Subcommittee on
Occupational Safety and Health
(Display Screen Equipment) Regulation

Meeting on 28 November 2001

At the House Committee Meeting held on 9 November 2001, Members requested the Administration to withdraw the notice of motion to move the captioned Regulation and suggested to hold another Subcommittee meeting for further discussion on the impact of the proposed Regulation on the business environment.

2. At the request of the House Committee, the Administration withdrew the notice to move the motion on 10 November 2001 and has prepared the following for deliberation at the Subcommittee Meeting to be held on 28 November 2001.

A. COST IMPLICATION ON BUSINESS ENVIRONMENT

Estimated number of workstations likely to be covered by the Regulation

3. The proposed Regulation covers workstations that are normally used by users for work. As defined in the Health Guide on Working with Display Screen Equipment (the Health Guide), users are those employees who use a workstation for continuous spells of an hour or more at a time, and more or less daily and are highly dependent on the use of display screen equipment (DSE). The coverage of the proposed Regulation is determined by the nature of work (i.e. whether the workstation is normally used by users for continuous spells of an hour or more at a time), rather than by occupation alone.

4. There is no prior knowledge of who among DSE users would be required to use a workstation for continuous spells of an hour or more at a time, and more or less daily, it is not possible to estimate the number of workstations likely to be covered by the Regulation. However, in order to gauge the possible number of users to be covered by the Regulation, we took reference from a survey of computer users in the financing, insurance, real estate and

business services sector, who were required to use computers for 4 or more hours everyday, conducted by the Occupational Safety and Health Council in 1997 (OSHC Survey). Utilising the statistics of different survey reports published by Census & Statistics Department (C&SD), it is estimated that **311, 836** workstations are being used by users who might fall within the definition in the Health Guide. **Annex 1** shows the calculation and breakdown of the affected workstations by occupational sector. It must be emphasised that the figure is a rough estimate.

5. For each sector, the estimated number of workstations covered by the Regulation is derived by:

P factor x no. of desktop computers

where the P factor is the estimated proportion of workstations covered by the Regulation in that sector, as given by the following: -

$$P = \frac{\text{No. of IT staff engaged in that sector}}{\text{No. of persons engaged in that sector}} \times 0.68 \times \frac{442{,}452}{37{,}646}$$

where 442, 452 represents the number of persons engaged in the financing, insurance, real estate and business services sector and 37, 646 represents the number of IT staff engaged in the same sector.

The number of desktop computers and IT staff engaged is based on the 2001 Annual Survey on Information Technology Usage and Penetration in the Business Sector, while the number of persons engaged is based on the Quarterly Report of Employment and Vacancies Statistics- June 2001 and the Quarterly Report on General Household Survey (April to June 2001). These are all published by C&SD.

6. The P factor for the financing, insurance, real estate and business services sector is based on the finding of the OSHC Survey which showed that 68% of the surveyed respondents in that sector used computers for 4 or more hours everyday.

Estimated cost of compliance for the proposed Regulation

7. To comply with the proposed Regulation, the person responsible for the workplace is required to:

a. conduct risk assessments of a workstation;
b. take necessary measures to reduce risks and to ensure that the workstation is suitable having regard to the safety and health of DSE users;
c. keep assessment records and to make the records available to DSE users; and
d. provide necessary safety and health training to DSE users.

8. Risk assessment of a workstation can be completed in 10 minutes by a clerical staff with knowledge of the use of DSE and the associated health risks. The estimated unit cost for a 10-minute assessment is $10 per workstation (assuming that the clerical staff deployed to conduct risk assessment is of average monthly salary, i.e. $11,500).

9. The necessary safety and health training can be provided to users in 30 minutes through various means, e.g. showing video, reading educational materials. The estimated unit cost for 30-minute training is $30 per DSE user.

10. Keeping risk assessment records and making the records available to users would not incur any significant additional cost.

