

**The Provision
of
Quality Awareness Programmes
Amongst Companies & Organisations Seeking
BS5750 Registration**

Christopher Trott

**Master of Science
by Research in Business Management**

The University of Aston in Birmingham

October 1994

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Thesis Summary

With the growth of quality system implementation in the UK has come an increase in the number of companies and organisations seeking to achieve BS5750 certification. Although the development of this Standard was initially the province of the manufacturing sector, this is no longer the case. The increase in certification amongst service industries has not only widened the range of companies and organisations seeking registration, but increased the types of activities covered and brought the requirements of the Standard into contact with different organisational cultures.

The fact that BS5750/EN29000/ISO9000 was geared towards manufacturing industries brought problems of interpretation when it began to be taken into the service sector since some of its requirements could not be transferred easily into non-manufacturing environments. The question of interpretation is not solely industry specific, however, since any company and/or organisation may have problems in construing the requirements of the Standard may occur whenever the wording of BS5750 apparently permits latitude in interpretation. Whilst there are several instances within the Standard where this might be said to be true, the particular area of this study has been chosen because of its central role in the overall picture.

The objective of this research is twofold; firstly to examine the way in which companies and/or organisations have interpreted the requirement within BS5750 to ensure that their quality policy is *understood, implemented and maintained*, and secondly to ascertain how the assessors of BS5750 quality management systems themselves interpret that requirement.

The methodology of gathering information from companies and organisations on the methods they adopted is described, together with an analysis of the data generated. Three case studies are included in an attempt to give more detailed examples of the ways in which awareness programmes can be approached. The methodology behind the questionnaires for assessors is explained, as well as analysis of the results.

The research data suggests that because of a number of identified factors companies and organisations employ a wide range of methods when seeking to raise staff quality/BS5750 awareness. In addition, the data also suggests some wide variation in the way in which individual quality system assessors interpret the requirement, and the principal recommendation of the research is that greater attention needs to be paid by those with influence on the assessment process to ensuring greater uniformity of interpretation.

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Author's Note

In July of this year BS5750: 1987 was revised as part of the regular updating process of British Standards which occurs whenever it is considered that sufficient changes have been identified as necessary to warrant re-issue. The 1987 version of BS5750 was itself a revision of the 1979 issue. As a consequence of this latest update BS5750 no longer exists and has been replaced by BS EN ISO 9000: 1994.

Although there are a number of changes to the text of the Standard, altering or adding to the 1987 requirements, the element of the Standard that is the subject of this study remains unchanged. The sentence in Section 4.1.1 of the 1987 version is exactly the same in the 1994 issue.

Since the requirement of the Standard that forms the basis of this study is unaltered, and all the research details had been obtained prior to the 1994 update, all references to BS5750: 1987 within the text remain unaltered.

Chapter 1

INTRODUCTION

Under the general heading of 'Management responsibilities', BS5750¹ requires the management of a company or organisation to define and document its Quality Policy². This policy statement has been defined as a *"signed declaration...signifying that company's commitment to a given quality assurance scheme"*³, and is intended to give all employees and potential customers an initial indication of the company or organisation's intentions towards quality.

The obligation imposed does not end with the documenting of the quality policy, however, since section 4.1.1 also requires an organisation to ensure that the policy is *"...understood, implemented and maintained at all levels in the organisation."*⁴ There is a duty on the management of an seeking registration to BS5750, therefore, to ensure that its employees

1. BS5750: Part 1: 1987: Specification for design/development, production, installation and servicing; Part 2: 1987: Specification for production and installation; Part 3: 1987: Specification for final inspection and test. The International and European equivalents, which to all intents and purposes are identical in content, are the ISO 9001 - 3 series and EN29001 - 3 series respectively. Unless otherwise stated, all subsequent references to the 'Standard' are to BS5750 Part 1 and 2.
2. Ibid. Section 4.1.1 (Parts 1, 2 & 3)
3. Stebbing, L: Quality Assurance: The Route to Efficiency and Competitiveness, Second Edition 1990, Ellis Horwood Limited, Chichester, pp58-9.
4. This requirement is only imposed on organisations seeking registration to BS 5750 Part 1 or Part 2, being omitted from section 4.1.1 of BS5750 Part 3.

are aware of both the quality policy itself, and the implications for both the organisation and the workforce. The difficulty for an organisation is in deciding how this requirement of the Standard can and should be met.

Registration is dependent on successful assessment by an external body, which will only recommend registration if it is satisfied that the organisation complies with all the requirements of the Standard. The requirement for dissemination to employees of both the letter and the spirit of the quality policy is, consequently, an assessable element of the Standard. It follows that a failure to meet this requirement, as with any of the others defined in BS5750, could result in an unsuccessful assessment, and a consequent delay in registration. The question facing an organisation's management is what steps need to be taken to satisfy this provision within section 4.1.1.

The sections of the Standard¹ indicate areas where control is required, but are generally couched in such a way as to allow the organisation implementing them to decide on the *actual* form that their methods of control will take. This will be dependent on the size of the organisation, for example, the nature of its activities, and so on. Whilst the ancillary Parts of the Standard² offer guidance on implementation, they suggest only limited examples of the methods that *might* be used.

On the subject of quality policy dissemination, organisations are required to take "...all necessary steps"³ to ensure that the policy is understood, implemented and maintained, and to provide "...sufficient and appropriate resources essential to the implementation of quality policies"⁴. Bearing in mind that this element of the Standard is assessable, organisation's seeking registration must, therefore, take steps that the assessing body regard as complying with the requirements of Section 4.1.1. But what steps?

1. There are twenty sections in BS5750 Part 1, and eighteen in Part 2; the sections on design and servicing activities are omitted from Part 2.

2. BS5750: Part 0: Section 0.1: 1987: Guide to selection and use; Part 0: Section 0.2: 1987: Guide to quality management and quality system elements; Part 4: 1990: Guide to the use of BS5750; Part 8: 1991: Guide to quality management and quality management systems elements for services.

3. Part 0: Section 0.2: 1987: Guide to quality management and quality system elements: Section 4.2

4. Ibid Section 5.2.4

The guidelines indicate that the quality policy *"...should be published throughout the organisation"*¹. Whilst this may in practice involve copies of the policy statement being placed on office notice boards, in employee canteens, company reception areas and so on, the requirement might equally be satisfied by placing copies of the quality policy in staff handbooks, or solely in copies of the organisation's Quality Manual; provided that copies of those Manuals were accessible to all employees.

Clearly this guidance is open to interpretation, but the guidelines offer more specific instruction on the subject of training given to employees.

*"The training...to heighten quality awareness and to mould attitudes of all personnel in an organisation is central to the achievement of quality"*² might be regarded as a recognition of the obvious, but the guidelines go on to indicate the sort of training necessary for compliance with Section 4.1.1. *All* employees are required to receive training that ensures that they *"...understand the objectives of management and the commitment required"*³. Whilst conceding that the comprehensiveness of such training *"...varies with the complexity of the organisation"*⁴, the guidelines indicate the need for a quality awareness programme for all employees⁵. Although there is no guidance on the form or content of such an awareness programme, there is the suggestion that it *might* be extended to new employees who join the organisation after implementation of the quality system, and *"...may include...periodic refresher programmes for long-standing employees"*⁶.

Given that the Standard does not impose specific requirements in relation to awareness programmes, companies and organisations seeking to implement a BS5750 quality system would appear to have a wide degree of latitude in the way in which they can interpret the requirements of section 4.1.1. The purpose of this research is to ascertain how they

1.Part 4: 1990: Guide to the use of BS5750: Section 4.1.1

2.Ibid Section 4.18

3.Part 4: 1990: Guide to the use of BS5750: Section 4.1.1

4.Ibid Section 4.18

5.Part 0: Section 0.2: 1987: Guide to quality management and quality system elements; Section 18.3.3; see also: Part 4: 1990: Guide to the use of BS5750: Section 4.18 (d); Part 8: 1991: Guide to quality management and quality system elements for services: Section 5.3.2.2

6.Part 0: Section 0.2: 1987: Guide to quality management and quality system elements; Section 18.3.3; see also: Part 4: 1990: Guide to the use of BS5750: Section 4.1.1; Part 8: 1991: Guide to quality management and quality system elements for services: Section 5.3.2.2

have translated the provisions of the Standard with regard to quality awareness amongst employees, if indeed they have identified a requirement for it in the first place.

Whilst it might seem unlikely that any two companies or organisations would handle staff quality awareness programmes in exactly the same way this is by no means certain, and there may well be elements common to all. The study aims to identify whether there are any significant differences in either substance and/or technique, and to establish how any awareness activity undertaken varies. Clearly there are many elements in such an analysis which will include consideration of:

- whether awareness programmes are always handled 'in-house', and what are the determining factors behind the decision to use external sources amongst those who do not;
- how the content of awareness programmes vary, and what essential elements, if any, do all programmes share
- what use is made of promotional back-up material such as posters, handbooks, videos and the like;
- whether follow-up training is carried out, or is awareness training seen as a 'one-off';
- whether the substance and methods are determined by the objectives of the awareness programme, or the objectives themselves determined by the resources available.

As has already been indicated, the provisions of section 4.1.1 are an assessable element of the Standard, and consequently an essential aim of the study must be to attempt to ascertain how the external assessors themselves interpret the requirement for understanding, implementation and maintenance of the Quality Policy.

Chapter 2

LITERATURE REVIEW

It should be recognised at the outset that the available literature on employee quality awareness is not restricted solely to the context of BS5750. Discussion of the subject encompasses a broad spectrum of management disciplines ranging across Quality Management generally, whether system based or otherwise. Although what has been written on the topic includes much that is related specifically to BS5750 it is not exclusively so.

Employee awareness has been analysed in relation to a diverse field of quality strategies, and since many of their themes make common cause with the spirit of BS5750 it would be unwise to exclude them from this review. These include the concept of 'Zero Defects' advanced by the likes of Halpin in the 1960's, and developed by Crosby into the management philosophy of 'Do it right first time'. In essence, this strategy emphasises that prevention rather than inspection is the key to quality; attention should be given to preventing mistakes happening in the first place, rather than to identifying them once they have occurred. These themes were themselves a development of the concepts of Quality Control promoted by Juran in the early 1950's, which stressed that quality could only be achieved through management planning, and which has more recently identified the importance of 'internal' as well as external customers in this process.

Equally important in the overall development of quality management was the idea of Total Quality Control pioneered by Armand Feigenbaum. Again initiated in the early 1950's, it advanced the view that successful quality control must involve the setting of the quality standards to be achieved, the monitoring of performance against them, and management planning for improvement in those standards. More recently, a combination of the basic philosophies behind these and other strategies have been brought together to become what is known as Total Quality Management. Advocates of this strategy such as Oakland argue that quality can only be achieved by applying quality management techniques throughout every aspect of a company or organisation's and activities.

These approaches to quality clearly have much to recommend them and consequently the views expressed by their proponents on the subject of raising quality awareness levels amongst staff/employees need to be considered. However, it should always be borne in mind that there is a fundamental difference between these approaches and the requirements of BS5750 in relation to quality awareness; the requirement within the Standard is an assessable one.

Identifying the Need

Although the need to raise quality awareness levels amongst employees is a requirement of BS5750 there are clearly other reasons why this might be considered advantageous, not least of which is that *"...the attitudes of personnel have a profound bearing on the successful operation of the enterprise."*¹ Recognition of the fact that the role of employees is crucial to the success of any system for quality maintenance and improvement is a recurring element of the analyses carried out. Cullen and Hollingum emphasised that any *"... proposal to introduce quality management systems along the lines of BS5750...will require education and training."*², and central to this theme is an appreciation of the fact that staff cannot be expected to fully play their part if they remain uninformed, not only of the specific tasks they are expected to fulfil, but also of the 'broader'

1. Feigenbaum, A V: Quality Control: Principles, Practice and Administration, McGraw-Hill Book Company, New York, 1951, p53
2. Cullen, J & Hollingum, J: Implementing Total Quality, IFS (Publications) Ltd, 1987, p72

picture: *"Employees will have to be informed of the programme's objectives and the roles they are expected to play in it..."*.¹

This view is reiterated by The Government Centre For Information Systems, which draws attention to the role of awareness training in the wider context of the introduction of a quality system: *"Quality awareness training provides a means for involving the organisation's personnel in the quality initiative, and for providing ongoing information and explanations. This process is crucial to the success of the quality initiative."*² Disseminating information to employees is, therefore, fundamental to raising awareness, but the available literature also stresses that any steps taken must serve two distinct but interlinked purposes.

Not surprisingly, given the importance to any quality system of personnel carrying out their quality functions within the system satisfactorily, the view taken is that the first aim of any awareness programme should be to instruct staff in what their allotted tasks are, and how they should be carried out, since all employees require *"...the necessary training to comprehend the overall objective and to gain the necessary competence in using appropriate procedures and techniques necessary for a viable system."*³ As John Oakland has pointed out, such training *"... alerts people to the requirements, codes of practice, conduct [and] procedures"*⁴

However, in addition to instruction on their specific functions within the intended programme of quality improvement, it is underlined that the other main aim must be to identify to personnel the more abstract elements necessary to its success. Generally these have been taken to mean employee commitment to quality maintenance and improvement, and their overall awareness of how the quality of their individual efforts has a bearing on the quality of the work of others as well as the company or organisation as a whole. This has been described by Professor Oakland as achieving the appropriate or *'mind set'* or *'quality*

1. Mortiboys, R J: "Quality Management for the 1990s" in Managing Quality, Dale, B G & Plunkett J J (Eds), Phillip Allen, 1990, pp33-43
2. The Government Centre for Information Systems: Quality Training, Wheeler, W & J (Eds), The Quality Management Library, HMSO, London, 1992, p17
3. The Chartered Institute of Building: Quality Assurance in the Building Process, Alden Press, Oxford, 1990, p39
4. Oakland, J: Total Quality Management, Butterworth-Heinemann Ltd, 1989, p243

consciousness"¹ and he has suggested that one of the objectives of the company quality policy itself should be *"...to develop within the organisation a climate in which everyone is quality conscious and acts with the needs of the immediate customer in mind."*² The view that the required level of personal commitment *"...is only likely to be achieved if every individual understands the aims and benefits of the [Quality Improvement] Programme"*³, whilst perhaps self-evident, clearly suggests that organisations seeking to implement a quality system who neglect to inform employees of their wider role do so at their peril.

In essence, what is being advocated is the development of a 'Quality Culture' within the organisation or company which will allow the chosen quality system to not only be implemented successfully, but also to develop. Obviously the steps taken to raise quality awareness will have a direct bearing on the achievement of this Quality Culture. This will be particularly true in the early stages of quality system implementation, since, to repeat an old cliché, you don't get a second chance to make a good first impression, though the suggestion that creating a quality culture *"...is initially a public relations exercise in generating understanding and commitment."*⁴ might be considered an overly pragmatic view. The success of any implementation will, therefore, *"...involve the co-operation of all concerned, and to obtain this co-operation all employees must understand the reasons for implementation"*, and to achieve this an organisation must communicate to all employees *"...the reasons for, and the benefits to be obtained from, the implementation of a quality assurance programme."*⁵

Choosing the Method

Acceptance that *"...properly communicated policies and objectives are essential if...employees are to work together as a winning team"* must lead any organisation wishing to implement a quality system to seek the

1. Oakland, J: Total Quality Management, op. cit., pp21 & 243 respectively.

2. Ibid, p266

3. Munro-Faure, L & M: Implementing Total Quality Management, Pitman Publishing, London, 1992, p117

4. Department of Health, Committed to Quality: Quality Assurance in Social Service Departments, HMSO, London, 1992, p12

5. Stebbing, L: Quality Assurance: The Route to Efficiency and Competitiveness, Second Edition, Ellis Horwood Limited, Chichester, 1990, p42

most appropriate means of communication¹. Whilst there are a wide range of methods that can be used, the programme of steps taken to raise awareness must be tailored to suit the company and *"...the techniques employed must take account of the culture and size and resources available within the organisation."*² Moreover, the programme may have to be adjusted within the organisation itself to make allowance for departmental and/or personnel variations *"...in such a way and applied to such a degree as would make sense in any specific application considering the organisational levels being dealt with"*³. However, although the range of techniques is extensive, they usually fall into two distinct but mutually supportive categories: specific training, and promotional material.

Taking the latter first, the range of promotional tools available mean that an organisation has a number of options available to it, and can utilise all or some of them as it deems appropriate, and depending, very often, on the funds available. Whichever are chosen, their purpose in the opinion of Philip Crosby should be *"...to provide reassurance that the company is serious about the emphasis on quality and to keep the message constantly in front of the people"*⁴, or as Halpin has suggested, they *"...must, in some way, convey the basic challenge of the program"*⁵

In making their choice of material to use, The Government Centre for Information Systems⁶ urges companies to make use of the widest possible range of communications techniques and media, but clearly the types utilised can be simple or sophisticated depending on what the organisation considers appropriate, or can afford. Halpin emphasises, however, that whichever methods are chosen *"...all should be of the quality and calibre to convince the employee that management really means business."*⁷ The suggested methods that follow cannot, given the wide range of possible alternatives, be considered comprehensive, and

1. Department of Trade and Industry: Total Quality Management & Effective Leadership, DTI, London, 1991, p29
2. The Government Centre for Information Systems: Quality Training, op. cit., p19
3. Marguglio, B W: Quality Systems in the Nuclear Industry, American Society for Testing & Materials, Philadelphia, 1977, pp627-8
4. Crosby, P B: Quality is Free: The Art of Making Quality Certain, McGraw-Hill Book Co., New York, 1979, p182
5. Halpin, J F: Zero Defects - A New Dimension in Quality Assurance, McGraw-Hill Book Co., New York, 1966, p94
6. The Government Centre for Information Systems: Quality Training, op. cit., p19
7. Halpin, J F: Zero Defects - A New Dimension in Quality Assurance, op. cit., p94

represent only those which have been most commonly analysed.

Poster Campaigns

These are probably the most commonly used promotional tool for raising quality awareness, with a wide range utilised by companies and organisations across the UK. Crosby¹, Halpin² and Oakland³ all give attention to them, and whilst generally acknowledging their usefulness are keen to point out that their success depends on how effectively they are used.

In addition to ensuring that planning and organising the campaign takes into account the most appropriate locations for the posters and their timing, the overriding emphasis they believe must be placed on the message intended to be put across. Oakland recommends that posters *"...should be simple and may carry very straightforward statements"*⁴, a view shared by Halpin who advises companies not to try to put too much information over at one time⁵. Both suggest that the most effective poster campaigns are those which are 'phased' so that they change to match the changing awareness and are continually *"...freshening the communication messages"*⁶. Halpin refers to *"Teaser"* and *"Kickoff"* posters as part of this programme, with the intended objective being to engender anticipation amongst employees⁷.

On the question of whether it is better for the company to buy-in the posters (either 'off-the-shelf' or designed specifically for it) or to produce them 'in-house', Crosby and Oakland appear to favour the latter and indicate that an employee poster competition can serve a useful purpose in this regard⁸. A wide range of other workplace reminders are suggested as part of, or an accompaniment to, poster campaigns, and include gate or entrance signs, banners, flags, and stickers, and whilst the list appears endless, the criteria to be used in deciding whether or not to employ them, however, must be the same as above.

