

Loss prevention standards

Display Screen Equipment

This document provides information on the risk factors associated with working with display screen equipment and the controls that can be introduced to prevent accident, injury or illness



Display Screen Equipment



Introduction

Working with Display Screen Equipment (DSE) such as computers, laptops, tablets and smartphones, is common in most workplaces. Prolonged periods of working with DSE, poorly designed workstations and unsuitable working environments can contribute to a range of potential problems such as: postural, visual, headaches, fatigue and stress.

This Loss Prevention Standard has been produced to help organisations provide a safe and healthy working environment and to assist them in meeting their legal duties.



Legal Requirements

Organisations have a legal duty to protect their employees who are based at their premises and those employees who work away from them, for example, homeworkers, workers on business travel, and workers who are within the premises of another employer.

They also have a legal duty to protect employees of other organisations and self-employed persons who are based on their premises.

The [Health and Safety \(Display Screen Equipment\) Regulations 1992 as amended by the Health and Safety \(Miscellaneous Amendments\) Regulations 2002](#) contains the specific requirement for the employer to conduct a DSE workstation assessment to consider the suitability of various elements of the workstation and the ergonomics of use.

They also contain the requirements for the provision of free eye tests to DSE users, free spectacles to certain users, breaks from screen and keyboard use and information and training.

DSE Workstation Assessment

Who should carry out the assessments?

Assessments can be made by health and safety personnel, or other in-house staff, if they have the appropriate competence to do so. It may be necessary to use the services of an external organisation/individual in certain circumstances, for example, where:

- DSE or associated components are faulty in design or use
- Workstation design is complex, or
- Critical tasks are being performed

When in-house personnel are trained to act as workstation assessors, suitable checks should be carried out to ensure that assessors have understood the information given to them and have reached an adequate level of competence (one way to do this is **for the trainer to check a sample of the assessor's work**).

How should the assessments be recorded?

In the simplest and most obvious cases which can be easily repeated and explained at any time, an assessment need not be recorded. This might be the case, for example if no significant risks are found and no individual user or operator is identified as being especially at risk. Assessments of short-term or temporary workstations may also not need to be recorded, unless risks are significant.

However, in most cases assessments need to be recorded and kept readily accessible to ensure continuity and accuracy of knowledge among those who may need to know the results, for example, where risk reduction measures have yet to be completed. Recorded assessments need not necessarily be written down but can alternatively be stored electronically.

When should the assessments be reviewed?

The assessment or relevant parts of it should be reviewed in the light of changes to the DSE worker population, or changes in individual capability, or where there has been significant change to the workstation such as:

- (a) a major change to software used
- (b) a major change to any of the equipment (screen, keyboard, input devices, etc)
- (c) a major change in workstation furniture
- (d) a substantial increase in the amount of time required to be spent using DSE
- (e) a substantial change in other task requirements (for example greater speed or accuracy)
- (f) if the workstation is relocated (even if all equipment and furniture stay the same)
- (g) if major features of the work environment, such as the lighting, are significantly modified

Risk Factors to be Considered in the Assessments

1. Display screens

There are a number of aspects of the screen itself that need to be considered, such as:

- Is the display screen clean and are suitable resources available to keep it clean?
- Is the text size readable and is the image free from flicker?
- **Is the screen's specification suitable for its intended use?**
- Can the brightness and contrast be adjusted?
- Does the screen swivel and tilt?
- Is the screen free from glare and reflections and for this purpose have adjustable window coverings been provided that are in adequate condition?

2. Keyboards

Unless the task is specific to the use of portable laptops, the keyboard should be separate from the screen.

Other considerations include whether or not the keyboard is tilted, if the keying position is comfortable and if the characters on the keyboard are easily readable.

3. Mouse, trackball, etc

Suitability for the task and the user is the key factor here, there are many varieties to choose from. The user is to have the mouse/trackball positioned close to them to avoid arm overreach. Support for the user's arm should be provided, this could be simply from the desk surface or arm of the chair, if not separate support devices are available. The speed and smoothness of use is to be suitable for the user.

4. Software

Software should be user friendly and users should receive appropriate training.

5. Furniture

Worksurfaces need to be large enough for the necessary equipment and users should be able to comfortably reach all equipment and papers.

Surfaces should be free from glare and reflection and these can be reduced by use of mats or blotters.

The chair needs to be suitable and stable with a seat back height and tilt adjustment, a seat height adjustment, a swivel mechanism and castors or glides.

The chair is to be adjusted to the user's needs, ensuring that:

- the small of their back is supported by the chair's backrest
- their forearms are horizontal when using the mouse/keyboard
- their eyes are roughly the same height as the top of the display screen

The user's feet should be supported, either flat on the floor or by use of a footrest without too much pressure to the back of their legs.