11. Improvement measures involving positioning and adjusting the workstations would not incur additional cost, e.g. adjusting the brightness and contrast of image, repositioning screens, adjusting the height of chairs and removing articles beneath work surface to allow adequate legroom. By making reference to the OSHC survey and the field experience of Occupational Hygienists, it is estimated that only 1-10% of the workstations require various improvements to reduce the risks.

12. The OSHC survey showed that 99% of the surveyed workstations already had chairs with backrests, 95% had chairs with adjustable height, 58% had screens with screen glare filters installed, 72% had tiltable keyboards, 12% had footrests, 18% had document holders and 3% had wrist rests. It therefore

suggests that many workstations have already built in measures to reduce risks arising from potential hazards.

13. It is worth noting that accessory items like footrests and wrist rests are optional and are needed only if necessary for safeguarding the health of DSE users. Moreover, it would normally not be necessary to replace the DSE just for the sake of compliance with the proposed Regulation. Replacement of DSE usually forms part of the on-going maintenance programme or enhancement of work efficiency rather than for promotion of occupational safety.

14. The cost of purchasing various improvement equipment varies from brand to brand. For example, a document holder may cost $10-$400, a footrest $100-$500, a screen glare filter $50-$700. The respective unit costs quoted reflect the prevailing market prices of those types that fully meet the minimum requirements for the purpose of compliance with the proposed Regulation.

15. It is estimated that the **average cost of compliance per workstation is $90.** Taking 312 000 as the estimated number of affected workstations, the **total cost of compliance is $28 million**. The details are tabulated at **Annex 2**.

B. IMPLEMENTATION

16. For workstations covered under the proposed Regulation, the responsible person is required to conduct risk assessments of a workstation (section 4). In a risk assessment, the responsible person should:

(a) identify the potential hazards arising from the workstation;
(b) evaluate the risks arising from the potential hazards;
(c) evaluate the adequacy of existing precautions; and
(d) draw conclusions to identify and plan any improvement measures that may be required.

The potential hazards arising from the workstations may be related to the DSE, the furniture and other peripheral items (e.g. chair, desk, document holder etc.) or the immediate working environment, e.g. lighting.

17. The Health Guide has provided practical guidelines for conducting risk assessments. The sample assessment checklist in the Health Guide can help identify the main features of a risk assessment. The focus of the questions in the checklist are on eye discomfort (boxes 1,4,5); arm, shoulder and upper back discomforts (box 2); arm, neck, shoulder, back and leg discomforts (box 3). A diagram showing the optimal workstation and working posture is also included on page 12 of the Health Guide to illustrate how the safety and health of the user can be secured.

18. As shown by the checklist, risk assessment is a relatively simple process. With the help of the Health Guide, it normally does not require expert knowledge or the service of a professional to complete a risk assessment.

19. The responsible person for a workplace is required to keep the assessment records for at least two years after workstations cease to be used by users (section 4(5)). The responsible person shall, upon request by occupational safety officer of the Labour Department, produce such record of assessments for inspection. If the responsible person failed to produce such record upon request, he shall deliver a copy of such record to the officer within a period as specified in a written request sent by the officer (section 4(6)(b)).

20. The proposed Regulation also requires the responsible person to take steps to reduce risks identified in a risk assessment to the lowest extent which is reasonably practicable (section 5). He shall also, so far as reasonably practicable, make available information to users (section 6) and provide necessary safety and health training to DSE users (section 8). On these aspects, the Health Guide has also provided guidance on practical measures to be taken.

21. In the case of non-compliance with the proposed Regulation, the Labour Department will usually issue warning letters and improvement notices as the initial steps of enforcement. Failure to comply with the requirements to perform risk assessment (section 4), keep record (section 4(5)), take steps to reduce risks (section 5), provide information (section 6) and necessary training (section 8) are strict liability offences. Nevertheless, we have provided a defence of reasonable practicability for sections 4(5), 5, 6 and 8 as proposed by

the Subcommittee.