1. Crosby, P B: Quality is Free: The Art of Making Quality Certain, op. cit., p182

2. Halpin, J F: Zero Defects - A New Dimension in Quality Assurance, op. cit., pp96-7

3. Oakland, J: Total Quality Management, Op. Cit., pp243-5

4. Ibid. p243

5. Halpin, J F: Zero Defects - A New Dimension in Quality Assurance, op. cit., p97

6. Oakland, J: Total Quality Management, Butterworth-Heinemann Ltd, op. cit., p245

7. Halpin, J F: Zero Defects - A New Dimension in Quality Assurance, op. cit., p96-7

8. Crosby, P B: Quality is Free: The Art of Making Quality Certain, op. cit., p182;

and Oakland, J: Total Quality Management, op. cit., p245

Company Magazines/Newsletters

Although restricted to those companies or organisations who have them (usually larger ones, though not exclusively so), they represent a ready-made organ for publicising both the quality system and the awareness programme. However, Oakland again stresses that they will only fulfil a satisfactory role if their content is *"...interesting, eye-catching and newsworthy."*¹ Halpin is of the opinion that an entire issue of an 'in-house' publication (or as much of it as possible) should be devoted to the awareness programme², a view shared by The Government Centre for Information Systems which suggests that a special edition *"...can provide a focus for the launch of the programme."*³ It must be remembered, however, that there would always be the danger that such a step might 'over-saturate' staff, and there is always the problem of sustaining momentum after such a start.

Aside from being a *"...palatable way of acquiring and transmitting knowledge"*⁴, 'in-house' publications have the added advantage of being able to supply not only a regular, but also more detailed range of information. Oakland indicates that they are particularly useful in providing a 'shop window' for the awareness programme, and can also encourage what he calls a *"... 'me-too' syndrome"* amongst staff⁵.

In addition to 'in-house' publications, external media can be utilised, and both Halpin and The Government Centre for Information Systems⁶ suggest that it might be used as a tie in to the company awareness programme. However, whilst articles in trade publications or the local press can add kudos to the programme (aimed specifically at company employees), this has to be weighed against the loss of editorial control that could result.

Handbooks

General information can be issued through booklets handed out to employees at the commencement of the programme, and whilst Halpin

1. Oakland, J: Total Quality Management, op. cit., p246

2. Halpin, J F: Zero Defects - A New Dimension in Quality Assurance, op. cit., p100

3. The Government Centre for Information Systems: Quality Training, op. cit., p20

4. Murphy, J A: Quality In Practice, Gill & MacMillan Ltd, Dublin, 1986, p118

5. Oakland, J: Total Quality Management, op. cit., p246

6. Halpin, J F: Zero Defects - A New Dimension in Quality Assurance, op. cit., p100;
and The Government Centre for Information Systems: Quality Training, op. cit., p18

implies that these need not be particularly elaborate, they should give employees information about the programme being implemented, as well as the philosophy behind it¹.

Competitions/Prizes

Oakland is at pains to point out that quality competitions *"...are no substitute for training, they simply raise interest and levels of awareness"*, and he goes on to warn that if they *"...fail to generate interest they are worthless"*². Although the types of competitions that may be introduced are not restricted to any particular field or area of activity, he suggests that those based on error/defect reduction are most common³.

By definition, competitions have prizes for the successful and whilst Oakland acknowledges that the type of rewards on offer can vary greatly, he emphasises that recognition of employee or departmental success is important⁴. Presentations of certificates, awards or prizes by senior management only add to the importance of the competition and ensures that *"...the commitment and support from the top are visually demonstrated."*⁵

There are, of course, other promotional methods that can be used which Oakland and Halpin offer as possible alternatives for providing an additional spotlight on the programme including, amongst others, suggestion schemes, exhibitions, and wage/salary inserts⁶.

Training

The techniques for raising and maintaining quality awareness detailed so far share a common theme: they support the awareness programme, and whilst they offer an important backdrop they are unlikely, of themselves, to initiate the level of knowledge amongst employees fundamental to its

1. Halpin, J F: Zero Defects - A New Dimension in Quality Assurance, op. cit., p97

2. Oakland, J: Total Quality Management, op. cit., p245

3. Ibid.

4. Ibid. p246

5. Ibid.

6. Oakland, J: Total Quality Management, op. cit., p242-247; and Halpin, J F: Zero Defects - A New Dimension in Quality Assurance, op. cit., p96-101

success. Such knowledge, it has been argued, can only be acquired when it is "...grounded in hard information made available to staff in a form and at a level of detail which they could use"¹, and is, it has been suggested, best imparted through specific awareness training.

Regardless of whether they are referred to as training sessions, seminars, 'talk-ins', briefings or presentations, their objective is to communicate "...to all employees the reasons for and the benefits to be obtained from, the implementation of a quality assurance programme."² Stebbing goes on to say that this "...is best done by holding a series of 'awareness' talks, or seminars",³ a view shared by Cullen and Hollingum who argue that a company-wide briefing exercise is often the best way to get this message across.⁴

The Government Centre for Information Systems emphasised that apart from assisting in the launch of the quality initiative across the organisation, awareness seminars serve two principal functions. Firstly they enable top management "...to demonstrate publicly its commitment to the programme"⁵, and secondly provide "...the opportunity to outline the main elements of the programme and to provide some general information on how it will operate and how everyone is involved."⁶

The importance placed on training, however, is tempered by the proviso that it will not fulfil its assigned role unless it is planned and organised in such a way as to give maximum benefit. Although, as with promotional material, the quality of the training will have a direct bearing upon both the way it is perceived by the workforce and the benefit they gain from it, the pivot of its success it has been claimed will be the attention given both to the structure of the training programme, and to its content.

The Training Cascade

This phrase has been used by both The Government Centre for Information Systems and the Munro-Faures to describe what they

1. Department of Health, Committed to Quality: Quality Assurance in Social Service Departments, op. cit., p12

2. Stebbing, L: Quality Assurance: The Route to Efficiency and Competitiveness, op. cit., p42

3. Ibid.

4. Cullen, J & Hollingum, J: Implementing Total Quality, op. cit., p177

5. The Government Centre for Information Systems: Quality Training, op. cit., p19

6. Ibid.

regard as the most appropriate method of structuring an awareness training programme.¹ What they suggest is a programme which starts with senior management and then moves down through staff levels so that all employees within the company or organisation are covered: *"Experience has shown that the most effective approach to training within a company is to cascade the learning process from the manager to the supervisors and then to individual employees."*²

Although this particular choice of words is not used by all, many identify a cascading process as the most suitable one for the task. Stebbing argues that communication of the awareness programme should be company wide *"...starting with senior management, through all levels to junior management. No one should be left out"*³, and, as has already been mentioned, Cullen and Hollingum believe a *"...top-to-bottom briefing"*⁴ to be the best way of getting the message across.

In his account of British Steel's implementation of a 'Total Quality Performance' programme in the 1980's⁵, David Procter uses the term 'training cascade' to describe their education awareness training process, which began at director/works manager level and then moved down through middle management, foremen and supervisors, and finally to all other employees. Similarly, the awareness programme adopted by Kyle Stewart Ltd in the period leading up to BS5750 registration in 1988 began with main board directors, then senior managers, and on down to professional, technical and administrative personnel⁶.

This is not the only method that can be adopted, of course, with the other principal alternative being what The Government Centre for Information Systems has referred to as the *"big bang"*⁷. This approach requires all employees to be brought together for a briefing session to

1. The Government Centre for Information Systems: Quality Training, op. cit., p20; and Munro-Faure, L & M: Implementing Total Quality Management, op. cit., p118
2. Munro-Faure, L & M: Implementing Total Quality Management, op. cit., p118
3. Stebbing, L: Quality Assurance: The Route to Efficiency and Competitiveness, op. cit., p42
4. Cullen, J & Hollingum, J: Implementing Total Quality, op. cit., p177
5. Procter, D: "Training for total quality: British Steel shows the way", in Quality Management Handbook, Hand, M & Plowman, B (Eds), Butterworth-Heinemann, Oxford, 1992, pp115-6
6. Patemen, J D: "A company-wide quality awareness programme", in Quality Assurance, Volume 15, No 4, December 1989, pp171-174
7. The Government Centre for Information Systems: Quality Training, op. cit., p19

launch the awareness programme, and has been referred to by Halpin as a "Kickoff"¹. He makes the point that where the company or organisation is very large the 'kickoff' programme can be carried out at departmental level, but suggests that it is advisable to ensure that all smaller 'kickoff' programmes should be completed on the same day to maintain a companywide impact². The Government Centre for Information Systems implies that the 'big bang' approach is best carried out by larger organisations who have the resources necessary to carry it off, since they can utilise the technology, special guest speakers and specialist consultants required to bring it off effectively.³

It goes on to say that one of the drawbacks that can be associated with this approach is that it can lead to a degree of cynicism amongst employees⁴. The problem being that staff may regard such an extravaganza as time and expense being wasted on the latest management fad. This, it has been suggested, is a major advantage that the cascade approach has, since it's lower key approach avoids "...mere sloganising [or] hype"⁵.

One feature that is sometimes used when cascading the training programme is having one level of staff training the level immediately below them, with top management "...[briefing] *the senior managers who in turn brief their managers, and so on*"⁶, and in some instances the company or organisation will specifically train employees to carry out, or 'facilitate', the training⁷.

Content

Although the structure of the training may have an influence upon its success, the ultimate aim must be to raise awareness amongst employees. It follows, therefore, that the information given to staff is critical to the overall effectiveness of the programme, and the content of awareness seminars, briefings or training sessions (regardless of the form they take) is of central importance.

1. Halpin, J F: Zero Defects - A New Dimension in Quality Assurance, op. cit., p96

2. Ibid.

3. The Government Centre for Information Systems: Quality Training, op. cit., p20

4. Ibid.

5. Cullen, J & Hollingum, J: Implementing Total Quality, op. cit., p177-8

6. The Government Centre for Information Systems: Quality Training, op. cit., p20

7. See for example, Procter, D: "Training for total quality: British Steel shows the way", op. cit., p116-7.

It should be emphasised, however, that the structure of the training programme may have a bearing on the content of training sessions. Brian Rothery favours single briefing sessions to either groups or individuals with the following outline:

- History and background to standards
- What is quality management?
- What is ISO 9000?
- Demonstration of elements of company
- Identification of key quality control steps
- Quality Manual
- Demonstration of new documentation and procedures¹

The Government Centre for Information Systems on the other hand suggests a two-phase process for its awareness programme involving both 'general' and a 'detailed' awareness briefings. The former, it believes, should avoid technical details and concentrate on *"...emphasising that the quality improvement programme is something which is in everybody's interest and provides a foundation for the future development and growth of the organisation."*² This briefing gives the management of a company or organisation an opportunity to present to its workforce:

- the reasons for the quality initiative
- what its scope will be
- what its aims and objectives are
- evidence of the level of management commitment
- what the effect on the organisation is likely to be³

The detailed sessions which should follow, however, should give a more specific briefing about how the quality initiative is to be implemented⁴, and provide them with an understanding of:

- quality management systems
- the quality policy of the company or organisation
- the importance of personnel involvement
- the importance of customers
- the importance of preventing waste⁵

1.Rothery, B: ISO 9000, Gower Publishing Company, Aldershot, 1991, p51

2.The Government Centre for Information Systems: Quality Training, op. cit., p20

3.Ibid. p18

4.Ibid. p21

5.Ibid. p18

Furthermore, it argues that these detailed sessions should be aimed at line management and personnel, and the sessions should consist of briefings in peer groups.¹

Another approach, outlined by Oakland, is to gear the content of the sessions or briefings to the different audiences being trained, because the information passed to them must take into account their different responsibilities, and the differing roles that they have to play in the success of the programme of quality improvement.² He identifies four levels of staff who need to receive specific role related training:

Very Senior Management (the strategic decision makers):

the principal aim of their training should be to "...provide awareness and gain commitment to quality"³, with emphasis placed on their responsibility for, amongst others, meeting customer requirements, setting the standards to be achieved, monitoring overall quality performance, and involving the whole workforce in the quality improvement programme.⁴

Middle Management (the tactical decision makers & policy implementers):

the basic objective of their quality training should be to make them "...conscious and anxious to secure the benefits of the total quality effort"⁵. Moreover, it is important to ensure that managers are made aware of the responsibilities for the various activities in all functional areas⁶.

First Level Supervision (the 'on-the-spot' decision makers):

this is the level within a company or organisation where Oakland believes quality is actually 'managed', and their training should include not only an explanation of the principles of the quality programme and their role in the operation of the quality system, but also "...a convincing exposition on the commitment to quality of the senior management, and an explanation of what the quality policy means for them."⁷

All Other Employees (the 'doers'):

their training should include the basics of quality, but care should be taken to ensure that the explanation of the terms and concepts gives

1.Ibid. p21

2.Oakland, J: Total Quality Management, op. cit., p269-272

3.Ibid. p269

4.Ibid. p270

5.Ibid.

6.Ibid. p271

7.Ibid.

sufficient regard *"...to various levels of intellect and experience"*¹.

Judging the content of training sessions or briefings, as with the training programme structure, requires careful planning and preparation, and the establishment of a specific team, rather than an individual, to oversee the process is sometimes considered beneficial. However, in such cases it is considered essential that that team itself receives training in how to carry through its appointed task. The Munro-Faures recommend that such a team attends an intensive course beforehand to ensure that its members thoroughly understand what their responsibilities are, and how the programme can be implemented².

Regardless of who is being trained, or how the content of the training sessions are determined by the structure of the programme, the overall objective must be to improve the levels of knowledge and appreciation amongst employees, and it has been suggested that by the end of the training sessions or briefings *"...there should be little doubt within the organisation that management are determined to make changes."*³

Training Aids

In addition to the structure and content of training sessions, a number of authors have given attention to instructional aids which may be utilised by companies and organisations within these sessions. Although they should not be used merely for the sake of it, when appropriately included within the training package they can improve both the impression given and the employee retention of information. However, as with the promotional tools discussed earlier, their quality should be such as to demonstrate the importance attached to them as part of the training.

Both Rothery⁴ and Halpin⁵ suggest that training films and videos have a role to play within the training programme, and Halpin indicates that he believes them to be useful when training management or on 'kickoff day'⁶. These may be bought off-the-shelf or prepared specially, though budget constraints may preclude the latter.

1.Ibid. p272

2.Munro-Faure, L & M: Implementing Total Quality Management, op. cit., p117

3.The Government Centre for Information Systems: Quality Training, op. cit., p19

4.Rothery, B: ISO 9000, Gower Publishing Company, Aldershot, 1991, p51

5.Halpin, J F: Zero Defects - A New Dimension in Quality Assurance, op. cit., p100

6.Ibid.

The employee handbooks discussed earlier can be employed as part of the training package, and may even be issued to staff during the awareness briefings. Alternatively, a specific training booklet may be used in addition to, or instead of, a general awareness handbook. The Government Centre for Information Systems indicates that a briefing pack should be prepared for the detailed awareness briefings, and should be standardised for all employees¹. Whilst it would be less likely that training handbooks or packs would be bought off-the-shelf, there is no reason why an outside agency could not be employed (as with awareness posters) to design and prepare them. Although there might again be budgetary constraints on this option, they are less likely to be as expensive as training/awareness films or videos, and could add to the overall impression created.

The decision as to whether to use training aids produced 'in-house' or by/from external sources (and these may also include such things as charts and slides, for example) is, of course, not merely a question of cost. It may well be that neither the resources or experience is available to the company or organisation to produce the preferred items itself, or equally time may be against them. In such instances, purchasing the training material needed ready-made from outside the company or organisation may well be the most sensible option, but where such material is used *"...it must be adapted to ensure it is relevant to the organisation and to the individuals being trained."*² The danger in not doing so is that the staff being trained will recognise it as not being specific enough to them, and consequently may view the whole quality improvement programme as something from outside the company over which they can have no influence, and in which they have no interest.

Speakers and trainers from outside the company or organisation could only loosely be categorised as training aids, and only then when considered as part of the overall presentational package. Rothery³ and The Government Centre for Information Systems⁴ both consider them valid enhancements when seeking to get the message across. The rationale being that guest speakers emphasise to the workforce the

1. The Government Centre for Information Systems: Quality Training, op. cit., p21

2. Munro-Faure, L & M: Implementing Total Quality Management, op. cit., p118

3. Rothery, B: ISO 9000, op. cit., p51

4. The Government Centre for Information Systems: Quality Training, op. cit., p19

importance which senior management attaches to the programme. Similarly, the use of quality consultants¹ as part of the training process adds to the overall impression whilst also allowing the company to make use of external expertise. Again, however, care needs to be taken to avoid the cynicism engendered by them being perceived by employees as an external influence.

Duration

As with the content of training, the amount of time taken up by the sessions *"...depends on the individuals being trained."*² Obviously the amount and type of information being disseminated will have a bearing on session duration, but the difficulty for any company or organisation is in ensuring that sufficient training is given to employees, but not too much. The correct balance will only be achieved when staff receive sufficient information to enable them to contribute to the success of the quality programme, but not so much that they are saturated with training to the point that fatigue and/or boredom set in.

The length of time recommended to be spent on each session varies; The Government Centre for Information Systems suggests that its detailed awareness briefings should be in groups of no more than 25-30 and last up to about 30 minutes³, whilst Cullen and Hollingum believe that any session intended to explain what quality is, its importance, and what the company's quality programme involves *"...is likely to take about two hours. If it goes on for longer, there is probably too much detail."*⁴

The training programme adopted by British Steel's Total Quality Performance (TQP) implementation involved training courses, workshops and presentations which varied in length from two days to two hours, with group sizes ranging from twelve to fifty⁵. It should be emphasised, however, that the differences in session length were determined by who were participating and what the training objectives were. For example, the presentations (on 'TQP communication')⁶ to all employees below

1. Ibid.; see also Procter, D: "Training for total quality: British Steel shows the way", op. cit., p115

2. Munro-Faure, L & M: Implementing Total Quality Management, op. cit., p118

3. The Government Centre for Information Systems: Quality Training, op. cit., p21

4. Cullen, J & Hollingum, J: Implementing Total Quality, op. cit., p178

5. Procter, D: "Training for total quality: British Steel shows the way", op. cit., p113

6. Ibid.

middle management level were of shortest duration, whilst the specialised training given to those responsible for 'facilitating' the training programme was led by external consultants and lasted seven days¹.

Whilst Crosby has indicated that a quality awareness programme should consist of *"...a constant stream of events with no real start or finish"*², the very nature of awareness training would suggest that, regardless of whether system based or not, it is likely to be concentrated at the 'front end' of the quality implementation process. The overall duration of the training programme as a whole will be determined by, amongst other factors, the number of employees to be trained, and in the case of BS5750 implementation, the time available before the proposed external assessment of the quality system. Whilst ideally the date for assessment should be determined in part by how long the company or organisation believes is necessary to raise the appropriate levels of awareness amongst employees, commercial pressures may require the assessment date to be fixed in advance and the awareness programme to fit into the time available.

The training programme initiated by British Steel was planned to take place over a thirty-two month period, starting with senior management and ending with all employees below supervisor/foreman level. It should be stressed, however, that unlike the example of Kyle Stewart which is discussed in the next section, the British Steel quality programme was not system based, and the training included detailed operational training for their TQP programme. Within the period from April 1988 to the end of 1990 there were distinct phases of training aimed at different employee peer groups. Senior management took part in a single two-day session at the beginning of the training programme whilst middle management each received four 1 day training sessions, with just over a thousand being involved over an eight month period between November 1988 and July 1989³. Supervisor sessions commenced as middle management training was ending, with two one-day sessions for all over two months, and the 5300 employees below this level were trained in groups of eighteen through two one-day sessions from September 1989 onwards⁴.

1.Ibid. p116

2.Crosby, P B: Quality is Free: The Art of Making Quality Certain, op. cit., p182

3.Procter, D: "Training for total quality: British Steel shows the way", op. cit., p113

4.Ibid.

Case Study: Kyle Stewart Limited¹

The group of companies operates within the construction industry, and at the time of BS5750 registration employed approaching 1000 people. In November 1988 four companies within the group achieved certification; two to BS5750 Part 1, and two to Part 2. Pateman's description details how the companies developed a training awareness programme in the period leading up to registration, and gives an indication of the way in which some of the topics discussed so far in relation to awareness training can be put into practice.

