user is defined as an employee, while an operator is self-employed. Both surveys captured the information on the type of individuals using DSE within organisations with the question, "Is

there anybody **not** permanently employed by your organisation that uses display screen owned or supplied by you?" The respondents were given eight options and could select as many as were applicable.

Comparable with the 1997 findings, just over three-quarters of respondents (78%) noted that they did not have temporary staff, with those organisations that did employ such staff, sourcing them from an agency. See Table 3.6.

However, the use of other self-employed staff not from an agency decreased from eight per cent in 1997 to four per cent in 2007, while the use of people on short-term contracts increased slightly from five per cent in 1997 to six per cent in 2007.

The difference among size bands remained distinct with the majority of the smaller organisations acknowledging that they did not use temporary staff (2007: 80%; 1997: 78%). However, for those organisations that did use temporary staff, most of these were concentrated among the larger-sized organisations. For example in 2007, of the eight per cent of organisations to use temporary/agency staff who are employed by an agency, 60 per cent of these organisations employed over 300 individuals. In 1997, of the 11 per cent of organisations to use the same category of staff, this was slightly lower at 51 per cent for organisations employing more than 300 individuals.

The use of temporary staff has remained consistent across the period.

Table 3.6: Use of temporary staff by size of organisation

<i>Type of temporary staff used</i>	Number of Employees									
	2007	1997	2007	1997	2007	1997	2007	1997	2007	1997
	2-24 (%)		25-99 (%)		100-299 (%)		300+ (%)		Total (%)	
Temporary/agency staff who are employed by the agency	6.2	8.8	17.9	22.4	40.0	41.5	60.0	50.9	7.5	11.1
Temporary/agency staff who are self-employed	3.3	2.9	3.8	5.4	6.7	12.8	20.0	15.1	3.5	3.5
Other self-employed	3.7	8.1	3.8	6.9	6.7	8.9	20.0	9.1	3.8	8.0
Sub-contractors	3.6	4.7	5.1	5.3	6.7	9.5	20.0	13.6	3.8	5.0
People on short-term contracts of fewer than 6 months	4.8	3.3	9.1	10.6	26.7	24.4	40.0	33.2	5.5	4.7
Other	1.9	4.2	3.8	5.5	0.0	6.3	0.0	7.3	2.0	4.4
None	79.6	78.1	65.4	63.5	46.7	44.3	25.0	37.9	78.1	75.7
Total (<i>N</i> = weighted data)	1138	958	78	104	15	25	5	7	1236	1094
Total (<i>N</i> = un-weighted data)	395	272	311	277	226	308	300	297	1232	1154

The other categories of temporary staff that the respondent listed were similar across surveys. These included student/work placement/experience, volunteers, trainees and part-time (casual staff).

3.1.4 Tasks involving 'users'

In order to assess the differing tasks for which DSE were used the respondents were asked, "What are the main tasks which require staff to habitually use display screen equipment as a significant part of their normal work?" In 1997, the respondents had six options for which they

could select as many as applied, while in 2007 they were provided with seven options. The category of 'Internet-based work' was not included in the 1997 survey and cannot be compared in this second report.

In 1997, the most common task for which DSE was used was word processing (90% of respondents). In 2007, while this was a common task (86%), data entry was just as popular (86%). Similar to 1997, the other tasks were less common but were cited more frequently than noted in 1997. For example, 20 per cent of organisations stated that they used DSE for process control in 1997, but in 2007, this increased to 31 per cent. Other increases were for CAD/CAM, from six per cent in 1997 to 17 per cent in 2007. See Table 3.7. The increases may perhaps be attributed to the advances that have been made with software and hardware since 1997, which allow different tasks to be managed much more effectively, or it may be due to firms becoming more familiar with DSE and its range of uses. Additionally, the price of computer equipment has decreased, which may also be a determining factor as this enables organisations to provide them to a wider cross-section of employees.

The additional categories listed by the respondents differed between the two surveys: in 1997, these focused on accounting; personnel information systems and sales control purposes; in 2007, while accounting was listed, the other categories were CCTV/security; programming; stock control; teaching/educational/lesson planning; till/checkout operation and research/surveys.

For both surveys, the use of word processing and data entry was consistent across the different sizes of organisations. However, larger organisations tended to use process control, desktop publishing and CAD/CAM to a greater extent.

An assessment of the results by sector showed that word processing and data entry remained as more common tasks among the different sectors. See Table 3.8. The use of data entry increased across all of the sectors, especially within transport/communications with a rise from 71 per cent in 1997 to 89 per cent in 2007. One of the surprising findings from the 1997 report, which showed that one-fifth of the businesses in services used process control, more than in manufacturing (19%), was reversed in 2007. In the present research, more businesses within manufacturing (40%) than in services (30%) acknowledged their use of process control. Interestingly, there was a substantial increase of the use of process control within the transport/communications sector, which rose from 19 per cent in 1997 to 55 per cent in 2007.

The 1997 report found that desktop publishing was more common among those establishments in business and other services sectors. However, in the present research, while desktop publishing did remain as a common task in those sectors, it increased across all of the sectors, e.g. in 1997 only 8 per cent of businesses within transport/communications used process control, but in 2007 this task is reported to be used by 27 per cent of these businesses.

CAD/CAM remained a common task among manufacturing and production establishments, but in 2007 close to half of all those within the production sector acknowledged its use, whereas less than one-fifth so admitted in 1997.

Table 3.7: Main tasks for which DSE are used *by size of organisations*

<i>Size (employees)</i>	Main Tasks															
	2007		1997		2007		1997		2007		1997		2007		1997	
	<i>Word processing</i>				<i>Desktop publishing</i>				<i>CAD/CAM</i>		<i>Other (%)</i>		<i>Total (N = weighted data)</i>		<i>Total (N = un-weighted data)</i>	
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)				
2-24	85.4	89.7	85.2	75.7	30.6	19.0	31.3	15.6	16.5	4.9	5.3	26.5	1142	965	396	275
25-99	89.9	89.8	92.3	87.7	37.2	26.4	38.5	23.3	20.5	15.4	5.1	23.0	78	106	313	288
100-299	93.3	95.8	93.3	88.4	46.7	29.0	46.7	30.3	26.7	19.9	12.5	16.3	15	26	228	312
300+	100.0	96.8	100.0	89.2	60.0	38.9	60.0	32.8	50.0	37.1	0.0	17.1	5	7	303	301
All establishments	85.8	89.9	85.8	77.3	31.4	20.1	32.1	16.8	16.9	6.4	5.3	25.9	1240	1104	1240	1176

Table 3.8: Main tasks for which DSE are used *by sector*

<i>Main business activity</i>	Main Tasks																			
	2007		1997		2007		1997		2007		1997		2007		2007					
	<i>Word processing (%)</i>				<i>Data entry (%)</i>				<i>Process control (%)</i>		<i>Desktop publishing (%)</i>		<i>CAD/CAM (%)</i>		<i>Other (%)</i>		<i>Total (N = weighted data)</i>		<i>Total (N = un-weighted data)</i>	
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)						
Manufacturing	90.4	89.8	88.3	73.6	40.4	18.9	40.4	19.1	25.5	23.9	3.2	19.6			94		146			
Other production	91.5	99.0	86.4	71.5	33.1	3.7	21.2	12.3	45.8	13.5	4.2	28.6			118		67			
Services	84.7	89.0	85.4	78.3	30.4	21.7	32.6	16.9	12.8	3.5	5.6	26.4			1028		1027			
Distribution/hotels	74.9	83.2	88.8	84.0	37.5	26.6	30.1	10.7	16.7	0.5	4.4	26.1			366		301			
Transport/communications	87.5	80.0	89.3	70.7	55.4	18.9	26.8	8.2	19.6	6.9	5.4	20.2			56		76			
Business services	91.2	90.6	81.6	74.6	23.1	16.7	30.6	22.2	7.5	9.5	4.7	28.0			386		244			
Other services	88.7	97.6	85.5	74.1	25.0	19.1	41.8	22.8	14.5	2.5	9.5	26.5			221		406			
All establishments	85.8	89.9	85.7	77.3	31.4	20.1	32.1	16.8	16.9	6.4	5.3	25.9			1240		1240			

As mentioned previously, developments in software and hardware have broadened how, where, when and for what DSE can be used. The “constraints” under which some tasks could have been used in 1997, may no longer be applicable in 2007; hence, the increases in the use of tasks across the sectors. Further, many information technology (IT) applications may have become easier and/or better known. This factor, in combination with an increased awareness of DSE of employers and that they might perceive the need to use up-to-date DSE, applications and software to keep up with their competitors, may assist in explaining the changes from 1997 to 2007.

3.2 CONCLUSIONS

The first comparison in this section focused on defining usage in the workplace. The results showed that habitual use of DSE seemed to have declined. This decline may be an indication of less frequent use of DSE, or it may be due to the slightly different ways in which the questions were phrased for both sets of surveys. Overall, the number of businesses stating that their employees used DSE is over 85 per cent and indicates the necessity of the Regulations for organisations to ensure the health and safety of their employees.

There was an increase in the perceptions of employers of who among their employees is covered by the Regulations. This increase was across all the categories with the exception of the eyesight tests and the other category. These increases can be viewed as a positive progression over the ten-year period as the definition of a ‘user’ is becoming more inclusive.

The most popular uses for DSE remained word processing and data entry, and this was regardless of the size of the organisation or the sector into which they fell. The use of DSE for process control, CAD/CAM and desktop publishing increased over the ten-year period and may reflect a change in perception of how DSE could be used or a change in the constraints of DSE. This could be pursued in further research.

Overall, employers seem to have progressed in acknowledging who are users, and this may contribute to a higher application of the Regulations across industry.

4 PERCEIVED RISKS

This section addresses the real and perceived risks among users of DSE. One of the objectives of both surveys was to assess the perceptions that individuals have about any real or perceived risks when using DSE.

Employer perceptions

In order to assess employers' perceptions they were asked, "*In this question we are trying to find out your perceptions of the risks (real or otherwise) associated with use of display screen equipment. In your opinion, which of the following health problems may be caused by the use of display screen equipment?*" In 1997, the employers were given eight choices to respond with a selection of either, *True, False* or *Don't know*. In 2007, the employers were given the same eight choices, but they were also provided with the options of back pain and an 'other' category. They were asked to respond, *Yes, No* or *Don't know* for each option. However, in the 2007 survey, the respondents stated that they were *Not sure* of the risks.

In the present comparison, 'True' will be paired with 'Yes', 'False' with 'No' and 'Don't know' to 'Not sure'. The options of *back pain* and the *other* category will not be assessed.

Overall, across both surveys the majority of respondents identified the actual risks associated with DSE use. See Figures 4.1 and 4.2. In 1997, close to 90 per cent identified temporary eyestrain and tiredness and stress as potential ill-health risks. In 2007, the responses were slightly lower at 81 and 71 per cent respectively. The proportion of respondents stating that upper limb pain and discomfort was a potential risk was fairly consistent across both surveys, in 1997, just over two-thirds listed it as a risk, with a similar percentage in 2007 (64%).

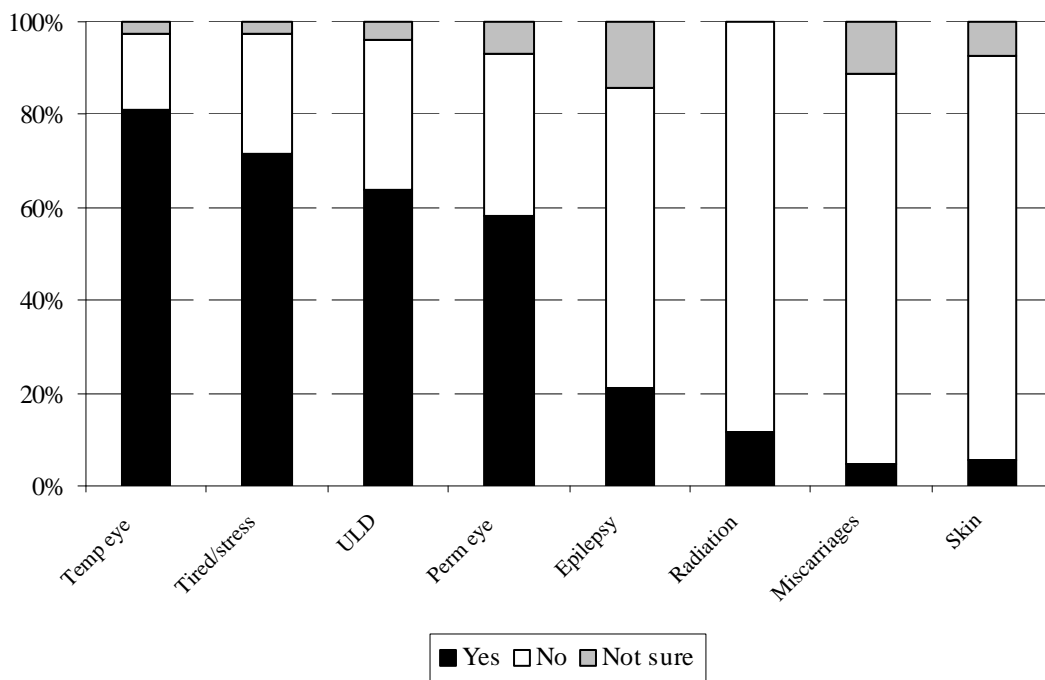
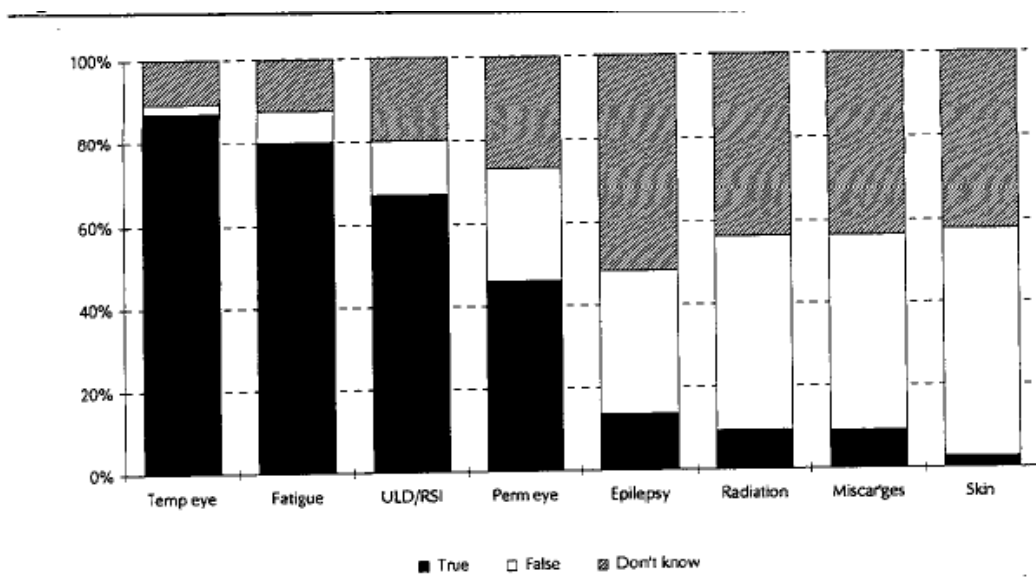


Figure 4.1: Perceived risks associated with DSE use (2007)



Source: IES employer survey, 1995

Figure 4.2: Perceived risks associated with DSE use (1997)

However, despite the positive findings, from the charts, it can be seen that there is a slight decrease in individuals providing the “correct” answer from 1997 to 2007. The accepted responses are provided in Table 4.1. For example, while close to 90 per cent acknowledged that temporary eyestrain was a risk in 1997, this decreased to 80 per cent in 2007. Additionally, while about 45 per cent of respondents stated that permanent eye damage was a risk associated with DSE in 1997, this percentage increased to close to 60 per cent among respondents in 2007. This may need to be explored further to determine the causes for the decline in knowledge about what actually determines a risk when using DSE.

