The EU directive 90/270 on VDU-work : a European state-of-the-art overview : report over the situation in France

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Report over the situation in

France

The EU Directive 90/270/EEC on the Minimum Health and Safety Requirements for Work with Display Screen Equipment

edited by

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The EU Directive on VDU-Work: a European State-of-the-Art Overview over the situation in France

"The EU Directive on the Minimum Health and Safety Requirements for Work with Display Screen Equipment in Practice - a European Overview"

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Content

Foreword

The EU Directive 90/270/EEC on the minimum health and safety requirements for work with display screen equipment gives general guidelines on responsibilities and identifies areas for legislation. It does not provide measurable ergonomic standards. These values are being identified in standards such as ISO 9241 and EN 29241.

The International Standards Organisation (ISO) has announced a set of standards called ISO 9241 which provide specific values on which legislation may be based. It also provides system manufacturers, employers and employees with a scientific basis for planning ergonomic working environments. The standard currently comprises 17 parts: Part 1 General Introduction, Part 2 Task design (the way jobs are designed for people working with display equipment), Parts 3-9 Hardware and physical environment, Parts 10-17 Software and usability.

The European Committee for Standardisation (CEN) has decided to issue its own standard, EN 29241, which will be virtually identical to ISO 9241. In this context EN standards are particularly relevant because CEN member countries, which include both EEC and EFTA, have jointly decided that EN standards will replace national standards (e.g. BS 7179) as soon as they are published. ISO-standards are not always introduced as national standards.

Of course, the Directive outlines minimum standards. Many countries will have existing legislation that already meets or exceeds the proposals.

Each member country will review the Directive and having interpreted it to suit local conditions, they will create new legislation. The new ergonomic laws should be in place as soon as possible. Local legislation will refer to local standards bodies' interpretation of ISO 9241 and EN 29241.

The principles behind ergonomic legislation are simple and founded in common sense. However, far reaching implications for manufacturers and employers ensure that their implementation is complex.

The aims of this book are threefold:

(1) to present the actual state of the national legislation from a theoretical, political and a practical point of view,

(2) to discuss the range of possible evaluation criteria,

(3) to give a state of the art overview of the methods and tools in practice.

The author will give an overview of the national activities and forthcomings of the legislation process.

We hope that this report will help to harmonize the implementation and practice of the EU Directive 90/270/EEC in Europe.

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The EU Directive 90/270 on VDU-Work:
A European State-of-the-Art Overview

France: EU Directive on VDU-work – Theoretical and Practical Implementation

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Abstract

This paper describes an investigation of the theoretical and practical implementation of the EU Directive on Visual Display Unit (VDU) Work 90/270/EEC ("EU Directive") in France. The three basic questions posed are: (1) What are the means of verifying the implementation of the EU Directive in France and what are the roles of the key persons associated with the implementation? (2) How are VDU workers in France informed of measures to prevent against health and safety risks associated with the use of display screen equipment? (3) What changes have been observed in the workplace since the legislation was introduction in 1993? The findings suggest that even though there is an implementation infrastructure in France and the EU Directive has been transposed it is neither a priority nor understood well by corporations and the workplace safety regulators.

Keywords: Work Inspectors, Doctors of Work, Safety Controllers, Hygiene and Safety Committee, prevention of risks, Decree.

1 Introduction

The information presented in this paper was obtained by two methods: (1) By analyzing the national French legislation and associated application materials pertaining to the EU Directive on VDU-work. (2) Through interviews with Work Inspectors, Medical Doctors of Work, Safety Controllers, and representatives from employee Hygiene and Safety Committees. The French legislation and national application text pertaining to the EU Directive on VDU-work has been summarized herein by the researcher. The legislative summary has been formulated based upon the assumption that the reader is reasonably familiar with the contents and intent of the EU Directive. Following this condensed presentation of French legislation, the results of the interviews with key implementors will be presented.

