

Human Factors (HF); Human Factors of work in call centres



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Foreword

This Technical Report (TR) has been produced by ETSI Technical Committee Human Factors (HF).

Introduction

The present document deals with the human factors aspects of work in call centres and gives some recommendations of best practice. It is based on reviews of existing studies of call centre operation in the UK and other countries, supported by some practical research.

The present document is aimed at managers of call centres, their customers, call centre equipment and software designers and manufacturers, occupational health and human resources management. The focus is on call handlers, but the advice is also pertinent to employees with other roles in call centres.

The document identifies jobs and tasks in call centres and the attributes and skills of call handlers and related training issues. The practical issues of disability are considered.

The document should be of interest to those responsible for health and safety although it does not deal with physical safety issues. It notes that some aspects of stress, which is dealt with, can impact on safety.

It details current European legislation that is relevant to call centre operation and reports on some voluntary initiatives in the area.

Recommendations in the present document are limited to real time voice based services although the implications of changing technology are noted.

1 Scope

The present document reviews the human factors issues of those centres where business is conducted via the telephone whilst simultaneously using Display Screen Equipment (DSE) and gives guidance on the design of the tasks and of the working environment. It classifies such call centres to facilitate the identification of specific tasks, functions and supporting equipment.

It reports a number of studies into the call centre working environment and consultations with stakeholders. Guidance is given in the context of current legislation and developing technologies.

Human factors problems associated with call centre work are highlighted, and where appropriate, examples of best practice are given to illustrate how they may be avoided.

The present document is applicable to call centres of various types such as help lines and telemarketing. It does not deal with issues related either to surveillance centres or to sex lines. It does not deal with web based contact centres.

Recommendations in the present document are limited to real time voice based services although the implications of changing technology are noted.

Although personal health considerations are included in the present document, safety issues are outside its scope.

2 References

For the purposes of this Technical Report (TR), the following references apply:

- [1] CEN Workshop agreement CWA 14087:2000 "European Call Centre standards for Training and Qualification - Customer Contact Representative Competences".
- [2] Directive 89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work OJ L 183, 29/06/1989 pp. 1-8.
- [3] Directive 89/654/EEC of 30 November 1989 concerning the minimum safety and health requirements for the workplace OJ L 393, 30/12/1989 pp. 1-12.
- [4] Directive 90/270/EEC of 29 May 1990 on the minimum Safety and health requirements for work with display screen equipment OJ L 156, 21/06/1990 pp. 14-18.
- [5] Directive 93/104/EC of 23 November 1993 concerning certain aspects of the organization of working time OJ L 307, 13/12/1993 pp. 18-24.
- [6] Directive 95/46/EC of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data OJ L 281, 23/1/1995 pp. 31-50.
- [7] Directive 97/66/EC of 15 December 1997 concerning the Processing of Personal Data and the Protection of Privacy in the Telecommunications Sector OJ L 24, 30/01/1998 pp. 1-8.
- [8] ETSI ETR 329: "Human Factors (HF); Guidelines for procedures and announcements in Stored Voice Services (SVS) and Universal Personal Telecommunication (UPT)".
- [9] ETSI ETS 300 381: "Telephony for hearing impaired people; Inductive coupling of telephone earphones to hearing aids".
- [10] 2000/520/EC: "Commission Decision of 26 July 2000 pursuant to Directive 95/46/EC of the European Parliament and of the Council on the adequacy of the protection provided by the safe harbour privacy principles and related frequently asked questions issued by the US Department of Commerce". OJ L 215, 25/08/2000 pp. 7-14.
- [11] ISO 9241: "Ergonomic requirements for office work with visual display terminals (VDTs)" (Parts 1 to 17).
- [12] ISO 9241-6 (1998): "Ergonomic requirements for office work with visual display terminals (VDTs) - Part 6: Guidance on the work environment".

- [13] ITU-T Recommendation P.10 (1998): "Vocabulary of terms on telephone transmission quality and telephone sets" Geneva 1998.
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- [17] Incomes Data Services, Pay & Conditions in Call Centres 2000.
- [18] Jung M: "Considerations on ergonomic workplaces for blind and visually impaired persons in call centres" In Universal Access In HCI - Towards an Information Society for All. Volume 3 of the Proceedings of HCI International 2001.
- [19] Lucent Technologies, Retaining & Motivating Call Centre Agents 2000.
- [20] "More care for your voice" The Voice Care Network (<http://www.voicecare.org.uk>).
- [21] "Occupational Voice Loss. A Negotiator's Guide", The Banking, Insurance and Finance Union Research Department.
- [22] "Risking acoustic shock. A seminar on acoustic trauma from headsets in call centres" - Freemantle, Australia, September 2001.

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the following terms and definitions apply:

call centre: central place where customer and other telephone calls are handled by an organization, usually with some amount of computer automation

NOTE Typically, a call centre has the ability to handle a considerable volume of calls at the same time, to screen calls and forward them to someone qualified to handle them, and to log calls.

call handler: (also known as customer service advisor/agent/operator) - individual whose job requires them to spend a significant proportion of their working time responding to and/or making calls on the telephone whilst simultaneously using Display Screen Equipment (DSE)

hot desking: signifies the fact that a person does not have an allocated desk

NOTE: They occupy the first free desk available when they turn up for work. Also known as free seating.

tele-marketing: marketing from a distance by telecommunications

upselling: the practice of offering a product or service to a customer in an inbound call situation

3.2 Abbreviations

For the purposes of the present document, the following abbreviations apply:

ACD	Automatic Call Distribution
ANI	Automatic Number Identification
BIFU	Banking Insurance and Finance Union
CCTV	Close Circuit TeleVision
CRM	Customer Relationship Management
CSC	Customer Service Culture

CTI	Computer-Telephony Integration
DNIS	Dialled Number Identification Service
DSD	Display Screen Directive
DSE	Display Screen Equipment
EPM	Electronic Performance Monitoring
ID	IDentity
IP	Internet Protocol
IVR	Interactive Voice Response
LAN	Local Area Network
MSD	MusculoSkeletal Disorder
PBX	Private Branch eXchange
PC	Personal Computer
RSI	Repetitive Strain Injury
VDU	Visual Display Unit
VoIP	Voice over Internet Protocols
VPN	Virtual Private Network
VRU	Voice Response Unit

4 General background

4.1 Classification of call centres

The call centre industry has grown greatly over the past decade. The UK currently has more call centre activity than any other country in Europe, with Germany and Ireland and the Netherlands in the following places.

There are a number of different sectors using call centres and there are a number of different types of activity. They are used by any organization that uses the telephone to sell or service products and services such as mail-order catalogue organizations, telemarketing companies and computer product help desks. The different jobs and activities that take place in call centres affect the overall job design, therefore it is important to categorize call centre activity.

4.1.1 Sectors and type

4.1.1.1 Sectors

The main sectors using call centres are shown in figure 1. The following are examples from some of the sectors:

Health care

Simple health care can be provided by call centres which are available to the general public who can call up and get advice from nurses about minor medical conditions. If the initial operator cannot answer the problem from a checklist the call is passed to a qualified nurse. If that nurse feels they are unable to help then the caller is advised to contact a family doctor or hospital outpatients department. The nurse can also if necessary alert the emergency ambulance services. Such nurses should be expected to deal professionally, effectively and efficiently with each caller, not to answer a specified target of calls.

Education

Many educational establishments have call centres which are available to students and potential students. Students can get information about courses and the qualifications that are required to undertake those courses. Voice calls and e-mails are handled by the call centre.

Utilities

In most European countries calls to utility operators are handled by call centres. These include Gas, Electricity, Water, Telephones. These call centres have existed for many years and customers are used to using them for billing information, emergency reporting and other enquiries. Many of the utility companies also provide internet facilities so that the customer can analyse their billing information on-line. Since privatization of the utilities in many countries, the nature of the business has changed in that the call centre operatives also have to act in a selling role, trying to get the customers to purchase other products that they handle. This has changed the role of staff in the call centres and there is usually high pressure on the staff to meet tough call handling targets.

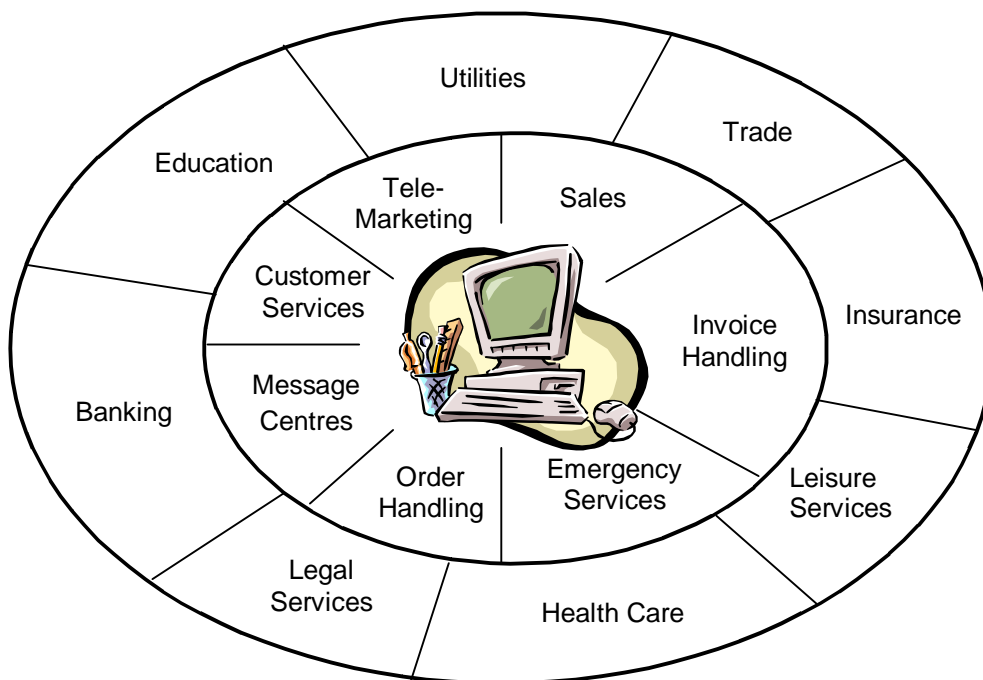


Figure 1: Call centre market sectors

Banking

Banking transactions conducted via a call centre can range from basic bank balance information to complex financial transactions. In order to offer 24 hour banking facilities to customers many banks are now using call centres in order to supply this service. The trend is for these to be integrated phone and web based services. Customers can interrogate their accounts, transfer money and pay bills either over the phone or on-line. Financial call centres tend to operate within a single country i.e. it is a very domestic market.

Insurance

Many insurance companies are offering direct insurance quotes over the telephone via call centres. The staff has to elicit the required information from the callers over the phone in order to arrive at a realistic quotation for car insurance, house insurance etc. Systems integration problems are the main concern of both banking and insurance sectors throughout Europe.

Legal services

The general public use services provided by "Citizens' Advice Centres" for obtaining information on their legal rights, government benefits etc. These services are National in nature.

Leisure services

Television services offered by cable companies are controlled by call centres. Customers have to access the call centre to get billing information and to lodge complaints about non functioning of the service. Many infotainment services such as "who wants to be a millionaire" rely on callers calling a premium rate telephone number, call handlers elicit information from the callers to establish if they could participate on the show.

Trade

Many trade organizations are using call centres for handling sales and invoicing. A large group of companies using this are the traditional mail order catalogues. Many call centres are used throughout the whole value chain from manufacture to retail outlet. Retail call centres can be found in food and non-food products. The computer hardware and software industry uses call centres for sales and user support. The travel business makes wide use of call centres and, for example, some airlines and car rental companies are locating their European call centres in one country. In addition, many transport companies e.g. railway and bus companies, use call centres for selling tickets, booking and timetable information.

4.1.1.2 Types

Call centre is the collective term for systems that support the effective management of a large number of telephone calls. For incoming calls the call centre offers automatic queue management and the co-ordination of calls and customer data. There are some specific types of activities that take place in call centres with different effects on the call handlers.

Emergency Services

Emergency services are a unique type of call centre as the calls are highly critical. Emergency services such as police, ambulance and fire brigade are controlled by call centres, 112 being the harmonized emergency number for European countries. The staff handling these calls is required to prioritize the calls and their decision-making is supported by very sophisticated software packages. However, this still places great responsibility on the call handler. The types of callers are different to other callers to call centres in that they may often be in a distressed condition. In addition all calls are recorded in case they are needed for court evidence at a later stage. Staff in such call centres should be paid on agreed salary scales, not by the number of calls handled.

Message Centres

Message centres are those call centres that handle calls for many companies, providing an answering and message service for those companies. This is a service found valuable by many small businesses, particularly those such as plumbers or similar tradesmen who work on customer's premises. Arrangements are normally made for the operator to provide an answer appropriate to the company being called.

Customer Services

Customer services and technical support for many companies are being handled by call centres. Customer services can range from highly technical help to straightforward directory enquiries. For the former type of centre, staff need product and systems knowledge to be able to handle the calls and to give advice.

Order Handling

The handling of orders is common in the retail sector where routine ordering is done via the call centre.

Invoice Handling

Again as with order handling invoice handling is common now in the retail sector.

Sales

Call handlers may be required to bring new products or promotions to the attention of callers (upselling). This can be seen as good customer service, however, some customers regard it as a sales pitch. Upselling can lead to different stresses for the operator as compared to call handlers responding to incoming sales enquiries

Tele-Marketing

Tele-marketing is marketing from a distance by telecommunications. This can be done for new and existing products and also for special offers. Calls can be made cold or to a recognized list. Many countries have legislation regarding cold calling and acceptable times of day that calls can be made

4.1.2 Factors affecting the call centre activities

There are a number of factors affecting call centre activity.

4.1.2.1 Who initiates the call

Traditionally call centres were set up for incoming calls only, but this has now changed. Some types of call centre operation rely on incoming calls such as customer services, emergency services whereas other types rely on the call centre agent making the calls as in sales, tele-marketing and market research. It is estimated that 50 % of call centres are doing inbound business, 15 % are doing outbound business and 35 % of call centres are doing both inbound and outbound business.

4.1.2.2 Location and use

The trend towards flexible home working continues to accelerate. Even small businesses are finding their employees - especially those with small children - asking if they can be given the opportunity (and the equipment) to work from home. However, it must be noted that the legal responsibility for the health and safety of home working employees falls on the person paying the wages. In addition home working is only a viable proposition where there is a fully developed telecommunications infrastructure in the domestic setting.

4.1.2.3 Size

Large call centres are those with more than 500 operators. Medium sized companies are those with 200 - 500 operatives. Small call centres have about 10 or 20 operatives; however, these are likely to be linked to other centres in a network. There is a trend away from large and medium size call centres to those with less than 50 agents.