There is less confusion in the 2007 survey about what employers perceive is a risk, with more individuals than in 1997 acknowledging that radiation, miscarriages and skin complaints are not risks associated with DSE use. Individuals’ perception of epilepsy as a risk (or not) has seen more respondents stating that it is not a risk (64%) in 2007, when compared to 1997 (approximately 30%), but this misperception could be reduced further.

The 1997 report combined the total number of correct responses for all the employers. A similar analysis was conducted with the 2007 data with the following responses identified in Table 4.1 as the accepted response.

Table 4.1: Actual versus perceived risks

Risk	Correct Response
Upper limb pains and discomfort	Yes
Permanent eye and eyesight effects, e.g. short sight	No
Temporary eye strain leading to symptoms such as red or sore eyes or headaches	Yes
Tiredness and stress	Yes
Epilepsy	No
Skin complaints	No
Health damage from radiation	No
Miscarriages and birth defects	No

The results showed in 1997 that very few respondents identified none of the statements as correct (5%). This has decreased in 2007 with only one per cent of the respondents not obtaining any correct responses. See Table 4.2. While the number of respondents to get all eight statements remained the same (7%) over both surveys, there was a substantial increase of those who got five or more correct from 1997 (46%) to 2007 (81%).

Table 4.2: Employers' understanding of the risks (combined responses)

	Proportion (%)	
<i>Number of correct answers to statements on risks associated with use of DSE</i>	<i>2007</i>	<i>1997</i>
None	0.8	4.5
One	0.0	2.0
Two	1.4	8.0
Three	6.1	26.8
Four	10.2	12.8
Five	24.2	14.4
Six	25.3	12.1
Seven	24.7	13.0
Eight	7.2	6.5
Total (<i>N</i> = weighted data)	1241	1103
Total (<i>N</i> = unweighted data)	1241	1187

4.1 CONCLUSIONS

Comparable to the 1997 survey, the awareness of the true nature of the risks seems to have remained fairly consistent over the period to 2007 when employers were surveyed again. There is less confusion in 2007 about what constitutes a risk, and there was an increase among those individuals who obtained five or more correct responses.

However, the perceptions of permanent eye and eyesight effects and epilepsy could be improved as there is still a misperception that DSE can have a permanent detrimental effect on eyes and eyesight and increase also the risk of epilepsy. Further information on these specific risks may help to dispel these misperceptions.

5 ALTERATIONS TO WORKSTATIONS

This section examines whether or not employers have undertaken alterations to workstations. It covers the use of risk assessments, the actual changes made to workstations and any other planned changes by employers.

5.1 RISK ASSESSMENTS

The use of risk assessments should be an essential part of the working environment. Employers, as outlined in the DSE Regulations, should identify the hazards and risks of DSE workstations and the extent to which they exist. The present comparison will assess any changes with the use of risk assessments since the last evaluation.

5.1.1 Prevalence of risk assessments

The question to assess the use of risk assessments in organisations differed across the surveys. In 2007, the respondents were asked, “*Does your organisation undertake risk assessments of workstations i.e. the display screen equipment and the immediate work environment every 12 months?*” They were allowed to select one option from: *Yes, No* and *Don’t Know*. In 1997, the respondents were asked: “*Have you undertaken a risk assessment of workstations i.e. the display screen equipment and the immediate work environment?*” The selection of one option from the listed three choices was the same.

In 1997, only 39 per cent of individuals acknowledged that their organisations had undertaken risk assessments. This has increased in 2007 with close to three-quarter of the respondents (72%) noting that their organisations conducted risk assessments.

A comparison across size band (see Figures 5.1 and 5.2) shows that while the larger establishments were still more likely to undertake risk assessments, the proportion of smallest-sized establishments choosing to do risk assessments had more than doubled from just over one-third in 1997 to 71 per cent in 2007. This is a positive development and acknowledges that smaller-sized businesses are focused on improving their health and safety requirements. There were no respondents who used the ‘Don’t know’ option in 2007 and may acknowledge an enhancement in the knowledge base of what is required or not to comply with the DSE Regulations.

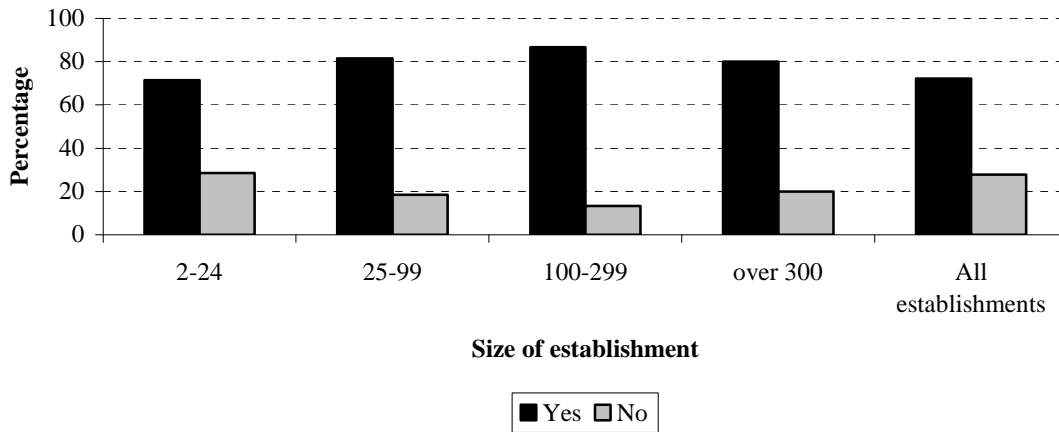
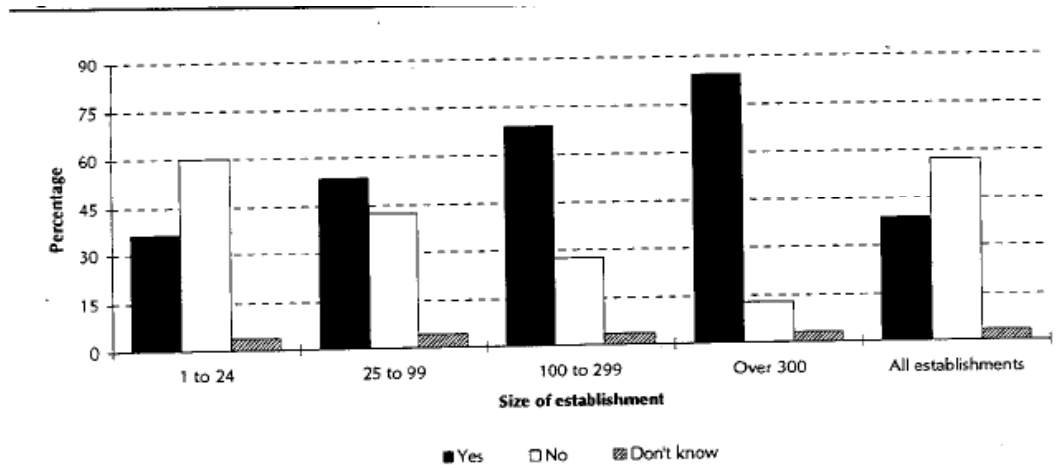


Figure 5.1: Proportion of establishments undertaking risk assessments *by size band* (2007)



Source: IES employer survey, 1995

Figure 5.2: Proportion of establishments undertaking risk assessments *by size band* (1997)

When the data are analysed by sector the results show a substantial increase across all of the sectors when compared to the 1997 survey. See Table 5.1. The largest increase was in the manufacturing sector that moved from 37 per cent of these businesses conducting risk assessments in 1997 to 80 per cent performing this activity in 2007. Additionally, although in 2007, close to or just over three-quarters of all businesses do undertake risk assessments, this task is slightly more abundant in the manufacturing, production and transport/communications sectors.

Table 5.1: Proportion of establishments undertaking risk assessments *by sector*

<i>Main business activity</i>	Risk Assessments (%)					<i>2007</i> <i>Total (N =</i> <i>weighted data)</i>	<i>2007</i> <i>Total (N = un-</i> <i>weighted data)</i>
	<i>2007</i>	<i>1997</i>	<i>2007</i>	<i>1997</i>	<i>1997</i> <i>Don't know</i> <i>(%)</i>		
	<i>Yes (%)</i>		<i>No (%)</i>				
Manufacturing	79.8	36.7	20.2	61.1	2.2	94	142
Other production	75.4	37.5	24.6	61.4	1.1	118	66
Services	71.1	39.6	28.9	56.4	4.0	1009	1013
Distribution/hotels	70.2	39.1	29.8	57.3	3.5	363	300
Transport/communications	75.0	35.3	25.0	58.8	5.8	56	75
Business services	70.5	39.5	29.5	57.4	3.2	373	239
Other services	71.9	40.9	28.1	54.0	5.1	217	399
All establishments	72.2	39.1	27.8	57.3	3.6	1221	1221

5.1.2 Why risk assessments were not undertaken

Similar to the 1997 survey, the results from the present survey found that awareness of the Regulations contributed to whether or not risk assessments were done. See Table 5.2.

Table 5.2: Awareness of Regulations by undertaking risk assessments (2007)

<i>Awareness of regulations</i>	Undertake risk assessments		<i>Total (N =</i> <i>weighted data)</i>	<i>Total (N = un-</i> <i>weighted data)</i>
	<i>Yes (%)</i>	<i>No (%)</i>		
Yes	76.8	23.1	1008	1131
No	48.9	51.0	194	81
All establishments	72.4	27.6	1202	1212

In 1997, nearly 62 per cent of employers who were aware of the Regulations noted that they had conducted risk assessments. This proportion increased to 77 per cent in 2007. An increase, from ten per cent in 1997 to 49 per cent in 2007, was found also for those who stated they were not aware of the Regulations but had still done risk assessments.

Another criterion that was used to comprehend why risk assessments were not completed was the extent of knowledge that the employers possessed. In 1997, 70 per cent of employers with a good understanding of the Regulations conducted risk assessments, compared to 52 per cent of those with a poorer degree of understanding. In 2007, the extent of knowledge did not strongly influence the undertaking of risk assessments as six per cent of respondents with a poorer understanding did risk assessments, as did those with neutral responses (44%) and those with a good understanding (45%). See Table 5.3.

Table 5.3: Extent of knowledge of the Regulations *by* undertaking risk assessments

Undertake Risk Assessments	Extent of knowledge of the Regulations					Total (n = weighted data)
	2007	1997	2007	2007	1997	
	<i>Poor knowledge</i>	<i>Neither</i>	<i>Good knowledge</i>			
Yes	6	52	44	50	70	774
No	28	-	44	29	-	234
Total	11	-	44	45	-	1008

5.2 ALTERATIONS TO WORKSTATIONS

The assessment of alterations to workstations has changed slightly since the 1997 survey. In the previous survey, as the Regulations were fairly new, the onus was on the employer “to meet the Schedule to the Regulations which sets out minimum requirements for DSE workstations.” There was a need therefore to determine if the employer was complying or in the process of complying with the Regulations. The survey in 2007 assisted in determining if the employer has continued to comply with the Regulations.

5.2.1 Alterations undertaken

Due to the slight difference in assessing why or if workstations were altered, the questions posed to employers differed across both surveys. In 2007, respondents were asked, “*Has your organisation made any changes to display screen workstations in the last 12 months?*” They were provided with 23 alterations and were asked to select only those that were relevant. In 1997, the employers were asked, “*Have you made any changes to display screen workstations since 1993?*” Then, they were presented with 16 alterations and were asked to select only those that were relevant. On both surveys the same four options were presented to indicate why they made the selected changes. These were: 1) Yes, as a direct result of undertaking risk assessment; 2) Yes, as a direct result of other requirements of health and safety law; 3) Yes, but for other reasons e.g. office refurbishment/policy upgrade and 4) No, have not made any changes.

Overall, the results showed an increase in alterations due to risk assessment from 1997 to 2007, and a decrease due to other health and safety law. See Table 5.4. Changes due to other reasons also declined over the period, and there were more increases than decreases with respect to not making any changes.

Although the provision of a chair remained the most common change in 2007 (58%), it did decline from 1997 when 71 per cent of companies stated that they provided that change. The redesign of tasks remained the least common change (22%) in 2007, but did increase from 1997 (17%).

Comparable to the 1997 survey, the majority of changes were not made as a result of health and safety legislation but rather for ‘other reasons’. The provision of a new computer remained the most common change over the period, with 62 per cent of companies in 1997 citing that they did this for reasons such as an office/IT upgrade and 44 per cent using the same reason in 2007. The alterations made across the period that were due to risk assessment remained fairly consistent and included: providing an adjustable chair, ensuring that the screen could swivel, moving the screen to avoid glare and providing suitable lighting.

Table 5.4: Alterations to workstations

<i>Alterations made</i>	Alterations Undertaken Due to:									
	<i>2007</i>	<i>1997</i>	<i>Other health & safety law</i>		<i>Other reasons</i>		<i>No changes made</i>		<i>2007</i>	<i>2007</i>
	<i>Risk assessment</i>		<i>2007</i>	<i>1997</i>	<i>2007</i>	<i>1997</i>	<i>2007</i>	<i>1997</i>	<i>Total (N = weighted data)</i>	<i>Total (N = un-weighted data)</i>
Provided adjustable chair	22.9	13.9	6.9	12.0	28.0	45.2	40.6	28.8	1222	1229
Provided a new computer	10.4	3.2	1.5	4.4	43.7	61.6	42.7	30.9	1219	1219
Ensured screen could swivel/tilt	19.3	12.3	7.9	9.7	28.7	45.1	42.3	32.9	1220	1229
Provided new display screen	12.4	5.1	3.0	4.5	39.2	54.2	43.9	36.2	1221	1227
Provided easy to use software	10.4	5.0	2.7	2.3	32.3	56.5	51.8	36.2	1207	1202
Screen moved to avoid glare	20.2	18.8	6.1	8.6	16.4	33.9	55.4	38.7	1217	1217
Provided new keyboard	12.6	2.7	1.6	3.5	39.5	49.2	44.7	44.7	1221	1225
Provided suitable lighting	19.6	8.8	7.6	10.0	23.6	34.6	47.7	46.6	1222	1228
Provided larger desk	11.9	7.8	2.7	3.5	21.9	34.4	61.8	54.4	1219	1219
Provided anti-glare screen	12.6	16.5	4.5	6.6	20.0	21.8	59.3	55.1	1195	1213
Provided a window covering	13.3	10.8	4.5	4.3	16.3	26.0	63.8	58.9	1214	1218
Provided low emission monitor	10.5	3.7	2.6	4.9	21.8	25.3	55.9	66.1	1125	1146
Reduced noise at workstation	9.0	2.2	2.6	5.6	12.8	17.4	73.2	74.9	1211	1210
Provided footrest	16.7	9.1	4.8	5.2	8.1	10.1	68.6	75.6	1219	1225
Provided hand/wrist support	19.4	7.0	5.7	3.7	13.8	7.5	59.5	81.9	1221	1228
Redesigned tasks	9.9	2.5	2.0	2.9	10.4	11.7	74.1	82.9	1197	1194
<i>All actions</i>	-	17.1	-	12.1	-	70.7	-	-	-	-

5.2.2 Proportion of workstations changed

The question to assess the proportion of workstations changed at the respective organisations slightly differed across both surveys. In 1997, the focus was on the proportion of workstations changed since January 1993, i.e. “*Approximately what proportion of workstations at your establishment have been changed since January 1993?*” In 2007, the focus was on changes made in the last 12 months, i.e. “*Approximately what proportion of workstations at your establishment have been changed in the last 12 months?*” At both times, the respondents were asked to provide a percentage of the workstations that had been changed over the respective periods.

