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## **DISPLAY SCREEN EQUIPMENT (DSE) RISK ASSESSMENT**

**DSE USER:**  
**WORKPLACE / AREA / ROOM:**  
**SELF ASSESSMENT DATE:**  
**ACS ASSESSMENT DATE:**



# DISPLAY SCREEN EQUIPMENT (DSE) RISK ASSESSMENT

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# DISPLAY SCREEN EQUIPMENT (DSE) RISK ASSESSMENT

## 1 INTRODUCTION

### WHAT IS DISPLAY SCREEN EQUIPMENT (DSE)?

DSE includes any graphic or alphanumeric display screen (regardless of the technology of the display) and includes computers, microfiche readers, radar screens and process control screens. A 'workstation' consists of:

- the screen, keyboard and software which the user interacts with on screen
- any accessories to the screen
- any disk drives, telephones, modems, chairs etc. used at the workstation
- the immediate work environment around the equipment

### WHAT ARE THE RISKS ASSOCIATED WITH DSE USE?

The health risks associated with DSE use fall under the following three categories:

- upper limb disorders (neck, arm, elbow, wrist, hand and finger pain)
- temporary eyestrain (but not eye damage) and headaches
- fatigue and stress

**Appendix 1** provides information on the Health & Safety factors associated with DSE use.

### WHAT LEGISLATION COVERS DSE USE?

The *Health and Safety (Display Screen Equipment) Regulations 1992* lay down minimum Health & Safety requirements for work with DSE. The employer's principal duty is to assess the risks to 'users' of DSE and to reduce the risks to the lowest level reasonably practicable. The employer is also under a duty to effectively manage four principal issues, namely:

- the design, set-up and use of the workstations, furniture etc.
- the work routine of operatives
- eye and eyesight care
- training and information provision

**Appendix 2** provides a summary of the Regulations.



# DISPLAY SCREEN EQUIPMENT (DSE) RISK ASSESSMENT

## 2 ASSESSMENT METHODOLOGY

The DSE User completes an initial self-assessment of health, safety and welfare factors associated with their workstation and DSE use. This is carried out in their own time by completing column 3 of the table set out in Stage 4 of the DSE Assessment form (Section 3 of this report).

Following completion of the self-assessment, an ACS Risk Assessor conducts a one-to-one assessment, once again working through the questionnaire originally completed by the User. This assessment is completed at the User's normal workstation and allows any concerns to be discussed and a visual observation of the working practises, surrounding environment and available equipment to be made. During the assessment, information pertaining to general working practices, eye tests and the provision of information and training is also obtained to determine legal compliance.

The observations made and action points identified during the assessment are recording in the tables set out in Section 3 of this report.

**Section 3** then acts as a **Safety Improvement Plan**, allowing the User or their Manager to record what actions are taken to rectify problems identified during the assessment.



## DISPLAY SCREEN EQUIPMENT (DSE) RISK ASSESSMENT

### 3 DSE ASSESSMENT


<b>STAGE 1 – ASSESSMENT DETAILS</b>			
<b>Name of DSE user</b>		<b>Date of self assessment</b>	
<b>Location of workstation</b>		<b>Desktop or laptop?</b>	
<b>Name of ACS assessor</b>		<b>Date of ACS assessment</b>	

<b>STAGE 2 – DSE ACTIVITIES</b>
<b>Provide a summary of your DSE activities – e.g. type of use; number of hours used each day, length of continuous use, etc.</b>

<b>STAGE 3 – PHOTOGRAPHS OF WORKSTATION (at time of ACS Assessment)</b>	

<b>STAGE 4 – ASSESSMENT AND ACTION PLAN</b>					
N <sup>o</sup>	Question	Self-Assessment – to be completed by the DSE User	ACS Assessment – comments (including actions taken)	Further Actions Required	Actions Completed (person and date)
1	Do you feel any pain, discomfort or stiffness in your neck, shoulders, arms or hand(s) during or after using IT equipment?				
2	Have you have felt any of the above when working with IT equipment in the past?				