22. Given the practical guidelines and the flexibility provided in the Regulation, we consider that the responsible persons can comply with the proposed Regulation without practical difficulty, and on a self-regulatory basis.

23. A revised Health Guide which has incorporated all agreed amendments at the Subcommittee meetings held since 18 June 2001 is at **Annex 3**.

Education and Manpower Bureau
November 2001

Annex 1

Estimated Number of Workstations Covered by
Proposed OSH (Display Screen Equipment) Regulation

Industry	No. of establishments	No. of persons engaged	No. of establishments having used computers	No. of desktop computers	No. of IT staff engaged	P factor	Estimated No. of workstations covered by the Regulation
Manufacturing, electricity and gas	19 999	226 939	7 920	74 177	3 731	0.13	9 643
Construction	24 976	327 000	11 439	42 349	1 548	0.04	1 694
Wholesale, retail and import/export trades, restaurants and hotels	176 597	1 034 882	87 415	375 281	13 063	0.10	37 528
Transport, storage and communications	36 253	185 901	10 586	100 446	6 503	0.28	28 125
Financing, insurance, real estate and business services	47 954	442 452	36 493	305 605	37 646	0.68	207 811
Community, social and personal services	29 152	372 538	12 652	180 235	6 986	0.15	27 035
Total	334 931	2 589 712	166 505	1 078 093	69 477		311 836

Note :

(a) The number of establishments and persons engaged in various industries are based on Employment and Vacancies Statistics Quarterly Reports and Detailed Tables published by the Census and Statistics Department.

(b) The number of establishments having used computers, desktop computers and information technology (IT) staff engaged in various industries are based on the Report on Annual Survey on Information Technology Usage and Penetration in the Business Sector published by the Census and Statistics Department.

(c) The proportion (P) factor for the financing, insurance, real estate and business services sector is based on the finding of the 1997 Occupational Safety and Health Council Survey that 68% of the surveyed population in that industry sector used computers for 4 or more hours everyday.

(d) The proportion (P) factors for other industry sectors are calculated using the following formula, on the assumption that the number of workstations normally used by employees in an industry sector for continuous spells of an hour or more at a time, and more or less daily is directly proportional to the number of IT staff engaged in that sector.

$$\text{Proportion (P) factor} = \frac{\text{No. of IT staff engaged}}{\text{No. of persons engaged}} x \frac{0.68}{37646} x 442452$$

(e) For an industry sector, the estimated number of workstations covered by the proposed Regulation is given by the following formula:

Estimated no. of workstations covered by the proposed Regulation = P factor x No. of desktop computers

Annex 2

Estimated Compliance Cost for the proposed Occupational Safety and Health (Display Screen Equipment) Regulation

		Unit Cost ($)	No. of Workstations/ Employees	Total Cost ($M)
I.	**Basic requirements**			
(a)	Risk assessment (10 minutes each)	10 (10 min x $11,500/month)	312 000	3.12
(b)	Safety and health training (30 minutes each)	30 (30 min x $11,500/month)	312 000	9.36
		Subtotal $40		**Subtotal** $12.48M
II.	**Reducing risks by providing** :			
	Chair (height adjustable)	300	15 600	4.68
	Backrest	70	31 200	2.18
	Footrest	150	31 200	4.68
	Keyboard drawer	350	3 120	1.09
	Document holder	70	31 200	2.18
	Screen glare filter	250	3 120	0.78
		Subtotal $1,190		**Subtotal** $15.59M
				Grand Total $28.07M

Average cost per workstation : $90

Range of cost per workstation : $40 (basic requirements only) - $1,230 (basic requirements + risk reduction measures)

Annex 3

DRAFT

A Health Guide on Working with Display Screen Equipment

Preface

The Occupational Safety and Health (Display Screen Equipment) Regulation governs the safety and health of employees who normally use display screen equipment (DSE) as a significant part of their normal work.