2 Legislative Summary: French Decree

France was one of the first EU member countries to transpose the EU Directive into national law. The transposition came by means of the French Decree n° 91-451 ("French Decree") Relative to Visual Display Unit Equipment and Prevention of Risks to Operators . In essence, the French Decree is a direct extraction of the EU Directive (Ministère du travail, 1991b).

2.1 Summary of French Decree n° 91-451

- The French Decree is applicable to the establishments mentioned in Article L. 231-1 of the French Labour Code, in which employees regularly work with VDU equipment for a substantial part of their work day.
- Certain equipment mentioned in the French Decree is expressly excluded from its field of application.
- The employer is bound by specific provisions in connection with the analysis and organisation of work.
- Specific provisions are laid down in the French Decree in connection with the information and training for employees that work with VDT equipment.
- Arrangements for special medical supervision are set forth.
- The French Decree includes specific provisions concerning equipment (screen, keyboard, etc.) and the working environment (radiation, humidity, noise, lighting).
- The French Decree came into force 1 January 1993, but in the case of equipment in operation prior to this date, certain provisions will not come into force until 1 January 1997.

In addition to the French Decree, there is an application text associated with the transposition of the EU Directive into French law. This application text is known as Circulaire DRT n° 91-18 of November 1991 ("Circulaire") Relative to the Application of Decree n° 91-451 Concerning the Prevention of Risks Associated with VDU Work. This Circulaire does not appear in the Official Journal, however, it is published in the French Labour Codes (Ministère du travail, 1991a). The intent of the present Circulaire is to provide a more precise interpretation of the French Decree. Although new requirements are not introduced in the Circulaire certain provisions of the French Decree are more explicitly described.

The subject matters expanded upon in the Circulaire are fourfold: (1) General Provisions pertaining to the use of portable equipment, (2) Rest breaks from work with display screens, (3) Conditions of medical surveillance, (4) Equipment and environmental conditions. A summary of points of the French Decree expanded upon in the Circulaire is as follows:

2.2 French Decree as elaborated by French Circulaire DRT n° 91-18

Chapter I, General Provisions:

Applicability:

It is the resonsibility of the employer, after having consulted with its salaried employees and the Committee of Hygiene and Safety, to determine which jobs and workplces are subject to the French Decree.

Portable Systems:

Pertaining to portable systems being excluded, the Circulaire clarifies that if a worker uses a portable system for a "non negligible" portion of their work day then the worker is protected by the provisions of the French Decree. N.B. "no negligible" is not defined in the Circulaire.

Chapter II, Workstations and Daily Work Routine:

Activity Changes:

The Circulaire explicitly defines "periodic activity changes". An example given of an activity change is that of performig office tasks instead of work with a display screen. Also, the alternative tasks must be in accordance with the employees normal work responsibilities.

Work Breaks:

The Circulaire further clarifies that "work pauses" are to be breaks from all work activity and that they are to be given in adition to traditional rest breaks. The timing and duration of the recommended work pauses are to be determined as a function of the organisation and characteristics of the work tasks.

Chapter IV, Medical Surveillance

Medical Examinations:

The role of the Doctor of Work and the special examinations for users of VDU equipment is further described in the Circulaire.

Vision Correction:

In the French Decree it is implied that if the results of the worker's visual examination justifies a means of correction then the costs shall be completely borne by the employer. However, in the Circulaire it is clarified that if the correction of a visual dysfunction benefits the worker in his daily life then the costs of correction are to be paid for by the worker.

Chapters V and VI, Equipment and Work Environment:

Chair:

The Circulaire clarifies that the French Decree does not intend to imply that the chair back must move independently from the seat pan nor does it imply that the chair back

and seat pan adjustment features be independent of one another. The Circulaire also notes that "monocoque" (i.e. single shell) type chairs could meet the objectives of the French Decree if the chair back and seat pan are able to incline in a synchronous manner.

Environmental Conditions:

The Circulaire provides examples of how the VDU worker should be protected from temperature changes caused by the equipment. In addition, precise levels of office environment humidity are given.

Electromagnetic Radiation:

The Circulaire prescribes that emissions of ionising radiation shall conform to the French Decree n° 86-1103 of 2 October 1986 Relative to Protecting Workers from Ionising Radiation.