4.1.2.4 Single or multiple business operation

Many small companies will contract their call centre business to a specialized call centre which may operate more than one business from one centre. This may put an additional burden on some call handlers as they have to be certain that they are answering the right calls on behalf of the right organization. Other operators welcome the variety as an enrichment to their work. To assist, it is normal for appropriate information to come up on the CTI screen.

4.1.2.5 Contract type

Some call centres are 'in-house' parts of the organization and are located within the company. However, other organizations may contract out their call centre operations to a specialized call centre company. This can have implications for the welfare and integration of the staff employed at the call centre. Some organizations use both types, using in-house call centres for handling complaints and the external service suppliers to handle other more routine activities such as order and invoice handling.

4.1.2.6 24/7 operation

Working through the night in call centres is becoming commonplace. Working practices such as "24/7" (24 hours per day, seven days per week) occupancy and layout changes are much more common in call centres than in typical offices. These working arrangements can have an effect on the environmental conditions. Call handlers working shifts in "24/7" call centres are particularly vulnerable from physical attack when leaving or arriving very late at night or very early in the morning. Public transport may not be available at these times, and call handlers may have to walk instead, which may expose them to greater risk.

4.1.2.7 Geographical coverage

In order to cover 24 hour operation many large multinationals are opting to have some of their call centre operation in a different time zone, for example in India or South Africa. This would overcome the need to employ staff on 24/7 operation and to pay the higher salaries for unsociable working hours. The advantages of using for example India is that it has a large population of highly educated people, well developed software and CTI industry and a large unemployed workforce - cost of labour is cheap and the second language in India is English. However, there can be problems (see below).

4.1.2.8 Languages

The English spoken by Indians is a very heavy dialect and much training is needed to make the accent more acceptable to the US and UK customers. The non-existent Customer Service Culture (CSC) in India will make training of call centre agents mandatory and difficult, since such a luxury such as service is not part of everyday life in India. In addition much training is given in common news items and culture so that it is not obvious to the caller where the call centre is located.

Foreign language knowledge can be important for some call centre staff when a multi-national company's call centre is located in just one country. If there is staff from many nations in one call centre their cultural requirements will need to be taken into consideration.

Ireland has established itself as one of the leaders in the field of pan-European call centres, with call centre qualifications including a foreign language component. Companies using Ireland in this capacity include airlines, car rental companies, parcel services and computer companies. Callers in the foreign country still call a freephone number in their own country. In the Netherlands it is stated that 73 % of the Dutch population speak one foreign language, 44 % speak two and 12 % speak three foreign languages so it is well placed for pan European companies call centres.

4.2 Technology

4.2.1 Current technology

Call centres in general use two kinds of technologies - "standard" office type applications (normally running on standard Personal Computers (PCs) and networks), and specialized software applications which are either generic to the call centre industry, or bespoke to a specific call centre. Examples of the former are word processing applications, spreadsheets, etc. An example of the latter would be Interactive Voice Response (IVR) software. Although much of this generic software will run on standard platforms (PCs or Workstations), some, due to the nature of the application, may require bespoke platforms.

In general, call centre workplaces have one of two types of equipment (terminals):

- 1) A PBX and associated telephones (either hand-held, or headset type); and
- 2) A PC/workstation linked by A Local Area Network (LAN) to a set of servers. These servers include both LAN servers, which maintain the LAN environment (e.g. access and authentication servers which validate usernames and passwords), and, database servers, which contain customer information in various forms.

For larger call centres, and especially in the case of multi-client call centres, such LAN environments may have access to remote databases world wide either through a corporate intranet, a Virtual Private Network (VPN), or the public internet. It should be noted that in these cases, multiple logins may be required of the operator, as they seek to access specific data to assist the caller.

The level of integration between the PBX equipment and the workstations can vary, depending on the equipment supplier. At the lowest level of integration, the call centre agent must type data from the client into the workstation in order to access the customer's data. More commonly, Interactive Voice Response (IVR) is used to screen callers and gather initial customer data, which is then used to trigger response information on the agent's screen.

Currently, one of the main drivers of technology in call centres is the requirement for greater integration, which would increase utilization of Computer Telephony Integration (CTI) and new media applications.

Technologies in routine use

Currently, the major dedicated systems in use by call centres are focused on call handling and routing. A major secondary function of these systems is overall performance measurement and reporting. The main technologies are Interactive Voice Response (IVR), and Automatic Call Distribution (ACD). The integration of calls with database information through CTI is also quite common, allowing calls to be routed to agents with accompanying data determined from the caller identity (ID), and the called ID (through Automatic Number Identification (ANI) and the Dialed Number Identification Service (DNIS)). A major emerging trend is towards the use of the Web, and the introduction of new media, such as voice over Internet Protocol (IP), and videotelephony.

Interactive Voice Response (IVR)

Also known as call steering and performed by a Voice Response Unit (VRU). This is quite widely used. The customer's call is screened by means of a question and answer dialogues using pre-recorded questions and with answers normally supplied via the user's touch tone keypad, and the call is then routed to the relevant department for processing. This processing can be automated, in the case for example, of a customer requesting a balance on an account, or it may be routed to an agent. Calls are queued depending on the nature of the customers query.

Automatic Call Distribution (ACD)

With this technology, incoming calls are routed to operators evenly, distributing the load. Calls are, in effect, queued and callers given a "holding message" such as "All our lines are busy..." if all operators are busy. One of the features of this type of technology is that it provides extensive status information and management reports. It can be combined with IVR, to create a more functional system. The user's position in the queue, and how long they can expect to be on hold, can also be given.

Customer Relationship Management (CRM)

Customer Relationship Management systems are becoming more widely used in call centre environments. Operators are given wider access to customer data, and typically use the system to perform a wider range of actions, including "up-selling" (the idea that every customer contact is a potential sales contact). High performance CRM systems offer a wide range of customer tracking, and operator handling information.

Computer-Telephony Integration (CTI)

This technology allows integration of call handling with customer data. Both Caller ID, and the number dialled are interrogated to provide initial routing of the call. IVR can also be used to screen the callers' requirements. Based on the information obtained from these sources, the call agent's screen is preloaded with data about the customer. Dialogue scripts may also be loaded for the agent.

Predictive dialling

Used mainly in telesales centres, this technology is in widespread use. It is normally integrated with CTI systems, whereby agents can automatically call any number in the customer data-base, as well as being presented with a dialogue script tailored for each call.

Call data recording

This is widely used in call centres. The motivation initially was for "operator training" purposes. Today, it is more widely deployed due to statutory, legal, or indemnity requirements.

Statistical systems

These give call centre management feedback on caller data such as call duration, etc. It is widely used.

Many of these technologies place specific requirements and stresses on the operator, which are discussed in clause 7 of the present document.

4.2.2 Development

There are many technologies under trial or in development in call centres including speech recognition; web integration; IP voice calls; email; etc. All these will lead to new requirements being placed upon the operator, which are discussed in clause 7.

Speech recognition

Speech recognition technology has been on the market for some time with somewhat mixed success. Much progress has been made, as evidenced by voice activation on mobile handsets, and various dictation tools. However, the full realization of the promise of speech recognition technology is still a little way off. Call centres are working with the latest versions of speech recognition software with a view to integration with existing call handling applications, such as IVR, ACD, CTI and automated basic services such as share prices and timetable services.

IP-calls

Some calls to call centres are undoubtedly routed from the caller to the centre by IP technology. It is possible that agents do not realize this, as the quality of such calls is now reaching that of the PSTN.

The use of IP telephony on the call centre intranet is also increasing.

Many call centres are also routing outgoing calls via VoIP providers.

Web

Integration of web features is ongoing in call centres. Customer contact with calls centres via web interfaces is now becoming a major aspect of many larger call centres. The technology enables agents to respond to customer queries via email or fax, as well as to interact with customers via chat services.

Integration of web based call centres with billing operations is an active development area. The general perception is that such integrated systems offer the ultimate in flexibility (from the customers perspective), with the maximum of price-performance from the call centre operators viewpoint.

New media/multimedia

A further development in the technology area is the use of new media by call centres, especially integrated with web based call centres. The integration of web technology with CTI offers the possibility of making contact video-telephony calls to agents. This type of application has been the subject of extensive trials in applications by national and regional administrations (e.g. public access kiosks). It is expected that this type of application will spread to call centres more rapidly as the uptake of the web increases across Europe (the eEurope Programme).

Future perspective

Call centre technology will mirror developments elsewhere in the business environment. This suggests higher levels of integration of applications and technologies. TV is likely to be more integrated with the web. There will be more widespread use of internet technologies, and introduction of newer technologies such as videotelephony.

Developments in home working (tele-operation) are also likely to increase.

4.3 Work force

4.3.1 Operator profiles

Data shows that in the UK, Ireland and Germany females outnumber males by 2:1 and the average age of call centre staff is between 20 years and 30 years, which is most likely reflected in other European call centres.

There have been identified four types of Call Centre staff:

- The Careerist Long Term - promotion keen.
- The passer through Short Term employees.
- The Foot Soldier Long Term - strong team worker.
- The Bill Payer Family & money motivated.

The call centre industry is undergoing change. Typically today the call handlers tend to be relatively low skilled people requiring close management by supervisors. However, in the future due to the task that the operators are undertaking becoming more integrated with other company divisions staff will need to be highly skilled and highly mobile people.

The longer service hours and weekend service has lead to a greater demand for part time workers. Also with the available workforce shrinking it is likely that there will be more job sharing and part time work in call centres in the future.

4.3.2 Recruitment

Many people thoroughly enjoy the role of call handler, but like any job it does not suit everyone. Increasingly though, call centres are able to fit working patterns to individual requirements by job sharing, home working, lunchtime shifts or even "term time only" contracts. Some call handlers are employed on annualized hours contracts, where the person will work full time during peak times and part-time during quieter periods: These contracts are frequently used by businesses that face seasonal peaks, for example holiday companies or motoring organizations. People seeking evening, casual or weekend work often find that a call centre is an ideal fit with their lifestyle.

The recruitment process should include some exposure to the call centres culture, so that potential employees can see and feel the environment that they will be working in. Some organizations will offer candidates the opportunity to sit with an experienced call handler and "listen in" to real telephone calls as part of the recruitment process, and this is an excellent way to give them some first hand experience of the role.

4.3.3 Retention/churn

A survey of call centre staff made by Lucent Technologies [19] showed the reasons given in table 1 when asked why they were planning to stay in a call centre.

Table 1: Reasons for staying

Factor	% Mentioning
Caring Company Culture	86
Team Spirit	84
Competitive Salary	83
Supportive Team Leaders	80
Training	79
Working Environment	76
Incentive Schemes	73
Responsibility/Involvement	72
Varied Work	71
Friendships at Work	70
Promotion Opportunities	69
Location of the Call Centre	63
Part Time/Full Time Opportunities	63
Team Building Events	33

When they were further asked what tools the company could provide them with in order to stay the answers, given in table 2 included.

Table 2: Tools wanted

Factor	% Mentioning
Enjoy it/Happy	41
Good Team Spirit	16
Supportive Managers	13
Career Prospects	10
Location	8
Good Pay	7
Suitable Hours	7
Good Products	6
No Choice	6
Good Training	5
Secure Job	4

However, according to the recent Incomes and Data Services [17] survey published in September 2000 the key factors affecting staff turnover were:

Table 3: Key factors affecting turnover

Factors affecting staff turnover	% of call centres citing as an important factor
Intensity of the call centre environment	50
Competition of staff from other call centres	45
Rates of Pay	35
Tight local labour market	33
Other	31
Working conditions	18

4.4 Legislation

There are many legal regulations and self-regulation documents that affect the call centre industry. Some of these are at a European level and some are at a national level. The present document covers the European legislation in full and gives examples of national legislation from a number of European countries. Any person interested in this area should establish the detail of the national legislation that exists in their own country.

4.4.1 European legislation

Directive 89/391/EEC [2] on the introduction of measures to encourage improvements in the safety and health of workers at work

The objective of this Directive is to introduce measures to encourage improvements in the safety and health of workers at work. To that end it contains general principles concerning the prevention of occupational risks, the protection of safety and health, the elimination of risk and accident factors, the informing, consultation, balanced participation in accordance with national laws and/or practices and training of workers and their representatives, as well as general guidelines for the implementation of the said principles. This is a framework directive with individual directives being produced in relation to Article 16. Those of particular relevance to call centres are individual directives addressing workplaces and work with display screen equipment.

Directive 89/654/EEC [3] concerning the minimum safety and health requirements for the workplace

This directive lays down the minimum safety and health requirements for workplaces. Workplaces are defined as the place intended to house workstations on the premises of the undertaking and/or establishment and any other place within the area of the undertaking and/or establishment in which the worker has access in the course of his employment. The directive covers areas such as electrical installations; emergency routes and exits; fire detection and fire fighting; ventilation of enclosed workplaces; room temperature; natural and artificial room lighting; floors, walls, ceilings and roofs of rooms; windows and skylights.

Directive 90/270/EEC [4] on the minimum Safety and health requirements for work with display screen equipment

This directive lays down the minimum safety and health requirements for work with display screen equipment. Under the directive employers are obliged to perform an analysis of workstations in order to evaluate the safety and health conditions to which they give rise for their workers, particularly as regards possible risks to eyesight, physical problems and problems of mental stress. Employers have to take appropriate measures to remedy the risks found.

This directive is dealt with in more detail in clause 6.1.1.

Directive 95/46/EC [6] on the protection of individuals with regard to the processing of personal data and on the free movement of such data

The purpose of this directive is to guarantee the free flow of personal data between the EU Member States whilst protecting individual rights to privacy. It provides, in particular, the obligation for those engaged in direct marketing to inform subjects that their data may be collected and used for direct marketing, and to give them the right to object.

The direct marketing industry supports these provisions. Some Member States are, however, in their national legislation implementing the directive, adopting additional provisions which are detrimental to direct marketing, and against the spirit of the Directive. The directive is likely to be subject to a review during 2002.

Directive 97/66/EC [7] concerning the processing of personal data and the protection of privacy in the telecommunications sector

This directive provides for the harmonization of the provisions of the Member States required to ensure an equivalent level of protection of fundamental rights and freedoms, and in particular the right to privacy, with respect to the processing of personal data in the telecommunications sector and to ensure the free movement of such data and of telecommunications equipment and services in the Community. The Directive applies to the processing of personal data in connection with the provision of publicly available telecommunications services in public telecommunications networks in the Community in particular via the Integrated Services Digital Network (ISDN) and public digital mobile networks.