This booklet is intended to help employers and employees minimize health risks associated with prolonged work with DSE in the office environment. Part I explains the meaning of 'display screen equipment', 'workstation' and 'user' in the context of the Regulation. It also discusses various health issues related to prolonged work with DSE. Part II provides guidance on the requirements in respect of risk assessment of workstations, including easy-to-follow steps for conducting such an assessment. Part III gives practical guidance on the ergonomic requirements of workstations and measures for reducing risks, safety and health training, as well as users' responsibility. Part IV covers offences under the Regulation.

Occupational Safety and Health Branch
Labour Department
November 2000

(5th revision - Oct 2001)

Part I

What is display screen equipment (DSE) ?

1.1 Under the Occupational Safety and Health (Display Screen Equipment) Regulation (the Regulation), 'display screen equipment' means any display screen which shows letters, numbers, characters or graphics, regardless of the display process involved. It covers conventional display screens, whether based on cathode ray tube displays, flat panels or any other display technology, e.g. ordinary computer displays and microfilm viewers.

What is a workstation?

1.2 Under the Regulation, 'workstation' means an assembly comprising the DSE, any chair, desk, work surface, printer, document holder or other item peripheral to the DSE, and the immediate working environment around the DSE, e.g. lighting and noise.

Who and how are employees affected by the use of DSE ?

1.3 Employees using DSE only occasionally are unlikely to suffer significant health problems arising from the use of such equipment. However, some employees are normally using DSE as a significant part of their normal work ('user' under the Regulation). These users are usually highly dependent on the use of DSE to do their jobs, and normally use the equipment for continuous spells of an hour or more at a time and more or less daily. Significant training and/or particular skills may be required in performing the DSE work. Moreover, rapid transfer of information between the user and screen as well as high levels of attention and concentration may be important requirements of the job. Examples of users are word processing operators, data input operators, telecommunications operators, computer graphic designers, etc.

1.4 As a result of prolonged DSE work, users could suffer discomfort and other short-term health problems like upper limb pains and discomfort, eyestrain, fatigue and stress. Whilst many of these problems are temporary and may go away after work, they can and should be avoided. If the temporary ailments are ignored, such symptoms can deteriorate into chronic health problems requiring long-term treatment which is expensive to both employers and employees, and ultimately to the health care service at large. Further information on DSE-related health issues is at Appendix A.

Which workstation is covered by the Regulation?

1.5 In any workplace, there may be workstations which are set up for use by different persons for different purposes. For the sake of protecting the safety and health of users, those workstations that fulfil the following conditions fall within the scope of the Regulation:

a) provided by a person responsible for the workplace (employer or occupier of the workplace, as the case may be) to be used by users for work;

b) not intended for use by the public; and

c) normally used or intended to be normally used by users.

1.6 The Regulation, therefore, does not apply to workstations that are normally used by employees who are not users (as defined in the Regulation), nor to workstations that are intended for public operation, e.g. workstations in public libraries and information/directory kiosks.

1.7 Moreover, the following DSE applications that would pose minimal health risks are excluded from regulatory control :

a) DSE that is used mainly to show pictures, television or films;

b) drivers' cabs or control cabs for vehicles or machinery;

c) DSE on board a means of public transport;

d) portable systems not in prolonged use;

e) calculators, cash registers or any equipment having a small data or measurement display required for direct use of the equipment; or

f) window typewriters.

Part II

As a person responsible for a workplace, how can I assess the risks arising from workstations?

2.1 Under Section 4 of the Regulation, a person responsible for a workplace should perform a risk assessment of a workstation in the workplace before it is first used by users. The assessment serves to identify the potential hazards and evaluate their risks so that appropriate measures can be taken to safeguard the health of the users.

2.2 In the assessment, the responsible person should identify the potential hazards arising from the workstation, which may be related to the DSE, the peripheral items, the furniture, or the immediate working environment around the DSE. He should also decide who may be at risk and how the person is affected, evaluate the risks arising from the potential hazards and decide whether existing precautions are adequate. He could then draw conclusions from the assessment to help identify and plan any improvement measures that may be required.