Approximately a year before assessment, the main board directors attended a two-day workshop which was intended to *"...provide a clear understanding of alternative approaches to quality management implementation and training"*². From this workshop a training programme was developed to pave the way for the change of culture which would result from the company's quality initiative, and to *"...help create an environment which could accept change."*³

Over a three month period in the spring of 1988 three two-day seminars were held for senior managers in groups of eighteen. Whilst one aim of each seminar was to explain the executive strategy to the attendees, it was also intended that the delegates should contribute to the development of the awareness programme and help to *"...establish the messages and the way they were to be communicated to the rest of the company."*⁴ Amongst the messages and ideas identified at these sessions as needing to be transmitted to the rest of the company's personnel were:

- Principles of, and need for, quality management
- Benefits to the company, and to individuals
- Need for procedures and their maintenance
- An understanding of audits
- How staff would be involved and affected
- How long it would take⁵

1. The details which follow have been taken from: Pateman, J D: "A company-wide quality awareness programme", in Quality Assurance, op. cit., pp171-174

2. Ibid. p171

3. Ibid.

4. Ibid. p172

5. Ibid.

In addition, each of the twenty separate messages identified were prioritised as either *vital*, *important*, or *of general interest*, and whilst some messages would be of the same level regardless of which company group was being addressed, the priority of others might vary according to each group. The different methods chosen for communicating the messages to the various groups within the company involved either:

- description in simple terms
- more detailed description using documents and illustrations
- full description with examples
- interactive sessions using case study/workshop techniques¹

The programme developed also highlighted several key characteristics which should apply throughout the sessions:

- Length should vary between two and three hours
- Numbers for the majority of sessions should be limited to 25
- All training should be carried out by departmental managers²

It was further decided that each group should attend either four or five sessions over a period of ten to fourteen weeks, with the first and last sessions being considered "*... 'milestone' events, where food and drink would be provided and an introduction would be given by a director.*"³

It was recognised that all the departmental managers responsible for carrying out the awareness training would themselves require both training and support, and whilst all had attended the two-day management seminars they also received further briefings before the awareness programme began, and further briefings halfway through. In addition, all the trainers were given access to a package of support material including session lecture notes, notes for attendees, and overhead projector slides. All of which they could modify and/or adapt to suit their own and the delegates needs.⁴

The awareness programme was specifically designed to commence after the initial implementation of the company's quality systems and procedures, and following the initiation of the programme of internal

1. Ibid.

2. Ibid.

3. Ibid.

4. Ibid. pp172-3

audits¹. In the first phase of awareness training only project-related departments were involved and over a period from September 1988 to January 1989 approximately four hundred employees attended awareness seminars. (During this period the external assessment was carried out, so not all company employees had received awareness training, nor all the 'first phase' delegates, by the time the assessment was completed).

The company was anxious to ascertain the effectiveness of the awareness programme, and to do so carried out a series of pre- and post-seminar surveys (using questionnaires and interviews) amongst fifty five people chosen from the original target group of four hundred. The objective of the surveys was to determine whether the awareness programme had improved employee knowledge of the benefits of quality system implementation to the company and the quality management programme, objectives and timescales². In addition, the surveys sought to identify whether the seminars had generated greater understanding of quality management, quality systems and procedures, and improved employee attitude to, and involvement in, the quality system implementation³.

The results of the surveys, Patemen claims, showed that the awareness programme had engendered:

*"...a more positive attitude in personal commitment and the individual perception in the commitment of managers and other departments...a clearer realisation of what the benefits are to the individual, the department and the company...an individual desire to be involved in the improvement process, because there is now a realisation that it can be brought about at a personal level."*⁴

The company regarded the success of its awareness programme as a foundation to build on, but it recognised that its benefits should not be restricted solely to the rest of the company employees and so initiated a

1. It is a specific requirement of BS5750 quality system implementation that a documented programme of internal quality audits is undertaken during the life of the quality system "...to verify whether quality activities comply with planned arrangements and to determine the effectiveness of the quality system."; See BS5750: Part 1: 1987: Section 4.17; and BS5750: Part 2: 1987: Section 4.16

2. Patemen, J D: "A company-wide quality awareness programme", op. cit., p173

3. Ibid.

4. Ibid.

series of awareness training presentations for the key companies to which it sub-contracted its work¹. These sessions were intended to allay the fears amongst many of those companies that quality management *"...was all about super checking, records and additional layers of bureaucracy."*² Furthermore, in addition to dispelling these suspicions, the company sought to put over the message that quality management *"...provided a greater chance for sub-contractors to be able to achieve the margins they had built into their price"*, and to develop a relationship that gave Kyle Stewart confidence in the abilities of its sub-contractors to meet specified requirements competitively³.

Following registration, the company has developed its awareness programme further. Since all new staff are required to undertake specific quality management training as part of their company induction, it has produced a short in-house video for use as part of induction training. This video, with adaptations, is also available for use when training sub-contractors, or when making presentations to clients.

The company in-house magazine, which is distributed to all employees, now has a 'Quality News' supplement concentrating on quality related matters which enables the company to outline its quality management strategies. It also provides staff with an opportunity to express their views on quality, and allows the Kyle Stewart Group to *"...advertise and acclaim all the successes...achieved in this field."*⁴

Summary

It is evident from all that has been discussed that there are a wide range of different, if often interrelated and mutually supportive, methods available for raising quality awareness levels amongst employees. The extent of the techniques considered lends weight to the assertion in the guidelines to BS5750 that the complexity of the training undertaken to heighten awareness and mould the attitudes of personnel *"...varies with*

1. Ibid.; At the time of reporting in December 1989, a total of twelve half-day sessions had been undertaken with the managing directors of one hundred and sixty companies.

2. Patemen, J D: "A company-wide quality awareness programme", op. cit., p173

3. Ibid.

4. Ibid.

the complexity of the organisation."¹ It is equally clear, however, that no two companies or organisations need instigate the same awareness programme; indeed there is good cause for suggesting the programme of methods adopted in one situation wouldn't necessarily be effective or successful in another. Nevertheless, the views expressed suggest that there are certain basic, if slightly intangible, 'rules' that should be adhered to for the awareness activity generally.

In addition to ensuring that the methods adopted are appropriate for the company or organisation in question, their quality should be such as to emphasise both the commitment of senior management and the importance that they attach to the awareness process. Moreover, the awareness programme itself should *"...emphasise the concrete nature of the activities and the objectives of improved competitiveness"*, whilst avoiding *"...mere sloganising [and/or] hype"*²

Any awareness activity, whether specific training or promotional 'back-up', should be planned and structured so that employees gain the greatest benefit, and the content analysed to ensure that the appropriate training is given to the right personnel. Aside from being a waste of time, effort and resources, awareness programmes which do not take into account the different needs and expectations of the staff to which they are to be addressed run the risk of alienating or estranging them.

One final point, stressed by Halpin, is that management should ensure that quality awareness programmes stand out from other activities, whether training related or otherwise. There is little point, he argues, in trying to assimilate quality awareness into existing company programmes, or in attempting to incorporate them into other activities since both their impact and message will be lessened, or even lost: *"A key factor to remember is that [the program] should not share the spotlight with any other program. It deserves its own exclusive showcase."*³

1.BS5750: Part 4: 1990: Guide to the use of BS5750: Section 4.18

2.Cullen, J & Hollingum, J: Implementing Total Quality, op. cit., p177-8

3.Halpin, J F: Zero Defects - A New Dimension in Quality Assurance, op. cit., p95

Chapter 3

COMPANY/ORGANISATION QUESTIONNAIRES

3.1 Methodology

3.2 Questionnaire Analysis

3.1

METHODOLOGY

As was indicated in the Introduction, the overall purpose of the research was to seek to determine how companies and organisations have sought to raise staff/employee quality/BS5750 awareness levels, if at all. This could only be done by canvassing those companies and organisations to establish what, if any, steps they took to achieve this, and the methods they adopted. However, such a survey could only be undertaken when the most appropriate method of information gathering had been determined.

In choosing the companies and organisations to be included in the survey, it was decided that only those already assessed and registered to BS5750 would be used. The reason for this selection criteria was that all companies and organisations registered *must*, it was presumed, have satisfied the requirement in the Standard for raising awareness levels amongst staff/employees. They had to have satisfied their assessing body that they had sought to ensure that their Quality Policy was *understood, implemented and maintained* throughout their workforce. These companies and organisations would provide, therefore, evidence not only of the different steps that could be taken to raise awareness, but also an indication of the methods for raising awareness which satisfy the assessing bodies.

The 'post event' nature of such a selection criteria, however, does preclude certain methods of information gathering. Given the activity under investigation, it seemed logical to assume that any company or organisation included in the survey would have taken most, if not all of any steps to raise awareness prior to to assessment and registration. Clearly then, this selection criteria would prohibit the effective use of participant observation studies, for example, which rely on analysis of the 'action' as it happens.

In addition, it was determined that the number of companies and organisations intended to be surveyed mitigated against the use of such an approach. The 1994 issue of the DTI Register of Quality Assured companies and organisations indicates approximately thirty thousand companies and/or organisations registered to BS5750, and since both the time and resources available would not allow all to be included it was necessary to survey only a sample of those available. A sample size of five hundred and fifty was chosen in order to ensure as wide a range of companies and/or organisations as both time and resources would allow, but this also meant that a survey based on telephone interviews had to be discounted as being impractical.

The possibility of conducting the research solely through the use of case studies was considered, but again time and resources mitigated against this approach. It was felt that the number of companies and organisations that would need to be investigated to provide a satisfactory range for the research was prohibitive, whilst concentration on a smaller selection of companies and organisations would not give that range. The use of case studies was not discounted entirely, however, and it was decided that they should have a role to play in the overall research and three are included in a later chapter.

Given the sample size, and the type of information required, it was considered most appropriate to conduct the survey through the use of questionnaires. There are constraints on this method of information gathering of course, not least of which is the need to keep the questionnaire simple and brief enough to ensure a satisfactory level of response whilst ensuring that it is detailed enough to provide the information required. In addition, the use of questionnaires sent to companies and organisations entails sacrificing control of the sample in terms of overall response. It is not until those questionnaires which are going to be returned have been returned that the actual sample range can be established. Despite these drawbacks, however, this approach was deemed likely to be the most effective in the circumstances, though it was recognised that great care would need to be taken in both the design of the questionnaires, and the monitoring of the sample range.

Respondent Selection

All companies and organisations were chosen from the QA Register

published annually by the Department of Trade and Industry. The Register details all those registered to BS5750 Parts 1, 2 or 3 at the time of publication, as well as companies and organisations assessed to other product or client specific quality assurance standards such as, the Ministry of Defence AQAP series or the National Health Service DHGMP Standard. In addition to the names and addresses of companies and organisations registered, it also indicates to which Part of the Standard they have been assessed, which accredited body carried out the assessment, and the products and/or services assessed (the scope of registration).

As has already been indicated, a total of five hundred and fifty questionnaires were sent out to companies and organisations throughout the UK. The principal determining factor in selecting those from whom responses would be solicited was whether or not they were registered to Part 1 or Part 2. Whilst it would have been advantageous also to select on the basis of company size, the Register does not give those details and it was not possible to use that criteria. However, some entries in the Register are for well known companies and organisations with known large workforces, and certain of these were chosen in an attempt to ensure that at least some of the respondents were large scale. More difficult were those of a smaller size, and whilst it was possible to make an estimate of size, their workforce levels could not be accurately ascertained until their replies had been received.

Since the Register does indicate the scope of registration it was possible to identify a range of types of companies and organisations when choosing those to whom questionnaires would be sent. Every effort was made to ensure a balance in selection across a wide spectrum of industry types; manufacturing and service industries, public and private sector; high-tec and low-tec.

In addition, because the role of the assessing bodies is an element of the research, it was considered necessary to ensure that companies and organisations were also selected on the basis of which body carried out their assessment. It may be that the various assessing bodies interpret the requirement for raising awareness levels differently, and in order to ascertain whether or not this was true it was necessary to ensure that the companies and organisations chosen were drawn from across the different assessor bodies.

Company/Organisation Questionnaires

Initially a 'pilot' questionnaire (see Appendix 1) was sent out to one hundred and fifty companies and organisations. Its purpose, in addition to gathering information on awareness programmes, was to ascertain whether the design of the questionnaire was satisfactory or could be improved. In particular, before sending out further questionnaires, it had to be established whether the responses received would provide the information required for meaningful analysis. Any questions which were misunderstood would require re-phrasing, any which did not provide useful information might need re-drafting, or omitting, and it was advantageous to ascertain whether the responses suggested any questions which could be added (see particularly Q29).

Although a large pilot size, particularly in view of the proportion of total questionnaire that it represented, it was felt that it needed to be large enough to cover the wide range of possible combinations. Industry type, company and organisation size, date of registration and the Certifying Bodies used, could all contribute to a diverse selection of possible respondents. For this reason it was felt that any disadvantages arising from slight disproportion were outweighed by the benefits of 'testing' it on a wide a range of respondents.

Based on the responses to this 'pilot', a number of changes were made to the questionnaire before being sent out to further companies and organisations (see Appendix 2). The alterations were to both form and substance, which resulted in an overall shortening of the questionnaire. It was apparent from the completed pilot questionnaires returned that there was a greater willingness to give answers to questions which required boxes to be ticked than to provide written information. For this reason, the revised design increased the number of questions which could be answered in this way, though space was still left for written responses as appropriate.

In the second questionnaire it was possible to incorporate the most common responses from the pilot as possible answer options for respondents (for example, see the difference in format of Q16, Q18, Q21 and Q24 in the first questionnaire and the corresponding Q15, Q17, Q20 and Q23 in the second). Whilst some questions and possible responses remained unchanged, as much use as possible was made of the answers given in the pilot as guidance for the re-design.

Question 4 in the first questionnaire, relating to the products and/or services covered by the scope of registration, was omitted from the second because the information given did not significantly enhance, or vary from, the scope of registration indicated in the DTI QA Register. Although there were some variations between the scopes provided by the respondents and those in the Register, they were not felt to be sufficiently different from those available in the Register to warrant the continued inclusion of that question.

In both questionnaires, the intention was to structure the questions posed so as to provide answers in distinct areas of interest. Questions 1 to 8 in the second questionnaire were designed to provide general information about the company or organisation that would enable comparisons to be made based on whether the registration was to BS5750 Part 1 or Part 2, the size of the company or organisation, and the date of registration. Similarly, being part of a larger Group, parts of which might have been registered to BS5750 before the respondents, could have a bearing on who carried out the awareness training. Those questions relating to the employment of full-time training personnel and the use of external trainers and QA consultants were intended to ascertain whether these factors influenced who carried out the awareness training, and its content.

Questions 9 to 18 were all intended to provide information on the methods used to raise awareness amongst employees, whether these were handled by the company/organisation or by outside sources, and the reasons behind the methods and training source adopted. Furthermore, these questions were designed to identify who was being trained, what they were being taught, and by whom.

Questions 19 to 25 dealt with the subject of post-registration training, both to new and existing employees. The intention was to identify any difference in method of raising awareness for new employees to that used for existing employees prior to registration, and whether any further training was given beyond the initial awareness programme.

The final questions sought to identify those companies and/or organisations which would be willing to act as case studies, and who had carried out their own investigations into employee awareness which might be incorporated into the case study details.

Included in the section evaluating the answers to the company and organisation questionnaires is a statistical analysis of those responses. Confidence limits have been set on those questions in the questionnaire relating specifically to the company or organisation's awareness programme which could illicit either a positive or negative response (Q9, Q13(a) & (b), Q19, Q21, Q22 & Q26). This permits construction of an interval that will, at a specified level of probability (95%), include the population mean. Unless specified otherwise, all 95% confidence intervals relate to YES responses.

For those questions where it is not possible to use this test, because they are multiple choice and can only illicit positive responses, a Chi-square test has been used in an attempt to ascertain whether there is evidence that the results obtained are not random, and significantly different from a uniform pattern of preferences. It should be noted, however, that in certain questions where '*Other*' was listed as an option, the number of companies/organisations choosing it was very small. In such cases, the Chi-square test carried out excluded '*Other*' so that the results would not be unnaturally imbalanced.

3.2

QUESTIONNAIRE ANALYSIS

This section details the responses to the questions posed in both the pilot and subsequent questionnaires, together with an analysis of those responses. It should be noted, however, that as there were differences between certain questions in the pilot and main questionnaires (rephrasing of questions or greater use of tick boxes) it was recognised that these differences might have influenced the responses. Consequently, the analysis differentiates between the responses to the two questionnaires where a question in the pilot was rephrased in the main questionnaire, or where additional tick boxes are used in the latter. Where there was no difference between questions in the pilot and the main questionnaire, save for numbering, no differentiation is made.

In addition, it should be noted that since not all questions were fully responded to in all the questionnaires returned, the percentages indicated in the analysis represent the proportion of the total who did provide a response. The question numbers referred to in the analysis relate to those from the main questionnaire.

SAMPLE DETAILS

Of the five hundred and fifty questionnaires sent out, a total of two hundred and forty eight were returned; sixty of the one hundred and fifty pilot questionnaires, and one hundred and eighty eight from the remaining four hundred, giving an overall response rate of 45%.

Questions 2 - 8 on the questionnaire were designed to provide general information about the respondent companies and organisations that would 'place' the sample. Furthermore, they would enable an analysis of responses to be made between different types of respondent companies

and organisations in an effort to ascertain whether their position within the sample had any bearing on the responses to later questions.

2. To which part of BS5750 has your company/organisation obtained registration?

Part 1:	22.6%
Part 2:	77.4%

Although the ratio 3.5:1 of Part 1 to Part 2 companies and organisations may appear unbalanced, the entries in the DTI QA Register suggest that the actual ratio is approximately 3:1. When the questionnaires were sent out the ratio of Part 1 to Part 2 was approximately 2.2:1, so the responses received are a closer representation of the actual ratio.

3. When did your company/organisation first obtain registration?

1984	0.5%
1985	1.7%
1986	2.5%
1987	3.0%
1988	4.6%
1989	11.4%
1990	11.8%
1991	28.0%
1992	36.0%
1993	0.5%

Since the DTI QA Register does not indicate the year in which companies and organisations obtained registration, it was not possible to select potential respondents on that basis. However, the breakdown above is indicative of the way in which registration has developed in recent years. Although initially published in 1979, BS5750 did not really 'take off' across a broader range of companies and/or organisations until after its re-issue, following changes, in 1987. The 1993 figure is small, however, because at the time the questionnaires were sent out (early and mid-1993) details of companies and organisations registered since the last issue of the DTI QA Register (1992) were not readily available. Consequently, the number of potential respondents available from 1993 were limited.

4. What is the total number of employees covered by your registration?

Less than 10	5.5%
10 - 50	31.3%
50 - 100	28.6%
100 - 500	26.6%
500 - 1000	5.4%
More than 1000	2.6%

As was indicated in the earlier section on respondent selection, the DTI QA Register does not give details of company and/or organisation size and as a consequence it was not possible to target specifically on that basis. Those companies and organisations who did provide responses, however, provide a reasonable approximation of those who have achieved registration to date. 86.5% of the companies and organisations who responded employed 10 - 500 staff/employees, and this bias is not untypical of those registered within the UK. It is only relatively recently that those employing less than 10 have begun to seek and achieve registration. The reasons for this are primarily twofold; firstly the cost of implementation and assessment has 'put off' smaller companies and organisations, and secondly it is only recently that they have come under pressure to seek registration.

As the pace of registration to BS5750 developed, customers and clients tended to concentrate on larger companies and organisations who they perceived as having a greater potential impact on the quality of their goods and services. It was these suppliers who initially came under pressure from clients and customers to achieve registration, and only later that the smaller ones began to come under similar pressure.