Lighting:

The Circulaire specifies that all disturbing reflections on the display screen should be avoided. In addition, it is noted that the disposition of the natural or artificial lighting must be such as to provide a well distributed and balanced luminance.

3 Means of Verifying Implementation

The implementation verification process of the French Decree on VDU-work is managed by a team of members from various disciplines. This verification team is comprised of a Work Inspector, a Safety at Work Controller, a Medical Doctor of Work, and representatives from the employee Hygiene and Safety Committee. In order to understand better this verification process and the roles each team member plays, the researcher interviewed 25 individuals from the Parisian and South East Regions of France. The information obtained from these interviews and the subsequent perceptions of an implementation verification process are summarized below.

3.1 Work inspector

In every region within France there are a number of government employed inspectors of work that are responsible for visiting companies in their district and ensuring that all labour codes and decrees are respected by employers. These inspectors provide a liaison role between employees, employers, and the national labour codes. Although the majority of work inspectors are generalists their principal focus is regulating work hours, scrutinizing employee redundancies, and overseeing the general health and safety conditions of the workplace.

In theory, other than the employer, the inspector of work is the team member most responsible for verifying that the minimum requirements of the French Decree on VDU work are followed. In reality, based upon the researchers' interviews with various work inspectors, it does not appear that such compliance verification is a priority when the annual workplace inspections are performed.

From a political perspective, the researcher learned that in 1996 the three national priorities for the work inspectors are: (1) asbestos removal in the workplace, (2) the reduction of risks of falling in the office and factories, and (3) the improvement of floor surfaces and interior walk-ways. The researcher was given the impression that it is likely that the priority given to verifying the implementation of the French Decree on VDU work

would most likely be elevated in 1997 as the entire Decree would be in force at this time following the four year transition period.

Although the French Decree and associated requirements were not always well known by the work inspectors interviewed, the general trend regarding ergonomic health and safety concerns seemed to be that of collective (overhead) lighting, reflections caused by natural light, and collective heating. On a few occasions, the researcher was informed that the most common complaint among workers was in regard to lighting. When queried further about overhead lighting, the inspectors were quick to add that it is the employers' responsibility to provide workers with individual lighting if he/she complained about the overhead lighting as related to their work with a display screen.

3.2 Medical doctors of work

While the theoretical role of the Work Inspector, in relation to the French Decree on VDU work, is that of an on-site verifier of regulation implementation, the Doctor of Work's function is one of preventative consultation (Cail et al., 1995). Essentially, their role is to consult employers, employees, and Work Inspectors on methods of preventing work related injuries.

The Doctor of Work is an employee of the state and a portion of his/her work time is dedicated to analyzing the workplace conditions and performing periodic general health exams of the employees. For those employees that work with VDUs, the medical examination includes an eye examination and a questionnaire related to the rhythm of work and the general working conditions. The questions pertaining to office ergonomics, and the corresponding interview between the Doctor of Work and employee, are geared towards the general lighting conditions of the workplace and the luminosity of their display screens. If the results of these employee-completed questionnaires indicate that there is a potential health risk in the work area, or with the VDU equipment the Doctor of Work would be obliged to visit the work premises and perform a special surveillance. This type of surveillance by the Doctor of Work is typically performed in conjunction with a Work Inspector and, in larger companies, with employee representatives of the Hygiene and Safety Committee. If the results of this special surveillance indicate that corrective measures must be taken by the employer, it is the Work Inspector and not the Doctor of Work that would asses necessary sanctions.

In contrast to the interviews with the work inspectors, the researcher observed that all of the Doctors of Work questioned were well informed of the French Decree on VDU-work and had taken action to incorporate the essence of this national regulation into their work practices.

In short, the Doctors of Work do not serve as direct verifiers of the French Decree. Instead they attempt to advise employers that by respecting the technical ergonomic norms - including the physical, organisational and psycho social factors - the quality of work life can be enhanced and thereby improving the overall performance of the corporation (Cail et al., 1995).