The percentage of businesses stating that they had not made any changes increased from 20 per cent in 1997 to 39 per cent in 2007. See Table 5.5. Also, those that admitted to changing all their workstations decreased from 38 per cent in 1997 to 14 per cent in 2007.

Table 5.5: Proportion of establishments that altered workstations

<i>Size (employees)</i>	Proportion of workstations altered												<i>2007</i>	<i>2007</i>
	<i>2007</i>	<i>1997</i>	<i>2007</i>	<i>1997</i>	<i>2007</i>	<i>1997</i>	<i>2007</i>	<i>1997</i>	<i>2007</i>	<i>1997</i>	<i>2007</i>	<i>1997</i>		
	<i>None</i>		<i>20% and under</i>		<i>21 to 50%</i>		<i>51 to 80%</i>		<i>81 to 100%</i>		<i>All workstations</i>			
2-24	40.8	21.5	19.6	12.6	15.4	15.2	8.7	9.3	1.1	2.0	14.5	39.4	1104	382
25-99	15.1	11.0	45.2	19.9	23.3	22.0	6.8	13.2	1.4	7.1	8.2	26.7	73	289
100-299	6.7	2.6	40.0	28.9	26.7	27.7	13.3	18.3	6.7	7.4	6.7	15.0	15	213
Over 300	0.0	5.2	50.0	26.7	25.0	32.0	25.0	17.3	0.0	6.7	0.0	12.2	4	261
All establishments	38.6	20.0	21.5	13.8	16.1	16.2	8.7	9.9	1.2	2.6	14.0	37.5	1196	1145

Comparable with 1997, the percentage of smaller companies noting that they had not made changes, as well as changing all their workstations was larger than the other groups in 2007. The larger companies admitted to a variety of changes, and this was consistent between the surveys.

5.2.3 Planned alterations to workstations

The question to determine if organisations were planning to make further changes to their workstations differed slightly over both surveys. In 2007, the respondents were asked, “*Are you planning to do anything else to workstations to comply with the Health and Safety (Display Screen Equipment) Regulations?*” In 1997, they were asked, “*Are you planning to do anything else to workstations to comply with health and safety law?*” They were provided with three options of ‘Yes’, ‘No’ and ‘Don’t know’. Although the questions do differ they can be compared still as the inherent query is compatible.

In 1997, across all of the establishments, only 13 per cent indicated that they planned to make further changes. In 2007, those establishments planning to make further changes increased to 22 per cent. The proportion of companies acknowledging that they did not plan to make further changes increased from 50 per cent in 1997 to 78 per cent in 2007.

When planned changes were compared across the different sized groups of companies, one-third or less were planning to do so in 2007. This is an increase for all the groups with the exception of very large organisations (300+). See Table 5.6. In 2007, as in 1997, the smallest-sized organisations were the ones that were planning to make the fewest changes and also the group with the largest proportion that did not plan to make any further changes.

Table 5.6: Planned changes to workstations by size of organisation

Size (employees)	Any Other Plans			1997	2007	2007	
	2007	1997	2007				
	Yes (%)	No (%)	Don't know (%)	1997	2007	2007	
				Total (N = un-weighted data)	Total (N = un-weighted data)	Total (N = un-weighted data)	
2-24	21.4	11.7	78.6	50.5	37.8	1105	382
25-99	28.9	20.0	71.1	42.7	37.4	76	301
100-299	33.3	30.5	66.7	44.7	24.8	15	221
Over 300	25.0	35.4	75.0	47.7	17.0	4	297
All establishments	22.1	13.1	77.9	49.6	37.3	1200	1201

A comparison by sector showed some remarkable changes. In 1997, only four per cent of businesses in the production sector stated that they were prepared to make further changes, but in 2007, the proportion increased to 39 per cent. Similarly, only ten per cent of organisations within the transport/communications sector wished to make further changes in 1997, but in 2007, 27 per cent noted that they were planning to make further changes. See Table 5.7.

In 2007, there were large proportions of organisations within the manufacturing and business service sectors that indicated that they did not plan to make further changes. This result is fairly consistent with what was found in 1997.

Table 5.7: Planned changes to workstations *by* broad sector

<i>Sector</i>	Any Other Plans					<i>2007</i>	<i>2007</i>
	<i>2007</i>	<i>1997</i>	<i>2007</i>	<i>1997</i>	<i>1997</i>		
	<i>Yes (%)</i>		<i>No (%)</i>		<i>Don't know (%)</i>		
Manufacturing	17.0	15.5	83.0	54.7	29.8	94	142
Other production	38.9	3.6	61.1	63.3	33.0	113	66
Services	20.7	13.7	79.3	47.7	38.6	992	993
- Distribution/hotels	23.7	11.1	76.3	43.8	45.1	350	290
- Transport/communications	26.8	10.2	73.2	54.8	35.0	56	74
- Business services	15.4	19.0	84.6	47.6	33.4	377	239
- Other services	23.1	13.0	76.9	51.8	35.2	208	390
All establishments	22.1	13.1	77.9	49.6	37.3	1199	1201

The employers were asked also, which were the specific changes that they were planning to make. The proportion of changes that they were planning to make has decreased from 1997. For example, in 1997, of those employers planning to make changes ($n = 77$), 63 per cent stated that they would provide footrests. In 2007, of those employers planning to make changes ($n = 225$), only three per cent were planning to provide footrests. See Table 5.8.

Table 5.8: Specific planned changes to workstations

Planned changes	2007	1997
	<i>Proportion (%)</i>	<i>Proportion (%)</i>
Provide footrest	2.8	63.2
Provide hand/wrist support	3.6	38.9
Provide suitable lighting	3.1	35.7
Provide a new computer	6.1	34.1
Provide new display screen	5.0	33.9
Provide a window covering	1.8	30.9
Redesign tasks	2.7	22.2
Provide low emission monitor	3.3	22.2
Reduce noise at workstations	1.6	18.2
Provide adjustable chair	3.0	18.0
Provide anti-glare screen	3.1	16.1
Provide new keyboard	4.2	15.8
Ensure screen could swivel/tilt	3.4	11.4
Provide larger desk	2.2	8.7
Screen moved to avoid glare	2.4	8.2
Provide easy to use software	2.7	2.6
Total (<i>N = weighted data</i>)	225	77
Total (<i>N = un-weighted data</i>)	293	149

Overall, in 2007, very few organisations (less than ten per cent) noted that they would be making other specific changes. While this total amount is slightly higher than in 1997, the proportion of businesses listing any specific changes is considerably lower in 2007. For example, in 1997 63 per cent of 77 businesses were planning to provide footrest to DSE users, while in 2007, only three per cent of the 225 businesses who were forecasting other specific changes were planning to provide footrest to DSE users. This indicates that fewer businesses in 2007 had specific concerns in respect of ensuring compliance.

5.3 CONCLUSIONS

Unlike 1997 where a minority of employers had conducted risk assessments (39%), in 2007 close to three-quarters (72%) admitted carrying out such assessments. This may indicate an increased awareness of the Regulations or of health and safety in general, and is a positive development in ensuring that the health and safety of users is acknowledged. More importantly, the use of risk assessments had close to doubled among small sized businesses from just over one-third in 1997 to 71 per cent in 2007.

Awareness of the Regulations has an impact on whether or not employers do risk assessments. In 1997, nearly 62 per cent of those employers who were aware of the Regulations did risk assessments and in 2007, those who were aware and did risk assessments increased to 77 per cent. The extent of knowledge had an impact also, but it was not as strong as simply being aware of the Regulations.

Alterations to work stations continue to be made for other reasons than health and safety, most notably office/IT upgrades, while alterations based on risk assessments were focused still on providing adjustable chairs or ensuring that the screen could swivel.

6 DAILY ROUTINE OF USERS

The following section examines the daily routine of DSE users, such as the intensity of the work, when breaks are taken, and the organisation of the work schedules to allow breaks to occur.

6.1 INTENSIVE DSE USERS

All of the respondents across both surveys were asked, “Do any of the jobs in your workplace involve spells of intensive display screen equipment work, and i.e. work that has no natural breaks such as continuous data entry?”

The proportion of organisations that indicated that they had jobs that involved intensive work decreased from 43 per cent in 1997 to 13 per cent in 2007. See Table 6.1. As expected, the larger organisations were the ones with a higher percentage of such jobs, but these did decrease over the period, from 55 per cent in 1997 to 40 per cent in 2007.

Table 6.1: Intensive DSE use by size of organisation

Size (employees)	Intensive DSE Use					2007 Total (N = weighted data)	2007 Total (N = un- weighted data)
	2007 Yes (%)	1997 No (%)	2007 No (%)	1997 Don't know (%)	1997		
2-24	12.2	42.8	87.8	56.7	0.5	1135	393
25-99	19.2	41.3	80.8	57.6	1.1	78	313
100-299	26.7	47.8	73.3	51.8	0.4	15	226
Over 300	40.0	54.7	60.0	44.2	1.1	5	298
All establishments	13.0	42.9	87.0	56.6	0.5	1233	1230

An assessment by sector showed that there was a change among sectors with respect to intensive use of DSE. In 1997, intensive use of DSE was more common in the distribution/hotels and services sectors and less common in manufacturing. In 2007, fewer organisations stated that they had jobs that involved intensive use of DSE. These types of jobs were less prevalent still in manufacturing (10%) and sharply declined in distribution/hotels from 54 per cent in 1997 to ten per cent in 2007. See Table 6.2.

Table 6.2: Intensive DSE use by broad sector

Main Business Activity	Intensive DSE Use					2007 Total (N = weighted data)	2007 Total (N = un- weighted data)
	2007 Yes (%)	1997 No (%)	2007 No (%)	1997 Don't know (%)	1997		
Manufacturing	9.6	30.0	90.4	67.6	2.4	94	145
Other production	12.7	41.4	87.3	58.6	0.0	118	67
Services	13.2	44.6	86.8	55.0	0.3	1020	1018
Distribution/hotels	10.0	53.5	90.0	46.5	0.0	359	298
Transport/communications	14.3	34.9	85.7	59.4	5.6	56	76
Business services	13.0	36.5	87.0	63.5	0.0	386	240
Other services	18.6	40.2	81.4	59.6	0.2	220	404
All establishments	12.9	42.9	87.1	56.6	0.5	1232	1230

This reported decline in the intensive use of DSE across businesses and sectors may be as a result of drawing more on occasional users to complete tasks and less on continuous users. Alternatively, it may be due to a change in employers' perception of what is intensive display screen equipment work, or what it entails. The data cannot provide a comprehensive explanation, and the findings should be viewed in this context while taking account of these suggestions.

6.2 BREAKS FROM DSE WORK

Those employers who noted that they had jobs involving intensive DSE use were asked if the staff in those jobs were allowed to take breaks or changes in activity. The results between both surveys are similar with the majority of users allowed to take breaks. In 2007, 97 per cent of employers replied in the affirmative, compared to 96 per cent in 1997, with three per cent across both times stating 'no'. In 1997, one per cent of employers stated they did not know if users were allowed to take breaks or change activity.

Regular or irregular breaks

In order to provide a more comprehensive assessment of the type of breaks, employers were asked for how long and how often the breaks were taken. They were provided with four options to select as many as were applicable. These included: *irregularly depending on work pattern*; *irregularly depending on the individual*; *regularly*; and *don't know*.

There has been a change in the taking of breaks from the 1997 findings. The most commonly given response in 1997 was that breaks were taken irregularly depending on the individual (64%). In 2007, more breaks are taken regularly (48%). See Table 6.3. There have been increases across all of the different size bands, with the exception of the 100-299 band that remained constant, in respect of a more regular pattern of taking breaks. On the one hand, this might be viewed as an improvement, as more users are engaging in a more structured approach to their work. On the other hand, a regular pattern while ensuring that users take breaks may not be as beneficial as an irregular pattern of frequent short breaks that are taken by the user when needed.

Table 6.3: Frequency of breaks undertaken by intensive DSE users *by* size of organisation

Size (employees)	Frequency of Breaks							2007 Total (N = un-weighted data)	2007 Total (N = un-weighted data)
	2007 Individual (%)	1997 Work Pattern (%)	2007 Regularly (%)	1997 Regularly (%)	2007 Don't know (%)	1997 Don't know (%)	1997 Don't know (%)		
2-24	40.6	64.7	12.0	47.1	47.4	19.6	4.3	133	47
25-99	33.3	61.0	13.3	57.8	53.3	26.5	3.1	15	59
100-299	50.0	59.4	0.0	42.7	50.0	39.3	0.9	4	60
Over 300	0.0	59.0	0.0	40.4	100.0	40.8	1.3	1	106
All establishments	39.9	64.2	11.8	47.9	48.4	21.0	4.1	153	272

Frequency and duration of regular breaks

As with the 1997 survey, data for the 2007 survey on specifics of the breaks were only available for a very small sub-sample ($n = 72$). These employers noted that 61 per cent of users took breaks every hour, 23 per cent every two hours and 15 per cent every three hours. Of those users taking breaks every hour, 39 per cent of them took a ten-minute break, 32 per cent took a five-minute break and 25 per cent took a fifteen-minute break.

Overall, the cell sizes for the variety of breaks are too small to allow any viable comparison between the surveys.

6.2.1 Organising breaks from DSE work

Across both surveys, employers were asked to provide information on the systems that were in place to remind users to take breaks. They were presented with six options and could select as many as applied. In 1997, as in 2007, the most common responses, cited by three-quarters of the employers, were that breaks occur naturally in the work and that it was left to employees' discretion to take breaks. See Table 6.4.

However, there was an increase in 2007 in respect of the other options available to users. For example, in 1997, only 11 per cent of employers indicated that they issued guidance, and in 2007, this had increased to more than one-third of employers (37%). Similarly, senior personnel were more likely to remind staff to take breaks in 2007 (30%), than they were in 1997 (17%).

The use of software to remind staff to take breaks remained the least common selection by employers across both surveys (1997: 1%; 2007: 4%).

Table 6.4: Activities relating to work routines of all users

Workplace Practice on Breaks	2007	1997	2007	2007
	%	%	Total (N = un-weighted data)	Total (N = un-weighted data)
Breaks occur naturally in the work anyway	74.9	79.6	1222	1231
It is left to employees' discretion to take breaks/change activities	75.0	76.4	1222	1231
Supervisor/manager reminds staff to take breaks from screen work	30.3	16.7	1222	1231
Jobs have been redesigned to incorporate non-screen work	20.4	14.5	1222	1231
Guidance is issued but it is not compulsory	37.3	11.4	1222	1231
Reminders for breaks are programmed into the software	3.7	0.7	1222	1231

6.3 CONCLUSIONS

There was a decline in the proportion of organisations stating that they had jobs involving intensive DSE work. This decline was consistent across size and sector. Although the use of DSE may have changed over the period, the data cannot explain these findings and this may need to be explored through further research.