The fact that companies and organisations with workforces of more than 500 only amount to 8% of the sample is perhaps due to the fact that typically their size tends to put them in the position of clients and customers mentioned above, and whilst they often put pressure on their suppliers to seek and achieve registration to BS5750 they were perhaps not quite so quick to seek and achieve it themselves. More importantly, however, when selecting potential respondents an effort was made to target well known companies and organisations with an anticipated large workforce in an effort to ensure that they were not under-represented in

the sample. Unfortunately, they proved the least willing to provide responses to the questionnaire.

5. Is your company/organisation part of a larger group?

YES 56.8%

(a) If YES, are any other parts of the group also registered to BS5750?

YES 23.4%

(b) If YES, did any achieve registration before your own company/organisation?

YES 18.1%

The earlier section on company/organisation questionnaires indicated that the reason for including this question was an attempt to ascertain whether being part of a larger Group, parts of which were already registered to BS5750, had any bearing on who carried out any awareness training that took place. From the figures above, it is evident that of the companies and organisations who responded to the questionnaire 18.1% were in Groups in which other parts were registered before them.

6. Are full-time training personnel employed by your company/organisation?

YES 21%

7. Does your company/organisation ever use external trainers or training organisations?

YES 88.3%

8. Did your company use external Quality Assurance consultants in the period leading up to assessment and registration?

YES 70.1%

As with question 5, questions 6 - 7 above were all included in an effort to ascertain whether there were any determining factors behind the ways in which companies and organisations tackled the problem of raising employee awareness levels, the content of any training sessions, workshops and the like, and who carried out that training.

Those employing full-time trainers might be more inclined to attempt to handle any awareness raising activities themselves, whilst those which did not (clearly the majority in the sample) might be more likely to seek outside assistance. Similarly, those companies and organisations which did not use external trainers for any training (only 11.7% of the sample) might conceivably be reluctant to use external sources for help in raising awareness levels. Equally, the use of consultants when implementing a quality system prior to assessment and registration could influence how the task of raising awareness was tackled; were the consultants themselves used, for example.

In addition to the sample information taken from the questionnaires, the following additional information was drawn from the entries for each company and organisation in the DTI QA Register.

Industrial Sector

Automotive	5.8%
Building & Construction	9.1%
Chemical Industry	5.4%
Civil Engineering	8.2%
Cleaning & Hygiene	2.2%
Electrical & Electronics	6.2%
Foodstuffs	1.8%
Foundries & Fabricated Metal Products	8.6%
Freight	3.8%
Furniture	1.4%
Local Authorities & Public Bodies	1.4%
Machinery, Equipment and Related Products	9.5%
Management Services	3.4%
Medical & Pharmaceutical	1.4%
Miscellaneous Manufacturing	4.2%
Polymer/Plastics	9.8%
Printing & Packaging	4.3%
Stationary Manufacturers	0.6%
Stockists/Wholesalers	6.2%
Telecommunications	1.8%
Textiles & Clothing	2.1%
Training & Education	2.2%
Travel	0.6%

Although every effort was made when selecting potential respondents to ensure that a wide range of industrial sectors were canvassed, it was always possible that the actual responses might create an imbalanced sample. In the event, the list above suggests that that danger has been avoided since no one industry dominates the sample. As with the bias towards manufacturing discussed earlier, those industries with a larger section of the sample only reflect those which historically have been at the forefront of BS5750 implementation.

Industry Type

Manufacturing	60.4%
Service	32.2%
Manufacturing & Service	7.4%

The predominance of manufacturing over service amongst the respondents is not untypical of the general range of companies and organisations so far registered to BS5750. Until relatively recently, implementation and assessment of quality systems tended to be undertaken mainly by manufacturers. The principal reason for this was that they were the companies and organisations initially targeted by clients and customers as having potentially the most direct impact on the quality of their own products and services. Those supplying components for inclusion in military equipment, for example, or the finished equipment itself, were historically the first to be subject to MOD AQAP assessment. The need to assess the management systems of service companies and organisations to BS5750 is a more recent development, but it is this industry type that has in recent years begun to predominate amongst companies and organisations seeking registration.

PRE-ASSESSMENT/REGISTRATION TRAINING

The information required by questions 9 to 18 in the questionnaire was geared towards ascertaining how companies and organisations sought to raise awareness levels, if indeed they did so. Specifically, the how, who, what and by whom elements of any awareness programmes, with particular attention given to whether the programmes were undertaken 'in-house' or from external sources.

9. In the period leading up to assessment and registration, were any steps taken to raise awareness of BS 5750 within the company/organisation?

YES	98.4%
NO	1.6%

95% confidence interval: 96.84% - 99.96%

It is clear from these figures that the vast majority of companies and organisations who responded had positively sought to raise awareness levels amongst staff/employees, but equally clearly a small minority did not. Although only a very small percentage of the overall sample, it should be remembered that the four companies in question were all satisfactorily assessed and were recommended for registration. As was indicated in the Introduction, however, BS5750 does not specifically indicate that awareness programmes are a mandatory requirement and the means by which awareness levels *might* be raised suggested by the various Guides to BS5750 are not compulsory.

It seems perfectly possible that a company or organisation might engender satisfactory awareness levels amongst its workforce without resorting to any specific steps. The spirit of the Quality Policy might conceivably filter through to all staff and employees, and a satisfactory level of understanding be generated, without any positive prompting by the company or organisation. This is perhaps more feasible in smaller companies and organisations, particularly where the management and workforce were 'close knit', and indeed one of the four respondents did indicate that whilst there had been no particular steps taken "Being a small company all employees were aware throughout". Three of the four companies had nine, eighteen, and twenty-four employees respectively, and so perhaps were 'close knit', though all other respondents employing twenty-four or less (13.7% of the sample) did consider it appropriate to take steps to raise awareness levels. The fourth company, however, employed five hundred people, and whilst it is not impossible that it was sufficiently close knit for awareness levels to develop without any additional influence, this seems a little unlikely.

Where companies and organisations did indicate that they had undertaken steps in order to raise awareness levels, the table below details those

methods used, whether they were handled by their own staff, by external sources, or by a combination of both.

	<i>YES</i>	<i>I-Hse</i>	<i>Ext</i>	<i>I-Hse & Ext</i>
<i>Staff training courses/meetings?</i>	97.1%	75.9%	9.2%	14.9%
<i>Poster campaigns?</i>	31.1%	81.6%	11.8%	6.6%
<i>Issuing of staff handbooks?</i>	33.6%	97.5%	2.5%	00%
<i>Other (See below)</i>	5.3%			

χ^2 (*YES*, excluding '*Other*') = 126.54 ($\alpha < 0.05$); suggesting that the responses are not random, and are significantly different from a uniform pattern of preferences.

The 'other' methods adopted included memos to staff on progress, letters to employees, monthly company newsletters, employee roadshows and a staff quiz, though these steps represented only a small percentage of the overall picture.

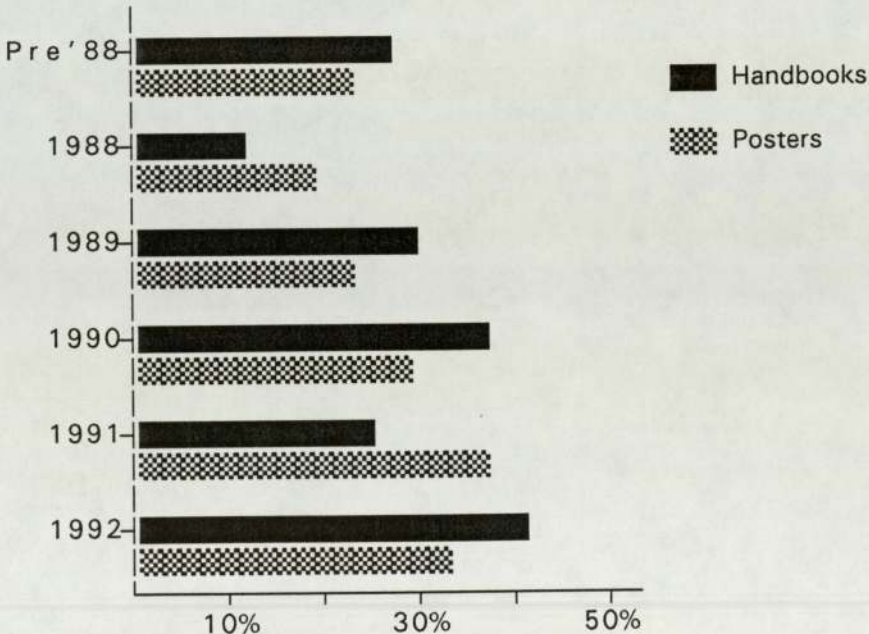
These figures suggest that far and away the most popular method adopted by respondents to raise awareness levels was the use of training courses and/or seminars. Although the use of poster campaigns and the issuing of handbooks were roughly equal in popularity, companies and organisations were approximately three times more likely to make use of some form of training course or meeting with staff/employees to raise awareness levels.

The emphasis given to staff/employee training courses and meetings is further illustrated by the fact that 44% (95% confidence interval: 37.77% - 50.23%) of respondents indicated that this was the only step they took to raise awareness levels, whilst only 2.8% used solely poster campaigns, staff handbooks or other methods. Furthermore, where a combination of steps was adopted, companies and organisations indicated that training courses/meetings always remained part of the awareness programme. 19.4% used them in conjunction with poster campaigns, and 21.1% along with the issuing of staff handbooks. 11% used all three methods.

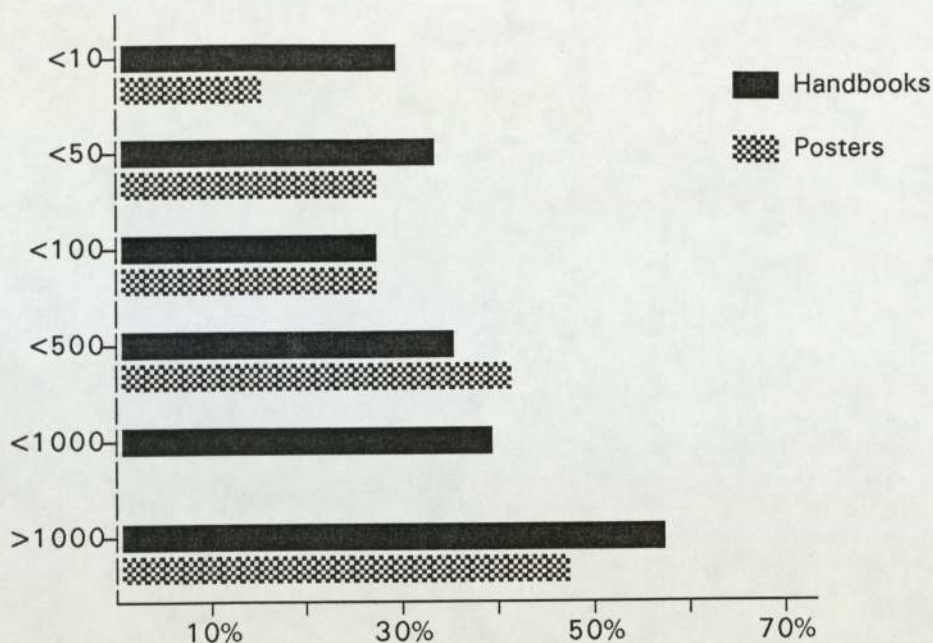
Of those companies and organisations who did not use training courses/meetings there was no common factor other than the fact that all but one of them did not employ full-time training personnel. Whilst this could clearly influence any decision not to use training courses/meetings, it has to be said that 97.5% of other companies and organisations who did not have full-time training staff *did* undertake courses/meetings.

Equally, the availability of training personnel was not a determining factor when it came to using poster campaigns or issuing staff handbooks. 79.9% of companies and organisations who used poster campaigns did not employ training staff, and 73.2% of companies and organisations who issued handbooks.

In an effort to identify whether there were any other influencing factors which determined the use of posters or handbooks, respondent companies and organisations were analysed with reference to both their size and date of registration.



Overall the figures do not suggest any particular trend one way or the other, although there appears to have been a slightly greater tendency to make use of both posters and handbooks in recent years. This slight increase might have been explained by the development of BS5750 increasing the availability of 'off-the-shelf' posters and handbooks in recent years, though 8.4% of companies and organisations who used either acquired them solely or partly from external sources.

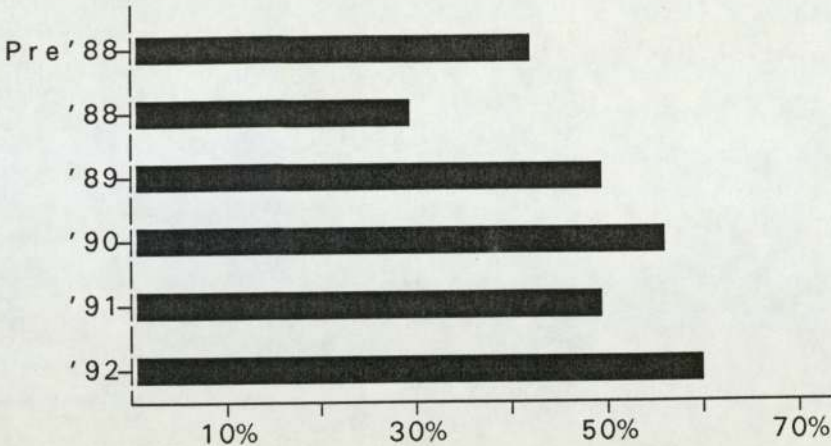


Again the responses suggest that there is no overwhelming difference between respondent companies and organisations based on their size, though there is a preference for the use of poster campaigns amongst those employing more than 500. It seems reasonable to suggest that this is at least in part due to it being one of the most effective method of getting a message across in companies and organisations of this size. Equally, it may be that their size brings with it the resources necessary to produce posters themselves.

Similarly, there appears to be a marked increase in the use of handbooks amongst respondent companies and organisations with more than 100 employees, though the absence of handbooks for those whose workforce is between 500 and 1000 seems strange. It may be that this is an anomaly in the sample, since there seems no obvious reason for it. As with poster campaigns, it seems reasonable to assume the reasons for the use of handbooks amongst companies and organisations of this size are, at least in part, the same.

Training courses/meetings were far and away the most popular method adopted for raising staff/employee awareness levels, with approaching half the companies and organisations indicating that this was the only step taken. However, the rest used these courses and meetings as part of a broader awareness programme which incorporated other methods. The following table indicates the way that the use of these broader programmes has developed, showing the proportions of companies and

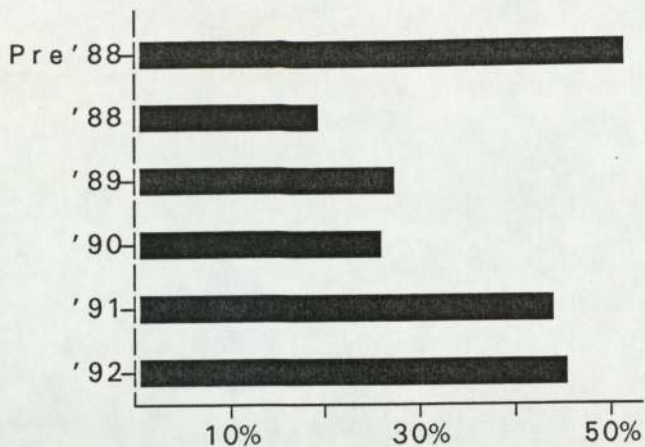
organisations who used training courses/meetings in conjunction with either poster campaigns, the issuing of staff handbooks, or both.



These figures suggest that the use of a broader brush when it comes to awareness programmes has grown in recent years. As with the use of posters and handbooks discussed previously, this may in part be due to the increasing availability of 'off-the-shelf' products for incorporation into a company or organisation's awareness programme, though equally it may be evidence of an increasing confidence, borne of a greater general awareness of BS5750, to attempt to do it themselves.

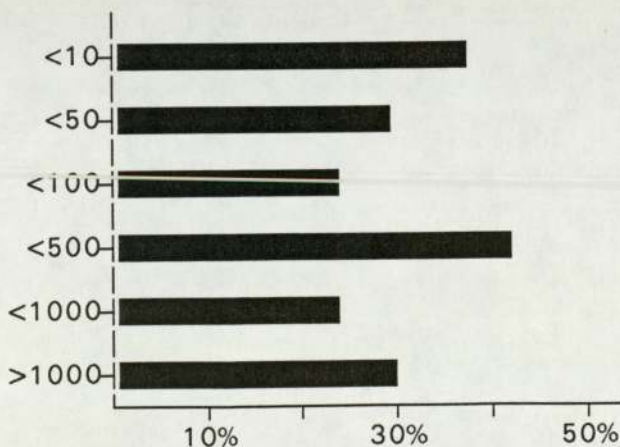
Why training course/meetings should be so popular is perhaps explained by the extent to which companies and organisations chose to handle whichever method was adopted 'in-house'. 75.1% of respondents (95% confidence interval: 69.68% - 80.52%) indicated that they undertook all steps themselves, whilst almost 92% (95% confidence interval: 88.6% - 95.4%) undertook at least part of the programme (in a little over 16% of cases the steps were undertaken both 'in-house' and with the aid of external sources).

Of those who used external sources for part of their training programme, just over 90% used them for their training courses/meetings but handled any other methods for raising awareness (posters/handbooks) themselves, whilst only a little under 10% undertook the training courses/meetings themselves but used external sources for at least part of the rest of the awareness programme. The following table details historically how the use of external trainers for courses and meetings has developed.



There appears to have been an increasing tendency in recent years to use external trainers, which would seem at odds with the general development of awareness of BS5750. The fact that the use of external external trainers was so popular pre-1988 is perhaps due to a lack of knowledge resulting in a reluctance to undertake courses and meetings themselves, but as such knowledge has grown it would seem reasonable to have expected a gradual reduction in the use of external sources.

In addition, one might have imagined that the economic climate in recent years would have resulted in a decline in the use of external trainers. If companies and organisations are experiencing financial hardships due to adverse trading conditions they might reasonably be expected to seek to reduce 'unnecessary' costs. The use of external trainers for awareness courses/meetings, rather than undertaking them themselves, might equally reasonably be considered to fall within this category.



Whilst it might not be a surprise that companies and organisations with less than 10 employees make a greater use of external trainers, given their lack of in house resources, the high proportion within the 100 - 500

range is more difficult to explain. A little over 65% of companies and organisations of this size who used external trainers achieved registration in 1991 or 1992, which has already been mentioned coincided with an increase generally in the use of external trainers. Almost 81% of them indicated that they did not employ full-time training staff, which might have accounted for this apparent discrepancy, but earlier analysis suggested that the majority of the total sample used their own staff to undertake training courses/meetings when only 21% had full-time trainers.

10. If all or any of the methods detailed above were handled 'In-house' please indicate your reasons for doing so.

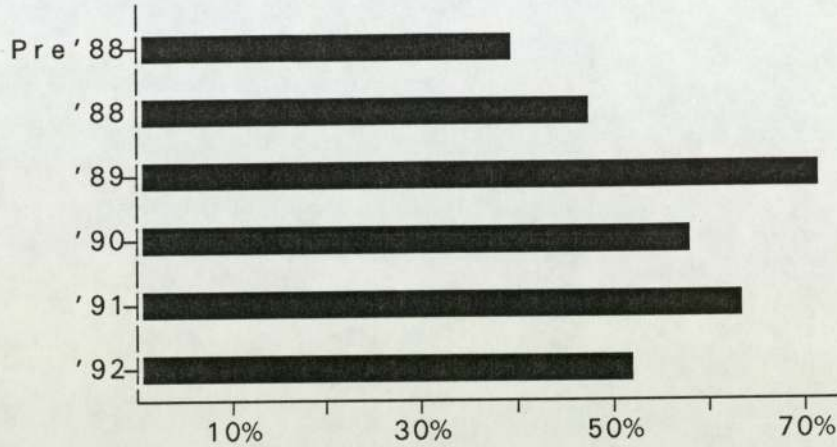
<i>Cost</i>	59%
<i>Resources/experience available within the company/organisation</i>	72%
<i>Need to emphasise company/employee 'ownership' of your quality system</i>	70.7%
<i>Other reasons (See below)</i>	4.9%

χ^2 (excluding 'Other') = 3.35 ($\alpha > 5$); so there is no evidence to suggest that the pattern of preference is other than uniform.