2000/520/EC [10] Commission Decision pursuant to Directive 95/46/EC [6] of the European Parliament and of the Council on the adequacy of the protection provided by the safe harbour privacy principles and related frequently asked questions issued by the US Department of Commerce

After more than two years of negotiations, the 'Safe Harbour' agreement between the United States and Europe took effect in November 2000. The origin of the 'Safe Harbour' negotiations is the European Union's Data Privacy Directive [6]. According to this directive information may not be transferred to countries without 'adequate' privacy protection. As the US does not have a general privacy law, the EU saw the need to create a programme in order to protect European data.

Seven principles were drafted to secure the safety of personal information which had been transferred to the USA: notice of what information is collected and how it is used; choice to opt out of third party data sharing; onward transfer of data only to third parties that give notice and choice; security precautions to safeguard data; data integrity processes for the collection of relevant data only; access to information and the ability to correct or ask for deletion; and enforcement of privacy protection and sanctions.

This agreement has implications for workers of call centres that are doing business in European and American markets.

Directive 93/104/EC [5] concerning certain aspects of the organization of working time

This Directive lays down minimum safety and health requirements for the organization of working time and applies to:

- (a) minimum periods of daily rest, weekly rest and annual leave, to breaks and maximum weekly working time; and
- (b) certain aspects of night work, shift work and patterns of work.

Equal employment opportunities for people with disabilities (1999/C 186/02) 17 June 1999

This Council Resolution states that in the 1999 employment guidelines (OJ C 69, 12.3.1999), guideline 9 acknowledges the need for the Member States to give special attention to the needs of the disabled, ethnic minorities and other groups and individuals who may be disadvantaged, and develop appropriate forms of preventive and active policies to promote their integration into the labour market.

In order to establish equal opportunities for people with disabilities with regard to securing, retaining and advancing in employment, call upon the Member States to develop, evaluate and review support programmes for the integration of people with disabilities in various ways, in particular in the field of employment.

Guidelines for Member States' employment policies for the year 2002 (2002/177/EC)

This Council Decision discusses combating discrimination and promoting social inclusion by access to employment. It states that many groups and individuals experience particular difficulties in acquiring relevant skills and in gaining access to, and remaining in, the labour market. This may increase the risk of exclusion. A coherent set of policies is called for to promote social inclusion by supporting the integration of disadvantaged groups and individuals into the world of work, and promoting the quality of their employment. Discrimination in access to, and on, the labour market should be combated.

Each member state will:

- identify and combat all forms of discrimination in access to the labour market and to education and training;
- develop pathways consisting of effective preventive and active policy measures to promote the integration into the labour market of groups and individuals at risk or with a disadvantage, in order to avoid marginalization, the emergence of "working poor" and a drift into exclusion;

- implement appropriate measures to meet the needs of the disabled, ethnic minorities and migrant workers as regards their integration into the labour market and set national targets where appropriate for this purpose.

4.4.2 National requirements

National legislation needs to be investigated to establish how the above directives have been implemented in the country in which the call centre is located. Legislation also needs to be investigated for the countries from which the call centre is receiving calls.

In addition to investigating how national legislation has interpreted the DSE directive, the national legislation needs to be checked on issues such as working conditions, data protection, recording or monitoring of information and risk assessment.

For example:

- In Ireland the monitoring of calls is covered by the Telecommunications Services Act of 1983 and the Interception of Postal Packets and Telecommunications Messages (Regulations) Act 1993.
- In Germany the legal situation concerning outbound calls in the business-to-consumer relation is that it is not permitted to call private persons at all without having a specific agreement. For business-to-business calls, calls are allowed if there is an agreement.
- In Germany it is against the law to monitor calls without the permission of both parties involved in the call.

In addition to National legislation there may be found to be National or European codes of practice on such issues as time of day that calls may be made, recording and monitoring of call information or data protection. For example, the Federation of European Direct Marketing (FEDMA) recommends that outbound calls should be made only between 08.00 and 21.00.

FEDMA is also a good source of information on National Legislation. They have available a comprehensive information pack [16] containing country by country fact sheets giving essential information on direct marketing legislation covering advertising law, data protection, gifts and premiums, sales promotion, distance selling and telemarketing.

4.5 Workers' representation

Whether or not a Trade Union is present and effective in a call centre, employees are entitled to be represented and take part in discussions and negotiations with employers, over a wide variety of employment issues. This will typically include health and safety, welfare and pay and working conditions. Consultation can be through union safety representatives, through elected representatives of employee safety or with the employee directly. All representatives should be given paid time off to carry out their duties and be trained as appropriate, and also be given adequate facilities on site.

Where a recognized trade union is in place, they will have rights to:

- be consulted about health and safety matters;
- inspect the premises;
- investigate reportable accidents, occupational diseases and dangerous occurrences;
- attend safety committee meetings;
- request a safety committee be formed;
- contact enforcing authority inspectors.

Where employees are not represented, employers have a duty to consult employees in good time on a range of matters affecting their health and safety at work, including:

- the introduction into the workplace of any measure which may substantially effect the health and safety of the employees;

- any information the employer is required to provide to the employee;
- the planning and organization of any training the employer is required to provide;
- the health and safety consequences of any new technology being introduced.

Where consultation is direct with employees, they must be provided with sufficient information to enable the employees to participate fully in the discussion.

Where no union exists to negotiate on such matters as pay and conditions, individuals may be expected to negotiate individually over their contract and other terms of employment, but need to be aware of any national or industry agreements which might apply, e.g. a national minimum wage, or agreement on working hours.

5 Working environment

5.1 General recommendations

The working environment is crucial for the well being of the staff. An assessment of the working environment will need to be done to comply with a DSE audit. These should be done every time the working environment changes, e.g. there are new staff and/or there has been a rearrangement of the working environment. There needs to be clear and easy procedures for staff to report unacceptable environmental conditions. Respond to complaints promptly and take them seriously. Give the complainant feedback on the results of any investigations and the reason behind any subsequent actions or decisions.

Problems with environmental conditions may arise if a building is only designed for a specific number of occupants and amount of equipment. If no allowances are made for expansions in the workforce, the environmental conditions control system may not be able to compensate for the additional occupants and equipment and the air quality, temperature and relative humidity may become unacceptable.

A number of aspects of the Display Screen Equipment Directive [4] apply to the working environment. This should be consulted along with National legislation implementing the directive. A further source of information is ISO standard ISO 9241 [11]. In particular part 6 which deals with environmental requirements [12].

5.2 Floor plan/Layout

Open-plan office layouts are common for call centres, as the layout is flexible. For example, re-organizations of teams can be easily reflected by re-organizing the layout of the workstations. If this has not been anticipated in the design of the control system for environmental conditions, problems may arise such as new privacy screens interrupting airflow and leading to pockets of stagnant air. Anytime that there are rearrangements, DSE audits should be undertaken.

Privacy screens which are too high can lead to a feeling of isolation. The upper edge should be about eye level when sitting fully erect so that contact can be maintained with work colleagues when required. When seated with a normal working stance with the head slightly lowered, the necessary protection is obtained.

The following are data which illustrate current call centre configuration of workstations along with advantages and disadvantages of each layout.

Workstations in call centres can be arranged in a number of different configurations [15]. Typical configurations are linear, linear offset, ring, 3 star and 5 star, as shown in figures 2 to 6.

The linear layout shown in figure 2 gives:

- a simple table shape;
- economic use of room;
- lighting which may conveniently be ceiling based;
- few problems from dazzle caused by daylight;

- effective sound absorption easily achieved through moveable screens based on the simple table form;

but:

- there is a danger of a "cage" effect.

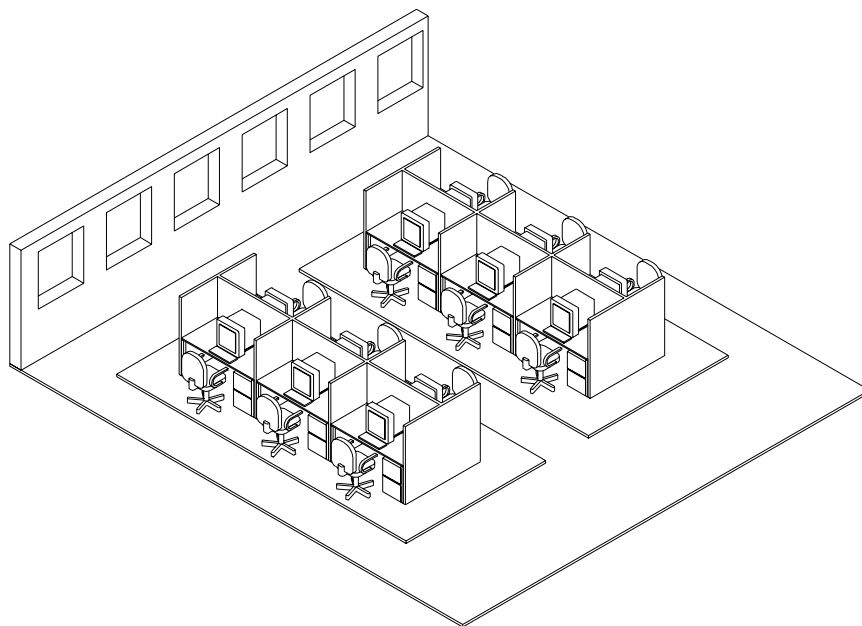


Figure 2: Linear arrangement

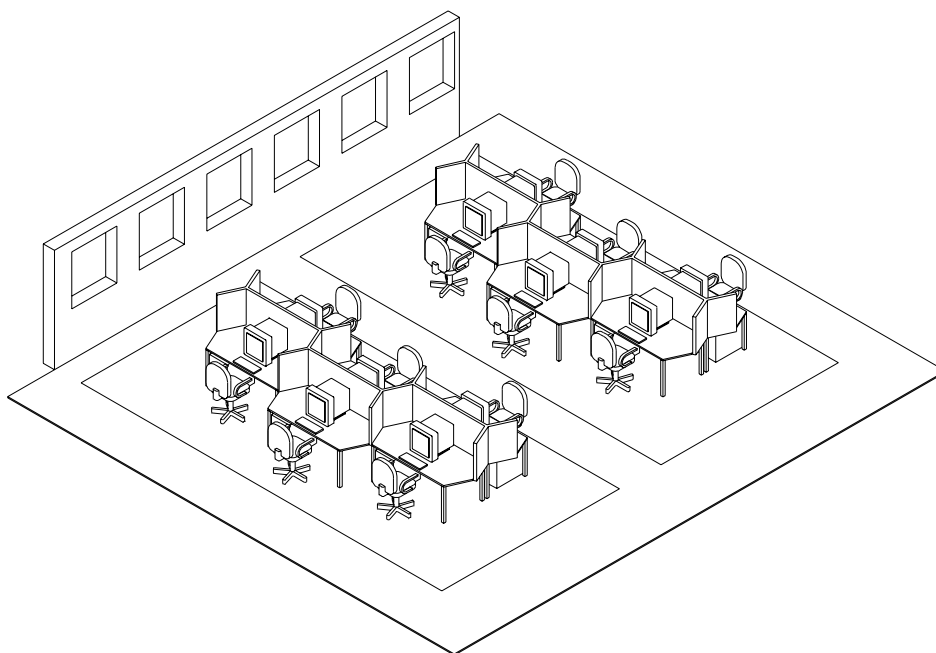


Figure 3: Linear offset arrangement

The linear offset arrangement of figure 3 offers:

- economic use of space;
- lighting which may conveniently be based on the table group;
- few problems due to dazzle from daylight;
- more informal layout;

- good sound attenuation;

and:

- reduced "cage" effect.

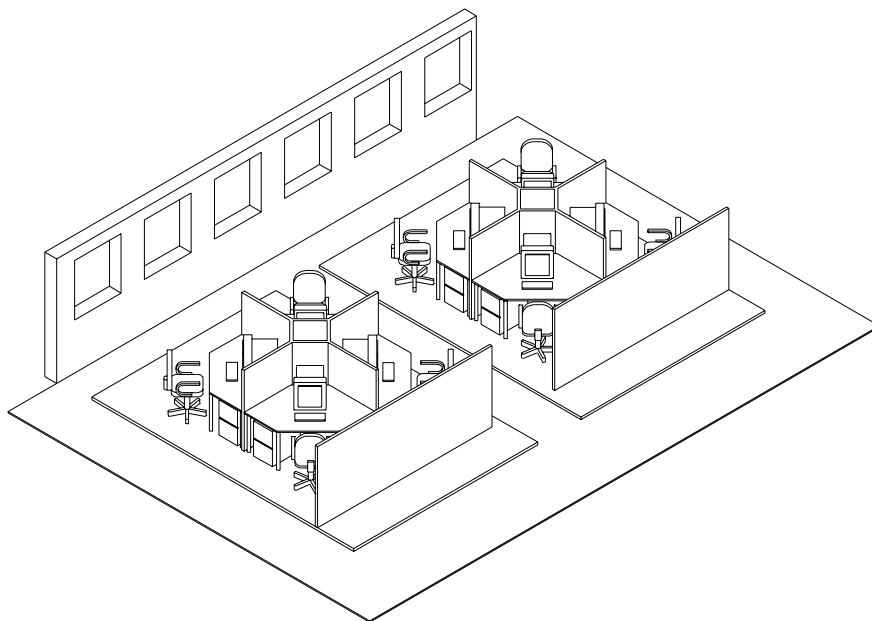


Figure 4: Ring arrangement

The ring arrangement shown on figure 4 gives:

- less economic use of space;
- lighting which may conveniently be based on the furniture group;
- problems with respect to dazzle from daylight;
- less formal appearance;
- a large working area which is suitable for deep VDUs;

but:

- effective sound absorption by screens is required because of the centrally directed speech of colleagues.

The three star arrangement shown in figure 5 offers:

- less economic use of room;
- lighting which may conveniently be based on the furniture group;
- problems of dazzle from daylight;
- less formal appearance;
- a subjective feeling of disturbance because of the centrally directed speech of colleagues;
- a large table area which is suitable for deep VDUs.

