Appendix 1

Workstation Set-Up

This guidance supplements the Council’s policy on display screen equipment.

1 Introduction

1.1 The correct workstation set-up can prevent, or alleviate, many of the problems associated with DSE work.

1.2 Workstation set-up is largely about individual preferences and requirements. However, there are many factors involved with workstation set-up which can be identified as acceptable standards.

1.3 This guidance document is based largely upon the British Standard BS 9241-5-1999 “Ergonomic requirements for office work with visual display terminals (VDTs). Workstation layout and postural requirements”.

2 Required Standard for the Workstation Environment

2.1 Lighting:

2.1.1 Lighting levels should be between 300 lux and 500 lux. Generally this means that there should be sufficient light to carry out all duties normally carried out in that area.

2.1.2 Ideally, lighting should be variable for individual requirements; higher levels of light are required for reading or writing than for using DSE. The use of local lighting, i.e. angle-poise lamps, and up-turned lighting, is preferable to general lighting where DSE is used. Natural light from windows and skylights etc. should be controllable by the use of blinds or curtains. Light reflected off shiny surfaces can be distracting and should be avoided. Light reflections and glare should not fall on the screen of the DSE.

2.1.3 Do not site the DSE with its screen facing an unshielded window. Bright light will reduce character legibility and may cause distracting reflections.
2.1.4 Do not site the DSE with its back to an unshielded window. The high level of contrast between daylight and the screen luminance can cause visual discomfort.
2.1.5 Where possible, place the screen at right angles to a wall with windows. Where necessary provide a means to control the angle and diffusion of light from the window.

2.2 Temperature and Humidity

2.2.1 The temperature around a DSE workstation should be between 19°C and 23°C, but above all should be comfortable to the individual user. An absolute minimum of 16°C should be achieved.

2.2.2 The relative humidity should be between 40% and 60%, but above all should be comfortable to individual users.

2.3 Noise

2.3.1 Noise levels should be below 60 dB(A) for DSE users, but where tasks require high levels of concentration the noise levels should be below 55 dB(A). A general guide-line is that normal speech is around 55 dB(A) to 60 dB(A). If noise is distracting to users then it should be reduced.

3 Required Standard for Equipment

3.1 Workspace

3.1.1 Each office worker is entitled to a minimum of 3.7m² of space - taking into consideration furniture etc.
3.1.2 There should be sufficient space for DSE users to arrange their workstation to their requirements.
3.2 The Chair

3.2.1 The Chair must be of the swivel type and have five or more castors. The height of the seat should be adjustable. The height and rake of the back rest should also be adjustable. If the chair has arms, they should be either adjustable or in such a position as to not restrict movement. The chair must allow the user to obtain the recommended ergonomically correct seating posture.

![Chair Diagram]

3.3 The Desk

3.3.1 The desk should be between 660mm and 730mm in height and should have a surface of at least 1200mm by 600mm. The surface of the desk should be matte finished. The desk must be of adequate size to allow the user to position all necessary equipment on it in an arrangement which is suitable to the task.

3.4 The Foot-rest

3.4.1 A foot-rest is not necessary unless the user is unable to place his/her feet comfortably flat on the floor. The foot-rest should be adjustable to individual requirements.
3.5 The Document Holder

3.5.1 If a document holder is considered necessary or beneficial, one should be supplied. It should be stable, adjustable in height and angle and be placed close to the screen to minimize head movement.
3.6 The Screen

3.6.1 The characters on the screen should be stable and free from flicker, of suitable size and adequately spaced. The contrast and brightness of the screen should be easily adjustable.

3.6.2 The screen should tilt and swivel easily. The screen should, if practicable, be placed at right angles to any windows and parallel to overhead lighting.

3.6.3 The top of the screen should normally be just below eye-level

3.7 The Keyboard

3.7.1 The keyboard should be adjustable in angle. The key symbols should be adequately contrasted.

3.7.2 There should be sufficient space in front of the keyboard for the user to rest his/her wrists and/or arms.

4 The Software

4.1 The software should perform the task required of it. It should provide feedback on the performance of the system.

4.2 The software should be reliable; software that “crashes” frequently causes unnecessary stress to the user.

5 Posture

5.1 The user should sit right back in the chair and make sure the backrest supports the back.

5.2 Avoid leaning or twisting to one side and any awkward neck or eye movements

5.3 Avoid sitting too high or too low in relation to the keyboard. Ensure that your forearms are approximately horizontal when your hands are on the keyboard. Try to keep your wrists in a neutral (straight) position.

5.4 When using a laptop computer, you should try and obtain a posture which is the same or similar to that adopted when working at an ordinary workstation.

• avoid slouching
• don’t hunch over the laptop

6 Using a Mouse

6.1 Position the mouse within easy reach, so it can be used with the wrist straight. Sit upright and close to the desk, so you don’t have to work with your mouse arm being stretched. Move the keyboard out of the way if it is not being used.

6.2 Support your forearm on the desk, and don’t grip the mouse too tightly.
6.3 Rest your fingers lightly on the buttons and do not press them hard.
Lap-Top Computers (incl. Tablets/Notebooks etc.)

1 Introduction
1.1 The Council recognises the convenience and versatility of lap-top computers and similar devices.
1.2 Although the DSE Regulations only apply to lap-top computers where they are in prolonged use, it is recognised that there is a need to promote positive ergonomic practices for all lap-top users.
1.3 Much of the advice is similar to that given for people working at an ordinary workstation and the advice given on the correct type of furniture, space, etc. for normal workstations applies also to laptops.

2 Laptops used as Permanent Workstations
2.1 If a laptop is used as a permanent workstation in an office, a separate keyboard, mouse and screen should be provided. This will allow the user to adjust the equipment so that he/she is adopting the correct posture.

3 Posture
3.1 When using a laptop computer, you should try and obtain a posture which is the same or similar to that adopted when working at an ordinary workstation.
   • avoid slouching
   • don’t hunch over the laptop

4 Sitting
4.1 As with an ordinary workstation, sit right back in the chair and make sure the backrest supports your back (use a pillow or cushion if necessary).
4.2 Avoid leaning to one side. If you are reading from a hardcopy, keep it as close to the laptop as possible.

5 Arms and Shoulders
5.1 Avoid sitting too high or too low in relation to the keyboard. Ensure that your forearms are approximately horizontal when your hands are on the keyboard. Try to keep your wrists in a neutral (straight) position.
5.2 When using the mouse control, don’t screw your fingers into a ball or hold them up in the air.

6 Reading the Screen
6.1 As with an ordinary workstation, try to avoid glare and reflection on the screen of the laptop. Keep the screen clean.

7 Planes, Trains and Vehicles
7.1 It is not recommended to use laptops on planes for the reason that it is difficult to adopt a comfortable posture.
7.2 When using a laptop on a train, pick a seat facing a communal table - seats with tables attached to the back of the seat in front do not offer enough space.

7.3 When using a laptop in a car, do not use the driver’s seat. Sit in the passenger’s seat with the seat pushed right back. Use a briefcase or similar to raise the level of the laptop.

8 Carrying Laptops

8.1 When carrying a laptop and any other items, make sure that the load is balanced.