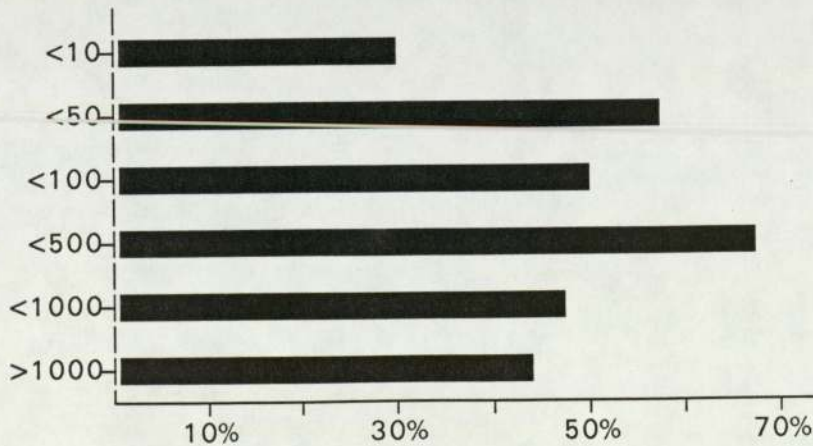
The 'other reasons' given by a small section of respondents included both a desire to keep the programme in-house, and to develop a 'team approach', though it could be argued that these are not dissimilar to a wish to emphasise the 'ownership' of the system included above. Further reasons included the both the convenience of handling the programme in-house and the time savings that could be made by doing so.

The heavy emphasis given by respondents to cost when deciding to undertake awareness programme elements 'in-house' (either solely or in part) perhaps helps to explain why training course/meetings were so popular. If a satisfactory awareness programme can be undertaken through the use of training courses/meetings, and that training can be carried out by a company or organisation's own staff, then the expense incurred can be kept low. This can, of course, be equally true of other awareness raising methods such as poster campaigns and the issuing of

staff handbooks, though perhaps these methods are not necessarily regarded as being as easily handled in-house as training courses/meetings. However, only 6.3% of companies and organisations gave cost as the only reason for undertaking their awareness programme 'in-house'.



The table above indicates those companies and organisations who gave cost as a reason for undertaking their awareness programme 'in-house' by year of registration. The figures suggest that there has been a general tendency amongst them in recent years to identify cost as a factor when deciding whether to undertake the programme 'in-house'. However, the figures do not appear to suggest that this has increased as the years have gone by, despite the fact that trading circumstances for most companies and organisations would have been adversely effected by the overall economic situation in the same period.



It would appear surprising that respondent companies and organisations employing less than 10 people should be the group which least identifies

cost as a factor. One might have expected that for smaller companies and organisations the cost of using external sources for their awareness programme would have been of far greater importance than for larger ones. Similarly, the fact that those employing over 500 do not give as great an emphasis to cost would appear at odds with the assumption that the cost of using external sources would increase with the number of employees requiring awareness training.

Of those who indicated that cost was a factor, 80.6% did not employ full-time training staff. Furthermore, of the total number of companies and organisations within the sample who never used external trainers or training organisations, 85.7% gave cost as a factor when deciding to undertake their awareness programmes 'in-house'.

Approaching three-quarters of respondents gave the availability of resources/experience as a factor, though this in itself would have cost implications for the companies and organisations since it would mean that they would not have to pay for external sources to undertake their awareness programmes. 46% gave both cost and the availability of resources/experience as factors, but only 9% gave the latter as the only factor.

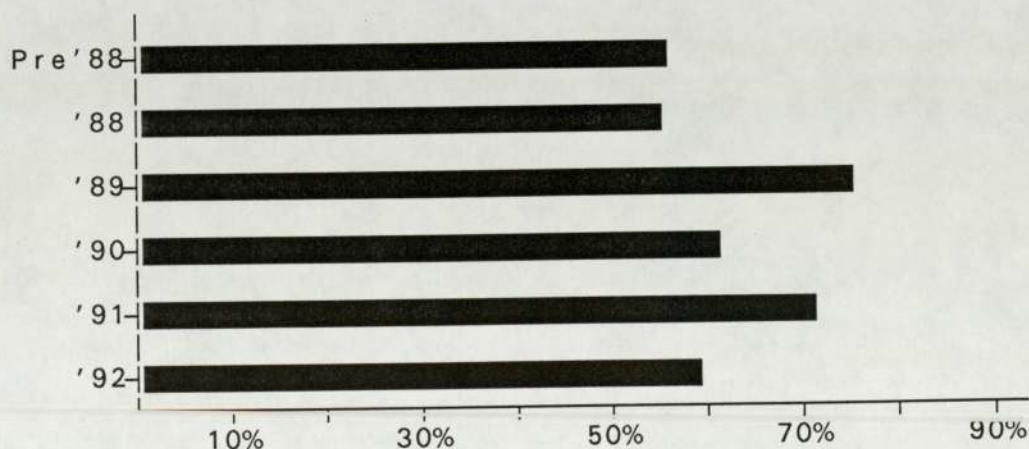
Interestingly, 62.2% of those who indicated that the availability of resources/experience was a factor did not employ full-time training staff, which would suggest that companies and organisations did not regard awareness programmes as part of the training function (this is dealt with in more detail under the later analysis of the responses to question 16). In addition, of the overall sample, 67.9% of those who stated that they did not use external trainers gave the availability of resources/experience as a factor. This might suggest that these companies and organisations had an overall tendency to be self-reliant for any type of training, and because of this handled their awareness programmes 'in-house'. However, only one of the companies and organisations who did not use external trainers gave the availability of resources/experience as the only reason for undertaking their awareness programme 'in-house'.

A similar proportion of companies and organisations gave a wish to emphasise 'ownership' as a factor when deciding to handle their awareness programme 'in-house' (70.7%). If a company or organisation wished to foster this culture amongst its employees, going outside for the

awareness programme might pose a threat to its development. Keeping the awareness programme 'in-house' would stress to employees that the quality system being implemented was to be part and parcel of their working environment, under the company or organisation's control. Using external personnel to undertake the awareness programme might, on the other hand, suggest that the quality system was something being imposed from outside.

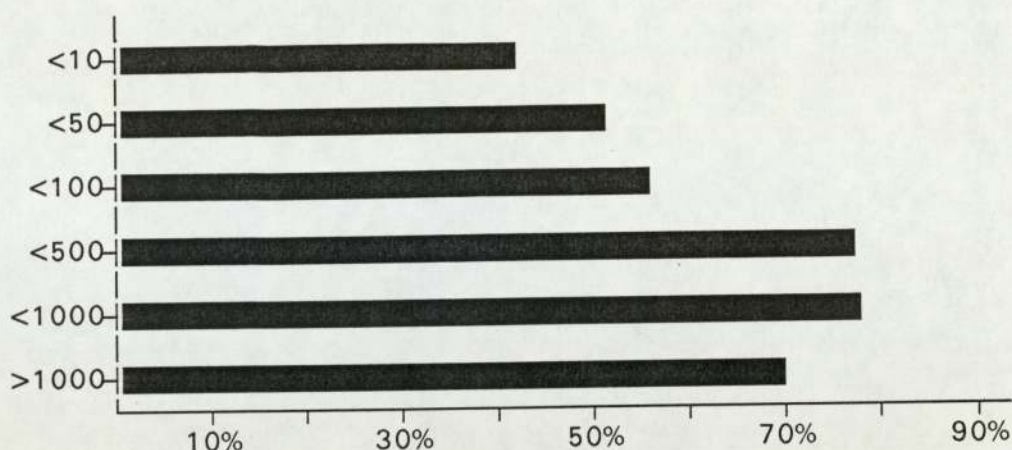
This question of 'ownership' is rather an abstract concept of course, and its importance to the wider scheme of the overall awareness programme is hard to determine. However, the fact that only 9% of respondents gave it as the only reason for undertaking the programme 'in-house' suggests that more pragmatic considerations had a greater overall influence.

The table below would appear to confirm that the concept of 'ownership' has remained a reasonably consistent theme amongst respondents throughout the overall period covered by the sample. More than half of all respondents, regardless of year of registration, indicated that the question of 'ownership' was a factor in the decision to undertake the awareness programme 'in-house'.



However, the following figures suggest that the importance attached to 'ownership' of the quality system increases with the size of the company or organisation. Why this should be so is perhaps due to the sort of general 'culture' that might be more prominent amongst larger companies and organisations. It may be that an awareness of the importance of 'belonging' is more prevalent amongst senior management in companies

and organisations of this size, and consequently a greater awareness of the importance of 'ownership' of the quality system in its likely success.



In analysing each of the factors behind a company or organisation's decision to handle its awareness programme 'in-house', however, it should not be forgotten that these factors cannot be seen in isolation. Only a little over a quarter of the respondents who undertook their awareness programme 'in-house' gave one of the factors listed as the *only* reason for doing so. The rest all indicated that there was a combination of factors behind their decision.

11.If all or any of the methods detailed were handled by external sources/trainers please indicate your reasons for going outside your company/organisation.

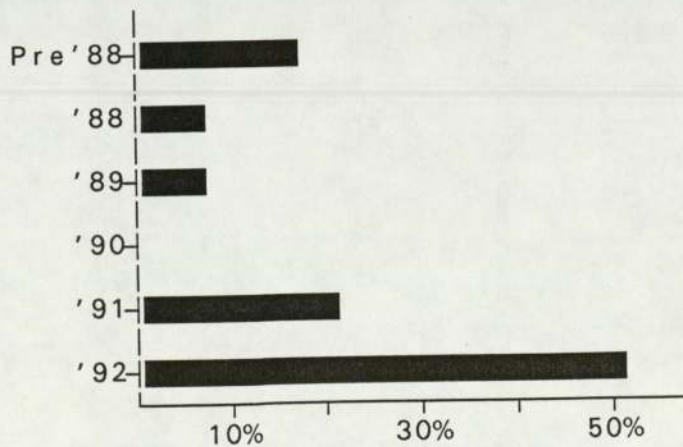
	Pilot	Main	Overall
<i>No resources/experience available within the company/organisation</i>	53.8%	57.8%	56.4%
<i>Lack of time available</i>	7.7%	18.7%	16.6%
<i>Part of consultancy package</i>	15.3%	43.7%	38.4%
<i>More convenient</i>	7.7%	18.7%	16.6%
<i>Need to stress importance</i>	15.3%	32.8%	29.5%

χ^2 (Overall) = 27.5 ($\alpha < 0.05$); suggesting that the responses are not random, and are significantly different from a uniform pattern of preferences.

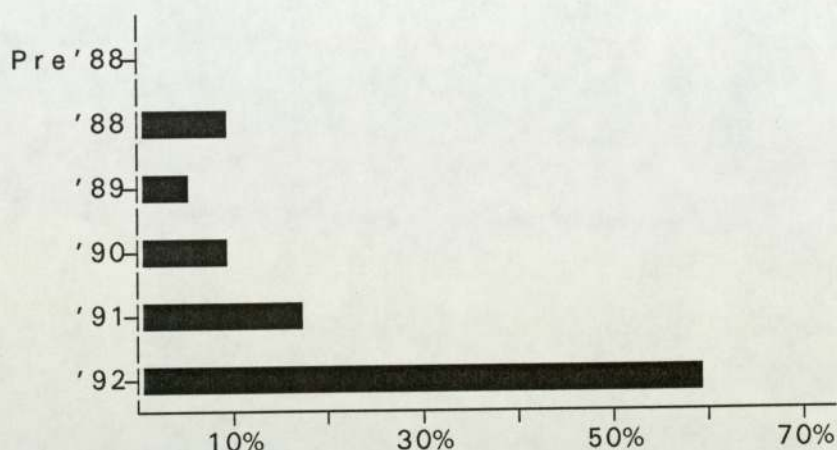
Overall these figures suggest that the dominant factor behind any decision by respondents to involve external sources/trainers in awareness programmes was the lack of resources/experience amongst the companies and organisations undertaking them. Clearly companies and organisations without the resources/experience necessary have to balance the cost of 'going external' against the benefits of doing so, or possibly more importantly the dangers of not doing so.

Both the time available and convenience as factors in electing to use external sources/expertise achieved the same level of response in both the pilot and main questionnaires. This may well be due to the fact that one can have a bearing on the other; if time is of the essence, then the most convenient (and quickest?) method of implementing the awareness programme is likely to be the most attractive option.

It would seem churlish to criticise companies and organisations for indicating time/convenience as a determining factor, even if this did suggest that their motives were not as 'pure' as those who used external sources/expertise because of a '*Need to stress importance*'. A company or organisation which is under pressure from clients/customers to achieve BS5750 registration, particularly if this has to be achieved within a specified time, are likely to regard anything which quickens and/or eases the process as of singular importance. In effect, 'trading-off' the purity of their motives against the financial/trading disadvantages that might otherwise accrue. The figures below, which break down by year of registration those who gave either or both time and/or convenience as an influence, suggest that there has been an increase in respondents citing them as factors.



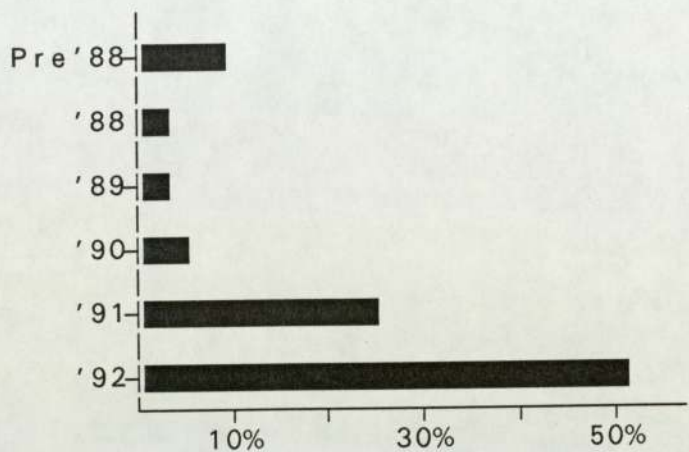
Equally, one might reasonably expect that the '*Need to stress importance*' might decrease as a factor. If time/convenience increases as an influence, whether due to customer/client pressure or not, then the need to stress the importance might be expected to lessen in importance in the face of more pragmatic considerations. The details below would tend to suggest otherwise.



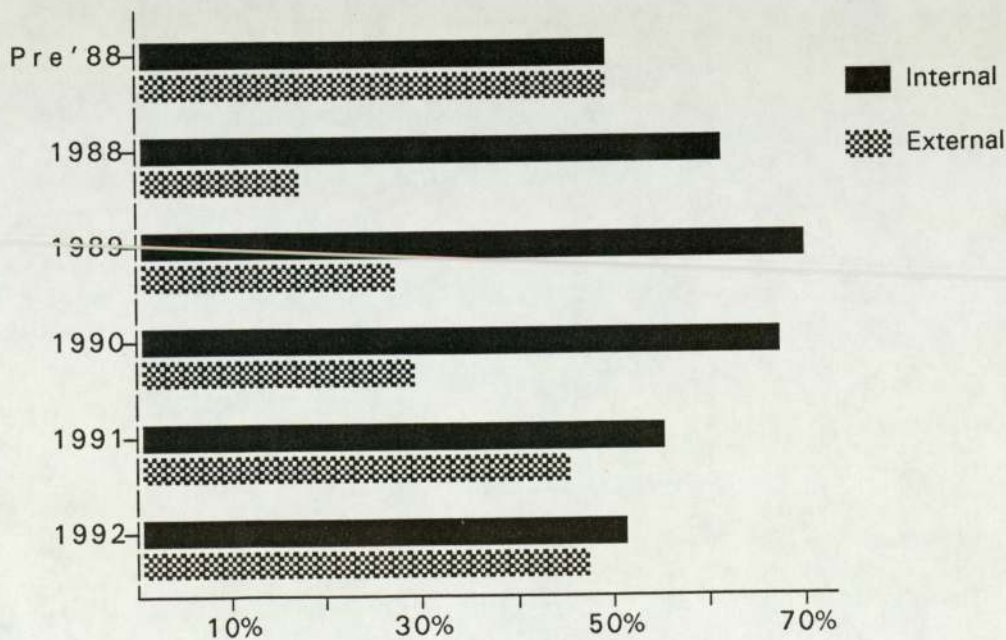
The fact that almost 30% of respondents who used external sources gave the need to stress importance as a factor suggests that companies and organisations regard such external input as an important motivator. Although the vast majority of the overall sample indicated that they generally used external trainers when required, all those who gave the need to stress importance as an influence were generally users of external trainers. It may be that the experience of these respondents was that external training was perceived by their employees as an indicator of importance generally, and that the awareness programme could benefit from it. Only a third of the companies and organisation who gave the need to stress importance as a factor also gave either time/convenience as a factor as well.

The role of consultants in the implementation of quality systems cannot be overstressed. For good or bad, their position in the broader picture of system implementation has become crucial. As the development of BS5750 implementation has progressed, the companies and organisations seeking registration may have tended to rely on the experience and expertise of external 'experts' to smooth their path to and through assessment. Consequently, the number of quality assurance/BS5750 consultants has increased as the market for their skills has increased.

The table below details by year of registration those companies and organisations who cited the involvement of external trainers as part of the consultancy package as a factor in their decision to go external. These figures suggest that their involvement in the awareness process has grown in recent years, though it is not clear whether this is due to an increase in demand or an increase in availability.



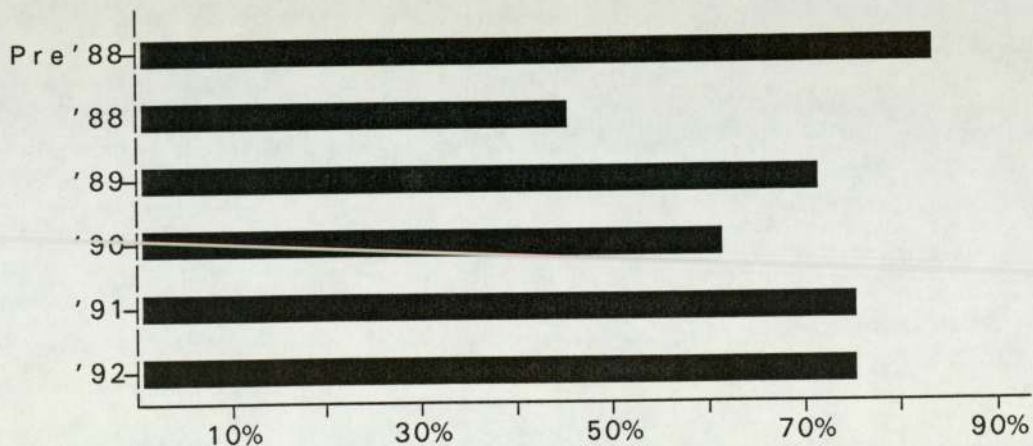
It may be that companies and organisations have identified a need for their consultants to be involved in the awareness programme, and the consultants have merely sought to accommodate that need; a simple question of supply and demand. Alternatively, it may be that increased competition amongst consultants has resulted in them having to offer an involvement in awareness programmes in an effort to secure new clients.



The preceding table details by year of registration those companies and organisations who handled their awareness programmes either exclusively 'in-house', or exclusively or partly through external sources. Although one might reasonably have imagined that as time has passed and a greater awareness of BS5750 has developed, that there would have been a greater tendency for respondent companies and organisations to handle their awareness programmes 'in-house'.