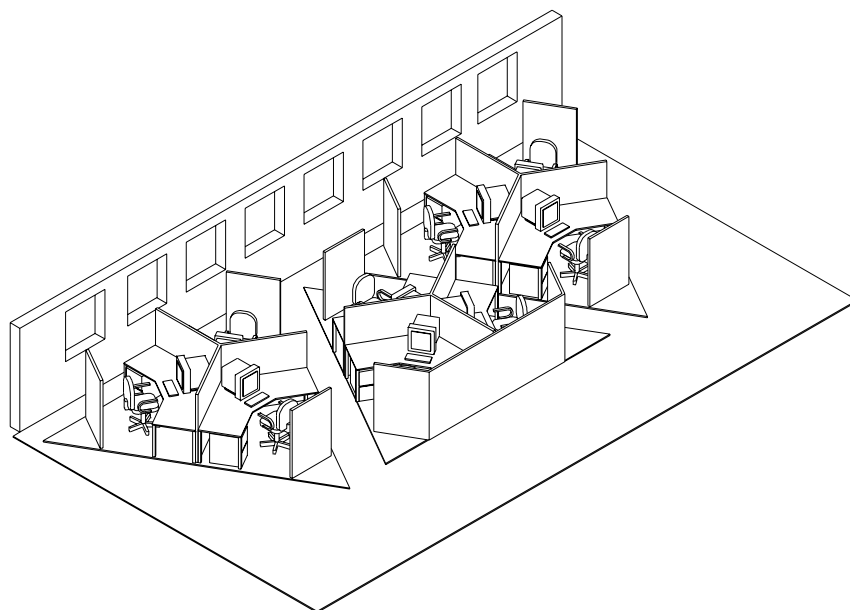


Figure 5: 3 star arrangement

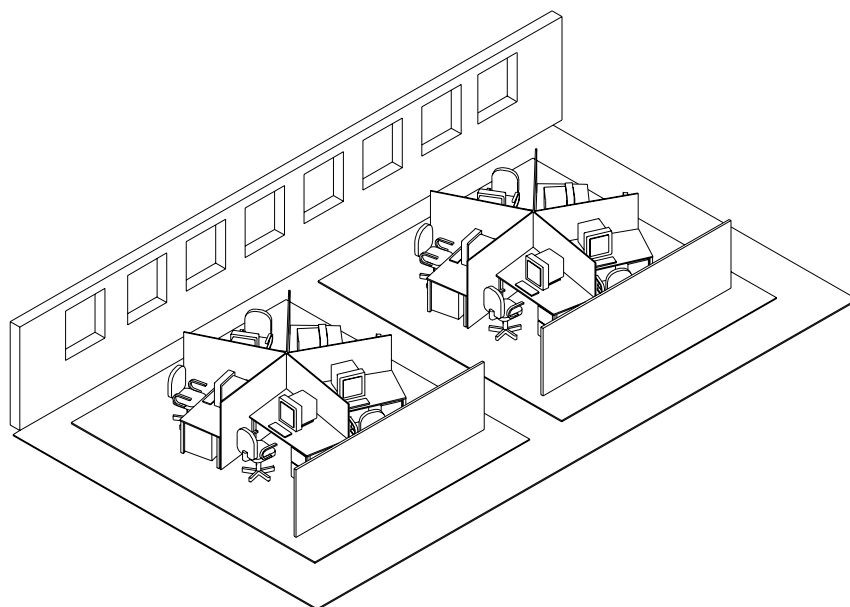


Figure 6: 5 star arrangement

With the 5 star arrangement of figure 6 there is:

- less economic use of room;
- lighting which may conveniently be based on the furniture group;
- problems of dazzle from daylight;
- less formal appearance;
- a subjective feeling of disturbance because of the centrally directed speech of colleagues.

Each layout configuration provides advantages and disadvantages for the utilization of space and for the working conditions and work organization for the call handlers. Generally call handlers prefer some grouping of the workstations rather than linear arrangements as it permits an easier interaction with other staff.

5.3 Space

As with a typical office, it is common practice to accommodate additional new staff by re-arranging the office. However, many call centres have rapidly expanding workforces, and managers should regularly review whether they are meeting regulations by accommodating new staff in this way or whether additional space is required.

Call centres should have enough free space to allow people to get to and from workstations and to move within the call centre with ease. The total volume of an empty area divided by the number of people normally working in it should be at least 11 cubic metres (ceilings higher than 3 m should be entered into calculations as 3 m). The workstation and basic storage facilities are included in this volume so, depending on the style and size of the workstation and storage facilities, additional space may be required to ensure there is sufficient space for the work activity to be undertaken without risking safety or health.

In many call centres, workers complain of the lack of secure storage space not only for personal items but also for work-related items and there are many reports of belongings going missing. Even though each desk should have all the necessary reference material and stationery, many call handlers like to make notes in the reference material. Where hot desking is used, they carry all these items with them when they hot-desk. They also carry stationery as the desk sets are often incomplete. The boxes, drawers or bags used to carry all these items can be so heavy that manual handling can become an issue, particularly when going up and down stairs. When there is inadequate space between or under desks, they become a trip hazard in the thoroughfares.

It is therefore good practice to provide individuals with sufficient lockable secure personal storage facilities.

Call centres should also ensure that some workplaces are accessible to people with poor mobility and those in wheelchairs.

5.4 24/7 operation

"24/7" is the work practice of having work being undertaken 24 hours per day, seven days per week. This is common in call centres and results in regular occupancy and layout changes. Hot desking is regularly used as a means to best utilize space. The cleaning regime for workstation equipment should be particularly strict if call handlers are required to hot-desk.

The environmental conditions control system should be designed to cope with the demands engendered by this level of occupancy. The distribution of the occupancy within the building can change dramatically depending on the shift, and the environmental conditions control system should be designed to make the appropriate adjustments or allow the occupants to make adjustments.

5.5 Hot desking

"Hot-desking" is the term used to signify the fact that a person does not have an allocated desk. They occupy the first free desk available when they turn up for work. As described in clause 5.3, hot desking leads to the problems of there potentially being no place for storing personal items and also for work-related items.

5.6 Air quality

5.6.1 Fresh air

Workplaces, including offices should be ventilated with either fresh air from outside or re-circulated air that has been adequately filtered and purified. This is to ensure that stale, contaminated, hot or humid air is removed, so workers do not suffer ill health effects such as tiredness, lethargy, headaches, dry or itchy skin and eye irritation. Adequate ventilation is particularly important in call centres, as the high concentration of employees and high level of occupation increase the risk of airborne pollutants and irritants. These, in turn, increase the risk of sickness absence, as bacteria and viruses can cause colds, and dust can irritate the throat and lungs which may contribute to voice problems or trigger asthma.

Air quality, along with temperature is always something that is difficult to get right, in that not all occupants will be satisfied. This is due to there being wide individual difference in what is felt to be the comfort zone.

5.6.2 Temperature

During working hours, the temperature in rooms containing workplaces must be adequate for human beings, having regard to the working methods being used and the physical demands placed on the workers [Workplace Directive].

The high concentration of employees and the high level of occupation also increase the risk of uncomfortably high temperatures. In addition, the computers which can be in use "24/7" also generate heat. If the temperature is dropped in unoccupied areas of call centres to save energy, the occupied areas are at risk of becoming too cold. This may be of particular concern on night shifts when a slightly warmer environment is likely to be required to compensate for the natural fall in body temperature. These factors must be properly controlled so an acceptable temperature is maintained.

A reasonable temperature for a call centre will be around 19°C.

Thermal comfort is a composite factor taking account of air temperature, relative humidity, air movement, number of people in the workplace, equipment and solar gain. The provision of fans or heaters can help alleviate localized problems.

Equipment belonging to workstations should not produce sufficient excess heat to cause discomfort to workers [4].

5.6.3 Humidity

The risk of low relative humidity is high in call centres. The greatest risk is from the large number of computers, which, as already stated, can be generating heat 24 hours a day, seven days a week, and this can dry the air to unacceptable levels. Low relative humidity can lead to dehydration which, in turn, can contribute to sore eyes, voice loss and headaches. Skin rashes may also appear. Unlike other physical stressors such as noise or temperature, people do not generally appreciate the impact of relative humidity on physical health and comfort so tend not to ascribe problems that they are experiencing to relative humidity levels.

Relative humidity for an office should be between 40 % and 70 % with the lower end being the most comfortable in warmer offices. Employees should be provided with information on the risks of low relative humidity and their potential effects on physical and mental well-being and how to reduce these risks.

5.6.4 Air movement

For mechanical ventilation systems, the recommended minimum fresh air flow is eight litres per second per person in no smoking areas, and air velocities should be around 0,1 m to 0,15 m per second and up to 0,25 m per second during the summer. Air flow velocity greater than 0,25 m to 0,35 m per second would be considered draughty. Call handlers should be provided with information on the potential risks of poor control of environmental conditions and should be trained to recognize the symptoms if these conditions arise.

5.7 Lighting

Lighting requirements may differ depending on whether call handlers are only operating DSE or whether they also have to consult and complete paperwork.

Generally there should be suitable and sufficient lighting to perform the tasks. Room lighting and individual lighting should ensure appropriate lighting conditions and an appropriate contrast between the screen and the background environment.

The lighting should be glare and reflection free. Most people prefer to be in an environment with some natural light, however, windows in call centres are covered by blinds to reduce glare. Glare and reflections on the screen can usually be avoided by careful positioning of equipment with respect to windows and luminous surfaces.

5.8 Noise

Noise levels in call centres are not generally caused by the equipment but by the fact that many conversations are taking place. It is essential that noise is monitored and noise absorption be incorporated into the workplace layout. Noise can be emitted by printers and cooling fans on equipment. Even though the level of this type of noise may be low, some individuals may find it distracting or irritating.

Special material, often in ceilings, can help to reduce the ambient noise levels in the call centre. Carpet, chairs with soft seats and padded screens between call handlers can also be effective noise absorbers if designed and fitted appropriately.

A maximum noise level of 55 dB is recommended for call centres. The noise level needs to be kept low so that operators do not have to turn the volume up in their headsets. White noise and background music are used in some call centres. The acceptability of these should be checked with the workers.

The layout of workstations in the office can affect the noise levels (see clause 5.2).

5.9 Radiation

The Display Screen Equipment Directive [4] requires that all radiation with the exception of the visible part of the electromagnetic spectrum shall be reduced to negligible levels from the point of view of the protection of workers' safety and health.

6 Work stations

6.1 Display screen equipment

6.1.1 EU directive

There is a European Directive specifically dealing with the use of display screen equipment.

Minimum Safety and health requirements for work with display screen equipment (Directive 90/270/EEC) 29 May 1990 [4]

This directive lays down the minimum safety and health requirements for work with display screen equipment. Under the directive employers are obliged to perform an analysis of workstations in order to evaluate the safety and health conditions to which they give rise for their workers, particularly as regards possible risks to eyesight, physical problems and problems of mental stress. Employers have to take appropriate measures to remedy the risks found.

The directive states that the employer is obliged to perform an analysis of workstations in order to evaluate the safety and health conditions; specifically looking at eyesight, physical problems and mental stress.

All workers need to be given information on all aspects of health and safety and trained in the use of the workstation.

The work of the operator must be such that daily work on the display screen is periodically interrupted by breaks or changes of activity.

Workers are entitled to appropriate eyesight tests and if necessary for the work special spectacles.

The main areas covered by the directive are as follows:

Equipment

- Covering Display screen, Keyboard, Work desk or work surface and Work chair.

Environment

- Covering Space requirements, Lighting, Reflections and glare, Noise, Heat, Radiation and Humidity.

Operator/Computer Interface

- Requiring that Software must be suitable for the task, Software must be easy to use, the Systems must provide feedback and that Systems must be paced to the operators needs.

Under these regulations, all operatives in a call centre are classed as DSE (Display Screen Equipment) users as they all use displays for a significant part of their work.

It follows then that company's need to conduct a risk assessment for all staff at regular intervals.

The risk assessment should be conducted in two parts, first of all with a DSE user's self-assessment checklist and secondly with a manager's workplace assessment checklist. Some companies designate and train individuals to become qualified risk assessors.

The individual's checklist should cover the following areas:

- Working posture
- Ability to read the screen
- Organization of work area
- Organization of the working day.

This will be completed after the user has received training and guidance on the use of the display screen equipment.

The manager/risk assessor's checklist should cover the following areas:

- Furniture and equipment.
- Visual environment.
- Acoustic and thermal environment.
- Software.

6.1.2 ISO 9241

ISO 9241 [11] deals with many aspects of display screen equipment.

ISO 9241 Ergonomic requirements for office work with visual display terminals (VDTs) [11]

This is a multipart International Standard targeted primarily at system designers but it can also be used by those responsible in organizations for the procurement of equipment. Although the title refers to requirements for office work, the application of the standard is not restricted to offices. It covers the following areas:

Part 1 General introduction

This part introduces the standard as a whole and provides an overview of the standard. It deals with text and data processing (not Computer Aided Design or process control tasks) and describes the basis of the user performance approach which details the important ergonomic factors and how to measure them.

An amendment deals particularly with the software parts of the standard and gives advice on their use.

Part 2 Guidance on task requirements

This part provides guidance on office task design in VDT based information processing systems relevant both to users and to designers of such systems.

The objectives of task design and the characteristics of well designed tasks are described and guidance is provided on how task requirements can be identified and specified.

Part 3 Visual display requirements

This part deals with the characteristics of a visual display which determine its effectiveness in presenting an image to the user. It specifies image quality requirements for the design and evaluation of VDTs. A user performance assessment method is provided in an annex which is replaced in amendment 1. Although it deals specifically with displays used in offices, it is appropriate to specify it for most applications which require general purpose displays to be used in an office-like environment.

Part 4 Keyboard requirements

This part specifies the ergonomics design characteristics of an alphanumeric keyboard which may be used comfortably, safely and efficiently to perform office tasks. It also specifies methods of conformance testing.

Part 5 Workstation layout and postural requirements

This part specifies the ergonomics requirements for a Visual Display Terminal workplace which will allow the user to adopt a comfortable and efficient posture.

Part 6 Environmental requirements

This part specifies the ergonomics requirements for the Visual Display Terminal working environment which will provide the user with comfortable, safe and productive working conditions. It takes into account lighting, the effects of noise and vibration, electrical and magnetic fields, static electricity, the thermal environment, space organization and the workplace layout.

Part 7 Display requirements with reflections

This part makes recommendations for image quality with the aim of making VDTs legible and comfortable in use. It specifies methods of measurement of glare and reflections from the surface of display screens, including those with surface treatments.

Part 8 Requirements for displayed colours

This part specifies the requirements for multi-colour displays which are largely in addition to the monochrome requirements in part 3. It is intended to be independent of display technology providing a lot of technical detail and test descriptions.

Part 9 Requirements for non-keyboard input devices

This part specifies the ergonomics requirements for non-keyboard input devices which may be used in conjunction with a visual display terminal. It covers such devices as the mouse, trackball and other pointing devices. It also includes performance test requirements. It does not address voice input.

Part 10 Dialogue principles

This part provides ergonomic principles in general terms for dialogue in visual display terminals. It deals with suitability for the task, suitability for learning, suitability for individualization, conformity with user expectations, self descriptiveness, controllability, and error tolerance by giving examples of applications.

Part 11 Usability statements

This part defines usability and explains how to identify what it is necessary to take into account when specifying or evaluating usability in terms of measures of user performance and satisfaction. Annexes provide guidance on specifying the context of use of the product and give examples of usability measures. It includes an example of how the usability of a product can be specified and evaluated.