3.3 Safety controllers

The Safety Controllers are government employees who provide support to the government and public sectors. Their function is to monitor and control the occupational health and safety at work and provide means of preventing accidents. In addition, it is their responsibility to both discover the workplace risks and offer improvement solutions for the work posts perceived to be dangerous and to distribute accident prevention documentation to industry. The Safety Controllers play a complementary partner role with the Work Inspectors.

Theoretically, the Safety Controller's principal role is to ensure that the laws and regulations concerning workplace safety are adhered to by industry. Therefore, it would be assumed that they would play a large role in verifying the implementation of the French Decree on VDU-work. Interestingly, the researcher determined that the implementation of the French Decree on VDU-work was not their primary occupation. Instead, the researcher was informed that these controllers are more concerned with preventing traditional "accidents" instead of "professional maladies" that may result from work with VDU equipment.

The Safety Controllers are responsible for periodically visiting companies and ensuring that preventative measures are in place to avoid accidents at work. However, the researcher observed that the Safety Controllers' periodic visits to corporations were more related to heavy industry. They typically only visited companies that employed workers of VDU equipment if there were employee complaints or related injuries.

3.4 Hygiene and safety committee

In large companies, that is those with 50 or more employees, it is mandatory in France that there is a Committee of Hygiene and Safety ("C.H.S.C.T."). This group is comprised of elected employee representatives and the president of the company or his representative (i.e. HR Director).

In theory, the role of the C.H.S.C.T. is to contribute to the protection of the health and safety of the employees through the analysis of professional risks and working conditions. They must survey the application of health and safety laws pertaining to corporations. These objectives are theoretically met via regular inspections of the workplace, analyses of professional risks, and investigations following each accident of work. They contribute to the promotion of the prevention of accidents and to providing solutions relative to the organisation of work, the office environment (temperature, humidity, etc.), and the organisation of work equipment. In addition, when a new technology or method is introduced to the workplace, the representatives from the C.H.S.C.T. are required to study the consequences that the new equipment or method may pose to the safety of the workplace.

The C.H.S.C.T. members are advised at their meetings by the Doctor of Work. The C.H.S.C.T. members normally meet on a quarterly basis. The respective Work Inspector and Safety Controller are systematically invited to meetings of the C.H.S.C.T.. In theory, this group is required to generate a report annually summarizing the general situation of hygiene, safety at work, and working conditions. In companies employing workers that use VDU equipment this annual report on safety and hygiene would reference the French Decree and EU Directive.

In practice, the researcher observed that in very large corporations, i.e. those employing more than 2000 persons, the C.H.S.C.T. committees functioned formally and efficiently. However, it was the observation of the researcher that the smaller companies did not function as formally or efficiently.

In summary, the C.H.S.C.T. committees seem to provide a valuable role in verifying the implementation of the French Decree on VDU-work. However, it is unclear whether the C.H.S.C.T. groups of smaller corporations are adequately informed of the legislation and preventive safety measures.

4 Prevention of Risks: Methods and Tools

Per the requirements set forth in the EU Directive and French Decree, the employer is obliged to provide information and training to their employees regarding the prevention of

health and safety risks associated with the use of VDU equipment. In France, the source of education materials supporting the application of such health and safety laws is the National Institute of Research and Safety (INRS). This government organization provides occupational safety and prevention support to all industries, the National Body of Health Insurance, and the Corporate Safety and Hygiene Committees. The INRS obtains, elaborates, and diffuses all documentation concerning the hygiene and occupational safety: brochures (INRS, 1996), pamphlets, posters, film, and bibliographic information.

There are a number of publication materials of the INRS concerning specific guidance on the prevention of risks associated with VDU equipment use and the application of the French Decree and EU Directive. A few examples of such recent publications found to be very informative by the researcher are: (unofficial title translations) Visual Display Screens, Methodological Guide for Doctors of Work (Cail et al., 1995), Better Life With Your Display Screen (INRS, 1994), and Display Screen Work in 50 Questions (INRS, 1995).