Overall these figures suggest that whilst there have always been a high proportion of companies and organisations who have undertaken their awareness programmes solely 'in-house', there has been a drop off of approaching 20% in recent years. Conversely, there has been a marked increase in the use of external sources/trainers for at least part of the awareness programme.

These responses might indicate, as suggested earlier, that it is the external trainers and consultants who are driving the move towards the use of external sources. The increased incidence of external involvement in awareness programmes as part of a consultancy package detailed earlier would seem to be in line with the overall figure for the use of external sources indicated above. Furthermore, the table below indicates the use of consultants by companies and organisations within the overall sample, and suggests that the involvement of consultants in the implementation of quality systems has not decreased in recent years.



As with the factors behind the use of either 'in-house' or external sources already discussed, however, the role of the consultants cannot be seen in isolation. The figures for cost as an influence on any decision to utilise 'in-house' resources showed that for the three years since 1990 cost was

a factor for at least 50% of respondents. At the same time there was an increase in the number of companies and organisations who gave consultancy packages as a factor, and it may be that the increased pertinence of cost in adverse trading circumstances together with a greater willingness for consultants to offer their services for the awareness programme has resulted in the apparent increase in the use of external sources/trainers generally.

12.If you did hold staff training courses/meetings, please indicate who attended them, and whether they were held by your own staff or by external trainers.

	YES	I-Hse	Ext	I-Hse & Ext
Senior Management	95.6%	63.2%	15%	15%
Operational Management	90.7%	67.2%	10.6%	10.6%
Administrative Staff	80%	63.2%	6.2%	7%
Supervisory Staff	89.8%	73%	7%	7%
Shopfloor Staff/Operatives	79.6%	72.1%	5.7%	4.4%

χ^2 (YES) = 5.2 ($\alpha > 5$); so there is no evidence to suggest that the pattern of preference is other than uniform.

As we have already seen, staff training courses/meetings were far and away the most popular method of raising employee awareness levels, and this question was intended to give more detail of the personnel who received that training. These figures suggest that awareness training was generally given by respondents to all the staff/employee groups listed, and this is emphasised by the fact that 66.8% (95% confidence interval: 60.78% - 72.82) of respondents who held training courses/meetings indicated that all the workforce attended. That said, it is equally clear that this was not always the case.

Certain staff/employee groups were excluded from the training by some of the respondent companies and organisations, most notably administrative staff and shopfloor staff/operatives. In view of the commitment required from senior management to ensure the success of the implementation of a quality system, it is perhaps not surprising that this group scored highest. Nevertheless, approaching 4% of senior managers in companies and organisations who did carry out awareness training courses/meetings did not receive any awareness training

themselves. Why these senior managers should have considered it unnecessary is unclear, and whilst this of itself would not necessarily evidence a lack of commitment from them to the overall success of the implementation of the quality system, it does raise legitimate questions about their involvement in its success.

Given the importance of everyone in a company or organisation playing their part in the success of the implementation, one might have expected everyone to have attended any awareness courses/meetings. Strangely, 61% of respondents who undertook 'in-house' training courses/meetings, but did not give training to all staff/employees, claimed that one of the factors behind their decision to undertake that training 'in-house' was a need to emphasise company/employee ownership of the quality system. How they intended to engender this feeling of ownership or quality consciousness amongst their staff/employees without providing them with training is not clear.

The fact that 20% of respondents should have excluded their administrative staff from any awareness training might be due to a perception that their role had less of an influence on the 'quality' of goods and/or services provided. Though important to the overall operation of any company or organisation, they are not perhaps regarded as contributing directly to the end product or service and thus it may be that they are viewed as not being a priority group when it comes to awareness training.

The same cannot be said of shopfloor staff/operatives of course, since they perhaps more than any of the groups listed have the most direct influence on the quality of goods and services. It would appear surprising, therefore, that they should be marginally the group most often excluded from awareness training. It may be that companies and organisations regarded it as more important for supervisory staff to receive training since they had direct influence on shopfloor staff/operatives. The fact that supervisory staff scored almost as highly as operational management is perhaps an indication of this.

13(a) Was attendance compulsory?

YES 88%

95% confidence interval: 83.8% - 92.2%

13(b) Was the same training given to all staff?

YES 72.7%

95% confidence interval: 66.9% - 78.5%

As has already been mentioned, it was surprising that not all staff were given awareness training where companies and organisations undertook any, and it seem equally strange that 12% of respondents did not feel it necessary to ensure that all staff/employees attended. Given both the importance of the implementation of their quality system and the effort/expense involved, it seems odd that these respondents made attendance at training sessions voluntary. 74% of those companies and organisations who did not make attendance compulsory (95% confidence interval: 63.1% - 84.9%) cited a need to emphasise company/employee ownership of the quality system as a factor behind their decision to undertake at least part of their awareness programme 'in-house'.

Less surprising is the fact that more than a quarter of respondents who undertook training sessions did not give the same training to all staff. As was noted in the Literature Review, the views discussed suggested that gearing the content of the training to the different employee groups being trained was the most effective method for getting the message across. The fact that approaching three quarters of respondents gave the same training to all staff, however, would appear to fly in the face of this advice.

14.If the same training was not given to all staff, please indicate:

(a)How the training differed:

<i>Simplified for certain employees:</i>	11%
<i>Emphasis on operational details/techniques given to shopfloor staff/operatives:</i>	13%
<i>Only trained in those procedures relevant to their particular job:</i>	30.3%
<i>Trained according to their responsibilities in relation to the quality system:</i>	43.7%
<i>Trained according to level of awareness they already had:</i>	2%

$\chi^2 = 33.18$ ($\alpha < 0.05$); suggesting that the responses are not random, and are significantly different from a uniform pattern of preferences.

These figures suggest that the most important factor when determining how the content of any training should vary was the role of the employee in the operation of the business and the quality system. There is an obvious logic in gearing staff/employee training to their specific requirements, and excluding those particular procedural requirements for which they had no responsibility. However, there would seem to be two principal drawbacks to this approach.

Firstly, there might be a tendency to compartmentalise or departmentalise the quality system, leaving the impression amongst employees that their role in the overall effectiveness of the quality system was limited to their specific area of responsibility. Secondly, employees might remain unaware of the importance of other personnel and/or departments in the broader picture.

(b) Why different training was given:

<i>Differing awareness levels staff/employees already had:</i>	3.8%
<i>Training in procedures relevant to their job considered most important:</i>	66%
<i>Time available:</i>	7.5%
<i>Detailed training not considered necessary for all staff:</i>	3.8%
<i>Different motivation levels of staff:</i>	11.3%
<i>Different intelligence levels of staff:</i>	5.6%

$\chi^2 = 101.26$ ($\alpha < 0.05$); suggesting that the responses are not random, and are significantly different from a uniform pattern of preferences.

Again there is heavy emphasis on the job responsibilities of employees, but the figures also identify additional important considerations when deciding whether the training should be different for individual groups of employees. The question of the time available has already been mentioned, but it is interesting that companies and organisations have recognised not only the relative intelligence levels of different employees as a factor, but also their different motivations.

There could be obvious benefits in identifying the advantages of the implementation of a quality system pertinent to the group of employees

being trained. One might, for example, draw attention to the increased marketing opportunities of registration to sales staff, but change the emphasis to the opportunities for reduced wastage to operational management. Similarly, the advantages identified to shopfloor staff and/or operatives would not necessarily be the same as those drawn to the attention of administrative staff.

15. Please indicate whether the training (both in-house and/or external) included all or any of the items listed below:

	<i>Pilot</i>	<i>Main</i>	<i>Overall</i>
<i>Outline of requirements of BS5750</i>	80.5%	97.3%	94.2%
<i>Company/organisation procedures</i>	51.2%	80.4%	75.1%
<i>Auditing</i>	7.3%	58.1%	48.9%
<i>Reasons for seeking BS5750 Registration</i>	22%	88.6%	76.4%
<i>Other (See below)</i>	29.2%	1.1%	6.2%

χ^2 ('Overall', excluding 'Other') = 32.13 ($\alpha < 0.05$); suggesting that the responses are not random, and are significantly different from a uniform pattern of preferences.

Amongst the wide range of other items included within the training sessions were the relation of BS5750 to product liability, the role of quality systems as part of a broader quality framework (eg:TQM), the importance of 'customers' (both internal and external), and details on how groups of trainees might pass the message on to other employees.

It should come as no surprise that an outline of the requirements of BS5750 should play such a large part in the content of training sessions. Any programme designed to raise employee awareness levels would presumably have include some detail of what BS5750 entailed, and the only surprise is that not all respondents indicated that this was part of the training sessions. Similarly, the reasons behind a company or organisation's decision to seek registration would seem an obvious corollary. This would not necessarily be related to staff motivations, of course, since given the attendant additional work that the implementation process would require (at least in the short term) it would seem common sense to let the workforce know why it was necessary.

As we have already seen, heavy emphasis was given to job and procedural responsibilities when the content of training sessions varied, and consequently three quarters of respondents included their procedures as part of the training. Whether procedures are included will depend, of course, on the aim of the training sessions. If the intention is to make employees aware of the general requirements/implications associated with the implementation of a quality system then it would not necessarily be appropriate to include specific procedural details. However, the converse would be true if the principal aim was to make individual employees or employee groups aware of the specific contribution they were expected to make to the implementation process.

It might be argued that the former approach is more conducive to an understanding of the company or organisation's quality policy, since this broader brush could be used as a background to the requirements of that policy. However, there is no obvious reason why procedural emphasis would not be equally effective in this regard; *this is our quality policy, this is what it entails, and this is your particular procedural role in ensuring its implementation.*

Regardless of which approach is adopted, the criteria for judging its success is whether the training leads to an increased awareness of the importance of meeting the requirements of the quality policy. The fact that all respondents had achieved registration would tend to suggest that both approaches are effective in this regard. Auditing was included as a listed option in the main questionnaire because of its appearance amongst the responses in the pilot. Auditing is a frequent element of quality system training because of the requirement in the Standard for companies and organisations to carry out internal audits of their quality system. This is, of course, a more specific type of training than general awareness training and whilst it can improve trainee awareness levels, one imagines that this is not its primary objective.

The responses suggested that it was rare for companies and organisations to include only one of the listed items in their training sessions, however, and it was far more common for them to cover several of the topics listed. 44% indicated that they included all of the listed items (95% confidence interval: 37.78% - 50.22), and 28% that the only listed item not included was auditing (95% confidence interval: 22.12% - 33.88).

16.If you held in-house training courses/meetings, please indicate who took them:

<i>QA Manager/Department</i>	80.4%
<i>Other management staff</i>	26.2%
<i>Consultant</i>	11.2%
<i>All employees</i>	4.7%
<i>Training personnel</i>	1.9%
<i>Group personnel</i>	3.3%

$\chi^2 = 462.38$ ($\alpha < 0.05$); suggesting that the responses are not random, and are significantly different from a uniform pattern of preferences.

It is apparent from these figures that awareness training sessions were generally regarded as the province of the personnel responsible for the maintenance of the quality system, whether that be the the QA/Quality Manager or the quality function staff generally. This is perhaps not surprising given that those personnel would reasonably be expected to have the greatest knowledge of BS5750, and thus the most appropriate staff to undertake any awareness training.

Although more than a quarter of respondents indicated that management staff other than quality personnel were responsible for undertaking training sessions, only a fifth of those respondents (5.6% of total respondents who undertook 'in-house' training) said that training sessions were undertaken solely by management staff generally. In all other cases, management staff undertook training sessions in concert with other trainers, most commonly quality function personnel.

Despite the fact that 18.1% of total respondents indicated that they were part of a group in which there were other companies/organisations who had been registered to BS5750 before them, only 20% of those respondents said that other group personnel had been involved in their training sessions. This rather suggests that there is not a great deal of sharing of experience/knowledge between group companies and organisations in such circumstances.

It is equally true that the figures suggest that training staff were not generally used for awareness training sessions, and where they were

used this is almost always in conjunction with other personnel; be they quality staff or management generally. Only one respondent indicated that there awareness training had been carried out solely by training staff.

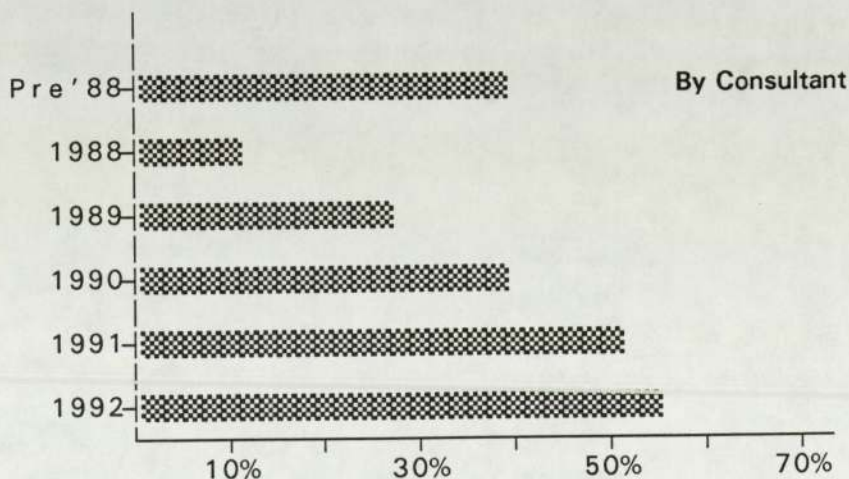
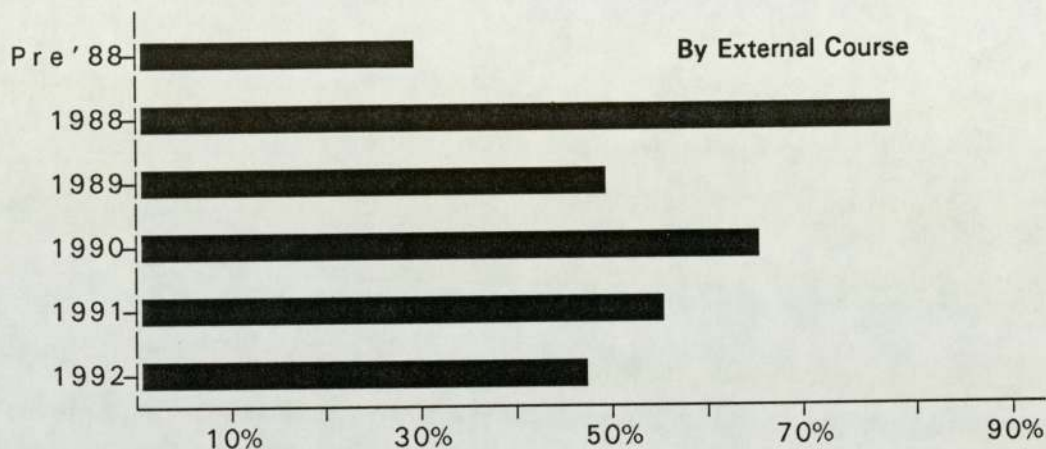
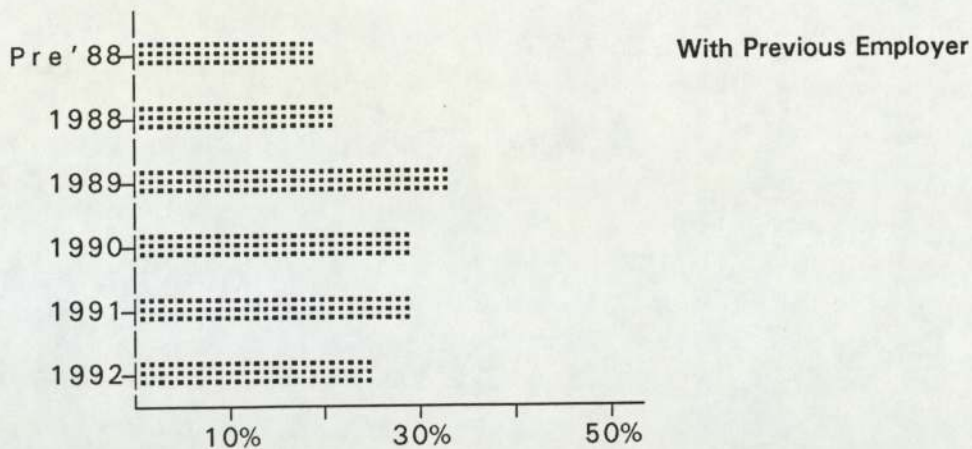
The inclusion of consultants in the responses given does suggest that some of the companies and organisations had misunderstood what was meant by 'in-house' training. However, the frequency with which they were included indicates that they have had an important role in awareness training sessions. In 20% of cases where they were used, they were solely responsible for the awareness sessions, but in all other instances they were involved in conjunction with other company or organisation personnel. Interestingly, given previous discussion of the increased incidence of external trainers and consultants in recent years, 69% of respondents who indicated that their consultants were involved in their awareness sessions were registered since the beginning of 1991.

17. How were these trainers themselves instructed in Quality Assurance/BS5750?

	<i>Pilot</i>	<i>Main</i>	<i>Overall</i>
<i>With previous employer</i>	21%	31.9%	30.4%
<i>External course</i>	51%	54.6%	53.8%
<i>By consultant</i>	30%	48.4%	44.3%
<i>No training or previous experience</i>	9%	8.6%	8.5%

χ^2 (*Overall*) = 70.08 ($\alpha < 0.05$); suggesting that the responses are not random, and are significantly different from a uniform pattern of preferences.

Given the development of BS5750 and a presumed increase in related training available to meet the attendant demand, it is not surprising that the use of external courses/training is the most popular method of training the trainers. That is not to discount the importance of the other methods listed since 35% of respondents indicated that two or more of the listed methods had been the source of the training, though in 88% of those cases one of the methods was an external course. The following tables detail how the trainers in the respondent companies and organisations acquired their own training in BS5750.



These figures would appear to suggest that whilst experience gained with previous employers has remained reasonably constant in recent years, the use of external courses has decreased. The reason for this may be explained by the apparent growth in training provided by consultants in the same period. If the staff charged with undertaking 'in-house' training sessions can themselves gain the necessary understanding and/or training

from their consultants (either as a specific element of the consultancy package or by 'taking notes' as the consultant provides his or her consultancy) then there would appear to be little reason why they should attend dedicated external training.

The fact that approaching a tenth of all awareness trainers had had no training or previous experience in BS5750 might suggest that the training they gave would be less useful or effective than that given by better trained/experienced trainers. However, all the respondent companies and organisations using untrained/inexperienced trainers did achieve registration.

18. Where 'In-house' training was given, please indicate any training aids used, and whether these were produced by you or acquired from external sources.

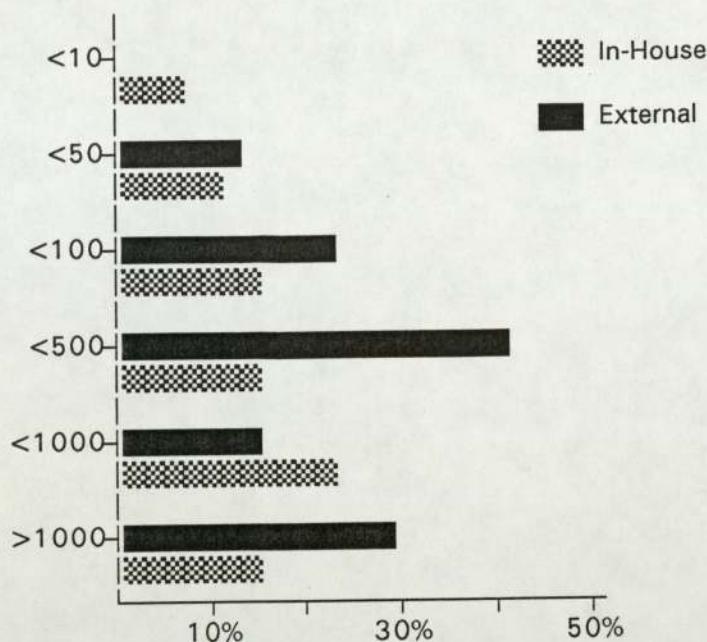
	YES	I-Hse	Ext	I-Hse & Ext
<i>Videos</i>	49%	14.6%	29.2%	5.2%
<i>Overhead projections</i>	56.3%	42.7%	6.7%	6.9%
<i>Training handouts</i>	76%	58.3%	8.9%	8.8%
<i>Other (See below)</i>	4.1%			

χ^2 (YES, excluding 'Other') = 12.79 ($\alpha < 1$); suggesting that the responses are not random, and are significantly different from a uniform pattern of preferences.