While the majority of organisations continue to acknowledge that staff is allowed to take breaks, the nature of the breaks have changed over the period. In 1997, the most common answers given for when breaks were taken were *irregularly* and *dependant on the individual*. In 2007, it was stated that more breaks were taken *regularly*. The onus of taking breaks still lies with the user.

7 EYE AND EYESIGHT TESTS

Section seven looks at the provision of eyesight tests by employers and the ways in which these tests are provided. While employers do not need to provide tests, the Regulations stipulate that if requested by an employee the organisation needs to ensure that the request is met.

7.1 PROVISION OF EYESIGHT TESTS

The data on whether or not employers provided eyesight tests to their DSE users differed slightly across surveys. In 1997, the respondents were asked, “*Do you provide eyesight tests for users of display screen equipment?*” They were given four options and asked to select **one** answer. The options were: *Yes, on request of user*; *Yes, for all employees using display screen equipment*; *No* and *Don’t know*. In 2007, while employers were asked the same question, they were given seven options and asked to select all that applied. The *Yes* options from 2007 were separated into 5 options. These were on the request of the user *before starting display screen work*; and *after starting display screen work*; for all employees *before starting display screen work*; and *after starting display screen work*; and *Yes, if they (users) experience visual difficulties due to display screen work*. Although the questions differ slightly they allow broad comparisons to be made. The 2007 data were recoded to match as closely as possible the responses from 1997.

Using the weighted data, the results showed that just over half of all establishments provided eyesight tests to users (2007: 52%). This is higher than in 1997 when one-third of employers stated that they provided tests to DSE users.

As expected the provision of eyesight tests remained differentiated across size band. However, in 2007, the percentage of small-sized businesses (50%) providing eyesight tests increased from 1997 (one-third). See Table 7.1, Figure 7.1 and Figure 7.2.

Table 7.1: Proportion of organisations providing eyesight tests

Year	Size of Organisation			
	<i>2-24 employees %</i>	<i>25-99 employees %</i>	<i>100-299 employees %</i>	<i>300+ employees %</i>
2007	50	77	93	100
1997	one-third	60	83	89

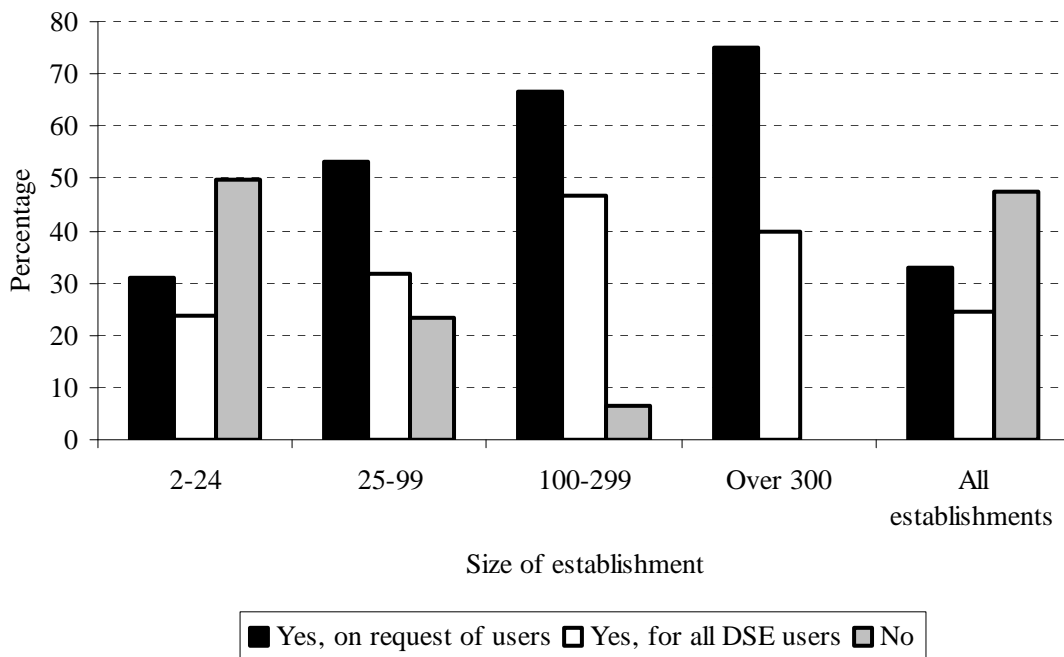
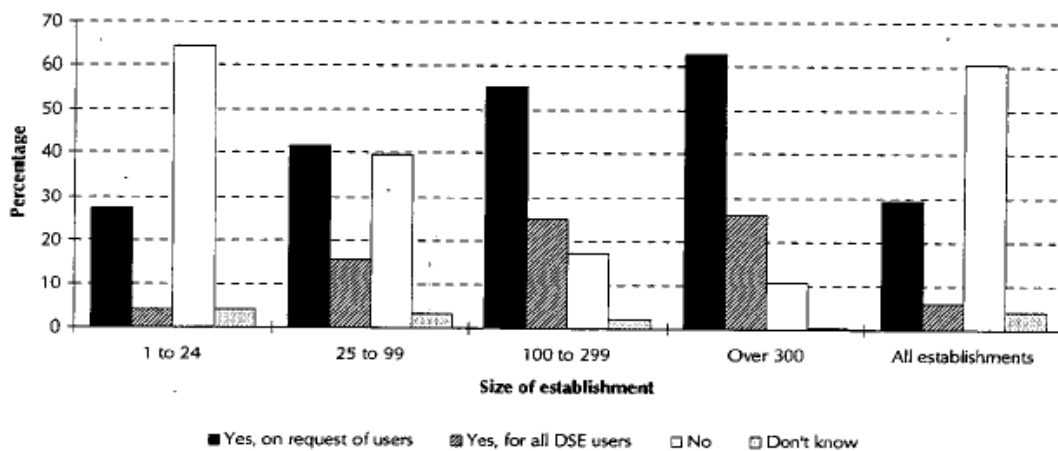


Figure 7.1: Proportion of Establishments with DSE providing eyesight tests *by size band* (2007)



Source: IES employer survey, 1995

Figure 7.2: Proportion of Establishments with DSE providing eyesight tests *by size band* (1997)

An assessment across sectors showed that provision of eyesight tests on the request of the user was more common in manufacturing than in the other two broad sectors in 2007, and this differed slightly from 1997 when it was more common in services. See Table 7.2. There was a substantial increase in the transport/communications sector of providing tests on the request of the user, moving from 28 per cent in 1997 to 47 per cent in 2007.

Employers in the other production sector showed a vast increase in providing eyesight tests for all DSE users. In 1997, only seven per cent of businesses provided tests in this sector, but in 2007, 45 per cent of them did.

The non-provision of tests declined across all of the sectors with the greatest improvement in the production (1997: 71%; 2007: 35%) and manufacturing sectors (1997: 75%; 2007: 37%).

Table 7.2: Proportion of establishments with DSE providing eyesight tests *by* broad sector

<i>Main Business Activity</i>	Provision of Tests							<i>2007 Total (N = weighted data)</i>	<i>2007 Total (N = un-weighted data)</i>
	<i>2007 Yes, on request of users (%)</i>	<i>1997 Yes, for all DSE users (%)</i>	<i>2007 No (%)</i>	<i>1997 No (%)</i>	<i>2007 Don't know (%)</i>	<i>1997 Don't know (%)</i>			
Manufacturing	38.3	17.5	24.5	4.6	36.6	74.8	3.0	94	146
Other production	26.1	21.3	44.9	7.1	34.5	71.1	0.6	119	67
Services	33.4	31.7	22.2	6.0	50.0	57.9	4.3	1029	1028
- Distribution/hotels	29.8	33.9	17.2	3.9	56.0	58.8	3.4	366	302
- Transport/communications	46.4	27.5	25.0	1.1	35.7	65.0	6.4	56	76
- Business services	31.1	28.6	19.7	9.5	53.5	57.6	4.3	386	244
- Other services	40.3	31.9	33.6	6.9	37.6	55.8	5.4	221	406
All establishments	33.1	29.5	24.5	6.0	47.5	60.6	3.9	1242	1241

7.1.1 Why tests are not provided

The link between awareness of the Regulations and provision of eyesight tests, was comparable to that found in 1997. In 1997, 55 per cent of those employers who were aware of the Regulations provided eyesight tests compared to six per cent of those who were unaware. In 2007, there was a slight increase in that 59 per cent of those who were aware of the Regulations had provided tests compared to 23 per cent of those who were not aware. See Table 7.3.

Table 7.3: Provision of tests by awareness (2007)

Awareness	Provision of Tests		
	<i>Yes (%)</i>	<i>No (%)</i>	<i>Total (N = weighted data)</i>
Yes	58.5	41.5	1010
No	23.2	76.8	194
All establishments	52.8	47.2	1204

7.1.2 Who receives eyesight tests?

The questions to determine the proportion of users who had received tests differ slightly between the years. In 1997, employers were asked to account for those users who had received eyesight tests since January 1993. In 2007, they were asked to account for users who had received tests in the last 12 months.

The findings show that in 1997 ten per cent of the establishments said that none of their users had received tests, this proportion increased to 22 per cent in 2007. See Table 7.4. However,

the proportion of all users receiving tests has declined from 1997, when 18 per cent of users received tests, to 2007 when 10 per cent of users received tests.

Table 7.4: Proportion of establishments with DSE users receiving eyesight tests

Proportion of users receiving eyesight tests - in the last 12 months (2007), and since 1993 (1997)	Proportion of establishments (%)		
	% of respondents		
	2007	2007	1997
None	10.5	22.3	10.3
20 per cent and under	19.7	41.9	25.9
21 to 50 per cent	8.9	19.0	32.9
51 to 80 per cent	2.8	6.0	10.2
81 to 99 per cent	0.6	1.2	2.4
All users	4.5	9.6	18.3
Total (<i>N</i> = weighted data)	-	584	363
Total (<i>N</i> = un-weighted data)	-	766	692

Although the data indicate that fewer users are receiving eyesight tests, this does not mean that employers are breaking the law *if* none of the users in their establishments had asked for a test although they were aware of their entitlement; or if users were provided with a test prior to the 12-month period stipulated in the survey. Opticians, for the majority of individuals, will recommend that they are tested every two years.

7.1.3 How tests are provided

The respondents were asked to provide the different methods by which users obtained eyesight tests. The question (“*How are these tests provided?*”) and the seven options listed below were the same across both surveys. The most common procedure across both surveys was for users to make their own arrangements and then be reimbursed by the organisation. See Table 7.5. Similar to the 1997 results, there were very few organisations that had arrangements with an external optician who visited the firm or used their own company doctor or optician in 2007.

Table 7.5: How eyesight tests are provided by size band

<i>How eyesight tests are provided</i>	Size of Organisation									
	2007	1997	2007	1997	2007	1997	2007	1997	2007	1997
	2-24 (%)		25-99 (%)		100-299 (%)		Over 300 (%)		Total (%)	Total (%)
User makes own arrangements and is reimbursed	69.8	73.7	70.7	53.0	57.1	42.8	50.0	34.5	69.4	68.4
Arrangement with local optician on his/her premises	43.3	22.8	33.3	36.9	35.7	39.0	25.0	43.6	42.1	26.1
Company doctor or optician	3.0	2.4	5.3	3.8	7.1	7.0	0.0	9.6	3.3	3.0
Through a voucher scheme	10.6	0.1	12.1	8.6	28.6	11.7	40.0	15.3	11.3	2.2
External optician who visits the firm	6.4	0.9	6.9	6.8	14.3	9.9	0.0	15.8	6.6	2.4
Other	0.4	5.7	0.0	2.9	0.0	2.6	0.0	2.0	0.3	5.0
Don't know	-	0.1	-	2.4	-	3.5	-	2.0	-	0.7
Total (<i>N</i> = weighted data)	559	324	58	63	14	21	4	6	635	414
Total (<i>N</i> = un-weighted data)	195	90	229	177	210	256	290	280	924	803

There was a shift in how companies provided eyesight tests. In 1997, 44 per cent of large organisation (over 300 employees) had an arrangement with a local optician, but in 2007 this fell to 25 per cent. Conversely, in 1997, 23 per cent of small organisations (2-24) had arrangement with a local optician, but this increased to 43 per cent in 2007.

There was an increase in the use of voucher schemes by large organisations (300+). In 1997, this method was used by 15% of such organisations, but this increased to 40% in 2007.

There was a vast increase in the users making their own arrangements in the manufacturing sector. In 1997, 44 per cent of employees noted the use of this method, but this increased to 89 per cent in 2007. See Table 7.6. Businesses in the production and services sectors increased their use of arranging with local opticians to have tests conducted on their own premises (Other production - 1997: 21%, 2007: 54%; Services - 1997: 26%, 2007: 43%).

Table 7.6: How eyesight tests are provided by broad sector

<i>How eyesight tests are provided</i>	Broad Sectors							
	<i>2007</i>	<i>1997</i>	<i>2007</i>	<i>1997</i>	<i>2007</i>	<i>1997</i>	<i>2007</i>	<i>1997</i>
	<i>Manufacturing</i>		<i>Other production</i>		<i>Services</i>		<i>Total</i>	<i>Total</i>
	(%)		(%)		(%)		(%)	(%)
User makes own arrangements and is reimbursed	89.3	44.1	48.6	57.6	70.5	71.4	69.6	68.4
Arrangement with local optician on his/her premises	22.8	25.9	54.1	21.4	42.6	26.4	42.1	26.1
Company doctor or optician	5.4	16.2	0.0	1.6	3.8	1.9	3.5	3.0
Through a voucher scheme	1.8	7.2	12.3	0.8	11.9	2.2	11.0	2.4
External optician who visits the firm	7.0	3.8	12.3	4.3	5.6	1.9	6.5	2.2
Other	0.0	8.7	0.0	15.2	0.6	3.9	0.5	5.0
Don't know	-	1.3	-	0.2	-	0.6	-	0.7
Total (<i>N</i> = weighted data)	56	31	74	27	505	355	635	414
Total (<i>N</i> = un-weighted data)	119	269	49	96	756	438	924	803

7.2 IMPACT OF THE REGULATIONS - FIRST PROVISION OF EYESIGHT TESTS

Across both surveys, employers were asked, “*When did your organisation first provide eyesight testing for users of display screen equipment?*” In the 1997 survey the employers were asked **when** to gain an idea of whether or not the provision of tests were brought in as a direct result of the Regulations. In 2007, employers were asked **when** to gain an idea of compliance with the Regulations.

The results showed that half of the employers responding to the 2007 survey had first provided eyesight over five years ago, and this suggests testing may have been introduced in order to comply with the Regulations. See Table 7.7.