2.3 A sample computer workstation assessment checklist is at Appendix B. It helps responsible persons conduct the risk assessment for common computer tasks in the office. The responsible person may use this checklist to assess the workstation. Based on the results, the responsible person can formulate and implement follow-up actions, if necessary, to reduce the risks. However, it is worth noting that the sample checklist may not cover every work condition. The responsible person may need to add more questions or modify them according to the characteristics of their work situations. In complex cases, the responsible person may have to seek expert advice.

2.4 The responsible person should review the risk assessment performed in respect of a workstation whenever there has been a significant change in the workstation or in the conditions of the previous assessment, for example:

a) workstation furniture;

b) hardware devices particularly the screen, keyboard or other input devices; and

c) working environment.

2.5 After completing a risk assessment of a workstation, the responsible person should record the findings. If the risk assessment has been reviewed, he should revise the record accordingly. He should also, so far as reasonably practicable, keep and retain that record for a period of at least 2

years after the workstation ceases to be used by any user.

2.6 The responsible person should produce the risk assessment records for inspection by an occupational safety officer upon request. In case he is unable to do so, he should deliver a copy of those records to the occupational safety officer within the period specified in the request in writing sent by the officer.

Part III

How to reduce the risks ?

3.1 Under Section 5 of the Regulation, the person responsible for a workplace is required to reduce any risks identified in a risk assessment of a workstation to the lowest extent as is reasonably practicable. For the information of the users concerned, he should, so far as reasonably practicable, make available to them the record of the findings of the risk assessment and the record of actions he has taken to reduce the risks (Section 6). He should also, so far as reasonably practicable, ensure that workstations in the workplace are suitable with regard to the safety and health of users of those workstations (Section 7). The guidance in the following paragraphs describes the general requirements for setting up such a workstation. The responsible person may need to reduce the risks through modifying the work organization or work practice.

General Requirements for a Workstation

3.2 A workstation is preferably designed ergonomically such that the safety and health of the user are secured, apart from fulfilling the inherent requirements of the task.* The main features of such a workstation and some suggested precautionary measures are as follows (please also see the diagram) :

** In general, the requirements are fully applicable to a typical office environment. However, there are special situations where some of these requirements may not be applicable because of the inherent characteristics of the task or some practical considerations, for example :*

a) when a user needs to rapidly locate and operate emergency controls, a detachable keyboard may not be suitable;

b) a user who is on wheelchair normally could not adjust the seat height of the chair;

c) when the original document is of poor quality, the scanned image on screen may not be clear.

In these special situations, the responsible person may need to make some other arrangements to ensure the safety and health of the worker when the latter performs DSE work.

Screen

The screen should give a clear, sharp and steady image.

- Replace aging monitors or repair defective ones.
- Clean the screen if necessary.
- When the colour blurs or the image deteriorates, try to relocate the screen away from any source of strong electromagnetic fields, e.g. high power speakers, or vice versa.
- In avoiding image deterioration caused by external electromagnetic fields, a LCD monitor may be chosen.
- If the software application allows, turn the display to light characters on a dark background to make the flicker less perceptible.
- Users who are susceptible to the flickering effect should look for other screen models which produce a more stable display.

The characters should be of adequate size, with adequate spacing between the characters and the lines.

- Use a monitor of adequate screen size.
- Adjust the image size and spacing by software control.
- Adopt a viewing distance where the image can be comfortably read. A distance of 35 - 60cm would be appropriate for text of normal font size.

The brightness and contrast of the image should be easily adjustable.

- Choose a screen with brightness and contrast controls.
- Always set the brightness and contrast to a comfortable level.

The screen should be swiveled and tilted, if so adjustable, to suit the needs of the user.

- A screen with swivel and tilt adjustment is preferable.
- Adjust the screen to make viewing comfortable.

Keyboard

The keyboard should be tiltable and detachable from the display screen so that the user may adopt a comfortable working posture.