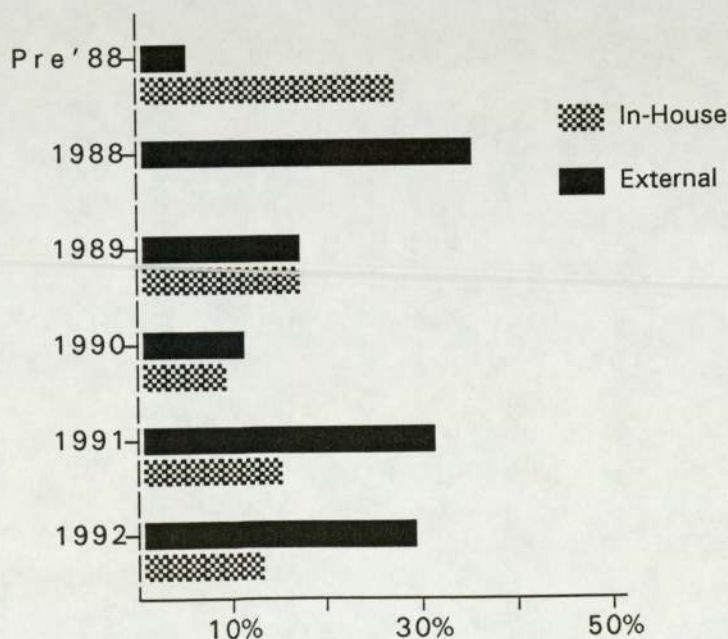
The 'other' training aids comprised the use of external publications such as trade magazines, and the company or organisations own procedures. The figures suggest that all three of the listed training aids were widely used, but equally that there was, with the exception of videos, a heavy emphasis on producing these 'in-house'.

Whilst it is no great surprise that externally purchased videos were more frequently used, there was perhaps more evidence of the use of 'in-house' produced videos than might have been expected. Given the likely cost of generating them 'in-house' if the facility for doing so did not already exist within the company or organisation, anyone wishing to make use of them would be virtually forced to purchase them from outside. One might have thought, therefore, that the use of 'in-house'

produced awareness videos would have been predominantly the province of larger companies and organisations.



These figures suggest that the use of 'in-house' videos is spread across the range of sizes of companies and organisations included in the sample, and whilst there is a slightly greater tendency to use them amongst respondents with more than 100 employees, it is perhaps surprising that companies and organisations with a workforce of less than 50 should be so willing to do so.



The preceding table indicates their use by year of registration, showing an upsurge in the use of externally produced videos recently, which may be allied to the increase in the use of consultants in awareness training generally that was discussed earlier. Again, the increase may be a consequence of video producers identifying a market need for videos, or that these videos may come as part of the consultancy package.

The fact that 85% of respondent companies and organisations who used overhead projections as training aids produced them 'in-house' should really come as no surprise, given the ease and relative inexpensiveness of their production. Similarly, just over 85% generated their training handouts themselves, one assumes for similar reasons.

It may be, of course, that respondents who indicated that they used training handouts may have used the staff handbooks detailed in question 9 for that purpose, and therefore the figures might be misleading. However, 74% of companies and organisations who used training handouts did not use staff handbooks as part of their awareness programme, which suggests that these were items produced in addition to any other awareness programme items.

As with the methods for raising awareness discussed in question 9, the training aids listed were not generally used in isolation. 61% of companies and organisations indicated that they used a combination of aids in their awareness training sessions (95% confidence interval: 54.12% - 67.88%), with 40% of those respondents indicating that they used all three of the listed methods (95% confidence interval: 33.09% - 46.91%). When one of the listed training aids was used in isolation, this was most often training handouts, with 60% of these companies and organisations using this and nothing else.

What the overall figures also indicate is that 20% (95% confidence interval: 14.36% - 25.64) of companies and organisations who carried out training sessions (either 'in-house' or with external trainers) made no use of any training aids. Again this might suggest that the training given would be less effective, but these respondents achieved registration without them.

POST-REGISTRATION TRAINING

The information gathered from questions 19 to 25 in the questionnaire was intended to establish what provision, if any, companies and organisations made for awareness or other 'quality' related training following satisfactory assessment and registration. In addition it was hoped to ascertain whether the type and method of any post-registration training differed from that which was carried out prior to assessment.

19. Since registration, have any employees covered in your pre-assessment awareness training received any further BS5750 related training?

YES 76.7%

95% confidence interval: 71.3% - 82.1%

Whilst the Standard makes no specific requirement for this type of training, it is clear that the majority of respondents thought it appropriate to carry it out. As can be seen from the alternatives listed in question 20, there are a number of possibilities for developing awareness training after registration. The overall aim of any training would be to ensure that awareness of the quality policy is maintained after registration, but also that the company or organisation benefits from any developments or improvements in awareness.

20. If YES please indicate the type of training received:

	<i>Pilot</i>	<i>Main</i>	<i>Overall</i>
<i>Auditing courses</i>	50%	77.4%	74%
<i>Training in new/revised procedures</i>	18%	41.3%	38.4%
<i>Ongoing awareness courses</i>	9%	36.7%	33.3%
<i>Refresher courses</i>	14%	14.8%	14.6%
<i>Other Quality Management training (eg. TQM)</i>	5%	29.7%	26.5%
<i>Other (See below)</i>	9%	00%	

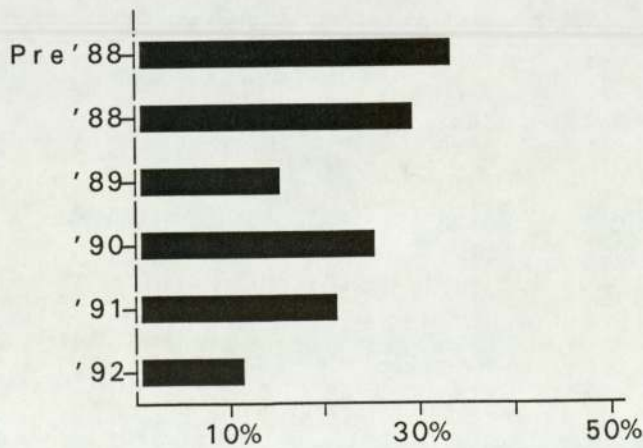
χ^2 (*Overall*, excluding '*Other*') = 95.67 ($\alpha < 0.05$); suggesting that the responses are not random, and are significantly different from a uniform pattern of preferences.

The 'other' indicated above included '*customer service*', and in one case the reasons for going for BS5750 in the first place!

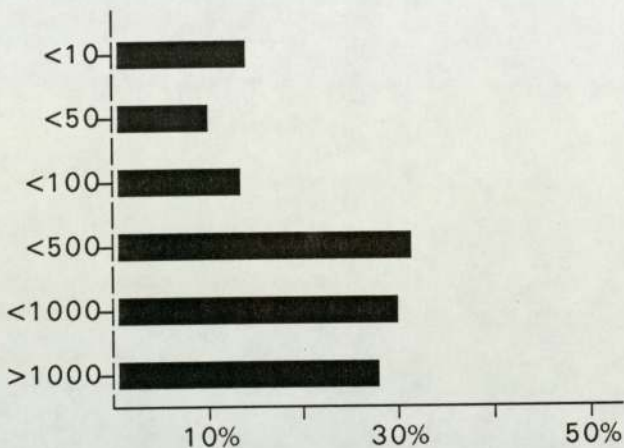
As with question 15, auditing courses were included because of the number of respondents in the pilot sample who included it under this heading, though as discussed earlier this is not specifically geared towards advancing or developing the awareness levels of all employees. Auditing falls more into the category of specific skills training, and would presumably be carried out in order to increase the number of internal auditors available to companies and organisations.

Similarly, training in new/revised procedures is clearly necessary as those procedures come into use, and the fact that overall more than 60% (95% confidence interval: 54.49% - 68.71%) did not include this option suggests that they have not issued any new/revised procedures since registration, have not carried out any specific training in those procedures, or that respondents did not regard this training as appropriate to include under this question.

The 'other quality management training (eg.TQM)' was included because firstly it was apparent from the pilot sample that respondents considered this as further 'quality related' training, and secondly because this might be considered to be a natural development of any quality system. There is, of course, no obligation on companies and organisations to make such developments, and they would not be in breach of any of the apparent requirements of BS5750 if they did not do so. It might be assumed that these other quality management disciplines would be a more recent development amongst companies and organisations who had achieved registration. Whilst these disciplines need not themselves be recent innovations, increased perception of their value, or existence, might be. However, the figures detailed below suggest that training in these developments have tailed off amongst respondents in recent years.



A cynical interpretation of these responses could be that if the development of BS5750 system implementation is a consequence of customer/client pressure then the impetus behind implementation does not lend itself to further development of the installed quality system. If a company or organisation's sole reason for implementing BS5750 is pressure to do so from its customers/clients then they may be inclined to do only that which is essential to maintaining their trading position. Where there is no pressure to do more than achieve registration, they may see no point in doing anything more.



The size of a company or organisation would not seem to be an obvious influence on whether further quality management developments would be undertaken. There would seem to be no apparent difference in the motivations for implementing these disciplines that was dependent on size. However, the previous table suggests that it is the larger respondents who have undertaken other quality management related training. It may be that these larger companies and organisations were not under the same level of customer/client pressure for registration, since their size might place them in the position of customer/client.

The ongoing awareness and refresher training listed in the questionnaire is perhaps the type of training which is most specifically geared towards the maintenance and development of both the company or organisation's quality system and quality policy. By definition, the aim of this type of training is to ensure that the awareness levels amongst employees are not allowed to wane, and thus ensure that whilst the requirements of the quality system hopefully become 'second nature' to the workforce, the importance of their quality policy is continually emphasised.

36% of companies and organisations who undertook post-registration training (95% confidence interval: 28.97% - 43.03%) indicated that ongoing awareness sessions and/or refresher courses were included in that training. Again, it has to be emphasised that there is no apparent obligation on companies and organisations to carry out any training of this type. The Guidelines to the Standard only indicate that refresher training might be carried out.

21. Have all personnel employed since registration been given BS5750 awareness training?

YES	88.3%
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95% confidence interval: 88.3% - 92.3%

As was indicated in the Introduction, the Guidelines only suggest that awareness training *might* be extended to new employees. The responses received, however, indicate that the majority of companies and organisations had included their new employees in their awareness programme. Regardless of the fact that the Standard does not impose any specific obligation to include new employees, it seems odd that almost 12% of respondents did not do so.

If companies and organisations do not extend awareness training to new employees there is an obvious danger that those new employees will not contribute to the efficiency of the quality system as effectively as those who received their training prior to registration. Furthermore, failing to provide awareness training to new members of the workforce might suggest that pre-registration awareness training was undertaken only because it was expedient to do so. A possible interpretation being that this training was only carried out in order to get them through assessment, and that after registration it was not considered necessary.

22. Is the training given the same as that given to employees leading up to registration?

YES	46%
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NO	54%
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95% confidence interval: 39.33% - 52.67%

There is of course no obligation on companies and organisations who gave awareness training to new employees to ensure that that training is the same as given to existing employees prior to assessment and registration. There might be advantages in doing so, however, since any awareness programme that lead to a successful assessment would be proven to provide a satisfactory level of employee awareness. That said, it is likely that the circumstances under which any pre-registration awareness programme were carried out would not necessarily be the same after registration

The pre-registration programme can be geared to all employees within a defined schedule for completion, and accompanies the implementation of the quality system. Consequently, the awareness training need not necessarily be seen as a distinct activity separate from system implementation, and the awareness training of employees benefits from the implementation process. After registration, however, it is unlikely that the training given to new employees can follow a similar pattern.

Firstly, new employees might not be taken on in sufficient numbers to permit a comparable training programme to be undertaken for their benefit. There would, for example, be obvious problems in gearing an awareness training schedule for one or two new employees based on a pre-registration programme designed for one or two hundred.

Secondly, it is likely that the initial training programme was developed in line with the need to develop a quality system culture in line with system implementation. Following registration, however, that culture should now (hopefully) exist, and rather than the importance of the quality policy being a new concept for everyone, and the awareness training emphasis being geared accordingly, any awareness training undertaken after registration is more likely to be geared towards bringing new employees 'into the fold'.

23.If NO, please outline how the training for new employees differs:

	<i>Pilot</i>	<i>Main</i>	<i>Overall</i>
<i>More streamlined</i>	66%	35.4%	41%
<i>More procedure based</i>	5%	51%	42.7%
<i>More general</i>	15%	24%	22.2%
<i>One to one awareness sessions with QA Manager/Representative</i>	10%	46.8%	40.1%
<i>Other (See below)</i>	00%	5.2%	4.3%

χ^2 (*Overall*, excluding '*Other*') = 8.85 ($\alpha < 5$); suggesting that the responses are not random, and are significantly different from a uniform pattern of preferences.

The 'other' differences included making the awareness training job specific, or part of 'on the job' training for new employees, as well as further quality management training such as TQM in two instances.

All of the listed items are indicative of the type of changes likely as a result of the post-registration change in emphasis already mentioned. The demands when inducting new employees into the philosophy of a company or organisation's quality policy and its attendant system requirements are likely to be different. These responses suggest that the view taken by respondents is that new starters need to be introduced to both the overall policy and system procedures more rapidly, and that their awareness training generally more specific.

The streamlining of awareness training would be an obvious way of satisfying these two demands. An emphasis on procedural requirements, particularly those with which a new employee would have most contact, would be a more expedient way of bringing them 'into the fold' than a detailed introduction to the whole system. New employee awareness inductions which are more general, however, whilst also lessening the time taken to instruct them, do suggest a move towards the least amount of training that will suffice (though it could be argued that all the listed options have that as their motive). Clearly the extent to which this is the case will depend on what is meant by 'more general'.

If by 'more general' the respondent companies and organisations mean training that gives an overview of the quality system and policy rather than a procedurally specific, or job specific awareness training given prior to registration then there could be clear benefits of such an approach. The view could be taken that following registration there was a greater opportunity for new employees to be given a more rounded, broader awareness training, because the perception was that the 'pressure was off'.

As has already been suggested, it is possible that the number of new employees entering a company or organisation at any one time will be small, though this will not always be so. In such circumstances, 'one to one' sessions of awareness training with the QA Management Representative would seem to be the most efficient way of undertaking that training. There would be obvious difficulties in providing full awareness training sessions for individual new employees, and equally there would be unsatisfactory delays if companies and organisations had to wait for sufficient new employees to join them before undertaking such sessions.

Whilst perhaps the easiest way of overcoming this problem, one to one sessions do have one possible drawback, however, and that is the danger that as a result the new employee regards the QA Representative as being solely responsible for the quality system and the maintenance of the quality policy, and that the new employee has little individual role to play.

24. Since registration, have you started/continued to use any of the steps listed, and please indicate whether they are now handled 'In-house' or by external sources/trainers.

	YES	<i>i-hse</i>	<i>Ext</i>	<i>I-Hse & Ext</i>
<i>Staff training courses/meetings?</i>	64.9%	83.2%	5.5%	11.3%
<i>Poster campaigns?</i>	25.8%	73.4%	17.2%	1.5%
<i>Issuing of staff handbooks?</i>	24.6%	70.5%	4.9%	3.3%
<i>Other (See below)</i>	1.6%			

χ^2 (YES, excluding 'Other') = 50.78 ($\alpha < 0.05$); suggesting that the responses are not random, and are significantly different from a uniform pattern of preferences.

The 'other' items were instances of the use of videos and staff/employee newsletters.

Overall these figures indicate that only 74.2% (95% confidence interval: 67.9% - 80.5%) of companies and organisations continued to use, or started to use, any of the listed items since registration, compared with 98.4% of respondents prior to assessment and registration. Interestingly, only one respondent which had not used any of the listed items prior to assessment and registration indicated that they now had started to use any of the listed items. In all other cases where respondents were no longer using any of the listed items they had utilised prior to registration.

Why there should be this drop in the use of the steps listed is perhaps explained by the change in emphasis discussed earlier. The methods indicated perhaps lend themselves to a broad programme intended to develop awareness amongst employees from scratch. Once an acceptable level of awareness has been created, the emphasis changes as evidenced by the tendency to change the training given to new employees indicated by the responses given in question 22.

The majority of respondents, however, did indicate that they had continued to use all or some of the steps listed, but when compared with the usage of the steps/methods listed prior to registration (see question 9) there is clearly a change in post-registration awareness programmes. 29.9% (95% confidence interval: 23.31% - 36.49%) of companies and organisations indicated that they had reduced the number of steps undertaken after registration, whilst only 12.5% had increased them (95% confidence interval: 7.74% - 17.26%). Presumably those who decreased the methods adopted did so because they did not consider that post-registration environment warranted a broader ranged awareness programme. This may have been due to cost of course, a confidence that awareness levels were now sufficiently well developed to need less intensive attention, or to a belief that staff/employee awareness was now less important.

Where respondents increased the number of steps/methods adopted, this may have been due to either a dissatisfaction with their pre-registration awareness programme, or to a recognition that a broader approach was required to maintain the awareness levels that now existed. Interestingly, almost 70% of those who broadened their post-registration programme handled the new steps adopted 'in-house', suggesting that both cost and an increased internal knowledge/experience were factors.

Overall there was a movement towards the use of 'in-house' programmes, with 28% of companies and organisations indicating that steps that were handled by/from external sources prior to registration were handled 'in-house' afterwards. Only 1% of respondents used external resources for all their awareness programme elements both before and after registration, compared with 46.7% who used solely internal resources for both. There were some companies and organisations who bucked this trend, however, with just over 10% of respondents indicating that they had used external resources for elements of their post-registration programme which had been handled 'in-house' previously.

There was a change in the particular methods/steps used after registration, however, for whilst training sessions remained the most popular element of awareness programmes after registration there was a drop off in the proportion of companies and organisations using them. 12% of respondents who used training sessions originally had dispensed with them after registration, whereas only one respondent indicated that it had started using them. This is not that surprising when one considers that training sessions are a fairly intense, specific method of raising awareness, and in addition to the time (and attendant cost) involved, they are perhaps best suited to initiating awareness rather than maintaining it.

Similarly, 12.5% of respondents indicated that they had stopped using poster campaigns and 15.7% that staff handbooks were no longer used, though 9.2% were now using posters and 10.8% staff handbooks where they had not done so previously. Whilst it is easy to understand why companies and organisations should start to use posters and staff handbooks, since they offer a relatively simple way of keeping quality awareness part of the day-to-day working environment, it is more difficult to understand a decision to dispense with them.

The benefits of their use have already been indicated, and the reasons behind their use prior to registration would presumably still hold true afterwards. As was suggested by the responses to question 9, the vast majority of companies and organisations who used poster campaigns and staff handbooks produced them 'in-house', and presumably the facilities for their creation would still exist.

Whilst there were no instances of companies and organisations using only poster campaigns pre-registration, and only a single case of a respondent which had only issued staff handbooks, the picture changes after registration. Almost 10% of companies and organisations indicated that the only step they were now taking was either running a poster campaign or issuing staff handbooks.