Table 7.7: When eyesight tests were first provided

When eyesight testing first provided	Eyesight testing (%)		
	2007	2007	1997
	<i>% of sample</i>	<i>% of respondents</i>	
Within the last three years	11.0	22.8	71.1
Between three and five years ago	9.7	20.2	5.7
Over five years ago	23.3	48.5	2.6
Not applicable	4.1	8.6	-
Don't know	-	-	20.7
Total (<i>N</i> = weighted data)	-	598	406
Total (<i>N</i> = un-weighted data)	-	879	798

7.3 CONCLUSIONS

The proportion of establishments stating that they provided eyesight tests increased from one-third in 1997 to 52 per cent in 2007. While this is an improvement, it is necessary to bear in mind that the non-provision of eyesight tests is not an indication of non-compliance. Further, just under one-quarter of organisations noted that none of their employees had received eyesight tests in 2007, an increase from 1997. Although these findings should be taken in context, it may be necessary to contemplate if more information needs to be provided to businesses about their duty with respect to the Regulations.

8 BENEFITS AND COSTS

This section observes those factors that incorporate the benefits and costs of compliance of the Regulations to organisations.

8.1 MOTIVATIONS FOR COMPLIANCE

The assessment of employers' motivation for complying with the Regulations was gained in 1997 and 2007 from the following question: "*Overall, to what extent were any of the following important in leading you to take the actions you have regarding display screen equipment?*" They were provided with nine options as well as an 'other' category and responded from strongly agree to strongly disagree. The responses to agree and strongly agree were combined to arrive at an overall level of agreement.

8.1.1 Employee welfare and morale

The same two main reasons emerged in the 2007 survey as were found in 1997 for employers complying with the Regulations. These were to follow good practice (2007: 85%; 1997: 79%) and to improve the comfort of the employee (2007: 84%; 1997: 79%). Across both studies the need to protect employees from risk was third (2007: 80%; 1997: 70%). See Figures 8.1 and 8.2.

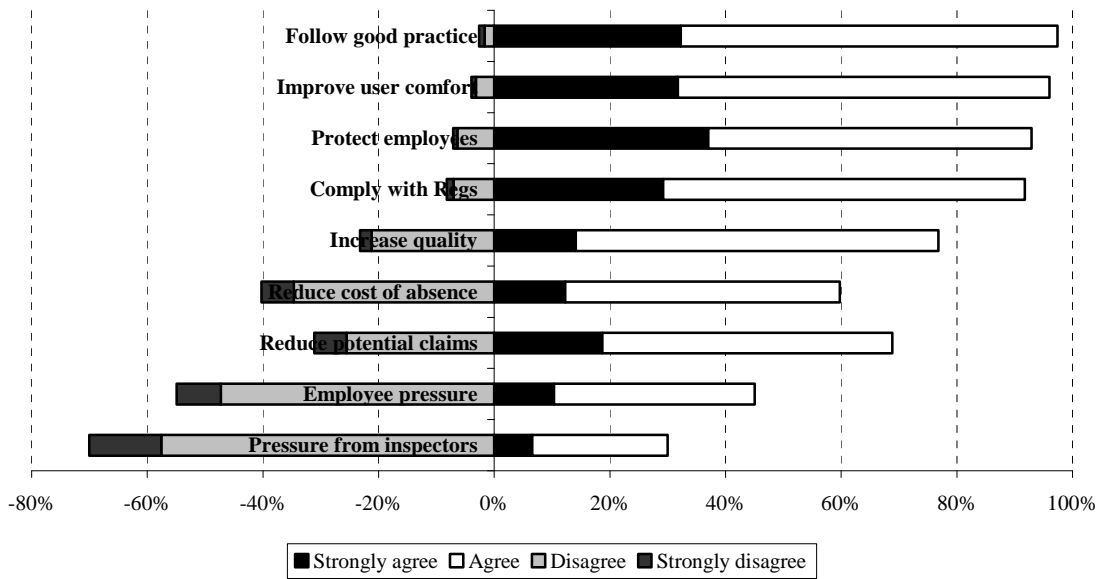
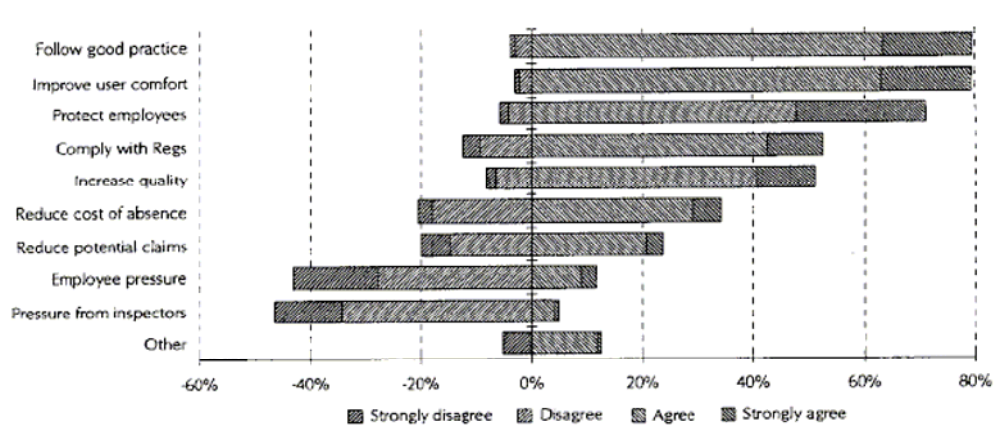


Figure 8.1: Motivation for compliance with the Regulations (2007)



Source: IES employer survey, 1995

Figure 8.2: Motivation for compliance with the Regulations (1997)

8.1.2 Compliance

To assess the various factors that influenced compliance with the Regulations the employers were asked at both surveys, “*Overall, to what extent were any of the following important in leading you to take the actions you have regarding display screen equipment?*” They were provided with the same nine options, as well as an ‘other’ category, and were asked to respond on a scale from ‘strongly agree’ to ‘strongly disagree’. For example, one factor was “*To protect employees from risks.*” In 1997, just over half of employers agreed or strongly agreed that they had taken actions in order to comply with the Regulations. In 2007, all of the employers who agreed or strongly agreed to any of the factors showed that 90 per cent of them had taken actions in order to comply with the Regulations.

Pressure from HSE or local authority inspectors remained a low justification for ensuring that they complied with the Regulations. Across both surveys, it was the least motivating factor of all listed.

8.2 BENEFITS OF COMPLIANCE

Employee morale

Consistent with the 1997 survey, the results from the 2007 survey showed that the benefits that organisations stated that they experienced were improved employee morale (2007: 56%, 1997: 37%) and reduced stress (2007: 54%, 1997: 30%). Figures 8.3 and 8.4 refer.

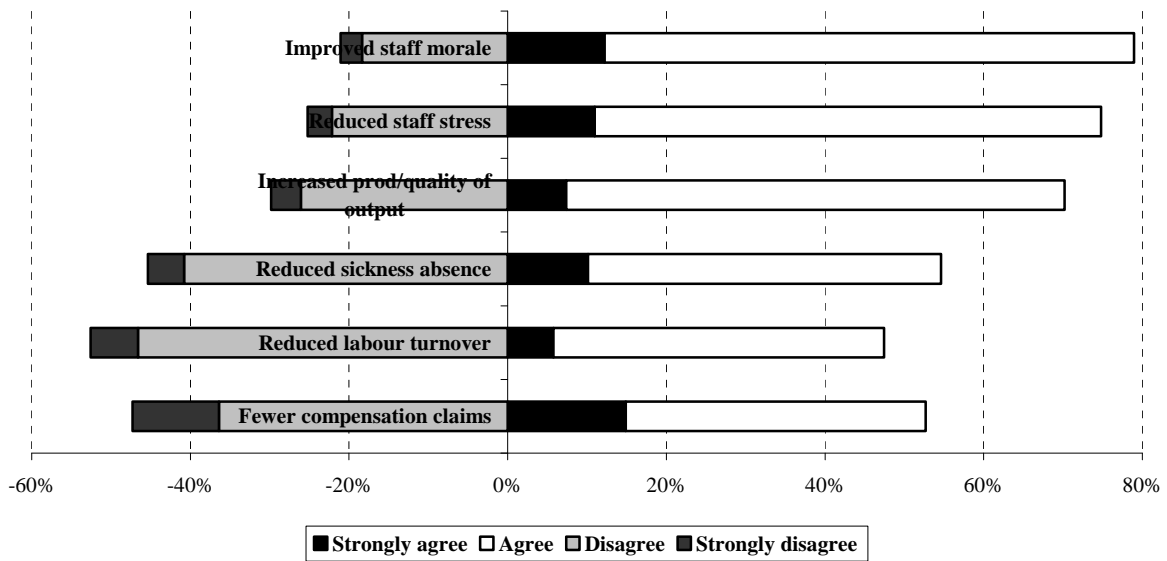


Figure 8.3: Benefits of compliance with the Regulations (2007)

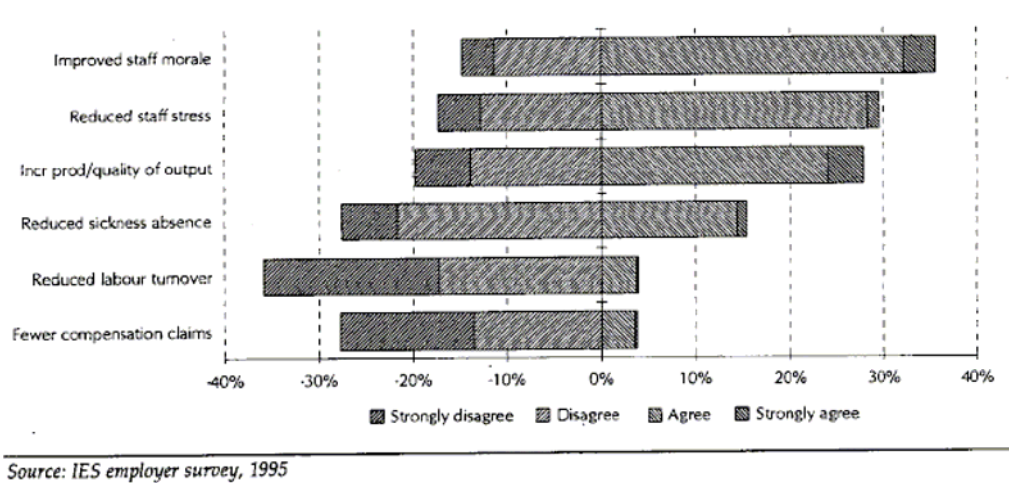


Figure 8.4: Benefits of compliance with the Regulations (1997)

Productivity

In terms of productivity, this had increased between the two surveys. In 1997, 28 per cent of organisations reported that they had seen an increase in productivity. This increased to 48 per cent in 2007.

Sickness Absence

The benefit of improved sickness absence has had mixed results. Some employers at both surveys have viewed a reduction in sickness absence as a benefit. In 2007, 35 per cent of organisations agreed or strongly agreed that sickness absence was reduced, compared to 15 per cent in 1997. The proportion of employers viewing the reduction of sickness absence improved over the ten-year period of both surveys.

However, close to one-third of organisations did not agree that the reduction of sickness absence was a benefit. In 1997, 28 per cent of employers did not agree that this was a benefit; and this stayed constant in 2007 with 29 per cent of employers not agreeing.

Comparison of benefits versus costs

The respondents were asked on both surveys to provide their level of agreement with the following statement, “*Benefits to the organisation of compliance with the Regulations outweigh the costs.*” They could respond on a continuum from strongly agree to strongly disagree. Strongly agree and agree were combined for one agreement rating as was strongly disagree to disagree.

Between 1997 and 2007, the number of employers believing that the benefits of DSE Regulations outweigh the costs has increased from just under one-quarter in 1997 to 54 per cent in 2007. Those who neither agreed nor disagreed went from just under two-thirds in 1997 to 22 per cent in 2007, and those who disagreed or strongly disagreed stayed at 16 per cent across both surveys. In 2007, nine per cent of respondents were not sure or declined to answer.

8.3 COSTS OF COMPLIANCE

The majority of organisations, as in the 1997 survey, did not have a separate DSE budget. In 1997, only one per cent of organisations had a separate budget and this increased slightly in 2007 to three per cent of organisations. See Table 8.1.

Table 8.1: Budgeting for health and safety *by* size of organisation

Budgets and compliance											
<i>Size (employees)</i>	<i>2007</i>	<i>1997</i>	<i>2007</i>	<i>1997</i>	<i>2007</i>	<i>1997</i>	<i>2007</i>	<i>1997</i>	<i>1997</i>	<i>2007</i>	<i>2007</i>
	<i>Separate DSE budget (%)</i>		<i>Itemised H&S budget (%)</i>		<i>Un-itemised H&S budget (%)</i>		<i>No separate budget (%)</i>		<i>Don't know</i>	<i>Total (N = weighted data)</i>	<i>Total (N = un-weighted data)</i>
2-24	3.0	1.3	3.0	1.1	6.0	5.2	88.0	77.0	15.5	1082	375
25-99	2.7	0.8	6.8	5.8	17.8	14.1	72.6	67.8	11.5	73	292
100-299	6.7	3	13.3	8.4	26.7	22.4	53.3	56.4	9.8	15	219
Over 300	0.0	4.2	20.0	13.7	20.0	24.9	60.0	48.9	8.3	5	296
All establishments	3.0	1.3	3.5	1.8	7.1	6.5	86.5	75.5	14.9	1175	1182

The percentage of businesses that reported not having a separate budget increased from 76 per cent in 1997 to 87 per cent in 2007. The smaller-sized organisations were the least likely to have a separate budget.

8.4 CONCLUSIONS

The main reasons for employers taking action to ensure compliance remained consistent across the surveys, and these were to follow good practice. The interest of the employees rated highly across both surveys.

While the proportion of organisations having a separate budget for DSE has increased from one per cent in 1997 to three per cent in 2007, the setting up of a separate budget does not seem to be a high priority for the majority of firms.

9 THE REGULATIONS

9.1 AWARENESS AND UNDERSTANDING OF THE REGULATIONS

Awareness of the Regulations has increased over the ten-year period of the surveys as could be expected. In 1997, 55 per cent of organisations were aware of the survey, and in 2007, 84 per cent were aware. See Table 9.1. This increase was regardless of organisation size. The increase has been especially substantial among small organisations that moved from 52 per cent in 1997 to 83 per cent in 2007.

Table 9.1: Awareness of the Regulations *by size band*

<i>Size (employees)</i>	Awareness of the Regulations					<i>2007 Total (N = weighted data)</i>	<i>2007 Total (N = un- weighted data)</i>
	<i>2007 Yes (%)</i>	<i>1997 Yes (%)</i>	<i>2007 No (%)</i>	<i>1997 No (%)</i>	<i>1997 Don't know (%)</i>		
2-24	83.1	52.3	16.9	28.2	19.5	1124	390
25-99	94.9	71.9	5.1	17.2	10.9	78	312
100-299	100.0	88.6	0.0	6.4	5.0	15	226
Over 300	100.0	95.0	0.0	3.2	1.8	5	303
All establishments	84.1	55.3	15.9	26.5	18.2	1222	1231

Within broad sectors awareness increased across all of them, especially among those businesses in the manufacturing sector (2007: 85%, 1997: 44%). Awareness was lowest in the business services sector and highest in the production sector. See Table 9.2.