The surfaces of the keyboard and keytops should be non-reflective. The letters and symbols on the key tops should be clear and easily recognizable.

There should be sufficient space in front of the keyboard to provide support for the hands.

- The table edge should preferably be rounded.
- A wrist support pad may be considered if the user finds it more comfortable.

Work Surface

The work surface should be large enough for the screen, keyboard, document and peripheral equipment.

- If the mouse is used intensively, the work surface or the keyboard shelf, if provided, should be large enough to hold the mouse as well. This allows the mouse to be within easy reach.
- If the work surface is limited, try to reorganize the surface layout. Less frequently used items may be taken away.
- Try to use compact equipment.
- Before new DSE is installed, it is desirable to anticipate the space allocation for the workstations.

The heights of the work surfaces for the screen and keyboard should be set to suit the needs of the user.

- For optimal screen positioning, place the screen in front of the user. The first line of screen display should preferably be at or slightly below the eye level.
- The screen height may be adjusted simply by placing the monitor on a stable object, e.g. the computer case. Other options like using height adjustable monitor arms can also be considered.

- The keyboard and the mouse should be positioned at a height that allows the user to adopt a natural hand-arm posture, i.e. the upper arms held vertical and the forearms approximately horizontal.
- So far as reasonably practicable, a height adjustable desk should be used to support the keyboard, the mouse or other input devices so that the natural hand-arm posture can be adopted.
- If a desk of fixed height is used and it is too high, an adjustable keyboard shelf can be installed under the desk to keep the keyboard at the right level. Alternatively, one may raise the chair to suit the height of the table and provide a suitable footrest to compensate for the raised seat height.

There should be adequate legroom below the work surface.

- Ensure that the workstation has sufficient legroom so that the user may stretch his legs or change posture.
- Clear any obstructing materials beneath the work surface.

A document holder, if provided, should be stable and preferably be adjustable, and be properly positioned to avoid awkward neck posture and movement.

Chair

The chair should be adjustable in height to suit the body size of the user.

- The chair should be so adjusted that the user can sit with thighs in a horizontal position when the lower legs are vertical and the feet are resting firmly on the floor. In general, the seat height should be adjustable in the range of 40 - 50cm from the floor.
- The seat height control should preferably be operable from the normal sitting position, and excessive force or tools should not be required.

The backrest should be easily adjustable in both height and tilt to provide adequate support to the lower back.

The seat pan should be of appropriate hardness and the front edge should be scrolled.

Armrests, if provided, should not interfere with keyboard operation.

The chair should have a stable base. Smooth castors should be provided at its base to allow easy movement if mobility is required.

- A five-pronged base is generally recommended to prevent the chair from toppling over.
- The type of castor should suit the properties of the floor surface. Castors with low resistance should not be used on a hard floor surface.

Footrest

A stable footrest should be made available to the user if the chair is too high for the feet to rest firmly on the floor.

- The footrest should be stable, should have a non-slip surface and be of sufficient size to allow some freedom of movement. The inclination of the support surface should preferably be adjustable.

Illumination

General lighting or task lighting should be suitably provided in accordance with the nature of the work and the visual demand on the user.

- The wall, ceiling and floor surfaces should be of medium reflectance to avoid gloom or glare.
- When documents are read in conjunction with computer work, it is best to use low lighting for the surrounding and a desk lamp for reading the documents. If task lighting is not provided, the illuminance level of the work area should be 300 - 500 lux.

Reflections and Glare

Reflections and glare should be avoided.

- Re-position the screen and/or control the light sources appropriately to prevent glare and reflections.

- The finishes of walls and furniture located near the workstation should not be highly reflective. Walls can be painted in subdued colours.
- The work area should preferably be located away from windows, and the screen be placed at right angle to windows. Sunlight through windows can be screened by blinds.
- Light fixtures can be equipped with diffusers or louvres to control distribution of light.
- Avoid placing the screen under rows of light fittings to eliminate light images.
- Turn the screen display to dark characters on a light background to make reflections less perceptible.
- Using a screen glare filter is another way of reducing screen reflections. In general, screen glare filters reduce the brightness of the image. Therefore the user should ensure that the image's brightness can be adjusted to an acceptable level if a filter is to be added. Nowadays the screens of some monitors are anti-reflective and do not need filters at all. Using a screen filter is not a substitute for proper lighting, but a supplementary solution only.