6. Environment

Enough room should be provided to enable the user to comfortably change position. Lighting should be suitable and prevent glare, and temperature, humidity and noise levels should be comfortable for the user.

Shared Workstations

Where one workstation is used by more than one worker, whether simultaneously or in shifts, it should be assessed for each user. For example, if a very tall and a very short worker are sharing a workstation, the assessor should check the chair has a wide enough range of adjustments to accommodate both of them and that a footrest is available when required.

Homeworkers

If a DSE user is employed to work at home, or at other locations away from their main base, the DSE Regulations still apply, whether or not the workstation is provided in whole or in part by the employer.

Homeworkers may encounter both the normal risks associated with DSE work and some potentially increased risks that may arise from social isolation, stress, lack of supervision and difficulties in undertaking risk assessments.

There are some steps that should be taken to reduce these risks, including:

- It is not always practicable for the employer to send someone else to conduct a risk assessment for homeworkers (particularly in the case of mobile workers). A possible solution is for the employer to train such workers to undertake their own risk assessments, for example, by using a risk assessment checklist
- Such training could be done before homeworking starts or as soon as practicable once it has been recognised that the homeworking has become a more permanent arrangement, and requires specific assessment
- In respect of the homeworker's main workstation, a standard DSE workstation risk assessment should be completed which should be reported to the employer, by submitting the completed checklist

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- For mobile working for very short periods in hotel rooms and similar places, the full procedure may not be necessary. However, such workers should be trained in dynamic assessment, i.e. mentally running through key points from the checklist and taking appropriate steps to ensure they are comfortable and can minimise the risks wherever and whenever they carry out DSE work

For further information, refer to the Aviva Loss Prevention Standard on [Homeworking](#).

As well as the risks common to both portable and desktop DSE work, the following additional risks may be associated specifically with portable DSE work, and need to be considered by employers and users:

- Manual handling risks when moving between locations (bearing in mind that other equipment such as spare batteries, printers or papers may add to the burden of the equipment itself)
- The risk of theft, possibly involving an assault
- Data security of both printed and electronic copies

Agency Workers

Where the worker is an employee of an agency or is self-employed, both the agency/employment business and the employer will have duties under the DSE Regulations. The following list clarifies these responsibilities:

- To assess the risk and implement controls
- To ensure activities are planned so that agency worker users can have breaks from DSE work
- Provision of training to agency worker users when their workstation is being modified
- Provision of information to agency workers (both users and operators) about risks, risk assessment and risk reduction measures; and additionally, to users about breaks, and training when their workstation is modified

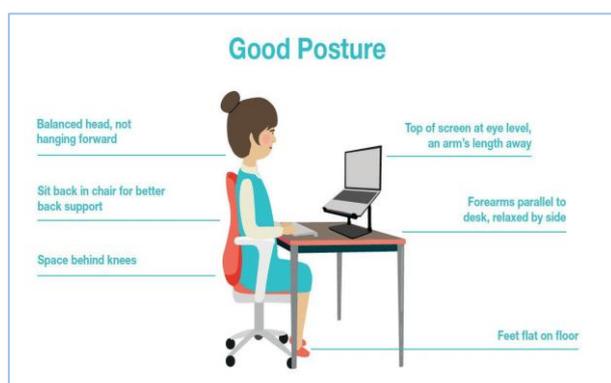
Employment businesses (agencies) should:

- Provide eye tests (and special corrective appliances, if required) to agency worker users who are their employees on request
- Provide health and safety training for such workers
- Provide information to such workers about eye tests and training
- Check that host employers carry out their duties (as described above) to conduct risk assessments of the workstations to be used, ensure their workstations comply with the minimum requirements, plan for breaks or changes of activity for users and provide information to agency workers

Reducing Risks

The assessment will highlight areas which may give reason for concern, and these will require further evaluation and corrective action as appropriate. Risks identified in the assessment should be remedied as quickly as possible. For typical applications of DSE, such as computers in offices, remedial action is often straightforward, for example:

- Postural problems may be overcome by simple adjustments to the workstation such as repositioning equipment or adjusting the chair. Postural problems can also indicate a need to reinforce the user's training, e.g. on correct hand position, posture, how to adjust equipment. New equipment such as a footrest or document holder may be required in some cases. Common posture mistakes and fixes, [click here](#).