In theory, the educational brochure designated for the VDU workers are to be distributed to employers by the Government Safety Controllers. In practice, the researcher had difficulty ensuring that such educational materials were actually distributed on a consistent basis by the Safety Controllers in all regions as there seemed to be a lack of knowledge within the Safety Prevention bureau as to the materials and risks to safety presented by VDU usage. Regardless, even assuming an ideal situation, the researcher observed, based upon interviews with C.H.S.C.T. members, that corporate management often refused to permit their safety committee to distribute the INRS brochures to the employees because of the fear that it could be incorrectly interpreted: for example, in one of the educational brochures it is noted that a work pause of 5 to 10 minutes every hour is recommended. In addition, this brochure details that one should leave their work post, move about, and stretch his/her muscles during the hourly breaks. The consequence is that employers fear reduction in productivity would result if the intent is not clearly explained orally to each employee. Unfortunately, in the large companies such specific explanations and associated training is not feasible.

Another method for the employers to receive information concerning risk prevention methods is through the respective Doctors of Work that support their companies. The researcher determined that it is not uncommon for Work Doctors supporting large corporations to offer educational seminars regarding the health and safety associated with VDU equipment work and general office ergonomics.

In summary, the consistent distribution of educational materials and employee training on office ergonomics is limited and often times thwarted due to the direct costs of distribution and training.

5 Workplace Improvements since 1993

Throughout the investigation and interview process the researcher attempted to gather information regarding the individual's perception of improvements made in the work place since the French Decree and EU Directive were introduced in January of 1993. An overview of the responses to this open ended question is as follows:

In France, it appears that improvements to the office workplace as a result of the implementation of the EU Directive have been slow in coming. However, this does not mean that improvements have not taken place. From a critique standpoint, it has been said that "unlike some of France's neighbors, the French treat the malady instead of preventing it". (Berna, 1995) Perhaps this is the case considering the small number of companies that have taken steps to come into compliance with the French Decree.

Those questioned noted some problems which seem to inhibit the improvements to the quality of the work life. Noted problems include:

- Costs of installing new computers are prohibitive.
- The arrangement of VDU equipment is often determined by the location of the cable hook up points to power and network lines instead of by ergonomic principles.
- Incompatibility between the architecture layout of old offices and placement limitations of VDU equipment.
- The disposition of VDUs with respect to natural and overhead lighting.

In summary, the researcher observed that the general trend in France is neither small nor large companies comply with the French Decree in it's entirety at this time. Even though in practice it appears that the French Decree is not yet being applied consistently, those questioned did feel that some general improvements to office ergonomics have resulted since 1993. For example, there seems to be certain focus areas of the decree that are considered more important to both the users and implementors. Such areas of improvements noted were with respect to the actual display screen equipment and associated software, however, it is unclear as to whether this is a direct result of the legislation or merely the advancement of display screen and computer technology. In addition, those questioned seem to feel that more attention has been given to office lighting conditions, natural light, and window coverings.

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Appendix

French Version of the EU Directive 90/270/EEC

Le décret français n° 91-451 du 14 mai 1991 concernant les prescriptions minimales de sécurité relatives au travail sur des équipements à écran de visualisation.

Le premier ministre,

Sur le rapport du ministre de l'agriculture et de la forêt et du ministre du travail, de l'emploi et de la formation professionnelle.

Vu la directive du Conseil des communautés européennes n° 90-270 C.E.E. du 29 mai 1990 concernant les prescriptions minimales de sécurité relatives au travail sur des équipements à écran de visualisation (cinquième directive au sens de l'article 16, paragraphe 1er, de la directive n°89-391 C.E.E.);

Vu le code du travail, et notamment l'article L. 231-2;

Vu le décret n° 82-392 du 11 mai 1982 relatif à l'organisation et au fonctionnement des services médicaux du travail en agriculture;

Vu le décret n° 86-1103 du 2 octobre 1986 relatif à la protection des travailleurs contre les dangers des rayonnements ionisant;

Vu l'avis du Conseil supérieur de la prévention des risques professionnels end ate du 26 septembre 1990;