Noise

Noise produced by the workstation should be controlled to avoid disturbance to the user.

- For general computer work, a noise level below 60dB(A) is optimal.

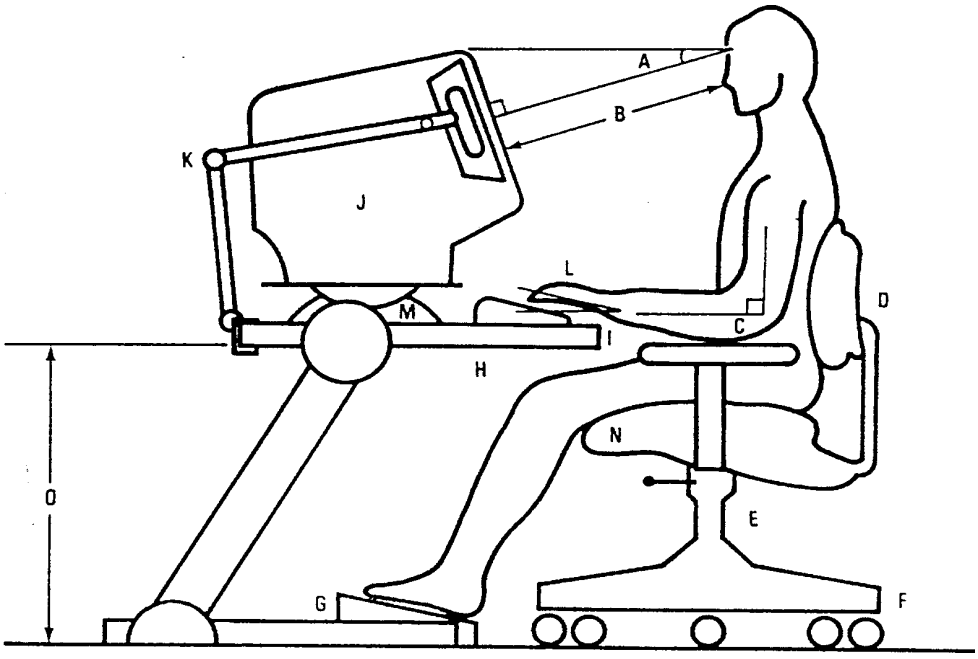

Diagram : The optimal workstation and working posture

A First line on screen at about or just below eye level
B Comfortable viewing distance e.g. 35 - 60 cm for text of normal font size
C Forearm at about right angle to arm
D Backrest adjustable in height and tilt
E Adjustable seat height : allowing the user to sit with thighs approximately horizontal, lower legs vertical and feet resting firmly on the floor
F Stable base, with castors if necessary
G Firm footrest if required
H Adequate leg room
I Support for hands
J Screen at about right angle to line of sight
K Adjustable document holder if required
L Wrist kept straight or at most slightly inclined
M Screen support easily adjustable for rotation and tilting
N Rounded or scrolled edge seat pad
O Adjustable table height preferable

How to reduce the risks by improving work organization or work practice ?

3.3 Continuous DSE work can be monotonous, while prolonged sitting is tiring. It is advisable that a DSE user performs DSE work and non-DSE work alternately so that posture can be changed and the fatigue arising from prolonged DSE work can be relieved. Where non-DSE work cannot be arranged, appropriate rest breaks are recommended, e.g. a 5 - 10 minute break after 1 - 2 hours continuous DSE work depending on the intensity of the work. Moreover, job enrichment can often give an employee more job satisfaction.