Part 12 Presentation of information

This part contains specific recommendations for presenting and representing information on text-based and graphical user interfaces used for office tasks. It includes guidance on ways of representing complex information using alphanumeric and graphical/symbolic codes, screen layout, and design as well as the use of windows.

Part 13 User guidance

This part provides recommendations for the design and evaluation of user guidance attributes of software user interfaces including Prompts, Feedback, Status, On-line Help and Error Management.

Part 14 Menu dialogues

This part provides recommendations for the design of menus used in user-computer dialogues. The recommendations relate to dialogue, input and output and cover menu structure, navigation, option selection and execution, and menu presentation. Sample techniques and a checklist are given for assessing compliance.

Part 15 Command dialogues

This part provides recommendations for the design of command dialogues. It covers command language structure and syntax, command representations, input and output considerations, and feedback and help. Sample techniques and a checklist are given for assessing compliance.

Part 16 Direct manipulation dialogues

This part provides recommendations for the design of direct manipulation dialogues where the user acts directly on objects on the screen. It covers those aspects of Graphical User Interfaces which are directly manipulated, and not covered by other parts of ISO 9241 [11]. Sample techniques and a checklist are given for assessing compliance.

Part 17 Form filling dialogues

This part provides recommendations for the design of form filling dialogues. The recommendations cover form structure and output considerations, input considerations, and form navigation. Sample techniques and a checklist are given for assessing compliance.

6.2 Workstation adjustment

Call centre managers have the duty to provide their employees with adequate health and safety training, as required by the EU directive 90/270/EEC [4]. The planning and organization of this training should be done in consultation with call handlers or their representatives. As the majority of risks to call handlers' health arise from working with display screen equipment, a significant proportion of the training should focus on the risks identified during assessments of such risks. As a minimum, call handlers should know how to recognize these risks and the importance of good DSE working practices in reducing such risks to physical and psychological health. The responsibility that individuals have for controlling risks should be explained and call handlers should be trained how to minimize the risks themselves, but if they need help the procedures they should follow should also be made clear. This training does not absolve the employer of their responsibility to take appropriate steps to minimize and control any risks identified during the risk assessment process.

Call handlers should be trained on good posture and workstation layout in order to achieve good posture. It is essential that call handlers know that they should check that their workplace is set up for themselves at the beginning of a day's work as another person may have been sitting at their workplace. This is very common where 24/7 operation is in existence and "hot desking" is employed.

One means of achieving this is to have a reminder to set up the workstation, on the log-on screen of the computer each time a call handler "logs on". A short checklist could be displayed on screen to prompt them to make appropriate adjustments to any of their workstation equipment as required. Sufficient time needs to be allowed to make these adjustments before they start work. Call handlers should also be trained how to use new furniture, particularly adjustments to chairs. It should not be assumed that the adjustments are obvious, and the introduction of new furniture is a good juncture to refresh call handlers' training on equipment set-up in general.

Proprietary interactive software is also available which can be used to guide a call handler through a simple training exercise on the importance of workplace design, together with an interactive self-assessment program for their own workstation. The results may be recorded and used for upgrading or planning of improvements to the workstations generally.

The technology and software used by the call centre industry is fast developing, and call handlers or their representatives should be consulted on the health and safety consequences of the introduction of new technology. Call handlers should be trained to use any new technology and software even if there are only relatively subtle changes.

6.3 Headset

6.3.1 Noise cancelling microphones

Headset manufacturers recommend the use of noise-cancelling microphones in environments in which the background noise levels are high. The noise levels in typical call centres do not justify the use of such microphones, which can cause problems of variable speech output levels as they are critically dependent on microphone position. A UK study recorded a mean background noise level of 62 dB(A). Unless background noise levels are of the order of 65 dB(A) to 70 dB(A), noise-cancelling microphones are of little benefit and conventional voice tubes or boom microphones are adequate.

6.3.2 Microphone positioning

There is an optimal position for a microphone in front of a call handler's mouth to avoid excessive speech levels for the caller and excessive sidetone (voice feedback) for the call handler. It is, therefore, essential for call handlers to be trained to position microphones correctly and avoid compromising the microphone's effectiveness. Callers may become frustrated if they cannot hear call handlers clearly, and there is a risk that call handlers may start to strain their voices in order to be heard.

6.3.3 Volume control

To limit call handlers' daily personal noise exposure, headsets, amplifiers and/or turrets should be fitted with volume controls and call handlers should be trained how to use them. There is a risk that call handlers will turn the volume up in order to hear a quiet caller but forget to turn it down for the next caller even if that caller speaks at a higher level. Call handlers may then get used to listening to callers at higher levels than is really necessary.

It is recommended that systems return the call handler's listening level to a default setting after each call. An on-screen reminder at the start of each new call could alternatively be used to prompt call handlers to assess the level and adjust the volume if necessary. At some call centres one of the keys on the call handlers' keyboards (specially marked) reduces headset volume immediately to minimum when pressed. Such a key can provide a very quick method for call handlers to reduce sudden high headset noise levels.

6.3.4 Headset type

There is little difference in the impact on hearing depending on whether the headset has two ear-pieces or only one. Some people feel it is easier to concentrate wearing binaural headsets, but others feel isolated and prefer monaural models. It is good practice to give call handlers the choice of either. The fit of many headsets can be affected by the wearing of glasses and so it is important that different models of headset should be available to suit the choice of the individual user.

6.3.5 Headset hygiene

As call handlers wear a headset throughout their shift every shift, it is important that it is fully adjustable to ensure a comfortable fit. This is particularly important if the ear pieces sit at the entrance to the ear canal rather than resting on the outside. Prompts about adjusting display screen equipment when call handlers log on at the start of their shift should include a reminder to adjust headsets to make them comfortable.

Headsets should be checked regularly and repaired or replaced immediately if necessary. There may be an increased risk of ear irritation and infection because headsets are worn so intensively. To reduce this risk, staff should be trained in headset hygiene and given the time and the materials to complete a hygiene programme. The issue of headsets to individuals is strongly recommended. If the sharing from a pool of headsets is unavoidable, then each call handler should be issued with their own personal foam ear pads and voice tubes.

Spare headsets should always be available so that call handlers who have forgotten or lost theirs, or worn them out, do not endure a shift with hard ear pieces and an incomplete headset.

Voice tubes can become blocked with food, make-up and dust, and this compromises the effectiveness of microphones. Call handlers should be trained how to clean the voice tubes in order to optimize the volume of the transmitted signals and avoid the risk of frustrated callers and strained voices.

6.4 Specialist equipment

6.4.1 Equipment for PSN operators

Many countries have implemented legislation requiring employers to give equal opportunities to people with disabilities. Such legislation will normally limit the special provision of facilities by terms such as "reasonable" but will nevertheless probably impact on workplace design by requiring suitable access for workers in wheelchairs, both to their workplace and to other facilities such as toilets. Whilst some hearing impaired workers may find the normally provided range of volume control sufficient, others may require the provision of headsets with inductive coupling facilities capable of meeting the requirements of ETS 300 381 [9].

Some operators with impaired vision may benefit from the ability to change the colours or contrast of the on-screen information. A successful call centre in Poland which employs only blind and highly visually impaired operators provides two headphone audio channels, one for the conversation with the caller, the other for reading the screen.

6.4.2 Textphone facilities for deaf people

Some callers may be so hearing impaired as to be unable to communicate without the use of a textphone. Where possible, provision should be made for accepting incoming calls from a textphone by means of a textphone fully compliant with the requirements of ITU-T Recommendation V.18 [14].

Where this is not possible, operators must be made familiar with the characteristics of calls from relay services and be made aware of the delays that might occur when conversation is transcribed to and from text.

Some customers may need to be accessed through relay services. Operators should be made familiar with the necessary procedures. Where possible, to avoid the use of relay services, provision should be made to make outgoing calls with a textphone fully compliant with the requirements of ITU-T Recommendation V.18 [14].

6.4.3 Workplaces for partially sighted people

The ergonomic requirements of blind and visually impaired persons are different from those of "average" video display terminal users. Some of the workplaces need to be adapted to the specific needs of the user. Every person with a disability has to be treated as a special case [18]. The following are examples of adaptations needed to the workplace for a large print user and a Braille user.

6.4.3.1 Large print user

A workplace should include a computer equipped with an appropriate (generally larger) monitor, large print software to magnify the screen contents, possibly a range of optical magnifiers and/or a video magnifying aid (CCTV). If lots of printed documents have to be handled, a scanner with optical character recognition software, a personal printer for (magnified) printouts and a headset is necessary for the workplace.

Additional desks are needed for the additional devices, chairs and desks should be chosen carefully. Not all of them give a visually impaired person the freedom to sit in a position very close to (i.e. within a few inches) the monitor. Special monitor stands can deal with this problem.

Some visually impaired computer users prefer inverted display colour schemes and most of these individuals do not notice flickering. There should be independent switchable light sources for the user.

6.4.3.2 Braille user

A workplace for a Braille user has to include a computer, a Braille display, speech output, a scanner for printed material and a tactile printer for Braille print. An additional acoustically isolated printer housing is recommended, since these printers produce noise during printing. Usually a standard monitor is included, for service purposes and additional desks for the equipment will be required.

Computer Braille readers usually place their keyboard on the Braille display. From an ergonomic point of view this increases the risk of injuries (such as RSI). Special furniture can solve this problem. If a speech output device is used exclusively for adapted access, measures should be taken to protect the workplace from the background noise of other workplaces.

Blind and visually handicapped people need more time for orientation and navigation. In addition, Braille readers use their fingers both for typing and reading, which can lead to time lags. Therefore these operators should not be placed under time constraints to handle calls. Sometimes due to the large number of adaptations needed, operators are allowed to work from home, with calls being routed to them from the call centre.

7 Work organization

7.1 General aspects of work organization

One of the fundamental principles of human factors is that work needs to be within the capability of an employee, it should also be intellectually stimulating and be satisfying and rewarding. Work needs to be organized in a way that allows for proper identification and definition of things for people to do. These should be organized to structure different jobs and tasks covering the whole range of duties, functions and operations to be carried out in a call centre between the number of people who work there. Jobs and tasks should be organized in such a manner as to make full use of the ability of job holders, provide job satisfaction and allow access to facilities which ensure proper career progression. The management structure and hierarchy needs to be transparent with a clear indication of where responsibility lies for different parts of the job and easy access for call handlers to discuss complaints and suggest improvements.

7.2 Job design

7.2.1 General

Job design includes attention to such factors as task variety, degree of control over the pace of work and individual workload, and the degree of role ambiguity. The benefits of well designed jobs include less work-related stress, better relations with colleagues, a feeling of being in control of one's work, a reduction in feelings of frustration, more variety and greater opportunity for learning and career development. Such factors are collectively referred to as job design. Clause 8.3 discusses good practices which could improve the job design of call handling and so could reduce the risk of call handlers suffering work-related stress.

Call handlers should be provided with information about the potential risks from poor job design to physical health and psychological well-being and how their employer is controlling those risks. The introduction of any changes to job design which may substantially affect call handlers' health and safety should be done in consultation with call handlers or their representatives in good time.

Particularly when introducing new roles or reviewing the tasks of existing roles, call centre managers should consider the various elements of job and task design to take into account new technology, or changing profiles for staff recruitment. Aspects such as age and sex discrimination should be carefully examined to ensure that no bias or shift in employment status is introduced, and existing staff is not disadvantaged in respect of promotion or skill development.

Jobs, composed of a number of tasks should:

- combine a variety of tasks resulting in a coherent whole;
- constitute a significant contribution to the whole function of the organization which is understood by the job holder;
- provide opportunity for problem solving;
- provide opportunity for learning and development;
- provide a reasonable degree of challenge;
- have clear objectives;
- allow for a degree of discretion and decision-making by the job holder.

7.2.2 Tasks

A structured task analysis should have been carried out as part of the job design process. This is important, especially before start-up and when introducing new technologies or revised working arrangements. It should be an essential adjunct to setting up recruitment and training requirements and for identification of job aids and support.

Every task should be differentiated into internal (operator skills and training) and external components to allow suitable skills to be developed and support to be devised and implemented taking into account where necessary any impairments or disabilities of individual operators. Feedback from operators and customers alike will play a critical role in ongoing appraisal and development of operator skills. External requirements such as the provision of detailed manuals and "how to" guides in relation to every part of a service or product, and the service being provided by the call centre itself all need careful consideration and continuous review and appraisal.

7.2.3 Careers

It should be possible for an employee to perceive a career path in their employment, with clear opportunities for improvement of knowledge and skills, leading to effective promotion to more responsible and critical jobs within the organization. Jobs should be flexibly structured to give some possibility to gain recognized qualifications and improve any special skills. For example, an operator who is particularly good at dealing with customers could be given "key" operator status and placed on call to cover for unexpected absences or deal with especially difficult problems or clients. Call handlers should be encouraged to pursue suitable courses leading to recognized qualifications (see clause 8.1.1).

7.3 Targets and rewards

7.3.1 Targets

Targets are often set for each statistic that call handlers are required to achieve. For example, some companies aim for their call handlers to be on the telephone for as much as 80 % of their shift, despite some industry specialists arguing that 60 % to 70 % utilization is optimal. Call duration in some call centres should be no longer than 2 minutes 15 s but others are shorter than this; and "wrap up" (the time after a call to complete the business in connection with that call) should be as fast as possible. The longer callers have to wait before speaking to a call handler, the higher the probability that they abandon the call before doing so and not give their custom to the company. Companies, therefore, aim for as short a wait as possible and to answer as many calls as possible to keep their abandonment rate low. Many call centres have an overhead display showing the number of calls waiting and the longest time waited.

Participants taking part in a UK study highlighted targets as a major source of stress in their written comments. Many were seen as unrealistic, and were often set, and frequently changed, without explanation. Call handlers said that this put them under pressure, as the targets did not allow for difficult calls taking longer. Neither did they allow for system crashes or quiet periods.

Call handlers also felt that whether they achieved their qualitative performance targets was too strongly influenced by the personal opinion and judgement of team leaders rather than based on more objective criteria, and that team leaders did not necessarily have personal experience of handling calls. Consequently, marks were inconsistent, particularly between team leaders, and this increased the rivalry between members of the same team and also between different teams. Call handlers highlighted a constant tension between meeting targets and the penalties that missed targets had on performance-related pay and bonuses, whilst also trying to give good customer service within the allocated time.

7.3.2 Rewards, payment by results

One of the fundamental principles of job design is that work should be rewarding, both mentally, but also by remuneration. Stimulation and challenge should be provided in the basic elements of job design, as discussed in clause 7.2. Rates of pay may follow market forces, but many call centres are also set up as a matter of policy in areas of high unemployment of where a pool of potential employees may be available eager for work.