## DISPLAY SCREEN EQUIPMENT (DSE) RISK ASSESSMENT

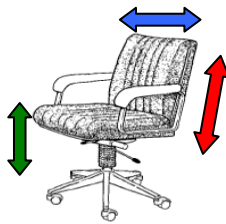
<b>STAGE 4 – ASSESSMENT AND ACTION PLAN</b>					
N <sup>o</sup>	Question	Self-Assessment – to be completed by the DSE User	ACS Assessment – comments (including actions taken)	Further Actions Required	Actions Completed (person and date)
3	Do you / have you had any health problems that could affect your work with IT equipment? (For example: epilepsy, back problems, poor circulation)				
4	Are the words on your screen clear, easy and comfortable to read?				
5	Is the image on the screen stable and flicker-free?				
6	Can you adjust the brightness and / or contrast?				
7	Does your screen:  <div style="display: flex; align-items: center; justify-content: center;">  <div style="margin-left: 20px;"> <p>swivel?</p> <p>tilt?</p> </div> </div>				
8	Are there any reflections on the screen? (For example from windows or lights)				
9	Is the keyboard separate to the screen?				



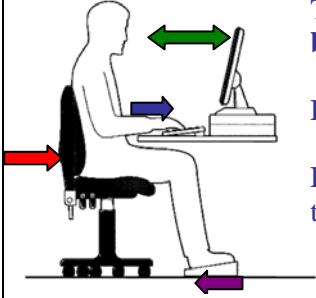
## DISPLAY SCREEN EQUIPMENT (DSE) RISK ASSESSMENT

<b>STAGE 4 – ASESSMENT AND ACTION PLAN</b>					
N <sup>o</sup>	Question	Self-Assessment – to be completed by the DSE User	ACS Assessment – comments (including actions taken)	Further Actions Required	Actions Completed (person and date)
10	Can you tilt the keyboard?				
11	Can you easily read the letters, numbers and symbols on the keyboard?				
12	Do you have a comfortable keying position?				
13	Is the mouse suitable for your needs?				
14	When using a mouse do you: a) Keep it close to the keyboard?				
	b) Have a straight wrist and relaxed hand?				
	c) Take your hand off the mouse when you are not using it?				
	d) Support your wrist and forearm while using the mouse?				
15	Does the mouse work smoothly at a speed that suits you?				

## DISPLAY SCREEN EQUIPMENT (DSE) RISK ASSESSMENT

<b>STAGE 4 – ASESSMENT AND ACTION PLAN</b>					
N <sup>o</sup>	Question	Self-Assessment – to be completed by the DSE User	ACS Assessment – comments (including actions taken)	Further Actions Required	Actions Completed (person and date)
16	Is the software you use suitable and can you use it comfortably?				
17	Is your work surface large enough?				
18	Can you comfortably reach and use the equipment / papers etc. on your desk?				
19	Are your work surfaces free from reflections? (For example from windows or lights)				
20	a) Can you adjust your seat's: <div style="display: flex; align-items: center; margin-top: 10px;">  <div style="margin-left: 20px;"> <p>Back height?</p> <p>Back tilt?</p> <p>Seat height?</p> </div> </div>				
	b) Does your seat have wheels / glides?				

## DISPLAY SCREEN EQUIPMENT (DSE) RISK ASSESSMENT

<b>STAGE 4 – ASSESSMENT AND ACTION PLAN</b>					
N <sup>o</sup>	Question	Self-Assessment – to be completed by the DSE User	ACS Assessment – comments (including actions taken)	Further Actions Required	Actions Completed (person and date)
21	<p>Is your chair adjusted as follows:</p>  <p>The <b>small of your back</b> supported</p> <p><b>Forearms</b> horizontal</p> <p><b>Eyes</b> level with the top of the screen</p> <p><b>Feet</b> flat on the floor without too much pressure from the seat on the backs of the legs?</p>				
22	Do you have enough room under your desk to move your legs and change position?				
23	How long do you work at a computer before taking a break?				
24	How often do you have an eyesight test?				
25	When was your last eyesight test?				
26	Do you wear glasses <b>only</b> when you are working with IT equipment?				