3.4 Heavy workloads and tight deadlines can cause work stress, which if not properly managed, may become excessive and affect health. It is advisable that a supervisor effectively plans and organizes the work of his subordinates so that workloads and deadlines are reasonable. In doing so, the supervisor can discuss with the subordinates in setting deadlines and work priorities.

As an employer, do I need to provide safety and health training to users?

3.5 Safety and health training is essential for helping a user avoid risks associated with DSE work. Under Section 8 of the Regulation, an employer should, so far as reasonably practicable, ensure that users employed by him are provided with necessary safety and health training in the use of workstations. It is recommended that the training should enable the users to recognize and understand:

a) the risks of the DSE work;

b) various precautions for avoiding the risks and their importance, for example, a correct working posture, adjusting the equipment and furniture to suit own body features and work comfort, changes of activities at suitable intervals, etc.;

c) how to report problems and symptoms; and

d) how to get assistance from the employer.

3.6 The format of training is not restricted to lectures. Other means like video shows, educational leaflets, seminars can also be considered so long as they are effective in meeting the purpose.

As a user, how can I co-operate with the person responsible for the

workplace?

3.7 Under Section 9 of the Regulation, a user of a workstation in a workplace should, so far as reasonably practicable, conform to the safe system of work and work practices and comply with any risk reduction measures, that the person responsible for the workplace has established or taken for the safety and health of users at the workstation. A user should co-operate with the responsible person in conducting risk assessments and in the implementation of preventive and remedial measures to reduce identified risks. In the case where serious problems relating to the DSE work arise, a user should immediately notify the responsible person of the matter.

Part IV

What are the offences and penalties?

4.1 A person responsible for a workplace or an employer who fails to comply with the relevant provisions of the Regulation commits an offence and is liable to a maximum fine of $50,000. These offences are offences of strict liability.

4.2 A user who fails to comply with the relevant provision of the Regulation commits an offence and is liable to a maximum fine of $10,000.

Appendix A

Health Aspects of Using Display Screen Equipment

Prolonged use of display screen equipment may cause short-term health problems like upper limb pains and discomfort, eyestrain, bodily fatigue and stress.

Upper limb pains and discomfort

The problems of discomfort at hands, arms, shoulders and the neck are common among DSE users. These may range from temporary fatigue or soreness to chronic soft tissue disorders.

Prolonged static posture of the neck, awkward positioning of the hands and wrists, heavy DSE workload combined with tight deadlines are some of the possible causes. These problems are largely preventable by the application of ergonomic principles to the design of workstations and to the organization of work.

Eyestrain

It refers to complaints of eye fatigue and headache. Causes may include poor visual display quality of the screen, poor lighting conditions and heavy workload. However, it is unlikely that DSE work would cause any permanent effect to the eyes or eyesight.

Fatigue and stress

Fatigue and stress can be more common among DSE users as the organization of certain types of DSE work may lead to a higher prevalence of common stress-related factors such as lack of sufficient control of the work by the user, high-speed repetitive work and reduced variety of postures.

Appendix B

Computer Workstation Risk Assessment Checklist

Department of the organization : _____

Workstation number / location : _____

Description of computer tasks : _____

Part A : Assessment*

Display screen equipment and peripherals	Yes	No
1. Is the work surface large enough for placing the screen at a comfortable viewing distance from the user ?	☐	☐
2. Can the input devices (e.g. keyboard and mouse) be placed on the same work surface for use conveniently ?	☐	☐
Work desk and chair		
3. Is the work desk providing adequate leg clearance and the chair adjustable to allow proper work postures ?	☐	☐
Environment		
4. Are glare and reflections being avoided ?	☐	☐
5. Is the lighting level adequate?	☐	☐

Other workstation problems that may need attention :

_____

_____

Part B : Conclusions and Follow-up

(a "No" answer for any of the above questions or the reporting of workstation problems may indicate the presence of safety and health risks requiring follow-up actions)

_____

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Assessor : _____ Date:_____

*Note: Please refer to Part III of this Guide for features of an ergonomically designed workstation.