Vu l'avais de la Commission nationale d'hygiène et de sécurité du travail en agriculture en date du 8 novembre 1990;

Le Conseil d'État (section sociale) entendu,

Décrète:

Chapitre Ier. Champ d'application

Article 1

Sont soumis aux disposition du présent décret les établissements visés à l'article L. 231 du code travail dans lesquels des travailleurs utilisent de façon habituelle et pendant une partie non négligeable du temps de travail des concernant à écran de visualisation. Toutefois le présent décret ne s'applique pas aux équipements suivants:

a. Les postes de conduite de véhicules ou d'engins;

b. Les systèmes informatiques à bord d'un moyen de transport;

c. Les systèmes informatiques destinés à être utilisés en priorité par le public;

d. Les systèmes portables dès lors qu'ils ne font pas l'objet d'une utilisation soutenu à un poste de travail;

e. Les machines à calculer, les caisses enregistreuses et tout équipement possédant un petit dispositif de visualisation de données ou de mesures nécessaires à l'utilisation directe de cet équipement;

f. Les machines à écrite de conception classique dites "<machines à fenêtre".

Article 2

Au sens du présent décret on entend par:

Écran de visualisation, un écran alphanumérique ou graphique quel que soit le procédé d'affichage utilisé;

Poste de travail l'ensemble comprenant un équipement à écran de visualisation, le cas échéant, d'un clavier ou d'un dispositif de saisies de données ou d'un logiciel déterminant l'interface homme/machine, d'accessoires optionnels, d'annexes, y compris l'unité de disquettes, d'un téléphone, d'un modem, d'une imprimante, d'un support-documents, d'un siège et d'une table ou d'une surface de travail, ainsi que d'environnement de travail immédiat.

Chapitre II. Analyse et organisation du travail sur écrans de visualisation

Article 3

L'employeur est tenu de procéder à une analyse des risques professionnels et des conditions de travail pour tous les postes comportant un écran de visualisation. L'employeur prend toutes les mesures qui s'imposent pour remédier aux risques constatés.

Il est tenu en outre, de concevoir l'activité du travailleur de telle sorte que son temps quotidien de travail sur écran soit périodiquement interrompe par des pauses ou par des changements d'activité réduisant la charge de travail sur écran.

Article 4

Pour l'élaboration, le choix, l'achat et la modification de logiciels ainsi que pour la définition des tâches impliquant l'utilisation d'écrans de visualisation, l'employeur tiendra compte des facteurs suivants, dans la mesure où les caractéristiques intrinsèques de la tâche ne s'y opposant pas:

a. Le logiciel doit être adapte à la tâche à exécuter;

b. Le logiciel doit être d'un usage facile et doit être adapté au niveau de connaissance et d'expérience de l'utilisateur; aucun dispositif de contrôle qualitatif ne peut être utilisé à l'insu des travailleurs;

c. Les systèmes doivent afficher l'information dans un format et à un rythme adaptés aux opérateurs;

d. Les principes d'ergonomie doivent être appliqués en particulier au traitement de l'information par l'homme.

Chapitre III. Formation des travailleurs

Article 5

L'employeur est tenu d'assurer l'information et, dans les conditions de l'article 231-3-1 du code du travail, la formation des travailleurs sur tout ce qui concerné la sécurité et la santé liées àleur poste de travail et notamment sur les modalités d'utilisation de l'écran et de l'équipement dans lequel cet écran est intégré.

Chaque travailleur doit en bénéficier, avant sa première affectation àun travail sur écran de visualisation et chaque fois que l'organisation du poste de travail est modifiée de manière substantielle.

Chapitre IV. Surveillance médicale

Article 6

Un travailleur ne peut être affecté àdes travaux sur écran de visualisation que s'il àfait l'objet d'un examen préalable et approprié des yeux et de la vue par le médecine du travail. Cet examen doit être renouvelé àintervalles réguliez et lors des visites médicales périodiques.

L'employeur est tenu de faire examiner par le médecine du travail tout travailleur se plaignent de troubles pouvant être dus au travail sur écran de visualisation.