- Visual problems may also be tackled by straightforward means such as repositioning the screen or using blinds to avoid glare, placing the screen at a more comfortable viewing distance from the user, or by ensuring the screen is kept clean. In some cases, new equipment such as window blinds or more appropriate lighting may be needed (see also guidance under Regulation 5 entitled 'Eyes and Eyesight' of the *Health and Safety (Display Screen Equipment) Regulations 1992 as amended by the Health and Safety (Miscellaneous Amendments) Regulations 2002*)
- Fatigue and stress may be alleviated by correcting obvious defects in the workstation and ensuring the software is appropriate to the task. In addition, as in other kind of work, good design of the task will be important. Wherever possible, the task should provide users with a degree of personal control over the pace and nature of each task

Provision of Free Eye Tests to DSE Users

Employers have a duty to provide DSE users within their employment with free eye tests, if the individual requests one. Where an existing user requests a test for the first time, the employer should arrange for a test to be carried out as soon as practicable. Where the test is requested by an employee who is not yet a user but is to become one, the employer should arrange for a test to be carried out before the person concerned becomes a user.

In Great Britain an 'appropriate eye and eyesight test' means a 'sight test' as defined in the Opticians Act legislation. The test includes a test of vision and an examination of the eye.

The test should take account of the nature of the user's work, including the distance at which the screen is viewed.

DSE users are not obliged to have such tests performed. However, where users choose to exercise their entitlement, employers should offer an examination by a registered ophthalmic optician, or a registered medical practitioner with suitable qualifications (referred to as optometrist and doctor respectively in the rest of the guidance). All registered medical practitioners, including those in company occupational health departments, are entitled to carry out sight tests but normally only those with an ophthalmic qualification do so.

Provision of Free Spectacles to Certain Users

DSE users within your employment are entitled to spectacles or other corrective appliances free of charge where these have been prescribed to correct vision defects for display screen work. Spectacles prescribed for any other purpose are to be purchased at the users own expense.

Employer's responsibility for the cost of these is restricted to payment of the cost of basic spectacles, i.e. of a type **and quality adequate for the user's work**. Where bifocal or varifocal spectacles are prescribed as special corrective appliances the employer is required to meet the costs associated with providing a basic frame and the prescribed lenses.

If, however, users are permitted by their employers to choose spectacles to correct eye or vision defects for **purposes which include the user's work but go wider than that**, employers need contribute only the costs attributable to the requirements of the job.

If users wish to choose more costly appliances, for example, with designer frames, or lenses with optional treatments not necessary for the work, the employer is not obliged to pay for these. In these circumstances, employers may either provide basic spectacles as above, or may opt to contribute a portion of the total cost equal to the basic cost.

Breaks from Screen and Keyboard Use

The daily work routine of DSE users should be planned to ensure periodic interruptions from display screen equipment, which can be achieved by the introduction of alternative tasks or breaks.

Breaks or changes of activity should be included in working time. They should reduce the workload at the screen, i.e. should not result in a higher pace or intensity of work on account of their introduction.

Breaks should be taken when performance and productivity are still at a maximum, before the user starts getting tired. This is better than taking a break to recover from fatigue. Appropriate timing of the break is more important than its length.

Short, frequent breaks are more satisfactory than occasional, longer breaks: for example, a 5-10 minute break after 50-60 minutes continuous screen and/or keyboard work is likely to be better than a 15-20 minute break every 2-hours.

Wherever practicable, users should be allowed some discretion as to when to take breaks and how they carry out tasks; individual control over the nature and pace of work allows optimal distribution of effort over the working day.

If possible, breaks should be taken away from the DSE workstation, and allow the user to stand up, move about and/or change posture.

Provision of Information and Training

Provision of information on the risks from DSE and workstations, including the controls that have been implemented, should be provided to DSE users within your employment and to DSE users or operators on your site who are employed by another employer or are self-employed.

Training, both at the initial stage of workstation set-up and following modifications to workstations should be provided to DSE users under your employment. This also extends to DSE users on your site employed by another employer in the instance that there have been workstation modifications.

Checklist

A DSE Risk Assessment Checklist is presented in Appendix 1 which can be tailored to your own organisation.

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Aviva Risk Management Solutions can offer access to a wide range of risk management products and services via our network of Specialist Partners who are reputable companies offering agreed discounted rates for Aviva customers.