Table 9.2: Awareness of the Regulations *by broad sector*

<i>Main Business Activity</i>	Awareness of the Regulations					<i>2007 Total (N = weighted data)</i>	<i>2007 Total (N = un- weighted data)</i>
	<i>2007 Yes (%)</i>	<i>1997 Yes (%)</i>	<i>2007 No (%)</i>	<i>1997 No (%)</i>	<i>1997 Don't know (%)</i>		
Manufacturing	84.8	44.0	15.2	38.3	17.7	92	145
Other production	92.4	59.0	7.6	27.8	13.2	118	67
Services	83.1	56.4	16.9	24.8	18.8	1012	1019
- Distribution/hotels	85.0	53.0	15.0	26.7	20.2	360	299
- Transport/communications	86.8	55.0	13.2	38.3	6.7	53	74
- Business services	77.0	57.9	23.0	27.0	15.1	378	241
- Other services	89.5	60.0	10.5	18.4	21.6	220	405
All establishments	84.1	55.3	15.9	26.5	18.2	1222	1231

9.1.1 Extent of understanding of the Regulations

The following analyses look at assessing the extent to which employers who were aware of the Regulations understood also what they meant. The questions differed slightly across the

surveys. In 2007 the employers were asked, “How understandable do you think the Health and Safety (Display Screen Equipment) Regulations are?” They were presented with five options ranging from 1 to 5 with 1 = easy to understand, through to 5 = difficult to understand. In 1997, they were asked, “ Please could you give some indication as to the extent of **your** knowledge of the Regulations by circling a number from 1 to 5 on the scale below with 1 = fully understand, through to 5 = no knowledge at all.”

The closest the mean score is to one, the greater the understanding of the respondents. The mean score was fairly consistent over both surveys (2007: 2.5; 1997: 2.7) and implies an average amount of understanding of the Regulations. The level of understating was lower in smaller establishments, although there have been very slight increases from 1997. See Table 9.3

Table 9.3: Level of knowledge of the Regulations by size band

<i>Size (employees)</i>	Mean Score		Total (N = weighted data)	Total (N = un-weighted data)
	2007	1997	2007	1997
2-24	2.5	2.8	934	328
25-99	2.3	2.4	74	296
100-299	2.1	2.2	15	225
Over 300	1.9	1.7	5	301
All establishments	2.5	2.7	1027	1150

In 2007 as in 1997 there was little variation by sector. See Table 9.4. Manufacturing and services retained a higher level of understanding than production across both surveys. Business services retained the fraction within all services to have the greatest understanding.

Table 9.4: Level of knowledge of the Regulations by broad sector

<i>Main Business Activity</i>	Mean Score		Total (N = weighted data)	Total (N = un-weighted data)
	2007	1997	2007	1997
Manufacturing	2.4	2.8	78	139
Other production	2.9	3.0	109	65
Services	2.4	2.7	306	274
- Distribution/hotels	2.8	2.7	46	71
- Transport/communications	2.5	3.0	291	217
- Business services	2.4	2.6	197	384
- Other services	-	2.7	-	-
All establishments	2.5	2.7	1027	1241

9.2 SOURCES OF INFORMATION

In order to gauge the various sources from which employers received or approached for information they were asked to list these sources. The Health and Safety Executive/inspectors was the source used by the majority of all business in 2007 (34%). See Table 9.5.

Table 9.5: Sources of information by size band

Sources of Advice	2-24 employees %		25-99 employees %		100-299 employees %		300+ employees %		Total %	
	2007	1997	2007	1997	2007	1997	2007	1997	2007	1997
	Manufacturers or suppliers of DSE (Display Screen Equipment), workstations or software	91.2	60.2	6.3	36.2	1.8	35.1	0.7	36.3	21.9
Health & Safety Executive / inspectors	87.1	21.7	9.8	42.9	2.4	53.9	0.7	51.3	33.8	24.9
External consultants or training organisations	88.7	16.8	8.8	30	1.9	34.8	0.6	31.7	29.3	18.7
Local Authority / Environmental health inspectors	88.6	12.4	8.4	18.3	2.4	18.7	0.6	17.7	13.5	13.2
Trade or sector organisations	93.1	9.3	5.0	12.2	1.5	15.0	0.5	17.9	16.3	9.8
Trade union	91.2	0.6	5.9	2.3	2.9	3.2	0.0	3.3	2.8	0.8
Other	89.7	6.2	8.6	14.1	1.7	12.3	0.0	20.7	4.7	7.2
Total (<i>N</i> = weighted data)	888	826	72	95	15	24	5	7	980	950
Total (<i>N</i> = un-weighted data)	313	237	287	264	223	298	299	283	1122	1082

The use of external consultants was the next most popular choice followed by manufacturers. This differs slightly from 1997 when manufacturers were the most popular source followed by Health and Safety Executive/inspectors.

Small businesses in 2007 are seeking advice from a wider variety of sources than in 1997. When the sources are assessed by size of organisation there does not seem to be one primary source from which advice was sought. This has changed from 1997.

There were changes with respect to sector as well. The finding in 1997 that “trade organisations were more often used in other production than the other sectors” was not replicated in 2007 as the use of trade or sector organisations was more prominent in the services sector. In 1997, the “use of HSE inspectors was more widespread in manufacturing”, but in 2007 the use of HSE/inspectors/advisors was more outstanding in the services sector. The finding in 1997 of “manufacturers of equipment and external consultants were more frequently used for advice in services than in manufacturing and other production”, was replicated in 2007.

9.3 CONCLUSIONS

Awareness of the Regulations has improved over the ten-year period of the surveys. The larger sized organisations indicated that they were fully aware, while those of a smaller size had improved their awareness level as well. The findings were in respect of sector also, and this is a positive development.

The understanding of the Regulations has improved also, albeit slightly, and the main source from which all establishments obtain information on DSE and the Regulations is the Health and Safety Executive/inspectors.

10 CONCLUSIONS

10.1 IMPACT

Overall, the Regulations can be seen to have impacted positively on businesses over the ten-year period between surveys. Awareness and understanding of the Regulations have increased among businesses surveyed, as has their undertaking of risk assessments. The HSE has emerged also as a main source for information. The impact is especially noticeable among small sized businesses and suggests they are making efforts to comply with the Regulations.

The 1997 report (IES - Honey et al., 1997) noted that the employers could be classified into three groups. The first group consisted of those who do little to control the risk in terms of assessment, workplace alterations or provision of eyesight tests. The second group were employers who conform reluctantly to the Regulations, and the third group consisted of those who exceed the requirements of the Regulations. The present results suggests that it may be difficult to form three such groups again, as for the most part businesses are implementing the Regulations.

10.2 IMPROVEMENTS TO THE REGULATIONS

As suggested in the 1997 study, there is no real consensus about anything specific that could be done to improve the Regulations. Of course, awareness and understanding could be improved within the small sized firms, and the perception of what constitutes a real risk could also be improved among employers. There were still quite a few respondents who were stating that permanent eyestrain and epilepsy were risks of DSE. The dissemination of information may assist with improving these perceptions.

Additionally, while the findings on the taking of breaks and the provision of eyesight tests also do not suggest non-compliance with the Regulations, there is room for improvement that may be assisted by information dissemination.

11 APPENDICES

11.1 APPENDIX 1 - EMPLOYERS' QUESTIONNAIRE (2007)

The purpose of this questionnaire is to gather views about the Health and Safety (Display Screen Equipment) Regulations. These Regulations first came into effect in 1993 and minor changes were made in 2002.

Display screen equipment (DSE) includes typical office visual display units (VDUs), such as personal computers and laptops. It also includes other alphanumeric or graphic display screens, for example, non-electronic display systems such as microfiche and process control screens.

The responses to this questionnaire will provide the Health and Safety Executive with information about the relevance and practical usefulness of the regulations governing work with DSE. All your answers will be collated by HI Europe and analysed by researchers at the Health and Safety Laboratory. Your answers will be confidential, and no individuals or organisations will be able to be identified from the survey.

Please answer the following questions **for your organisation, but only for the workplace location where you are situated**. Please answer by ticking the boxes or writing in the spaces provided. Even if you think that you do not have any display screen equipment at your workplace we would be grateful if you would at least complete the first section, **Section A**. The full questionnaire should take less than 30 minutes to complete.

If you have any queries, please contact HI Europe (HI to add contact details)

Thank you for your help

A. Background Information

A1. What is your main business activity, i.e. what are your main products or services?

Please tick the appropriate box.

Mining and quarrying	<input type="checkbox"/>
Manufacturing	<input type="checkbox"/>
Electricity, gas and water supply	<input type="checkbox"/>
Construction	<input type="checkbox"/>
Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	<input type="checkbox"/>
Hotels and restaurants	<input type="checkbox"/>
Transport, storage and communication	<input type="checkbox"/>
Financial intermediation	<input type="checkbox"/>
Real estate, renting and business activities	<input type="checkbox"/>
Public administration and defence; compulsory social security	<input type="checkbox"/>
Education	<input type="checkbox"/>
Health and social work	<input type="checkbox"/>
Other community, social and personal service activities	<input type="checkbox"/>

A2. Approximately how many people are currently employed at this organisation? *Please include full-time and part-time permanent employees i.e. total head count, not full-time equivalents. Please tick the appropriate box.*

2-24 25-99 100-299 300+

A3. Which of the following best describes your organisation? *Please tick the appropriate box.*

Public Sector Private Sector

A4. What is your role within the organisation? (i.e. job title)

Please write in.

.....

A5. Do you have a recognised trade union at your workplace? *Please tick one box.*

Yes No Don't Know

A6. Do any staff in your organisation routinely use display screen equipment as a significant part* of their normal work? *Please tick one box.*

*For example: people using DSE more or less continuously on most days. Or others who:

- Normally use DSE for continuous spells of an hour or more at a time; and
- Use it in this way more or less daily; and
- Have to transfer information quickly to or from the screen; and
- Also need to apply high levels of attention or concentration; or are highly dependent on DSE or have little choice about using them; or need special training or skills to use the equipment.

Yes No Don't Know

If you answered YES to question A6 above, please complete the rest of the questionnaire.

If you answered NO or DON'T KNOW, Thank You for your time you do not need to complete the rest of the questionnaire.

B. Use of Display Screen Equipment

B1. Please estimate the percentage of permanent employees in your company who **always**, **occasionally**, or **never**, work with display screen equipment? (The total must be 100%)

a. % Always work with a display screen
b. % Occasionally work with a display screen
c. % Never work with a display screen
Total 100 % Employees

B2. Approximately how many display screens in total do you have at this organisation? *Please tick the appropriate box.*

- | | | | | | |
|------------|--------------------------|-------------|--------------------------|------------|--------------------------|
| 1 to 4 | <input type="checkbox"/> | 5 to 9 | <input type="checkbox"/> | 10 to 24 | <input type="checkbox"/> |
| 25 to 49 | <input type="checkbox"/> | 50 to 99 | <input type="checkbox"/> | 100 to 249 | <input type="checkbox"/> |
| 250 to 499 | <input type="checkbox"/> | 500 to 1000 | <input type="checkbox"/> | over 1000 | <input type="checkbox"/> |

B3. Is there anybody **not** permanently employed by your organisation that uses display screen equipment owned or supplied by you? *Please tick as many boxes as apply.*

- Temporary / agency staff who are employed by the agency
- Temporary / agency staff who are self-employed
- Other self-employed
- Sub-contractors
- People on short-term contracts of fewer than 6 months
- Other, please specify
- None
- Don't know

B4. If yes to any of the above, approximately how many jobs involving the use of display screen equipment, have been filled with individuals **not** permanently employed by your organisation over the last 12 months? *Please write in.*

.....

B5. What are the main tasks that require staff to routinely use display screen equipment as a significant part of their normal work? *Please tick as many boxes as apply.*

- | | | | |
|-----------------|--------------------------|---------------------|--------------------------|
| Word processing | <input type="checkbox"/> | Desktop publishing | <input type="checkbox"/> |
| Data entry | <input type="checkbox"/> | CAD / CAM | <input type="checkbox"/> |
| Process control | <input type="checkbox"/> | Internet-based work | <input type="checkbox"/> |

Other, please specify

.....
.....

C. Perceived risks

C1. In this question we are trying to find out your perceptions of the risks (real or otherwise) associated with use of display screen equipment. In your opinion, which of the following health problems may be caused by the use of display screen equipment?

Please tick one box for each health problem.

		Yes	No	Don't know
A	Upper limb pains and discomfort	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B	Permanent eye and eyesight effects, e.g. short sight	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C	Temporary eye strain leading to symptoms such as red or sore eyes or headaches	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D	Tiredness and stress	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E	Epilepsy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F	Skin complaints	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
G	Health damage from radiation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
H	Miscarriages and birth defects	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I	Back pain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
J	Other - Please specify			

D. Alterations to workstations

D1. Does your organisation undertake risk assessments of workstations i.e. the display screen equipment and the immediate work environment every 12 months? *Please tick one box.*

Yes

No

Don't Know

D2. Has your organisation made any changes to display screen workstations in the last 12 months? *Please indicate what changes have been made and why by ticking the appropriate boxes.*

		Yes, as a direct result of undertaking risk assessment	Yes, as a direct result of other requirements of health & safety law	Yes, but for other reasons e.g. office refurbishment / upgrade policy	No, have not made such changes
A	Provided suitable lighting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B	Provided new computer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C	Provided new display screen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D	Provided window covering	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E	Ensured screen could swivel/tilt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F	Reduced noise at workstation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
G	Screen moved to avoid glare	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
H	Provided adjustable chair	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I	Provided new keyboard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
J	Provided larger desk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
K	Provided footrest	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
L	Provided easy to use software	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
M	Provided anti-glare screen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
N	Redesigned tasks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
O	Provided low emission monitor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P	Provided hand/wrist support	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q	Ensured sufficient space is available around workstation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R	Ensured temperature is comfortable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S	Ensured humidity levels are adequate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
T	Ensured characters on screen are well-defined, clearly formed, and adequately spaced	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
U	Ensured image on screen is stable, with no flickering	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
V	Ensured brightness / contrast easily adjustable by operator	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
W	Ensured height of screen is adjustable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

D3. Approximately what proportions of workstations at your organisation have been changed in the last 12 months? *Please write in.*

..... %

D4. Are you planning to do anything else to workstations to comply with the Health and Safety (Display Screen Equipment) Regulations? *Please tick the appropriate box.*

Yes No **Go to Q.D6** Don't Know **Go to Q.D6**

D5. If yes, which of the changes from question D2 are you planning to make? *Please write in appropriate letter(s) from question D2(A-X).*

.....

Other, please specify

.....