Call centres operated by utilities are often set up "in-house", and are staffed and run by company employees who enjoy the same conditions and benefits as other workers in the organization (which may also be protected by national or company agreements with labour organizations). Many other, including those set up by local authorities, are outsourced or being run by private contractors. Pay and conditions will vary across a country or region, and may well be less favourable in non-unionized centres. The need to offer a round the clock service to customers has led in some cases to abolition of overtime or shift payments at the same time as an extension of hours outside the traditional basic working week. However, geographical concentration of call centres may engender competition for staff and maintain higher levels of pay.

7.3.3 Consultation with employees

Depending on whether or not there are recognized trade unions in the workplace, consultation can be through union safety representatives, through elected "representatives of employee safety", or with the employee directly. Details of these various arrangements are given below. All representatives must be provided with paid time off to carry out their duties and to undertake appropriate training. They must also be given adequate facilities on site.

Directive 89/391 [2] requires employers to consult workers and/or their safety representatives on:

- health and safety issues;
- the appointment of safety representatives;
- the health and safety assessment of the workplace;
- the provision of information to workers from outside;
- the enlistment of outside experts;
- the planning and organization of safety training.

Such consultation can be with the employees directly or through elected safety representatives.

When employers consult directly with employees, employers should provide employees with sufficient information to enable the employees to participate fully in discussions. The information provided must take into consideration the employees' level of knowledge.

In addition workers must receive health and safety training on recruitment and in the event of a transfer or change of job or the introduction of new equipment or new technology.

7.4 Management

Management needs to be fairly balanced between the needs of the organization and its targets (economic, efficiency and reputation) and the needs of the employees to work in a stable, stress-free and rewarding environment. Managers need to be skilled in the execution of all tasks and have at least a minimum understanding of the demands that changing circumstances may make on their operators. Aspects of the job, such as Automatic Call Distribution (ACD) and Electronic Performance Monitoring (EPM) need to be explained and their working made transparent to the workforce.

7.5 Monitoring

7.5.1 General considerations

Although the productivity of typical office workers is measured, it is often in fairly gross and subjective terms such as all the enquiries needing a response have been answered or all the related paperwork has been completed.

In comparison, the productivity, both quantity and quality, of call handlers is assessed in a more objective manner by Electronic Performance Monitoring (EPM). By this means it is possible to produce statistics concerning every aspect of a call handler's job, both at an individual and at a group level. It is an almost universal working practice in call centres. Monitoring is used as a basis for training, improving customer service and determining performance-related pay.

Relatively few workplace studies have examined the effects of long-term EPM on the physical or mental health of employees, but monitored employees have reported higher levels of stress than unmonitored employees. However, the relationship between EPM and stress is not straightforward. Some argue that being monitored threatens privacy, increases the pressure on productivity and is an inherently negative and, therefore, stressful experience. Others argue that the stress does not arise from monitoring per se but from poor job design (see clause 7.2) which is commonly associated with electronically monitored tasks. Call handlers may also be under additional stress, as, invariably, EPM assesses whether predetermined targets have been reached. If targets are consistently too high, call handlers will consistently receive negative feedback about not achieving productivity demands, and this may become stressful.

EPM does, however, have potential benefits. Feedback is acknowledged as a positive element of job design, and EPM is a means of collecting more objective information about a call handler's productivity on which to base feedback. EPM enables call handlers to improve their performance as poor performance is identified, but it also highlights good performance. For these benefits to be reaped though, it is essential for team leaders to be trained how to give feedback in a constructive rather than punitive manner, particularly if targets have not been achieved.

A supportive line manager has been shown to be associated with lower levels of stress in a monitored workplace. The relationship between call handlers and team leaders will obviously influence how feedback is both given and received, but training should enable team leaders to be more objective in their assessments and the style of their feedback. Practical arrangements are also important: feedback should be given one-to-one in private.

Quantitative monitoring

Often referred to as "stats" by those in the industry, quantitative monitoring is the minute-by-minute collection of quantitative data automatically by computer. This includes: the percentage of a specified period that a call handler is on the telephone, the average duration of a call handler's calls and the average time spent in "wrap up" after a call. The length of time call handlers are logged off on breaks is also recorded. The data yielded is analysed to provide statistical information for individual call handlers, for teams and also for the call centre as a whole.

Other data monitored for the call centre as a whole includes the average length of time a caller has to wait before he or she is put through to a call handler; and the abandonment rate, i.e. the number of callers who ring off before they are put through to a call handler. Some of this information may be presented "real-time" on large display screens for all in the call centre to see.

Qualitative monitoring

In this case, performance is assessed by team leaders who listen to call handlers on the telephone both in real time and also from recordings. This type of monitoring is done to check that call handlers are giving customers correct information, as there are legal implications if information is incorrect. Team leaders also assess whether call handlers have achieved a variety of criteria including whether the call handler follows the script closely, listens to the caller, speaks appropriately, uses their knowledge of the products effectively, and exploits sales opportunities. This type of data may also be used as a basis for improving or changing training methods, and as a means of assessing changing demands from callers.

7.5.2 Legal requirements and recommendations

Workers should be kept informed about the introduction and operation of performance monitoring facilities, including any proposed changes in the monitoring system or targets. Call handlers or their representatives should also be consulted about EPM, as it may affect call handlers' health and safety. The setting of targets should be included in this consultation process, and call handlers should clearly understand that targets take into account time for breaks.

Call handlers appear to make few comments about quantitative monitoring, but many specific comments about qualitative monitoring. Call handlers felt that the relatively small number of calls that were monitored, particularly if they presented difficulties, gave their team leaders very distorted impressions of their ability to handle a very diverse range of calls under pressure over an extended period. Many also felt their performance could be detrimentally affected as they found eavesdropping in real time disconcerting. For both quantitative and qualitative monitoring, call handlers wanted management to explain what monitoring they were doing, why they were doing it and how it affected them.

It is recommended that call handlers be given a mechanism for commenting on EPM and that any resultant comments be responded to. A clear set of criteria should be introduced against which qualitative monitoring is marked and team leaders should be trained so that they are consistent.

7.6 Feedback

7.6.1 General

Feedback is an essential part of any development process. In the call centre environment it can be external, from customers/callers about the quality of service offered, or internal, from call centre operators/agents, about customers, software or hardware problems or other aspects of the work, such as shift times, monitoring, work pacing or workload or environment. All such data is valuable for correcting faults and improving service quality.

7.6.2 Feedback from callers

Callers (or called parties) may raise a variety of topics, including complaints about service or individual call centre agents, quality of service help received, or may be complimentary. Service complaints might be concerned with waiting time, before or after a call is initiated. Other complaints might include call handlers approach to or attitude to customers. In all cases some feedback need to be provided to call handlers with appropriate praise or rebuke when information/instruction should be provided about how to improve individual performance in this respect. With repeated complaints about individual call handlers a policy needs to be in place regarding retraining, or even change of job within the call centre. Feedback may also be a factor in determining rewards, on an individual or group basis.

7.6.3 Feedback from supervisors

Information collected from electronic, quantitative or qualitative performance monitoring is fed back to call handlers by team leaders. This can either be immediate if the team leader has been actively listening to a call or later in a one-to-one session.

It is good practice to introduce a clear set of criteria against which qualitative monitoring is marked and to train team leaders so they are consistent. Team leaders should be given adequate time to provide feedback.

7.6.4 Feedback from call handlers

Some call handlers see feedback as a useful means of maintaining standards and quality and achieving consistency, as well as improving customer service. Call handlers like to know if they are reaching their target and it is also acknowledged that training requirements could be identified during feedback. For the majority of those who had made written comments, though, feedback on their performance was a source of stress. Some had feedback too often whilst others felt they did not receive it often enough. Many felt the depth of the feedback discussions was too variable, and team leaders focussed too much on relatively minor discrepancies and did not give enough praise.

It is good practice to give call handlers a mechanism for commenting on EPM and any resultant comments be should be responded to. Call handlers should be consulted about how often they would like feedback and such feedback should be given in a consistent manner.

7.7 Hot desking

Hot desking is a fairly common practice in many call centres. Some call handlers may sit at any workstation within their team area, and different shifts may also use the same team area. Sometimes, whole teams move to another area in a call centre. Other call handlers sit anywhere in a call centre, not necessarily with their team. As a result of this tidiness and hygiene at the workplace are essential.

Having disinfectant wipes available so call handlers can clean their keyboards or other workstation equipment as required may make hot desking more acceptable. Individuals like to personalize their workplace, this is more difficult with hot desking.

Hot-desking has some advantages for employees who enjoy the change of scene and mixing with other call handlers rather than having to sit at the same desk all the time and only knowing other members of their team. In general, however, hot-desking is not a popular working practice. Frustration is often expressed about not having an allocated workstation but having to find the correct one for a shift and then having to make all the appropriate adjustments and arrangements for their personal support items. Some respondents to a UK survey would also prefer to remain with their team members rather than being scattered throughout the call centre. They felt that they did not belong and that hot-desking was depersonalizing.

7.8 Shift work

Typical office work may sometimes require employees to work different shifts rather than a fixed number of hours per working day - even when working flexitime. In call centres it is common practice to operate in shifts, in some cases with constantly changing shift patterns, especially when operating 24/7 hours. Employees working night shifts, or shifts that start or finish very late early are especially vulnerable, and consideration should be given to the risks that employees shift working may incur. There are many reported incidents that call handlers and/or their colleagues had experienced when returning home from work at night. Part-time workers who may be arriving or leaving singly between shift breaks are also especially at risk.

The following are some important considerations:

Refreshments

Canteens and local shops are usually closed at night, and it may be too dangerous to go out for something to eat. Careful consideration must, therefore, be given to providing adequate refreshments for nightshift call handlers. These workers are more likely to be suffering from dietary problems as working irregular and unsocial hours means they are more likely to have irregular meal times and snack. They could suffer acute ill-health effects such as headaches, migraines, and gastro-intestinal (stomach) problems as a result.

Safety and first aid

Most occupational health departments and health and safety representatives work regular hours. As it is a legal requirement to have first aid cover at all times whilst work is in progress, special provision may be needed to ensure first aid cover is adequate for nightshifts.

Although a large percentage of call handlers are female, the safety of male staff should also be protected. Call handlers of both sexes should understand the risks associated with working nights and the procedures they should follow to reduce these risks. These points should be summarized in written information for future reference. Call handlers should also be aware that they are entitled to a medical assessment to ensure they are fit to undertake night work. The introduction of any changes to shifts which may substantially affect call handlers' health and safety should be done in consultation with call handlers or their representatives in good time.

Physical attack

The risk of violence must be assessed. Call handlers working shifts in "24/7" call centres are particularly vulnerable from physical attack when leaving or arriving very late at night or very early in the morning. Public transport may not be available at these times, and call handlers may have to walk instead which may expose them to greater risk.

It is recommended that advice should be provided on how to integrate working shifts with home life, which covering in particular, eating properly and how to promote good sleep during the day.

It is important to ensure that car parks are well lit and consideration should be given to employing a security person to patrol car parks or installing closed circuit television to increase security. Car sharing should be encouraged so that public transport does not need to be used late at night.

Where appropriate, bus timetables should be available so that employees can wait in the call centre rather than on the street if they miss the bus they had intended to catch. Where buses are not available arrangements should be made for taxis to collect staff at the call centre rather than leave staff to catch them on the street.

7.9 Partnerships

Union-employer partnership agreements have been negotiated at some call centres, which have successfully been able to resolve pay and grading issues, flexibility in working patterns and a number of equal opportunity cases.

7.10 Group working

While there are obvious and clear benefits of organizing call centre work in group structures, there are many cases in which call handlers are organized in loose groups only or are even assigned to work places on an ad-hoc basis.

Nevertheless, for the following reasons call handlers should be organized in stable groups:

- Group working facilitates the assignment of call handlers to special products or activities such as technical support, invoicing, or order handling and allows the covering of particular customers by a limited number of call handlers.
- If organized in groups, call handlers can exchange experiences (e.g. regarding certain problem customers or new products) more easily.
- Call handlers in groups share the benefits of informal communications. Informal communication is the unplanned and spontaneous exchange of information, e.g. during breaks, and has been identified as being beneficial for the exchange of information within organizations. The quality and frequency of informal communication is being increased if call handlers know each other because they work on the same team.
- Call handlers working in groups may receive a feeling of social context that is otherwise difficult to achieve in a background of part-time and shift-oriented work. They can also swap shifts more easily if they work within a stable group.
- Group working encourages the growth of a team spirit which can increase productivity as members support one another.
- Having call handlers organized in stable groups may also facilitate the initial and ongoing training measures (see clause 8.1).
- Supervisors may find it easier to provide feedback to agents working in stable groups (see clause 7.6).
- Stable groups provide some level of continuity in a climate of fast changing employment, they facilitate the handing over of experience and information.

7.11 Breaks

Breaks are subject to regulation under the Display Screen Directive (DSD). This EU legislation specifies that DSE users have the right to regular breaks or changes in activity away from the screen. Proper, paid breaks away from the work area should be made available for all call centre operators.

Apart from more general advantages of breaks, call handlers are particularly at risk from focussing at fixed distances for extended periods, which can cause eyestrain and headaches, aggravated by working under pressure. The risk of dulled hearing and tinnitus may also be reduced by giving the ears a break from headsets; similarly, the risk of voice loss or sore throat may be reduced by giving a break from talking to callers.

Call handlers should be trained to stretch and change position both during breaks and when at their workstation, when a few simple exercises may help to relieve muscle tension. Training should also be given in simple eye exercises and the importance of maintaining a normal blink rate during working.

Breaks should be possible in a defined rest area where a suitable environment may be created for peaceful relaxation.

Where refreshment facilities are provided they should always cater for groups of employees who may have differing dietary requirements for cultural or religious reasons. A main hot meal should be available as often it is the only hot meal available to an employee and its absence can be a contributor to work related stress.

8 Operator issues

8.1 Selection and training

Call centre work is intensive and requires a good knowledge of a company and its procedures, how computer systems work and how to deal with customers. Call centre operators should be recruited and selected from applicants with at least one of these attributes and likely to respond to further training in other skills. Training is therefore essential to ensure that call centre staff have the basic skills to do the job. The requirements for the job and tasks will dictate the level at which recruitment and selection for training can take place. Call centres currently employ approximately 70 % female workers, and many are young people, but these are not adequate selection criteria alone and discrimination on these or a number of other grounds is expressly forbidden under the provisions of national and European legislation.