For more information please visit:

[Aviva Risk Management Solutions – Specialist Partners](#)

Sources and Useful Links

- [Work with display screen equipment: L26](#) – Health and Safety Executive
- [Working safely with display screen equipment](#) – Health and Safety Executive
- [Display screen equipment \(DSE\) workstation checklist](#) – Health and Safety Executive
- [Working with display screen equipment \(DSE\) – A brief guide: INDG36](#) – Health and Safety Executive
- [Managing upper limb disorders in the workplace. A brief guide: INDG171](#) – Health and Safety Executive
- [Home working and staying healthy \(an infographic\)](#) – The Chartered Institute of Ergonomics and Human Factors

Additional Information

Relevant Aviva Loss Prevention Standards

- [Homeworking](#)
- [Pandemic Recovery: 'New Normal' and the Post-Pandemic Business World](#)
- [Cyber Security, Homeworking and the Coronavirus](#)

Appendix 1 - DSE Risk Assessment Checklist



Location	
Date	
Completed by (name and signature)	

	DSE Risk Assessment Checklist	Y/N	Comments
1.	<p>Display screens:</p> <ul style="list-style-type: none"> • Are the display screens clean and is there a procedure in place to maintain this? • Is the text size readable? • Is the image free from flicker and jitter? • Is the screen's specification suitable for its intended use? • Can the brightness and contrast be adjusted? • Does the screen swivel and tilt? • Is the screen free from glare and reflections? • Are there adjustable window coverings provided that are in adequate condition? 		
2.	<p>Keyboards:</p> <ul style="list-style-type: none"> • Is the keyboard separate from the screen? (Unless the task is specific to the use of portable laptops) • Is the keyboard able to be tilted? • Is the keying position comfortable? • Are the characters on the keyboard easily readable? 		

	DSE Risk Assessment Checklist Contd.	Y/N	Comments
3.	Mouse, trackball, etc.: <ul style="list-style-type: none"> • Does the chosen device suit the task and the user? • Is the mouse/trackball positioned close to the user to avoid arm overreach? • Is the user's arm supported? (This could be simply from the desk surface or arm of the chair, if not, separate support devices are available) • Is the speed and smoothness of use suitable for the user? 		
4.	Software: <ul style="list-style-type: none"> • Is the software user friendly? • Have users received appropriate training? 		
5.	Furniture: <ul style="list-style-type: none"> • Are worksurfaces large enough for the necessary equipment? • Can users comfortably reach all equipment and papers? • Are the surfaces free from glare and reflection? (These can be reduced by use of mats or blotters) • Is the chair suitable and stable and does the backrest have height and tilt adjustment? • Does the seat have a height adjustment? • Does the seat have a swivel mechanism and castors or glides? • Has the chair been adjusted to the user's needs, ensuring that: <ul style="list-style-type: none"> ○ the small of their back is supported by the chair's backrest? ○ their forearms are horizontal when using the mouse/keyboard? ○ their eyes are roughly the same height as the top of the monitor? • Are the user's feet supported, either flat on the floor or by use of a footrest ensuring there is not too much pressure to the back of their legs? 		

	DSE Risk Assessment Checklist Contd.	Y/N	Comments
6.	Environment: <ul style="list-style-type: none"> • Is there enough room provided to enable the user to comfortably change position? • Is the lighting suitable and does it prevent glare? • Are the temperature, humidity and noise levels comfortable for the user? 		
7.	Eye tests: <ul style="list-style-type: none"> • Has the employee requested an eyesight test and has this been arranged? 		
8.	Provision of free spectacles to certain users: <ul style="list-style-type: none"> • Has the employee requested spectacles or other corrective appliances to correct vision defects for display screen work and has this been arranged? 		
9.	Breaks from screen and keyboard use: <ul style="list-style-type: none"> • Has the daily work routine of DSE users been planned to ensure periodic breaks from display screen use? (This can be achieved by the introduction of alternative tasks or breaks) • Are users allowed some discretion as to when to take breaks and how they carry out tasks? (Individual control over the nature and pace of work allows optimal distribution of effort over the working day) • Are users able to take breaks away from the DSE workstation, to allow the user to stand up, move about and/or change posture? 		

	DSE Risk Assessment Checklist Contd.	Y/N	Comments
10.	Provision of information and training: <ul style="list-style-type: none"> • Have employees been provided with information on the risks from display screen equipment and workstations? • Have employees been provided with information on the controls that have been implemented? • Have DSE users or operators on your site who are employed by another employer or are self-employed been provided with information on the risks from display screen equipment and workstations? • Have DSE users or operators on your site who are employed by another employer or are self-employed been provided with information on the controls that have been implemented? • Has training been provided to employees following workstation set up? • Has training been provided to employees following modifications to workstations? • Has training been provided to DSE users on your site employed by another employer following modifications to workstations? • Do individuals know who to report problems/concerns to regarding working with DSE? 		
11.	Homeworkers: <ul style="list-style-type: none"> • Has consideration been given to homeworkers, or those at other locations away from their main base? • Where practicable has a risk assessment been conducted at the homeworkers' base by the employee? • If not, has the homeworker been trained to undertake their own risk assessments? (This can be done by training homeworkers to use an ergonomic checklist) 		
12.	Additional Comments:		

Please Note

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