D6. Overall, to what extent were any of the following important in leading you to take the actions you have regarding display screen equipment? *Please tick one box for each of the questions.*

		Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
1	To protect employees from risks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Pressure from HSE or local authority inspectors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	To follow good practice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	To improve comfort of employee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	To reduce the costs of absence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	To increase productivity/product quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Pressure from employees/safety representatives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	To comply with the Regulations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	To reduce potential claims caused by Repetitive Strain Injury (RSI)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other <i>please specify</i>					

E. Operator Computer Interface

E1. Does your organisation take into account the following when purchasing, designing, selecting, commissioning and modifying software, and in designing tasks using display screen equipment? *Please tick one box for each question.*

		Yes	No	Don't Know
A	Software suitable for the task	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B	Software easy to use and adaptable to the operator's level of knowledge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C	System gives feedback to workers on their performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D	Systems display information in a format and at a pace adaptable to operators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E	Principles of software ergonomics are applied, in particular to human data processing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

F. Daily routine of DSE users

F1. Do any of the jobs in your workplace involve spells of intensive display screen equipment work, i.e. work that has no natural breaks such as continuous data entry? *Please tick one box.*

Yes No **Go to Q.F4** Don't Know **Go to Q.F4**

F2. If yes, are staff in those jobs allowed to take breaks or changes in activity? *Please tick one box.*

Yes No **Go to Q.F4** Don't Know **Go to Q.F4**

F3. For how long and how often are these breaks undertaken? *Please tick as many boxes as apply.*

Irregularly depending on work pattern

Irregularly depending on the individual

Regularly

Don't know

If regular breaks are taken, please indicate the most common pattern in terms of the length and the frequency of the break (*e.g.* a ten minute break every hour). *Please write in.*

.....minute break everyhours

F4. Which of the following occur with regard to work routines of all DSE users? *Please tick as many boxes as apply.*

- Supervisor / manager reminds staff to take breaks from screen work
- It is left to employees' discretion to take breaks / change activities
- Jobs have been redesigned to incorporate non-screen work
- Guidance is issued but it is not compulsory
- Reminders for breaks are programmed into the software
- Breaks occur naturally in the work anyway
-

G. Information and Training

G1. Are employees who are DSE users in your company given information about how to prevent the health risks associated with display screen work? *Please tick the appropriate box.*

Yes - all DSE users Some No **Go to G3** Don't know **Go to G3**

G2. When would an employee be given such information? *Please tick as many boxes as apply.*

- On commencement of employment
- At regular intervals
- When workstations have been substantially modified

G3. Have employees who are DSE users in your company been given training on how to arrange their workstation in such a way as to avoid health problems? This refers to information on aspects such as the proper height of the desk and the chair and the distance they should sit from the screen and keyboard. *Please tick the appropriate box.*

Yes - All DSE users Some No **Go to H1** Don't know **Go to H1**

G4. When would an employee be given such training? *Please tick the appropriate box.*

- On commencement of employment
- At regular intervals
- When workstations have been substantially modified
-

H. Eyes and eyesight

H1. Do you provide eyesight tests for users of display screen equipment? *Please tick the boxes that apply.*

- Yes, on request of user, before starting display screen work
- Yes, on request of user, after starting display screen work
- Yes, for all employees using display screen equipment, before starting display screen work
- Yes, for all employees using display screen equipment, after starting display screen work
- Yes, if they experience visual difficulties due to display screen work
- No **Go to I1**
- Don't know **Go to I1**

H2. What proportion of display screen equipment users do you estimate have received eyesight tests in the last 12 months (by registered ophthalmic optician)? *Please write in.*

..... %

H3. How are these tests provided? *Please tick as many boxes as apply*

- By an external optician who visits the firm
- By arrangement with a local optician on his/her premises
- Through a voucher scheme
- By company doctor or optician
- User makes his/her own arrangements and is reimbursed
- Don't know
- Other, *please specify*.....

H4. When did your organisation first provide eyesight testing for users of display screen equipment? *Please tick one box.*

	Eyesight tests
Within the last three years	<input type="checkbox"/>
Between three and five years ago	<input type="checkbox"/>
Over five years ago	<input type="checkbox"/>
Don't know	<input type="checkbox"/>
Not applicable	<input type="checkbox"/>

H5. What proportion of individuals having had an eyesight test do you estimate have been prescribed spectacles for use specifically with display screen equipment? *Please write in.*

..... %

I. The Regulations

I1. Are you or someone in your organisation aware of the Health and Safety (Display Screen Equipment) Regulations? *Please tick one box.*

Yes No **Go to J1** Don't Know **Go to J1**

I2. Please indicate the extent of your knowledge of the Regulations by circling a number from 1 to 5 on the scale below, with 1 = full knowledge, through to 5 = no knowledge at all.

Full knowledge Have no knowledge at all
 1 2 3 4 5

If answering 5 please go to J1

I3. How understandable do you think the Health and Safety (Display Screen Equipment) Regulations are? Please indicate by circling a number from 1 to 5 on the scale below with 1 = easy to understand, through to 5 = difficult to understand.

Easy to understand Difficult to understand
 1 2 3 4 5

I4. How relevant do you find the Health and Safety (Display Screen Equipment) Regulations for daily work? Please indicate by circling a number from 1 to 5 on the scale below with 1 = Not at all relevant, through to 5 = Very relevant.

Not at all relevant Very relevant
 1 2 3 4 5

I5. How useful do you find the Health and Safety (Display Screen Equipment) Regulations for daily work? Please indicate by circling a number from 1 to 5 on the scale below with 1 = Not at all useful, through to 5 = Very useful.

Not at all useful Very useful
 1 2 3 4 5

I6. How have you decided which employees are covered by the Regulations at your workplace? Please tick as many boxes as apply.

- We consider that everybody is covered
- We follow HSE guidance
- We apply the Regulations where employees use DSE for over half their working time
- We apply the Regulations to all workstations
- We only set criteria for those wanting eyesight tests

Other, please specify

I7. How would you generally describe the situation in regard to your organisation's access to information about regulations concerning work with Display Screen Equipment? Please tick the appropriate box.

- Good Adequate Fair Poor Don't know

I8. Who do you go to for advice regarding display screen equipment and its use in the workplace? Please tick as many boxes as apply.

- Trade or sector organisations
- Trade unions
- Manufacturers or suppliers of DSE, workstations or software
- External consultants or training organisations
- Health & Safety Executive / inspectors
- Local Authority / Environmental health inspectors

Other, please specify

I9. How **confident** are you that your organisation has done all it needs to do to comply with the Health and Safety (Display Screen Equipment) Regulations? Please indicate by circling a number from 1 to 5 on the scale below with 1 = Not at all confident, through to 5 = Very confident.

Not at all confident Very confident
 1 2 3 4 5

I10. How much more do you think could be done in your current organisation to comply with the Health and Safety (Display Screen Equipment) Regulations? *Please tick one box.*

Very little	A slight amount	A moderate amount	Quite a lot	A great deal	Don't Know
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

J. Costs

J1. Do you have a separate budget to meet the costs of complying with the Regulations? *Please tick one box.*

- Yes, as a separate DSE budget
- Yes, but as an itemised part of the Health & Safety budget
- Yes, as an un-itemised part of the Health & Safety budget
- No, no separate budget for Health & Safety or DSE **Go to Q.K1**
- Don't know **Go to Q.K1**

J2. What has been the total cost to the organisation of complying with the Health and Safety (Display Screen Equipment) Regulations in the past 12 months? (This is only additional costs incurred to comply with the regulations and does not include purchase of standard computers and furniture.)

Please give an **estimated** total cost and, if possible, indicate how this breaks down between each aspect of the Regulation.

		Don't know
Total Cost:	£.....	<input type="checkbox"/>
Risk assessments or workstation assessments	£.....	<input type="checkbox"/>
Altering workstations	£.....	<input type="checkbox"/>
Altering work routine	£.....	<input type="checkbox"/>
Provision of eye or eye sight tests	£.....	<input type="checkbox"/>
Provision of spectacles	£.....	<input type="checkbox"/>
Training and information	£.....	<input type="checkbox"/>
Other, <i>please specify</i>	£.....	<input type="checkbox"/>

K. The benefits

K1. To what extent have any of the following benefits been observed as a direct result of implementing the measures associated with the Display Screen Equipment Regulations in the workplace? *Please tick one box for each statement.*

Compliance with the Regulations has led to:	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Reduced labour turnover	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reduced staff stress	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reduced sickness absence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increased productivity or quality of output	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improved staff morale	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fewer compensation claims, e.g. linked to RSI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other, <i>please specify</i>				
				

L. General Comments

L1. Below are a series of statements about the use of display screen equipment in your workplace. *Please indicate the extent to which you agree with the following statements by circling a number from 1 to 5 against each statement with 1 = strongly agree, through to 5 = strongly disagree.*

		Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
1	Senior management lack commitment to DSE assessments	1	2	3	4	5
2	Employees forget how to use DSE equipment properly	1	2	3	4	5
3	We have had a positive reaction from staff to the changes we have introduced	1	2	3	4	5
4	Benefits to the organisation of compliance with the Regulations outweigh costs	1	2	3	4	5
5	The Regulations are complex and definitions confusing	1	2	3	4	5
6	Costs of compliance with the Regulations are easy to identify	1	2	3	4	5
7	Complying with the Regulations are onerous	1	2	3	4	5
8	It is difficult to ensure that employees take regular breaks	1	2	3	4	5
9	Employers should not have to pay for eye tests or spectacles	1	2	3	4	5

Thank you very much for completing this questionnaire

If you have any queries about the study, please contact HI Europe (add contact details)

VDUS IN THE WORKPLACE

Confidential to the Institute for Employment Studies



Please answer the following questions for this establishment only, by ticking the boxes or writing in the spaces provided. Even if you do not think that you have any display screen equipment at your workplace we would be grateful if you would at least complete Section A. If you have any queries, please contact Sheila Honey at IES: telephone 01273 686751. Thank you for your help.

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0277 (1-4)
 _____ (5-8)
 _____ (9)
 _____ (10-13)

A. Background information

A1. Does anyone use display screen equipment at your workplace? (Display screen equipment includes typical office visual display units (VDUs) and other alphanumeric or graphic display screens, for example, non-electronic display systems such as microfiche and process control screens but not closed circuit television monitors). Please tick one box.
 Yes No Don't know

_____ (14)

If you have answered yes to question 1 above, please go to question 2 and complete the rest of the questionnaire. If you answered no or don't know please complete questions 2 to 5 only and return the questionnaire in the reply paid envelope provided.

A2. What is your main business activity, ie what are your main products or services? Please write in.

_____ (15-17)

A3. Approximately how many people are currently employed at this establishment? Please include full-time and part-time permanent employees ie total head count, not full-time equivalents

_____ (18-22)

A4. What was the approximate financial turnover of the establishment in the last financial year?

Please write in. £

_____ (23-30)

A5. Do you have a recognised trade union at your workplace?
 Please tick one box

Yes No Don't know

_____ (31)

You only need to answer the remainder of the questionnaire if you answered yes to question 1 above, otherwise please return questionnaire in reply paid envelope provided.

B. Use of Display Screen Equipment

B1. Do any staff in your organisation habitually use display screen equipment as a significant part* of their normal work? Please tick one box.

Yes No Don't know

_____ (32)

* For example: people using a VDU more or less continuously on most days. Or others who:
 - normally use a VDU for continuous spells of an hour or more at a time; and
 - use it in this way more or less daily; and
 - have to transfer information quickly to or from the screen;
 and also need to apply high levels of attention or concentration; or are highly dependent on VDUs or have little choice about using them; or need special training or skills to use the equipment.

B2. If yes, approximately how many permanent (ie those not in Q.B4) employees use display screen equipment in this way? Please write in.

..... employees

_____ (33-37)

In confidence

- B3.** Approximately how many display screens in total do you have at this establishment? *Please tick appropriate box*
- | | | | | | | | | |
|------------|--------------------------|---|-------------|--------------------------|---|------------|--------------------------|---|
| 1 to 4 | <input type="checkbox"/> | 1 | 5 to 9 | <input type="checkbox"/> | 2 | 10 to 24 | <input type="checkbox"/> | 3 |
| 25 to 49 | <input type="checkbox"/> | 4 | 50 to 99 | <input type="checkbox"/> | 5 | 100 to 249 | <input type="checkbox"/> | 6 |
| 250 to 499 | <input type="checkbox"/> | 7 | 500 to 1000 | <input type="checkbox"/> | 8 | over 1000 | <input type="checkbox"/> | 9 |

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- B4.** Is there anybody **not** permanently employed by your organisation who uses display screen equipment owned or supplied by you? *Please tick as many boxes as apply.*

- | | | |
|---|--------------------------|------------------------|
| temporary/agency staff who are employed by the agency | <input type="checkbox"/> | (40) |
| temporary/agency staff who are self-employed | <input type="checkbox"/> | (41) |
| other self-employed | <input type="checkbox"/> | (42) |
| sub-contractors | <input type="checkbox"/> | (43) |
| people on short-term contracts of under 6 months | <input type="checkbox"/> | (44) |
| Other, please specify | <input type="checkbox"/> | (45) |
| none | <input type="checkbox"/> | (46) Go to Q.B6 |
| Don't know | <input type="checkbox"/> | (47) Go to Q.B6 |

- B5.** If yes to any of the above, approximately how many jobs involving the use of display screen equipment, have been filled with individuals **not** permanently employed by your organisation over the last 12 months? *Please write in.*

..... (48-49)

..... (50-52)

- B6.** What are the main tasks which require staff to habitually use display screen equipment as a significant part of their normal work? *Please tick as many boxes as apply.*

- | | | |
|-----------------------------|--------------------------|---------|
| word processing | <input type="checkbox"/> | (53) |
| desk top publishing | <input type="checkbox"/> | (54) |
| data entry | <input type="checkbox"/> | (55) |
| CAD\CAM | <input type="checkbox"/> | (56) |
| process control | <input type="checkbox"/> | (57) |
| Other, please specify | <input type="checkbox"/> | (58) |
| | | (59-60) |

C. Perceived risks

- C1.** In this question we are trying to find out your perceptions of the risks (real or otherwise) associated with use of display screen equipment. In your opinion, which of the following health problems may be caused by the use of display screen equipment? *Please tick one box for each effect.*

- | | | | | |
|--|-------------------------------|--------------------------------|-------------------------------------|------|
| upper limb pains and discomfort | True <input type="checkbox"/> | False <input type="checkbox"/> | Don't know <input type="checkbox"/> | (61) |
| permanent eye and eyesight effects, eg short sight | True <input type="checkbox"/> | False <input type="checkbox"/> | Don't know <input type="checkbox"/> | (62) |
| temporary eye strain leading to symptoms such as red or sore eyes or headaches | True <input type="checkbox"/> | False <input type="checkbox"/> | Don't know <input type="checkbox"/> | (63) |
| tiredness and stress | True <input type="checkbox"/> | False <input type="checkbox"/> | Don't know <input type="checkbox"/> | (64) |
| epilepsy | True <input type="checkbox"/> | False <input type="checkbox"/> | Don't know <input type="checkbox"/> | (65) |
| skin complaints | True <input type="checkbox"/> | False <input type="checkbox"/> | Don't know <input type="checkbox"/> | (66) |
| health damage from radiation | True <input type="checkbox"/> | False <input type="checkbox"/> | Don't know <input type="checkbox"/> | (67) |
| miscarriages and birth defects | True <input type="checkbox"/> | False <input type="checkbox"/> | Don't know <input type="checkbox"/> | (68) |

In confidence

D. Alterations to workstations

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D1. Have you undertaken a risk assessment of workstations ie the display screen equipment and the immediate work environment? Please tick one box.
 Yes No Don't know

.....(69)

0277 (1-4)

D2. Have you made any changes to display screen workstations since January 1993?
 Please indicate what changes have been made and why by ticking the appropriate boxes.

.....(5-8)

2 (9)

Yes, as a direct result of undertaking a risk assessment. Yes, as a direct result of other requirements of health and safety law. Yes, but for other reasons eg office refurbishment/IT upgrade policy. No, have not made such changes.

- a) provided suitable lighting
- b) provided new computer
- c) provided new display screen
- d) provided window covering
- e) ensured screen could swivel /tilt
- f) reduced noise at workstation
- g) screen moved to avoid glare
- h) provided adjustable chair
- i) provided new keyboard
- j) provided larger desk
- k) provided footrest
- l) provided easy to use software
- m) provided anti-glare screen
- n) redesigned tasks
- o) provided low emission monitor
- p) provided hand/wrist support

.....(10)

.....(11)

.....(12)

.....(13)

.....(14)

.....(15)

.....(16)

.....(17)

.....(18)

.....(19)

.....(20)

.....(21)

.....(22)

.....(23)

.....(24)

.....(25)

D3. Approximately what proportion of workstations at your establishment have been changed since January 1993? Please write in.