## DISPLAY SCREEN EQUIPMENT (DSE) RISK ASSESSMENT

<b>STAGE 4 – ASESSMENT AND ACTION PLAN</b>					
N <sup>o</sup>	Question	Self-Assessment – to be completed by the DSE User	ACS Assessment – comments (including actions taken)	Further Actions Required	Actions Completed (person and date)
27	Do you feel that the lighting levels are suitable?				
28	Do you have comfortable levels of ventilation?				
29	Is the workplace at a comfortable temperature?				
30	Are there comfortable noise levels in the workplace?				
31	Do you have any other concerns or comments regarding your workstation or DSE use?				
32	Have you received any training on the following:				
	a) The risks from DSE work?				
	b) The importance of good posture and changing position and how to adjust furniture to avoid risks?				
	c) Organising the workplace to avoid awkward or frequently awkward movements?				
	d) Avoiding reflections and glare on or around the screen?				



## DISPLAY SCREEN EQUIPMENT (DSE) RISK ASSESSMENT

<b>STAGE 4 – ASSESSMENT AND ACTION PLAN</b>					
N <sup>o</sup>	Question	Self-Assessment – to be completed by the DSE User	ACS Assessment – comments (including actions taken)	Further Actions Required	Actions Completed (person and date)
	e) Adjusting and cleaning the screen and mouse?				
	f) Organising work for activity changes or breaks if necessary?				
	g) Who to contact for help and to report problems or symptoms?				
33	Who to contact for DSE and office furniture faults?				
<b>General Recommendations</b>					
Nil.					



# DISPLAY SCREEN EQUIPMENT (DSE) RISK ASSESSMENT

## APPENDIX 1 HEALTH AND SAFETY FACTORS IN DSE USE

### Equipment

#### **Chairs**

Chairs should support the worker in a position that allows required tasks to be done comfortably and efficiently. The chair should have a stable base, be height adjustable, comfortably support the buttocks and thighs and allow for changes in position.

#### **Tables and Work Surfaces**

As a general rule, the work surface area should allow space for all computer equipment, paperwork and equipment. It should also be non-reflective, height adjustable and allow the operator to work at an optimum position with suitable clearance for legs and changes in position. Tabletops, if used, should be the size of a “standard” office desk - 30 by 60 inches wide.

#### **Monitors**

The top of the screen should be at eye level, or not more than 15 degrees below eye level, and the monitor should generally be positioned 18 - 24 inches away from the operator. Closer positioning magnifies possible eyestrain and dust and radiation exposures. DSE operators should also be made aware of the need to keep monitor screens dust free as they attract dust and repel it towards the face with the potential to cause allergic reactions.

#### **Computer Keyboard Placement**

Keyboards are best operated from elbow height, with a slight incline towards the elbows. They should be capable of being operated with a light touch. Typing with the wrists in a neutral position reduces this pressure and its possible consequences.

#### **Ergonomic Keyboards**

These types of keyboards are thought to facilitate a more natural position whilst typing. Opinion is divided on their effectiveness in preventing cumulative stress disorders.

#### **Mice**

Ideally, the mouse should be used with a neutral wrist position, without force. The whole arm should be used rather than the forearm alone, which can put strain on the hand and wrist muscles. The mouse should be in the immediate reach zone on a platform slightly above the keyboard, for comfort and hand eye co-ordination. Mouse wrist rests are also useful as is occasionally changing the mouse to the other hand.

### Environment

#### **Temperature and Humidity**

The workplace should be at least 16°C and a maximum of 24°C for work that is largely sedentary.

The level of humidity within the workplace should be between 30% and 50% relative humidity. It is important to maintain a good circulation of air (but not draughts), especially around machines such as copiers and printers.

#### **Lighting and Screen Glare**

Adequate illumination levels should be maintained, with an appropriate contrast between the screen and the background environment. Screen glare can be reduced by repositioning monitors, using indirect lighting, blinds and anti-glare screens.