Si les résultats des examens médicaux le rendent nécessaire un examen ophtalmologique est pratiqué.

Si les résultats de la surveillance médicale rendent nécessaires, une correction si des dispositifs de peuvent être utilisés les travailleurs sur écran doivent recevoir des dispositifs de correction spéciaux en rapport avec le travail concerné: ceux-ci ne doivent en aucun cas entraîner des charges financières additionnelles pour les travailleurs.

Chapitre V - Équipement

Article 7

Les caractères sur l'écran doivent être d'un bonne définition et formés d'une manière claire, d'une dimension suffisante et avec un espace adéquat entre les caractères et les lignes.

L'image sur l'écran doit être stable.

La luminance ou le contraste entre les caractères et le fond de l'écran doivent être facilement adaptables par l'utilisateur de terminaux à écrans et être également facilement adaptables aux conditions ambiantes.

L'écran doit être orientable et inclinable facilement pour s'adapter aux besoins de l'utilisateur.

Il peut être installé sur un pied séparé ou sur une table réglable.

L'écran doit être exempt de reflets et réverbérations susceptibles de gêner l'utilisateur.

Article 8

Le clavier être inclinable et dissocié de l'écran pour permettre au travailleur d'avoir une position confortable qui ne provoque pas de fatigue des avant-bras ou des mains.

L'espace devant le clavier et les caractéristique des touches doivent tendre à faciliter son utilisation.

Les symboles des touches doivent être suffisamment contrastés et lisibles à partir de la position de travail normale.

Article 9

Le plateau de la table ou de la surface de travail doit avoir une surface peu réfléchissant et de dimensions suffisantes pour permettre de modifier l'emplacement respectif de l'écran, du clavier, des documents et du matériel accessoire.

Le support de documents doit être stable et réglable et se sit

uer de telle façon que les mouvements inconfortables de la tête, du dos et des yeux soient évités au maximum.

L'espace de travail doit être suffisant pour permettre une position confortable pour les travailleurs.

Article 10

Sans préjudice des dispositions de l'article R. 232-4 du code travail, pour les travailleurs sur écran de visualisation, ses sièges doivent être, s'il y a lieu, adaptables en hauteur et en inclinaison. Un repose-pieds sera mis à la disposition des travailleurs qui en font la demande.

Article 11

Les dimensions et l'aménagement du poste de travail doivent assurer suffisamment de place pour permettre au travailleur de changer de position et de se déplacer.

Article 12

Les dispositions des articles 7 à 11 ci-dessus ne s'appliquent que dans la mesure où les éléments considérés existent dans le poste de travail et où les caractéristiques de la tâche en rendent l'application possible.

Chapitre VI. - Conditions d'ambiance

Article 13

Les équipements des postes de travail ne doivent pas produire un sursoit de chaleur susceptible de constituer une gêne pour les travailleurs.

II. Toutes radiations, à l'exception de la partie visible du spectre électromagnétique, doivent être réduites à des niveaux négligeables du point de vue de la protection de la sécurité et de la santé des travailleurs.

III. Une humidité satisfaisante doit être étable et maintenue dans les locaux affectés au travail sur écran de visualisation.

IV. Le bruit émis par les équipements du poste de travail doit être pris en compte lire de l'aménagement du poste de façon, en particulier, à ne pas perturber l'attention et l'audition.

V. En ce qui concerne l'éclairage, les dispositions des articles R. 237-7 à R 232-7-10 du code du travail sont applicables.

Chapitre VII - Dispositions finales

Article 14

Les dispositions du présent décret entrent en vigueur à compter du 1er janvier 1993; toutefois, pour les matériels mis en service avant cette date, les dispositions des articles 7 à 11 ne sont applicables qu'au 1er janvier 1997.

Article 15

Le ministre de l'agriculture et de la forêt et le ministre du travail. de l'emploi et de la formation professionnelle sont chargés, chacun en ce qui le concerne, de l'exécution du présent décret, qui sera publié au Journal officiel de la République français.

Fait à Paris, le 14 mai 1991

Michel Rocard