Call handlers need to have basic training in the use of the telephone, as well as computer and some administrative skills. They also need to have service specific and product specific training appropriate to the type of centre. Operators in some call centres may need a much higher level of knowledge or an appropriate national qualification. Call handlers in local government call centres may, for example, need detailed knowledge of regulations and entitlement in some complex areas, such as housing benefit. Training must be comprehensive, and take place on induction and be ongoing. It should include development of skills required both for promotion or transfer to other jobs or as a result of changing technology.

It is also the duty of call centre managers to provide their employees with adequate health and safety training as required under any legislation currently in force.

8.1.1 Qualifications

Since 2001 it has been possible for universities and training institutions to apply for accreditation to deliver European diplomas or certificates in direct and interactive marketing. Courses contributing to such awards include a minimum of 120 hours study for a certificate and 330 hours for a diploma. Specific call centre training courses have become available based on the needs of local employers. A CEN Workshop agreement [1] is in place which covers some of the specific elements required by call handlers in their work.

Call handlers who wish to obtain recognized qualifications or who may have become specialized in some way need to have a promotional path available, e.g. to a more supervisory position.

8.1.2 Upselling

"Upselling" is the practice of offering a product or service to a customer in an inbound call situation, e.g. a customer calls the call centre because he is facing difficulties with a product he recently purchased and while his problems are being dealt with, he is offered to purchase further products or services such as extensions or updates. Upselling is increasingly becoming common practice and is often performed in such a way as to give the customer the impression of being offered a very special deal.

Leaving out the question of the ethical justification of upselling, the following recommendations can be made to the benefit of both the call handler and the customer:

- Upselling should be introduced on a voluntary basis. This is because not every call handler who is a good customer-care agent is a good sales person.
- It should be introduced with additional incentives based on performance and not on a priori targets (see 7.3).
- Special training has to be provided for upselling.
- Excellent knowledge of the products/services to be sold is required by the call handler who has to be able to show the benefits of the product/service offered in comparison to the customer's current solution.
- A clear "No, I am not interested" from the customer should be accepted by the call handler.

8.1.3 Supervision

The role of supervisors may include a requirement for monitoring some calls or call handlers to provide backup and to allow feedback to the operator on performance. On occasion they may need to take over abusive or persistent difficult callers. Supervisors also help to interpret statistics and explain how performance related benefits may be allocated, either individually or for a group.

8.1.4 People with special needs and foreign callers

Call centres should have routines to allow calls from callers identified as having special needs to be dealt with in a sympathetic manner. This may be done by transfer of the call to a specially trained and suitably equipped operator. Future technological developments may recognize these needs and perform the transfer automatically.

In the case of callers who cannot speak the language, such transfer should be to a linguist and be accompanied by a special "comfort" announcement. In some cases, where a high percentage of callers may be in this category, recorded announcements and stored-voice dialogues may need to be in more than one language.

8.1.5 Code of practice

In the UK, a Standard for Best Practice has been produced for the members of its Call Centre Association, which includes recommendations on the following areas:

- employee training and development;
- employee-management communication;
- culture;
- service performance and organizational efficiency.

8.2 Health issues

8.2.1 Hearing

In a study conducted to establish whether there is a noise hazard associated with the call centre industry, the noise exposure of call handlers was assessed at a number call centres from a range of different sectors within the industry. Background noise levels were measured using dosimeters. Noise levels generated by headsets were measured at the eardrum position of a manikin and appropriate corrections made. The results indicate that the risk of hearing damage from using a headset is extremely low. Although call handlers may occasionally experience high noise levels, these are usually of very short duration. Consequently, even taking these events into consideration, call handlers' overall daily personal noise exposure is unlikely to exceed the 85 dB(A) generally accepted action level.

The risk of injury caused by acoustic shock, defined [13] as "any temporary or permanent disturbance of the functioning of the ear, or of the nervous system, which may be caused to the user of a telephone earphone by a sudden sharp rise in the acoustic pressure produced by it, is deemed to be a safety matter, and as such is outside the scope of the present document. There is some evidence that the susceptibility to injury from some types of shock may be in some way related to stress [22]. Clause 8.3 gives some advice on stress reduction, and call handlers should be encouraged to report to management exposure to all acoustic shock incidents or any other abnormally loud noises. Management should make a record of these reported events.

It is good practice for employers to conduct hearing tests on induction and at regular intervals thereafter, especially for employees whose daily personal noise exposure is likely to be high. Employees should be encouraged to report immediately exposure to any acoustic incident that results in physical damage. Management should implement a policy so that the details of these incidents are recorded, and that employees are examined by an appropriate expert to investigate the extent of any physical damage (this may include a hearing check).

8.2.2 Eyesight

8.2.2.1 General

Although intensive use of Visual Display Units (VDUs) can cause temporary effects on vision, there is no convincing scientific evidence to support the widely held belief that using VDUs causes long-term eyesight damage. Permanent deterioration of an operator's eyesight can usually be explained by normal aging effects. Because of the intensive use of VDUs, any existing but previously undetected and, therefore, uncorrected eyesight deficiencies are more likely to become apparent, often in the form of headaches etc. This risk can be reduced by offering eyesight tests at induction and at regular intervals thereafter and providing spectacles if they are necessary for working with a VDU.

Employers are required to provide eyesight tests [4] if an employee experiences difficulties which may be due to DSE work. This right and the procedure for requesting a test should be clearly explained to call handlers at induction training. New recruits should also be made aware that they can request an eye test before they start work. Induction and refresher training on DSE should also cover the risks from low blink rates and techniques for maintaining normal rates as well as information on the risk of visual fatigue and how call handlers can avoid it.

All employees should be made aware that their employer is obliged to pay for "special corrective appliances" (these are usually spectacles) if an eyesight test indicates these are required for VDU work only. If an employee already wears corrective appliances, but an eyesight test shows that these are unsuitable specifically for the distances involved in VDU work, the individual's employer is also obliged to pay for appropriate corrective appliances for this activity only. If individuals choose frames that are more expensive than basic frames, employers are only obliged to contribute the cost of the basic frames. The introduction of any working practice which may substantially affect call handlers' eyes or eyesight should be done in consultation with call handlers or their representatives.

8.2.2.2 Visual fatigue

Visual fatigue is highlighted as a principal risk associated with display screen equipment work and, as call handlers use VDUs so intensively, they are at high risk. Symptoms include sore eyes, blurred vision, tired eyes and headaches. In addition to offering eye tests, there are a number of measures which can reduce the risk of this condition. These include: adjusting the VDU brightness and contrast settings; keeping the VDU clean, particularly from smears; ensuring the VDU is free from glare and reflections by controlling the ambient lighting conditions; and suitable positioning of any reference material.

Software fonts should not be smaller than size 12. Exercising and stretching the eye-movement muscles from time to time whilst at the workstation can also help reduce the risk as does looking away from the VDU and focusing on something as far away as possible, as this relaxes the eye muscles. Breaks or changes in activity, as discussed in clause 7.11 are particularly important to avoid visual fatigue and should be taken away from the computer to permit call handlers' eyes to recover.

8.2.2.3 Blink rates

Blink rates have been shown to drop when using a VDU. Consequently, the eyes are less well lubricated, and this can lead to tired and sore eyes. The risk will be heightened if there is low relative humidity (see clause 5.6.3). Contact lens wearers are also at greater risk, as contact lenses prevent blinks from lubricating the eye properly. The risks due to low blink rates can be reduced by breaks or changes of activity (see clause 7.11).

Reminders should be displayed on-screen from time to time to prompt call handlers to look away and focus on a distant object. They should also be prompted to exercise their eye movement muscles and blink.

Call handlers should be reminded that free regular eye tests are available as are any basic corrective appliances that are required for VDU work.

8.2.3 Voice

Call handlers spend a larger proportion of their working day speaking on the telephone than many employees in typical office jobs. However, the risk of them experiencing problems with their voices can be reduced if good practices are followed. The introduction of any good practice for voice health which may substantially affect the health and safety of call handlers should be done in consultation with call handlers or their representatives.

The medical term for voice problems is dysphonia. The condition is not just an inability to speak but symptoms also include pain, tension, croakiness, irritating cough, inability to modulate, poor or no vocal power and breathing difficulties.

Call centre employees should be provided with information on the risk of dysphonia, the various symptoms of the condition and how this risk can be reduced. The Research Department of the Banking, Finance and Insurance Union (BIFU) published a report [21] which outlines the condition and gives practical advice about how to reduce the risk of occurrence. The Voice Care Network is also a source of useful information such as their leaflet "More care for your voice" [20].

The length of scripts can sometimes strain call handlers' voices, and opening greeting scripts should be broken into short segments, giving call handlers frequent micro-breaks while callers respond to their questions.

The risk of voice problems is greater when suffering from a cold or any type of throat infection. Any such problem should be reported to management who can reduce the risk of voice strain by assigning staff in these circumstances to tasks which do not involve speaking on the telephone.

Call handlers should be encouraged to drink water or caffeine-free soft drinks to maintain hydration rather than tea or coffee or soft drinks containing caffeine which are diuretics. They should be allowed to drink at their workstations to ensure that their throats are adequately lubricated.

Tension can be relieved by stretching the neck and shoulders. These exercises can be done at the workstation as well as during breaks. A prompt which appears on the screen from time to time may be a helpful reminder for call handlers to do these stretches.

8.2.4 MusculoSkeletal Disorders (MSDs)

MusculoSkeletal Disorders (MSDs) are recognized as a principal risk associated with display screen equipment work. Compared to many typical office workers, call handlers may be at a higher risk of experiencing MSDs, because they use display screen equipment so intensively and have less opportunity to take breaks from using the computer either through a change of activity or a rest. Consequently, risk assessments should give careful consideration to MSDs and measures taken which reduce the chances of them occurring.

Training call handlers how to use workstation equipment properly and how to adjust it to meet their needs is vital if the risk of MSDs is to be reduced in the long term. Call handlers should receive training on all aspects of display screen equipment at induction, not just how to adjust the chair and screen height, and their knowledge should be refreshed from time to time to prevent bad habits developing. They should also be trained how to use any new or unfamiliar equipment particularly any specialist equipment such as chairs and keyboards that have been identified as necessary in their DSE assessment.

Call handlers could also be made aware of the advantages of regularly changing posture and stretching whilst at the workstation rather than sitting for long periods in one position. Training should make the link clear between the risk of MSDs and not setting up a workstation to an individual's requirements, not taking breaks away from the workstation, and poor environmental conditions such as being too cold or sitting in a draught. Call handlers should also be provided with information on the factors associated with MSDs and the preventative measures. Training and information on MSDs should be provided after consultation with employees or their representatives.

The requirements in applicable national or European legislation for risk assessments, workstation minimum requirements, breaks, information and training are all relevant to prevention of MSDs in call handlers. Working practices that may substantially increase or decrease the risk of call handlers experiencing MSDs should only be introduced after consultation with call handlers or their representatives.

Although there is, currently, no duty to provide health surveillance for MSDs, procedures such as self-reporting of symptoms by employees and checking sickness absence records should be used to ensure MSDs are identified and dealt with promptly.

The procedure for self-reporting of symptoms should be clear and easy. One way is by the regular use of proprietary software for the systematic assessment of individual workstations available on screen, and the provision of simple on screen reminders about relevant adjustments for the individual call handler. The reports from self assessments should be taken seriously and the complainants should be kept informed of any actions or decisions. Any medical assessments should be treated in confidence.

Call handlers should be trained to stretch and change posture while on the telephone at their workstation to release muscular tension and help prevent MSDs. They should be encouraged to do this with an on-screen prompt.

Call handlers should be provided with an adjustable footrest, which should be properly adjusted. The use of a dynamic footrest or regular "treadle" movements of the feet will also help prevent lower leg oedema (swelling of the ankles) and the possibility of deep vein thrombosis.

It is also useful to introduce health promotion and education in addition to regular health checks.

8.3 Stress

Work-related stress may be defined as "the adverse reaction people have to excessive pressures or other types of demand placed on them". Call centre employees will differ in their vulnerability to work-related stress and which factors affect them, and individuals will also vary over time. Prolonged or particularly intense stress can lead to physical and psychological ill health including heart disease, back pain, gastrointestinal disturbances, anxiety and depression. Work-related stress can have consequences for organizations including increased sickness absence, reduced staff morale and performance, and increased turnover.

Seven categories of risk factor have been identified which can contribute to work-related stress, as follows:

- Work culture.
- Job demands.
- Control at work.
- Work relationships.
- Organizational change.
- Role conflict and ambiguity.
- Job support factors.

External domestic factors are also known to have an influence on work related stress and are a proven psychosocial element in the onset of MSDs.

8.3.1 External influences

One of the most common factors influencing work related stress is marital status, particularly disharmony caused by separation and divorce. Other influences include the number of dependent children of school age, and the amount of domestic chores performed by either partner. Shopping, cleaning and cooking are high on the list of stressors, particularly when unsocial hours are being worked.

Sickness absence or illness on the part of either partner can impose severe additional stress for long or short periods while the other partner tries to maintain a normal work pattern.

An understanding of employees' domestic circumstances and a willingness to compromise on working hours and times can contribute to a reduction of stress in many instances, as can the degree of support provided from the home environment.

8.3.2 Work culture

A positive culture is one of the key factors in helping to reduce the risk of work related stress. Two elements of a positive culture are regular and open two-way communication between call handlers and managers and consultation with staff. This should include, where possible, participation in decisions that may affect them. The collective knowledge and experience of the call handlers in an organization can be a valuable resource, especially if the managers have little or no experience of handling calls themselves.

Staff welfare must also be a priority. Organizations with positive cultures will also have a clear sickness/absence policy and should encourage call handlers to recover fully before returning to work from sick leave in order to protect the health of other employees, as, even with excellent control systems for environmental conditions, bacteria and viruses spread more easily in open plan offices. Where employed staff are multinational, being able to fulfil specific dietary requirements and food preferences are another important aspect of reducing stress at work, as is the possibility to have a hot meal at work rather than being forced to consume fast or snack food.

8.3.3 Job demands

Work overload

Call handlers are at risk from work-related stress when they are overloaded by being given too much work to do in the time allocated or are not trained how to do the work. Performance monitoring, both quantitative and qualitative and targets have been discussed in clause 7.5. and training is discussed above in clause 8.1. Call centres should emphasize the importance of rest breaks or changes in activity (see clause 7.11) as these are essential if the risk of work-related stress is to be reduced. If call handlers feel they have too much to do, they may not take their breaks.

Capability and capacity

Call centres must ensure that call handlers have the necessary skills and knowledge to be able to meet the demands of the job. Training and qualification have been discussed in clause 8.1. When setting targets, make sure they are achievable. New call handlers should start with lower targets than those with more experience, and the number of calls allocated to them should be increased over a period of time. This system may also be appropriate for those returning from sick leave. Quiet periods and equipment failures should be taken into consideration when setting and assessing targets.