## DISPLAY SCREEN EQUIPMENT (DSE) RISK ASSESSMENT

### Human Factors

#### **Exercise**

Exercise is one of the key elements in an ergonomics programme. Ideally, DSE users should move around the workplace once an hour if doing intensive computer work. Work routines should also be varied, i.e. mixing computer work with non-computer work.

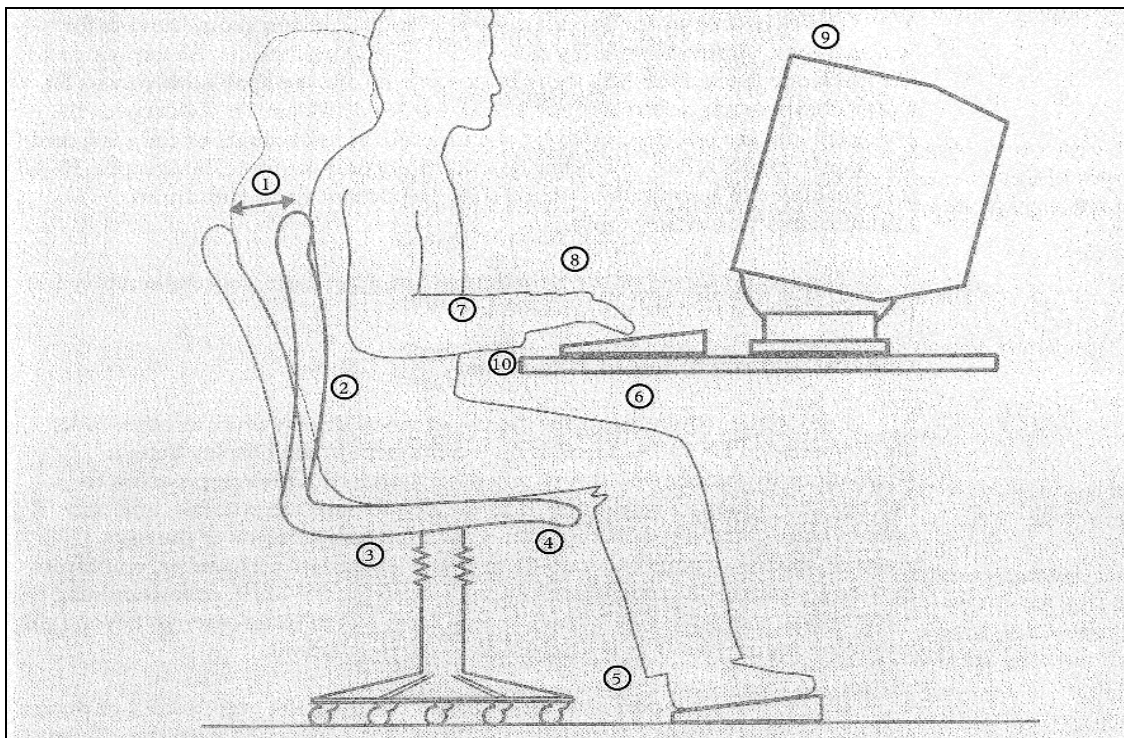
#### **Eye Care**

Simple strategies can be used to prevent eyestrain, for example, minimising exposure to DSE screens, resting the eyes **before** they get tired and closing the eyes for a few seconds at regular intervals. Other measures include choosing a distant focal point and looking at that on a regular basis. Eye moisturising drops can also be used to help soothe strained or dry eyes.

#### **Radiation**

Electromagnetic radiation from computer screens is currently not believed to adversely affect users, including pregnant employees. Existing skin conditions may be aggravated in conditions of low humidity.