..... %

.....(26-28)

D4. Are you planning to do anything else to workstations to comply with health and safety law?

YES No Go to Q.E1 Don't know Go to Q.E1

.....(29)

D5. If yes, which of the changes from question 2 are you planning to make? Please write in appropriate letters a) to p) from question 2.

.....(30-33)

.....

.....

Other, please specify

.....(34-37)

.....(38-41)

.....(42-45)

.....(46-47)

.....(48-49)

E. Daily routine of users

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- E1. Do any of the jobs in your workplace involve spells of intensive display screen equipment work ie work that has no natural breaks such as continuous data entry? *Please tick one box.*
- Yes No **Go to Q.E4** Don't know **Go to Q.E4** _____(50)
- E2. If yes, are staff in those jobs allowed to take breaks or changes in activity? *Please tick one box.*
- Yes No **Go to Q.E4** Don't know **Go to Q.E4** _____(51)
- E3. For how long and how often are these breaks undertaken? *Please tick as many boxes as apply.*
- irregularly depending on work pattern _____(52)
- irregularly depending on the individual _____(53)
- regularly _____(54)
- don't know _____(55)
- If regular breaks are taken, please indicate the most common pattern in terms of the length and the frequency of the break (eg a ten minute break every 30 minutes). *Please write in.*
- minute break everyminutes _____(56-57)
- E4. Do any of the following occur with regard to work routines of all users? *Please tick as many boxes as apply.*
- supervisor/manager reminds staff to take breaks from screen work _____(60)
- it is left to employees discretion to take breaks/change activities _____(61)
- jobs have been redesigned to incorporate non-screen work _____(62)
- guidance is issued but is not compulsory _____(63)
- reminders are programmed into software _____(64)
- breaks naturally occur in the work anyway _____(65)

F. Eyes and eyesight

- F1. Do you provide eyesight tests for users of display screen equipment? *Please tick one box.*
- Yes, on request of user _____(5-8)
- Yes, for all employees using display screen equipment _____(9)
- No **Go to Q.F5**
- Don't know **Go to Q.F5** _____(10)
- F2. What proportion of display screen equipment users have received eyesight tests since January 1993 (by registered ophthalmic optician)? *Please write in.*
-%
-(11-13)
- F3. How are these tests provided? *Please tick as many boxes as apply.*
- by external optician who visits the firm _____(14)
- by arrangement with a local optician at their premises _____(15)
- through a voucher scheme _____(16)
- by company doctor or optician _____(17)
- user makes own arrangements and is reimbursed _____(18)
- other *please specify*..... _____(19)
- Don't know _____(20)
- In confidence* _____(21-22)

F4. What proportion of individuals having had an eyesight test have been prescribed spectacles for use specifically with display screen equipment? *Please write in.*

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..... (23-25)

F5. Does your organisation undertake vision screening (vision screening is a simple form of test designed to identify those who may need a full sight test. These can be carried out in-house by a competent person)? *Please tick one box.*

Yes No **Go to Q.F8** Don't know **Go to Q.F8**

..... (26)

F6. As a result of vision screening, what proportion of users of display screen equipment were identified as having a sight problem and needing a full eyesight test? *Please write in.*

..... (27-29)

F7. What proportion requested a full eyesight test although they were not identified as having a problem? *Please write in.*

..... (30-32)

F8. When did your organisation first provide eyesight testing or vision screening for users of display screen equipment?

	Eyesight tests	Vision screening
Within the last three years	<input type="checkbox"/> 1	<input type="checkbox"/> 1
Between three and five years ago	<input type="checkbox"/> 2	<input type="checkbox"/> 2
Over five years ago	<input type="checkbox"/> 3	<input type="checkbox"/> 3
Don't know	<input type="checkbox"/> 4	<input type="checkbox"/> 4
Not applicable	<input type="checkbox"/> 5	<input type="checkbox"/> 5

..... (33)

..... (34)

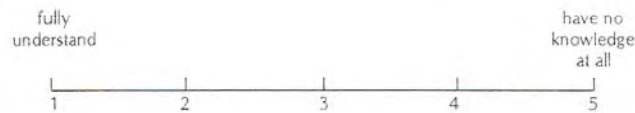
G. The Regulations

G1. Are you or someone in your organisation aware of the Health and Safety (Display Screen Equipment) Regulations 1992? *Please tick one box.*

Yes No **Go to Q.G5** Don't know **Go to Q.G5**

..... (35)

G2. Please could you give some indication as to the extent of **your** knowledge of the Regulations by circling a number from 1 to 5 on the scale below with 1 = fully understand, through to 5 = no knowledge at all.



..... (36)

G3. How have you decided which employees are covered by the Regulations at your workplace? *Please tick as many boxes as apply.*

- we consider that everybody is covered
- we follow HSE guidance
- we apply the Regulations where employees use VDUs for over half their working time
- we apply the Regulations to all workstations
- we only set criteria for those wanting eyesight tests
- Other, please specify

..... (37)

..... (38)

..... (39)

..... (40)

..... (41)

..... (42)

..... (43-44)

34. How clear do you find the definitions contained in the Regulations? Please indicate the extent to which you agree with the statements, by circling a number from 1 to 5 against each statement with 1 = strongly agree, through to 5 = strongly disagree.

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	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	I do not know the definition	
I find the definition of a 'user' helpful	1	2	3	4	5	<input type="checkbox"/>	_____ (45)
The definition of 'display screen equipment' is confusing	1	2	3	4	5	<input type="checkbox"/>	_____ (46)
I understand the distinction between 'user' and 'operator'	1	2	3	4	5	<input type="checkbox"/>	_____ (47)
The Regulations should cover employees ('users') only, not self employed ('operators')	1	2	3	4	5	<input type="checkbox"/>	_____ (48)
The term 'workstation' is useful	1	2	3	4	5	<input type="checkbox"/>	_____ (49)
I do not understand the difference between 'reducing risks' and meeting the 'requirements of the schedule'	1	2	3	4	5	<input type="checkbox"/>	_____ (50)

G5. Who do you go to for advice regarding display screen equipment and its use in the workplace? Please tick as many boxes as apply.

trade or sector organisations	<input type="checkbox"/>	_____ (51)
trade unions	<input type="checkbox"/>	_____ (52)
manufacturers or suppliers of DSE, or workstations, or software	<input type="checkbox"/>	_____ (53)
external consultants or training organisations	<input type="checkbox"/>	_____ (54)
Health and Safety Executive/inspectors	<input type="checkbox"/>	_____ (55)
Local Authority/Environmental health inspectors	<input type="checkbox"/>	_____ (56)
Other, please specify	<input type="checkbox"/>	_____ (57)
		_____ (58-59)

G6. Are you aware of any publications or written guidance on display screen equipment? Please circle yes or no. If you answer yes, circle a number from 1 to 4 to indicate how useful you found the document:

Document:	Do you know of it?	very useful	useful	of some use	not at all useful	
		1	2	3	4	
"Display Screen Equipment work. Guidance on Regulations L26", Health and Safety Executive, 1992	YES/NO	1	2	3	4	_____ (60-61)
"VDUs: an easy guide to the regulations", Health and Safety Executive, 1994.	YES/NO	1	2	3	4	_____ (62-63)
"Working with VDUs" Health and Safety Executive, 1992	YES/NO	1	2	3	4	_____ (64-65)
Other HSE publications: please specify title.						_____ (66-67)
.....						_____ (68-69)

G7. What are the most useful publications other than those produced by the HSE that you have used? Please write in the title, author and publisher.

.....	_____ (70-71)
.....	_____ (72-73)

H. Costs

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H1. Do you have a separate budget to meet the costs of complying with the Regulations?
Please tick one box.

- Yes, as a separate DSE budget 1 0277 (1-4)
- Yes, but as an itemised part of Health & Safety budget 2 (5-8)
- Yes, unitemised part of Health & Safety budget 3 4 (9)
- No, no separate budget for Health & Safety or DSE 4 **Go to Q.I.1**
- Don't know 5 **Go to Q.I.1** (10)

H2. What has been the cost to the organisation of complying with the display screen equipment Regulations? Please give an estimated total cost and, if possible, indicate how this breaks down between each aspect of the Regulations, distinguishing if possible between initial one-off costs and regular annual costs.

	Initial Costs (ie one-off set-up costs)	Don't Know	Continuing cost (ie regular/ variable costs)	Don't Know	
Total cost	£	<input type="checkbox"/>	£..... pa	<input type="checkbox"/>	<u>CODING SHEET</u>
workstation assessments	£	<input type="checkbox"/>	£..... pa	<input type="checkbox"/>	
altering workstations	£	<input type="checkbox"/>	£..... pa	<input type="checkbox"/>	
provision of eye or eye sight tests	£	<input type="checkbox"/>	£..... pa	<input type="checkbox"/>	
provision of vision screening	£	<input type="checkbox"/>	£..... pa	<input type="checkbox"/>	
provision of spectacles	£	<input type="checkbox"/>	£..... pa	<input type="checkbox"/>	0277 (1-4)
training and information	£	<input type="checkbox"/>	£..... pa	<input type="checkbox"/>	(5-8)
other please specify	£	<input type="checkbox"/>	£..... pa	<input type="checkbox"/>	£ (9)
					(12-33)

I. The benefits

I1. To what extent have any of the following benefits been observed as a direct result of implementing the measures associated with the Display Screen Equipment Regulations in the workplace? Please circle a number from 1 to 5 against each statement with 1 = strongly agree, through to 5 = strongly disagree.

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	
Compliance with the Regulations has lead to:						
reduced labour turnover	1	2	3	4	5	(34)
reduced staff stress	1	2	3	4	5	(35)
reduced sickness absence	1	2	3	4	5	(36)
increased productivity or quality of output	1	2	3	4	5	(37)
improved staff morale	1	2	3	4	5	(38)
fewer compensation claims, eg linked to RSI	1	2	3	4	5	(39)
other, please specify	1	2	3	4	5	(40)
						(41-42)

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J. General Comments

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- J1. Below are a series of statements about the use of display screen equipment in your workplace. Please indicate the extent to which you agree with the following statements by circling a number from 1 to 5 against each statement with 1 = strongly agree, through to 5 = strongly disagree.

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	
senior managers lack commitment to assessments	1	2	3	4	5	(43)
employees forget how to use equipment properly	1	2	3	4	5	(44)
we have had a positive reaction from staff to the changes we have introduced	1	2	3	4	5	(45)
benefits to the organisation of compliance with the Regulations outweigh the costs	1	2	3	4	5	(46)
the Regulations are complex and definitions confusing	1	2	3	4	5	(47)
costs of compliance with the Regulations are easy to identify	1	2	3	4	5	(48)
changes to workstations were undertaken as part of a general office refurbishment/equipment upgrading	1	2	3	4	5	(49)
the costs of complying with the Regulations are onerous	1	2	3	4	5	(50)
it is difficult to ensure employees take regular breaks	1	2	3	4	5	(51)
employers should not have to pay for eye tests or spectacles	1	2	3	4	5	(52)

- J2. Overall, to what extent were any of the following important in leading you to take the actions you have regarding display screen equipment? Please circle a number from 1 to 5 against each statement with 1 = strongly agree, through to 5 = strongly disagree.

	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree	
to protect employees from risks	1	2	3	4	5	(53)
pressure from HSE or local authority inspectors	1	2	3	4	5	(54)
to follow good practice	1	2	3	4	5	(55)
to improve comfort of employee	1	2	3	4	5	(56)
to reduce the costs of absence	1	2	3	4	5	(57)
to increase productivity/product quality	1	2	3	4	5	(58)
pressure from employees/safety representatives	1	2	3	4	5	(59)
to comply with the Regulations	1	2	3	4	5	(60)
to reduce potential claims caused by RSI	1	2	3	4	5	(61)
other please specify	1	2	3	4	5	(62)

- J3. Do you have any other comments about the Display Screen Equipment Regulations at your workplace? Please write in. Please continue on a separate sheet if necessary.

..... (63)

.....

Further Contact

We would like to follow up the issues raised in this questionnaire in greater depth. If you or a colleague would be willing to spare a short amount of time (less than an hour) in a confidential discussion with a member of our research team and/ or distribute a short questionnaire to a selection of your employees, please tick the box below and provide your name and telephone number:

Further discussion: Employee Questionnaire (64)

Name Tel. No. (65)

Thank you for completing this form.

If you have any queries about the study, please contact Sheila Honey or Janet Moralee, at IES.
Please return the questionnaire in the reply-paid envelope provided.
Institute for Employment Studies, Mantell Building, University of Sussex, Falmer, Brighton BN1 9RF.

In confidence

12 REFERENCES

Gervais, R. L., Williamson, J., Sanders, V. and Hopkinson, J. (2007). *Evaluation of the Success in Britain of the Directive on Minimum Safety and Health Requirements for Work with Display Screen Equipment (90/270/EEC)*. HSL Report RSU/07/12. Buxton, UK: Health & Safety Laboratory.

Honey, S., Hillage, J., Frost, D. & La Valle, I. (1997). *Evaluation of the Display Screen Equipment Regulations 1992*. Institute for Employment Studies (Contract Research Report 130/1997). HSE Books.

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1. Common Requirements for the evaluation of the VDU Directive: *Describes the background to the project and the overall issues the evaluation is designed to answer, and discusses methodology including some mandatory aspects. Note however that the subjects of questions the evaluation should put to employers, employees and other stakeholders are described in the second document:*

2. Evaluation of the VDU directive (90/270/EEC). Overview about terms of reference for the preparation of empirical investigations: *Lists in more detail aspects of the Directive that should be investigated in the evaluation. Note that what is to be evaluated in each member state is not the Directive itself, but the corresponding parts of the national legislation that implements the Directive. Also note that the last 4 columns of the table contain “national hypotheses” to be investigated by individual member state. HSE will discuss this with the chosen contractor and indicate whether there are any UK-specific issues to be listed in this section, though it is not thought these will be extensive.*

UK Standard Industrial Classification of Economic Activities 2003 London: The Stationery Office.

3. Honey, S., Hillage, J., Frost, D. & La Valle, I. (1997). *Evaluation of the Display Screen Equipment Regulations 1992.* Institute for Employment Studies (Contract Research Report 130/1997). HSE Books.

4. Work with display screen equipment: Health and Safety (Display Screen Equipment) Regulations 1992 as amended by the Health and Safety (Miscellaneous Amendments) Regulations 2002, L26, ISBN 0 7176 2582 6.

5. The law on VDUs. An easy guide: Making sure your office complies with the Health and Safety (Display Screen Equipment) Regulations 1992 (as amended in 2002). HSG90 ISBN 0 7176 2602 4.

6. Working with VDUs. INDG36 (rev1) ISBN 0 7176 1504 9.

Evaluation of the success in Great Britain of the Directive on minimum safety and health requirements for work with display screen equipment

A comparative assessment of the 1997 and 2007 evaluations

This current report involved a comparative evaluation of the impact, including the costs and benefits, of the Display Screen Equipment (DSE) Directive 90/270/EEC in Great Britain, with the previous evaluation of the Regulations that was completed in 1997. The research is based on a structured sample of employers in Great Britain, in which data were collected from 1,241 respondents.

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