Work underload

Call handlers may also experience work-related stress if they feel their work is repetitive and boring rather than being a challenge and making the most of their skills. Scheduling alternative tasks such as coaching new call handlers, becoming involved in projects such as helping to develop promotional material, or taking different types of call (remember, when properly trained and supported, some call handlers even enjoy the satisfaction of successfully dealing with complaints) may provide opportunities for call handlers to use their individual skills and knowledge.

Physical environment

The clause dealing with working environment highlighted mainly physical outcomes of a poorly controlled working environment and workstation, but people still complain even though the physical working environment is excellent. These complaints often arise because people feel they have no control over their working environment. For example they may not be able to open a window to let in fresh air, because the windows do not open or other people will find it too draughty. Following the good practice advice given under "Working Environment" in clause 5 will help call handlers feel they have more control. Various issues have been discussed in connection with hot-desking (see clause 5.5), but a thorough cleaning and maintenance regime will reduce the risk of work-related stress arising from unhygienic and inoperable workstation equipment.

Psychosocial environment

Working shifts that fit an individual's lifestyle can be an attraction of becoming a call handler (see also clause 7.8). However, if shifts continually change and call handlers are only given short notice about what shifts they are scheduled to work, it may become difficult to make domestic and social arrangements, and the initial attraction may become a stressor. Call handling can be a very intensive job, and holidays are important for reducing the risk of work-related stress. Again, to make domestic arrangements easier, call handlers must be allowed to book their holiday as far in advance as possible. Some prefer to take odd days and have long weekends, but for those who request it, at least one period of seven days leave per year should be authorized. Verbal abuse is discussed in clause 8.6.

8.3.4 Job control

Many call handlers have little control over when they take calls, as calls are distributed automatically. The amount of time that call handlers spend on each call is often controlled by quantitative targets and what they say during a call is controlled by qualitative targets and scripts (see clause 7.3). Such limited control over their own jobs could mean call handlers are at risk of work-related stress. Involving call handlers in decision-making can also help to increase job satisfaction and limit the risk of work-related stress.

8.3.5 Work relationships

In the context of call centres the term describes the way people interact at work for business purposes and includes bullying and harassment. The pressure of meeting management targets (see clause 7.3) and satisfying customers can threaten relationships. Rivalry may develop between call handlers as they strive to meet personal targets, and emphasizing the importance of group targets may help to reduce this risk. Setting clear standards against which quantitative and qualitative performance can be measured may help to avoid the problems of arbitrary objectives and inconsistent monitoring. An effective policy against bullying and harassment should be introduced, after consulting staff, which should help to reduce the number of incidents and the risk of stress arising as a result.

8.3.6 Organizational change

The call centre industry continues to expand rapidly, and there are many changes associated with expanding businesses including mergers and takeovers. Business restructuring may mean teams are re-organized, and working with different colleagues under a different team leader may be unsettling for some call handlers. Changing business objectives and products may also mean procedures and performance targets change. Technology is also changing rapidly and automation may be a threat to job security in the future. Clear communication and consultation with call handlers is essential to reduce the risk of change giving rise to work-related stress. For some call handlers, small but frequent changes such as changes to shift schedules or changing workstations due to hot-desking can be just as, or even more, stressful than large but infrequent changes.

8.3.7 Role

Role conflict

Call handlers may experience work-related stress if they do not feel that the target time for a call allows them to answer all a caller's questions as fully as they would like. They may feel, consequently, that the quality of their service is being compromised in order to meet call volume targets. Call handlers may be required to bring new products or promotions to the attention of callers (see also clause 8.1.2). Some call handlers may regard this as good customer service, but others may consider it to be a sales pitch, and if they started working in the call centre industry to provide a service rather than make sales, it may result in work-related stress from role conflict.

Role ambiguity

To limit the risk of work-related stress, it is essential that call handlers are clear about what is expected of them in their day-to-day work.

8.3.8 Support for reducing stress

Support

Support, particularly from line managers but also from peers, is a very important factor in protecting employees from work-related stress. This support can be both practical and emotional. Team leaders should encourage improvement with praise, and feedback on performance should be constructive (see clause 7.6). Pressure to meet targets may mean that call handlers do not have the time to support their peers. Call handlers who are required to hot-desk (see clause 7.7) may not always sit with the other members of their team so may be isolated from their support. Social events arranged by work but after work may help to provide the required support, but some may have commitments which mean they cannot participate so feel even more isolated. Call handlers may need emotional support following distressing calls.

Training

This has been discussed in clause 8. Call handlers should not be expected to read training material or maintain their knowledge of products and promotions between calls, unless there are extended intervening periods. The majority of training should be conducted in allocated time, away from the telephones. Newly appointed team leaders with no prior experience of personnel management should be trained and even those with experience may benefit from refresher training. This may also help to reduce the risk of the call handlers working under the new appointees suffering work-related stress.

Individual factors

The risk of work-related stress may also be reduced by ensuring that work does not dominate a call handler's life to the detriment of out-of-work activities and interests. Call handlers should be encouraged to develop a balance between work and home life.

8.3.9 Critical calls

Calls such as those to Police, Fire brigade, Ambulance Service or crisis helplines place great responsibility on the call handler. The types of caller are different to most other callers to call centres as they will be in a distressed condition. In addition, all such calls are recorded in case they are needed for court evidence at a later stage. Staff in such centres should be paid on agreed salary scales and not by the number of calls handled. Extensive specialist backup may be needed and more sophisticated software in use, requiring additional skills and training. Often, especially following disaster calls, counselling may be required for the call handlers.

All call centre operators should be aware of the possibility of a critical call occurring at any time and the procedures in place to deal with them.

8.4 Reference material

A great deal of reference material will normally be made available for call handlers as support for their work. This will include, for sales persons, details of current offers and advice on choice of options, and for service persons, guidance pages containing Socratic dialogue for fault-finding and fixing for many different products. This may be split between "first line" help and detailed back up from "back room" staff with more specialized knowledge. Such help should be available for transfer/referral from one call handler to another in a seamless way, with minimum delay. Where such delay exceeds a reasonable time, call handlers should be able to request a free ring back from the customer to a dedicated line (not via another call centre queue).

The first choice for reference material to support call handlers work (job aids) must be for display on-screen, where searching and retrieval can be efficient and fast. Material must, however, be properly organized for such use and not simply reproduced from written support material. Initial training must deal with such material and all job aids as a matter of priority, second only to telephone manner and call handling procedure. This must include procedures for follow up calls or referral to back room experts, as appropriate.

It is likely paper based material will be more of a back-up resource and as such, reference material available in printed form needs to be particularly well organized to enable rapid searching on the part of the call handler to minimize delay during the call. Where possible, reference should be from the electronic display, but lists and indices must be well laid out and in appropriate type style and size to be read while a call handler is still in front of a screen. Sometimes, this material will supplement other material which is available as an on-screen display, when reference numbers and paragraphing must be consistent between media and formats.

The design and layout for on-screen or printed reference material may be developed with reference to ISO 9241 [11].

8.5 Support from supervisors

Supervisors and junior management take a crucial role in call centre operation. Initially, they will typically be responsible for training, both on induction and for promotion, and ongoing in relation to monitoring and performance assessment. In addition they represent a first line backup for referral in the event of any problems occurring during a call handlers shift, and act as a buffer between call handlers in the event of any dispute between callers or those called and management alike.

This dual role means that most supervisors should be/will have been recruited or promoted from experienced call handlers, aware of most problems likely to occur and with many solutions to various problems. Situated half way between handlers and managers, means that training for specific management aspects is important and assumptions should not be made about the amount of knowledge gained on the job. Supervisors should be able to take over a call at any time and resolve difficult issues satisfactorily and quickly.

Call handlers should be able to call on supervisors for active support at any time, on all aspects of their job, from difficult and abusive callers to promotion prospects and training possibilities as well as more personal aspects such as problems with workload, performance assessment, shifts, workplace and the environment, or sickness and interactions with other employees.

8.6 Abuse

8.6.1 Verbal abuse

Call handlers may experience more verbal abuse than typical office workers, because they spend more time on the telephone. Work-related violence may be defined as any incident in which a person is abused, threatened or assaulted in circumstances relating to their work, a definition which includes verbal abuse. There are no clear criteria as to what constitutes an abusive call, as some call handlers may feel less threatened than others by callers shouting, swearing and making insulting, lewd and aggressive comments. Individuals may also vary over time as to how they cope with these kinds of calls and how long it takes them to recover.

All these factors should be given careful consideration in a risk assessment. The first step in avoiding abusive calls is training. Call handlers must be trained so they are fully competent to answered satisfactorily. At induction, newly recruited call handlers should be made aware of some of the common reasons for verbal abuse, and they should be trained how to handle abusive callers. This should include the procedures for passing those calls to more experienced colleagues or supervisors or for terminating the call. The planning and organization of training should be done in consultation with employees. Call handlers should also be consulted about the information on the risk of verbal abuse and the procedure for dealing with it. The training and information may include the following advice.

- Try not to panic or put the receiver down immediately.
- Try not to lose your temper or be tempted to react with a similar response.
- Try not to take the remarks personally and become upset.
- Be patient as the abuse may stop shortly.
- If the caller does not calm down, clearly advise them that unless they are able to continue the discussion in a civil manner, the call will be terminated.
- If the caller is not satisfied with the answers to their questions, offer to pass them to a colleague or a supervisor, or to take their number and return the call when further investigations have been made.
- If, despite a warning, behaviour does not improve, then you may terminate the call.
- Take a short break or speak to a colleague or supervisor about the call if this would help you to recover.
- All calls of this nature should be logged with your supervisor.
- Listening to the recording of the abusive call with a more experienced colleague or supervisor may help you identify alternative ways of dealing with similar calls in the future.

Company policies on work-related violence should have a section dedicated to the verbal abuse experienced by call handlers. It should state clearly when call handlers should terminate an abusive call or pass it to their supervisor, and the procedure for doing so. The roles and responsibilities of call handlers, supervisors and managers should be clearly defined. There should be a clear and simple procedure for reporting all incidents of verbal abuse, no matter how minor, and call handlers should be actively encouraged to report incidents. Call handlers must be assured that such procedure will not be viewed by managers as a lack of ability, nor will they be penalized for terminating such calls. The introduction of a policy on verbal abuse should be done in consultation with call handlers or their representatives.

It is good practice to allow call handlers who have just taken an abusive call time to recover and discuss it with a colleague or their supervisor if they so choose.

Customers who have been abusive previously could have this noted on their files and a warning marker flashed on screen when a call handler accesses their details. However, all personal information in customers' files is covered by European Directives and applicable national legislation, and any such arrangements for using warning markers will need to be carefully defined in company policy.

It is recommended to provide awareness training and information on personal safety.

8.6.2 Discriminatory calls

A call handler is entitled to the full protection of laws, regulations and Codes of Practice regarding abusive or offensive telephone calls, e.g. as provided in EU Guidelines. Callers who abuse by reference to the call handler's sex, race or religion, in particular, must have such protection with full support from supervisors and management. Arrangements should be made for such callers to be diverted and/or their calls recorded, either for future reference or action by the police or appropriate authority. Extreme cases could have their incoming calls noted and barred. Call handlers should have training covering this specific problem area, which allows them to give an appropriate response, remain polite and divert or reject calls when necessary.

9 Client issues

This clause deals with issues relating to the caller or client, or the end-user, being the person who makes a call with expectations of talking to an individual able to answer queries, take orders or give general information about their company or organization, but ends up in a call centre. The client expects as high a degree of service as a customer as if the call handler was a direct employee of the organization called.

9.1 Expectations

Staff training must always extend to any new products, offers or campaigns. Customers are less likely to become frustrated if their calls are taken efficiently and all their questions dealt with expeditiously in a confident manner.

A customer can reasonably expect a call, not ringing back in response to his own earlier query, to be during reasonable (social) hours, e.g. between 8.30 am, 12 to 12.30 pm or between 5 to 9.30 pm. Unexpected calls outside these times may annoy or worry some customers, especially those of aged or nervous disposition. An exception could be service calls to or from utilities, such as gas, electricity or water.

Calls of this nature should always be made by call handlers well versed in their particular domain, whether sales, service or help of any kind. In service cases, agents should be able to talk customers through different situations and maintain a calm manner whatever the provocation.

9.2 Voice menus

A common situation arises when a caller is presented with a number of options in a voice-menu as part of a stored voice switching system. Typically these contain instructions as to which number key to press for a particular option. In all cases the dialogue should follow the guidelines offered in ETR 329 [8]. Such menus should be short (five items), words and instructions unambiguous and should never end in silence or a dead end. Waiting times or pauses in the dialogue should not exceed 1 s and the caller should always be aware that he is still connected.

When the menu hierarchy is complex, the service should provide a command to enable the user to return easily to the main menu. Services should be error tolerant and try to prevent errors. When the system detects an error from the user, it should play a context sensitive error announcement. The system should permit a skilled user to dial ahead without listening to the announcements.

A help announcement should be available at any point of the dialogue. This announcement should be context dependent. Pause and repeat functions should be available. The user should know how to contact a human operator at any time in the dialogue.

9.3 Time in queue

Although not unique to call centre operations, possibly the most irritating aspect of encountering a call centre answering service is being kept waiting in a queue. A long period of ring-tone should be avoided, but even with prompt call pick-up, there should not be a long time before connection to an operator or recorded announcement appropriate to the service being sought. Such time should not exceed 10 s. Particularly disconcerting is a time-out or disconnection. Call centres should monitor complaints for this aspect of their operation and take times in excess of 30 s seriously, even though this may mean the provision of extra lines or call handlers at peak times.

9.4 Feedback

Appropriate feedback should be provided at all times throughout connection with a call centre, preferably through voice announcements or tones.

9.5 Dead line

Some call centres in the marketing and selling domain may use what is called predictive dialling. This is aimed at contacting potential customers, particularly through "cold calling", i.e. when an end user is not known as a customer and may be picked from data supplied by other organizations, or at random from telephone, other directories or data bases.

Because the response from predictive dialling is unknown and inevitably low, numbers are assembled for simultaneous calling and call-handler availability is less than a possible maximum response. This means that an end-user may pick up a call and find no caller response, which is particularly irritating at the least and for some elderly or nervous persons, disturbing. Such practices are not recommended and should not be employed.

9.6 Time of day

Call centre operators should be sensitive to the time of day when calling customers and, in general, avoid very early or late calls. An exception would be when responding to specific customer enquiries or urgent service calls, e.g. utilities such as gas, electricity or water, or call outs for medical, veterinary or fire service emergencies. This is especially important when call centres are located in a different time zone from the one being called into.

History

Document history		
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