The following HSE diagram illustrates good seating and posture:



**FIGURE 2**

**SEATING AND POSTURE FOR TYPICAL OFFICE TASKS**

- ① SEAT BACK ADJUSTABILITY
- ② GOOD LUMBAR SUPPORT
- ③ SEAT HEIGHT ADJUSTABILITY
- ④ NO EXCESS PRESSURE ON UNDERSIDE OF THIGHS AND BACKS OF KNEES
- ⑤ FOOT SUPPORT IF NEEDED
- ⑥ SPACE FOR POSTURAL CHANGE, NO OBSTACLES UNDER DESK
- ⑦ FOREARMS APPROXIMATELY HORIZONTAL
- ⑧ MINIMAL EXTENSION, FLEXION OR DEVIATION OF WRISTS
- ⑨ SCREEN HEIGHT AND ANGLE SHOULD ALLOW COMFORTABLE HEAD POSITION
- ⑩ SPACE IN FRONT OF KEYBOARD TO SUPPORT HANDS/WRISTS DURING PAUSES IN KEYING



# DISPLAY SCREEN EQUIPMENT (DSE) RISK ASSESSMENT

## APPENDIX 2

### HEALTH AND SAFETY (DISPLAY SCREEN EQUIPMENT) REGULATIONS 1992, AS AMENDED

The *Health and Safety (Display Screen Equipment) Regulations 1992, as amended* (DSE Regulations) lay down minimum health and safety requirements for work with display screen equipment. The following definitions are given with respect to the Regulations:

- **display screen equipment:** any alphanumeric or graphic display screen, regardless of the display process involved
- **operator:** a self employed person who habitually uses display screen equipment as a significant part of his normal work;
- **user:** an employee who habitually uses display screen equipment as a significant part of his normal work;
- **workstation:** an assembly comprising display screen equipment disk drive, telephone, modem, printer, document holder, work chair, work desk, work surface or other item peripheral to the display screen equipment; and the immediate work environment around the equipment

The principal duties of the employer and employees under the Regulations may be summarised as follows:

#### **Regulation 2: Analysis of workstations to assess and reduce risks**

Employers should perform a suitable and sufficient analysis of workstations used by operators and users to assess health and safety risks to such persons using them, and reduce identified risks to the lowest extent as reasonably practicable. Assessments should be reviewed if there is reason to believe they are no longer valid or there has been significant change in the workstation / environment.

#### **Regulation 3: Requirements for workstations**

Employers must ensure that workstations meet the minimum requirements laid down in the Schedule. These include:

- Stability, legibility and appearance of the screen image
- Tilt and swivel of the screen, which must be capable of use on a separate base
- Keyboards, work desks and chairs
- The workstation environment including space, humidity and lighting, as well as more specific requirements concerning glare, interference and non-visible radiation.
- Software design including: user friendliness, display of and application of software ergonomics

#### **Regulation 4: Daily work routine of user**

Employers should plan users' activities so that DSE work is periodically interrupted by breaks or changes in activity. Jobs that are based solely on data / text entry or screen monitoring must have deliberate breaks or pauses built into them.

#### **Regulation 5: Eyes and eyesight**

Users are to be given the right to an eye and eyesight examination at the employer's expense. The right can be exercised on taking up employment as a user, at regular intervals or whenever a work related visual defect is suspected. Employers are required to meet the cost for basic frames and lenses where spectacles are needed **specifically** for working with DSE. Employees cannot be instructed to have an eye and eyesight examination against their will.

#### **Regulation 6: Provision of training**

Where a person is, or is about to become, a user, the employer shall ensure that adequate health and safety training, which should cover:



## DISPLAY SCREEN EQUIPMENT (DSE) RISK ASSESSMENT

- The user's role in correct and timely detection and recognition of risks
- An explanation of the causes of risk, and how harm is caused
- User actions and procedures to control risks
- Means of alerting management to ill health symptoms or problems with workstations
- Information on the DSE Regulations, particularly regarding eyesight, breaks and the users contribution to assessments

### **Regulation 7: Provision of information**

Employers shall ensure that operators and users at work are provided with adequate information on health and safety relating to workstations and measures taken to comply with the Regulations.

Information the employer has to provide to users and operators:

Category of person	Does employer have to provide information on:					
	Risks from DSE and workstations ?	Risk assessment and measures to reduce the risks?	Breaks and activity changes?	Eye and eyesight tests?	Initial training?	Training when workstation modified?
Users employed directly by the company	Yes	Yes	Yes	Yes	Yes	Yes
Users employed by another company	Yes	Yes	Yes	No	No	Yes
Operators – self employed people	Yes	Yes	No	No	No	No