Overall, only 20% of companies and organisations (95% confidence interval: 15.02% - 24.98%) indicated that their pre and post registration awareness programmes were kept exactly the same, in terms of which methods were used and whether they were undertaken 'in-house, from/by external sources, or a combination of both.

25.If any of the items listed above were carried out by external sources prior to registration, but are now handled 'in-house' (or vice versa), please indicate why this has been changed.

Of those respondents who indicated that they were undertaking all or any of the steps listed after registration, 37.5% (95% confidence interval: 30.53% - 44.47%) had changed the source of those steps ('in-house' to external, or visa versa). Unfortunately, only a third of those companies and organisations included their reasons for changing on the questionnaire, and the figures which follow only represent the responses as a proportion of that third rather than of all those companies and organisations which did change their sourcing. In addition, all those who did give their reasons were respondents who had moved away from using external resources and were now handling the steps 'in-house'; none of those who did it the other way round (23.2% of those the companies and organisations who had changed their sourcing) gave their reasons.

39% (95% confidence interval: 19.51% - 58.51%) who gave their reasons indicated that cost had been a factor; using 'in-house' resources and expertise is, presumably, likely to be a cheaper option. 69.5% (95% confidence interval: 51.08% - 87.92%) had now started to handle the

methods 'in-house' because they now felt they had the necessary experience/expertise to do so, which they did not feel they had had previously. Again this is no great surprise since it would be strange if companies and organisations went through quality system implementation without 'picking up' at least some of the experience and expertise necessary.

Of the remaining reasons given, one respondent indicated that it had started handling its awareness programme internally because it was felt that this gave a greater flexibility to the programme, and another that the change to an 'in-house' programme helped to emphasise staff/employee ownership of the system. The strangest reason given for changing to internal resourcing was one respondent which indicated that it believed that there was now "*less reason to stress the importance of quality*"!

26. Have you ever carried out any surveys into the level of Quality Assurance/BS5750 awareness amongst your employees, either before or since registration?

YES	29.8%
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95% confidence interval: 24.1% - 35.5%

This question was included in order to ascertain whether companies and organisations undertook any monitoring of the effectiveness of their awareness programmes. If the results of any survey indicated that satisfactory awareness levels had not been achieved by the programme then the company or organisation would have the opportunity to change the programme, or to give additional training.

Equally, pre-programme surveys could help to indicate the level of awareness that already existed, if at all, across the workforce or amongst different groups, and the programme itself could be tailored accordingly. The fact that more than two thirds of all respondents did not consider any monitoring activity to be necessary, suggests that this was either an option they had not considered, or that they were sufficiently confident of the effectiveness of their awareness programmes that any testing of it would be superfluous.

Chapter 4

CASE STUDIES

4.1 Metallifactory Limited

4.2 Leicester City Council Leisure DSO

4.3 Alpha Flight Services

Introduction

The aim of these case studies is to give a broader picture of the way in which some companies and organisations undertook to raise awareness levels amongst staff/employees. Whilst the company/organisation questionnaires gave an indication of the way in which respondents handled their programmes in general terms, these case studies are intended to give more detailed examples of the methods that can be adopted.

These case studies are the result of interviews carried out by the author with the persons named below, and are descriptions of the awareness programmes undertaken by their company and/or organisation. No comment is intended on the methods or steps used, or on their programmes as a whole.

The author is indebted to the following people for their participation:

Mr M Lawrence & Mr N Sharkey - Quality Assurance Manager, and
Planning Officer; Alpha Flight Services

Mrs J Evans - Quality Assurance Manager;
Leicester City Council Leisure DSO

Mr W Hird - Quality Manager; Metallifacure Limited

4.1

Metallifactory Ltd

The company manufactures and assembles metal pressings for the automotive industry from its main Nottingham site, with pressed components being supplied from its wholly owned subsidiary division based just outside Birmingham. This Pressings Division was the the first of the two sites to be assessed, to BS5750 Part 2, in January 1991. The main Nottingham assembly operation was assessed to BS5750 Part 1 in July 1991. At the time of their assessments, the two sites employed approximately seventy and two hundred and ninety personnel respectively.

Through its involvement with the motor industry the company had first hand experience of quality standards; the Nottingham site having been successfully assessed by several of its customers (Ford, General Motors, Peugeot Talbot, and Nissan) against their own quality system requirements prior to its involvement with BS5750. However, the Birmingham division had never been directly assessed during any of these supplier audits, and had no specific experience of quality system implementation.

In retrospect, the company do not feel that this previous 'quality' experience had any direct effect on the awareness programme adopted for BS5750. Nor do they feel that it was of any significant benefit when the time came to initiate that awareness programme, though employees at the Nottingham site did, they feel, start with a slight advantage

because of a previous knowledge of quality acquired through experience of the second-party assessments mentioned above. In addition to raising awareness of BS5750, the company intended that the programme would be a vehicle for reiterating general quality awareness and for reinforcing the concept of employee 'ownership' of quality issues. There was a recognition that because of the sometimes different demands made by their customer supplier assessments there was a need to pull together the assorted 'strings' associated with these assessments, and it was felt that the implementation of BS5750 gave them an ideal opportunity to do so.

The decision to undertake implementation at Birmingham was made in August 1990, and since there had never been any documented procedures in use at that site the process had to start from scratch. Although procedures were used at Nottingham these were not considered appropriate basis for Birmingham, or for BS5750 either. The procedures that were eventually implemented at Birmingham formed the basis of those adopted at Nottingham, though with obvious alteration; design not being incorporated at the former, for example.

The first stage of the awareness programme undertaken at Birmingham was a series of training sessions which began in September 1990, normally at the rate of one per week. These were held for groups of about ten employees, made up of a mixture of both management and shopfloor personnel, and lasted approximately an hour. Undertaken by the Quality Manager and the company's external QA consultant, usually together, using OHP slides written on during the sessions, the overall aim of this training was to engender an awareness of quality and quality assurance issues rather than specifically BS5750. All employees at the Birmingham site attended one of these sessions.

In addition to this training, a further single session was undertaken solely for the small number of management personnel based at Birmingham shortly before the main awareness sessions started. Of a similar duration to the other sessions, it was intended to give those staff more specific instruction on what BS5750 entailed. The company recognised that because of the central role that management had to play in the implementation process, it was necessary for them to more fully understand how the Standard worked than had been explained at the sessions conducted for all personnel. As part of this training, the attendees were given a brief handout covering the points discussed

during this session. In December 1990, selected management staff also attended an externally run internal auditor course in order that a pool of trainer auditors would be available to the company for both sites, but which also gave further training on the principles of quality assurance and BS5750.

At the same time as this training took place, all employees at Birmingham were given a copy of the company's Quality Policy, and copies of that policy were posted throughout the Birmingham factory. Little use was made of awareness posters in the period leading up to assessment. A few were purchased and used at Birmingham, but were essentially of the 'Think Quality' or 'Quality Counts' variety. The view taken was that whilst posters can help to maintain awareness, they are not generally very useful in creating that awareness in the first place. It was not until after registration at both sites that posters were used in any numbers, with the aim of keeping an awareness of the importance of quality in all employees minds. The majority were purchased externally 'off the shelf', though some were produced 'in-house'. These posters were, and are still used across both sites, and are a combination of comic cartoons with a serious message together with more of those of the type used in the period leading up to assessment.

In the last month prior to assessment, quality staff from both Nottingham and Birmingham conducted a series of small questions and answer sessions with small groups of operatives on the shopfloor at Birmingham; either one-on-one, or in groups of no more than three. These staff were asked to explain what parts of procedures meant, and how they personally fitted into those procedures. In addition to both providing evidence on shopfloor awareness levels and helping operatives to understand them fully, these Q & A sessions were intended to give those staff some indication of what they might be asked by the assessors.

Although the assessment for the Nottingham site was not planned until the middle of 1991, the awareness programme there started in November 1990. The reasons for this were that firstly there were about four times as many staff at Nottingham as at Birmingham, and therefore a longer time was necessary to carry out the awareness sessions, and secondly it was considered inappropriate for the Nottingham staff to be kept in the dark whilst Birmingham was implementing its system. The staff at Nottingham could hardly fail to notice that something was happening at

the other site, given the daily contacts between staff from both sites, and it was felt to be counter-productive not to give Nottingham personnel an insight into what was happening, particularly since they were also shortly to be embarking fully on the same process.

Because it was considered that the awareness programme used at Birmingham had been very successful, the same training methods were adopted at Nottingham. The same training sessions, trainer briefing notes and OHP slides were also used in the Nottingham programme, with the same size and duration of training sessions. One benefit of the larger number of staff at Nottingham, however, particularly since the Head Office functions were based there, was a greater ability to mix the shopfloor and management personnel who attended these sessions. Again these sessions were undertaken by the Quality Manager and external consultant, and once more, all staff were given a copy of the company's quality policy, which was also posted throughout the Nottingham factory.

As with the Birmingham site, separate training was given to management on the specific requirements of BS5750. However, because of the greater management personnel based at Nottingham, more than one session was necessary. It was felt that because of the more specific management structure at Nottingham, and the presence of Head Office functions, that these sessions were particularly important. Whilst the same training handout was used, more stress was placed on both the input and involvement of these managers.

Both in the period leading up to assessment, and afterwards, the company newsletter, which is issued two monthly, was used to keep staff up to date on the progress towards BS5750 and quality achievements and issues generally. The company felt that the newsletter was particularly useful for keeping employees informed about the assessment process; who was coming, what was going to happen, and so on.

One further method adopted at the Nottingham factory was the temporary stopping of work for approximately a quarter of an hour so that the Managing Director could address all the workforce. This was only done in specific instances, usually to coincide with a certain point in the awareness/assessment process; immediately before assessment to

stress both the importance of the external audit, and the importance of all employees in its success, and straight afterwards to announce the result and to thank the workforce for its contribution. The company thought that this was a particularly valuable exercise since it stressed to all employees the importance attached to the whole enterprise.

Following successful registration, the company's management were anxious to maintain the impetus for quality and quality awareness developed prior to assessment. In the opinion of the company, it was fortunate that the period immediately after registration coincided with a change in the shopfloor structure at the company since this presented an ideal opportunity to reinforce the the messages given during the implementation process at both sites.

The company's development of greater operator responsibilities and their adoption of shopfloor 'Team Leaders' meant that staff had to be trained for their new roles. This training gave the company an opportunity to keep up the momentum of quality awareness whilst instructing staff in their new responsibilities and their role in maintaining quality. This training was again undertaken in small groups lasting about approximately an hour, and was based around certain individual quality system requirements using handouts given to those staff involved. The overall objective of both the change in shopfloor structure and these training sessions was to develop the concept of shopfloor 'ownership' amongst employees, both in terms of the manufacturing activities and the quality system.

Following on from this organisational development and its associated training, the company sought to maintain the momentum of quality awareness, though not specifically with regard to BS5750, by seeking to continue the progress of what it saw as an essential change in quality culture amongst all employees. In June 1992 the company began a series of sessions with all personnel at Nottingham, but not at Birmingham, aimed at focusing quality awareness towards the company's customers. The CARES programme, with its emphasis on satisfying customer needs, shared many of the themes of BS5750, but by including the concept of both internal and external customers it had much in common with the ideas found in TQM.

These training sessions followed the same basic framework of the BS5750 awareness training undertaken leading up to assessment, but in this instance were carried out by the Quality Manager and Managing Director together. Pre-prepared OHP slides were used at these sessions, and at the end of them all employees were given a personal CARES card to remind them of the basic message. In addition, all attendees were given three externally purchased 'off the shelf' handbooks on quality, attitude and 'housekeeping'. This training was considered to be very successful, and is still being undertaken today for groups of new employees.

All new employees to the company receive an induction which includes BS5750 awareness. Usually conducted one-to-one, it is undertaken by the Departmental Heads for management staff, and by team leaders for shopfloor personnel. All new employees are given a copy of the company's quality policy.

4.2

Leicester City Council Leisure DSO

The Leisure DSO is made up of five distinct elements; four subsidiary DSOs: Sports & Leisure, Catering, Grounds Maintenance, and Building Cleaning, together with a central Support/Administration Section servicing the DSOs. Under the umbrella of the Leisure DSO, the four individual DSOs are responsible for running the contracts secured following Compulsory Competitive Tendering. In total, the Leisure DSO employs 650 staff.

The separate elements were successfully assessed, all to BS5750 Part 2, at different stages. The Sports & Leisure DSO in June 1992, Grounds Maintenance in May 1993, Building Cleaning and the Support/Admin Section in August 1994, and the Catering DSO in September 1994.

As the Sports & Leisure DSO was the first element to be assessed, it was during the implementation of its quality system that the awareness programme was initially developed. Although aspects of the awareness programme were further developed as it was extended to the other elements of the Leisure DSO in line with their assessment timetable, the basic framework was established during the Sports & Leisure implementation.

Initial understanding of what quality system implementation involved came in the spring of 1991 when the Leisure DSO Quality Assurance

Manager and General Manager both attended a local government conference presentation on BS5750 in local authorities. Shortly after this presentation the first drafting of quality system procedures commenced. It was at this stage that it was recognised that all senior management within the Sports & Leisure DSO needed BS5750 training in order for them both to satisfactorily draft the procedures and to manage and monitor the implementation process. Consequently, in the summer of 1991, the QA Manager, General Manager, and all other senior management staff attended a one day internal/supplier auditing course run by external trainers. In addition to auditing practice and techniques, the course also included the origins and principles of Quality Assurance and BS5750. These senior managers received no further formal training.

The first element of the quality awareness programme was initiated in the autumn of 1991 when several framed copies of the Sports & Leisure DSO Quality Policy were posted in each of the twelve leisure centres operated by the DSO. In both A4 and A3 sizes, these Quality Policy copies were placed in offices and reception areas, and their display was made a quality system procedure requirement.

As the procedure drafting continued a Quality Implementation Team was established, consisting of senior, operational and supervisory management. Its principal function was to assist the implementation process by aiding the procedure drafting and by identifying solutions to any problems encountered during the implementation process. In addition, the members of the QIT based at the leisure centres were able to report back on how the implementation was proceeding.

It was recognised that in order for the quality system implementation to proceed satisfactorily it was essential that the leisure centre operational and supervisory management receive some formal instruction on what BS5750 required, and what their own role in the implementation process entailed. The first element of that awareness programme was for a selection of those staff to attend the same internal auditor course as senior management in the autumn of 1991. In addition, however, all operational and supervisory staff were given specific awareness training sessions in late 1991. Split into three groups of about twenty, each attended a three hour session given by a member of the QA staff who had gained experience of BS5750 and quality system implementation with a previous employer, and who also had experience as a trainer.

In deciding how to approach these training sessions, the QA Manager and the trainer identified certain elements of BS5750 and the Sport & Leisure DSO's quality system that would require explanation if the sessions were to be successful:

What Quality Assurance involves

Why a documented quality system is crucial to its success

The role of BS5750

Benefits generally, and to the Sports & Leisure DSO in particular

At the end of each of the three sessions, the attendees were asked to complete a questionnaire in an effort to establish whether, at the end of the training, the staff had satisfactory awareness levels. In addition, it was intended that the questionnaire should identify staff attitudes to BS5750 and the DSO's implementation of its quality system. The results of the questionnaire indicated that both staff awareness levels were satisfactory, and that staff attitudes were on the whole positive. This was the only occasion, during any of the DSOs implementations, that any surveys into staff awareness levels were carried out. Having established that the awareness sessions had the desired effect, no reason was seen for any further testing.

In conjunction with these sessions, a Sports & Leisure DSO QA Handbook issued to all senior, operational and supervisory management. The handbook covered all of the points raised during the awareness sessions, and was intended to supplement that training. Parts of the handbook were also used for a poster campaign that was initiated following completion of the sessions. As well as the Quality Policy, certain pages from the handbook were posted in A4 and A3 size were posted throughout each of the DSO's leisure centres and offices. These pages had also been used as OHP slides during the awareness training sessions.

The responsibility for any awareness training of other leisure centre staff rested with the operational and supervisory management. As part of their ongoing training activities, all leisure centres ran weekly training sessions to cover all aspects of their operation, and QA awareness training was incorporated into these weekly sessions. Most, but not all, of this leisure centre staff awareness training was based by operational and supervisory management on the DSO QA Handbook, but the basis and methods adopted were left up to the management at each centre. These sessions began in the winter of 92/93 and continued throughout the spring and

early summer of 1993. Whilst some centre staff received only one session of awareness training, others received more depending on the need perceived by centre management, and though most had attended at least one session by the time of assessment there were some staff who had not.

Since registration, all new employees have received QA training as part of their DSO induction. These are generally carried out by their own manager or by the QA Manager depending on the level at which they enter the DSO, usually as one-to-one sessions (though sometimes in groups of two or three) as the small numbers of new starters at any one time usually precludes the use of specific full-blown awareness training sessions.

Those staff who were employed at the time of assessment have continued to receive quality related training since registration, though this has principally been in relation to procedural amendments and revisions. This training has again been undertaken by operational and supervisory management at the weekly training sessions for centre staff, with the QA staff involved in any training for management as they deem necessary. The posters employed prior to registration have continued to be used, but no further QA Handbooks have been issued to either new or existing staff.

When the Grounds Maintenance DSO began its own quality system implementation in July 1992, the same basic framework was adopted for their awareness programme. All management and supervisory staff attended the same training session as that given for the leisure DSO, though the small number of staff meant that only one session was needed. Although certain of the Grounds Maintenance management also attended an internal Auditor course run by external trainers, unlike the Sports & Leisure DSO this was held after the awareness session.

A QA Handbook was also issued to management personnel which was basically the same as that issued within the Sports & Leisure DSO, the only changes made were to alter DSO references to those of Grounds Maintenance. The same posters, taken from the handbook, were also used in offices and at site locations.

Again the management staff were responsible for training those staff and operatives for which they were directly responsible, beginning in the autumn of 1992. There is a similar ongoing weekly training programme for Grounds Maintenance operatives, and the awareness training was incorporated into these, and again the handbook formed the basis of that training. Any training related to procedural changes and revisions since registration has been undertaken through these sessions also.

Unlike the Sports & Leisure DSO, Grounds Maintenance publishes a monthly newsletter, and articles and information on BS5750 and their quality system implementation were included in issues prior to assessment.

The same basic format of awareness training was adopted for subsequent quality system implementations for Building Cleaning, Catering, and the central Support/Administration section. Again specific awareness sessions and external auditor training courses have been held for the management of these elements of the Leisure DSO, with those staff then responsible for training those under them.

However, whilst the same posters from the handbook used previously were again adopted for these subsequent quality system implementations, the handbooks themselves were dispensed with. It was felt that these were no longer necessary since the overall management awareness levels within these groups had developed satisfactorily through contact with the implementation process undertaken by the other two DSOs. Moreover, the relatively unsophisticated nature of the handbook was considered inappropriate for further use.

Since late 1993, in addition to overseeing the implementation within the Leisure DSO, the QA Manager has also been charged with quality system initiation for Leicester City Council's Arts & Recreation Department. This is the 'Client' organisation for the Leisure DSO (along with others). To date, none of the sections of the R & A Dept have been assessed to BS5750 but will be in due course. As part of this process, an awareness programme has been undertaken by the QA Manager which again uses the same framework as that adopted by the Leisure DSO.

Specific awareness training sessions (along with auditor training as necessary) have been, and continue to be, carried out. Posters are once

more being used, but also handbooks as well. This handbook is considered more sophisticated than previously, and also approaches BS5750 and quality system implementation from a broader perspective.

The decision to re-commence using handbooks was based on a recognition that levels of awareness amongst R & A staff could not reasonably be expected to be as good as within the DSO. Since they had not had the contact with BS5750 that Building Cleaning, Catering, and Support/Administration had prior to their own implementation, it was considered unlikely that the same degree of knowledge would have 'rubbed off'.

Moreover, it was recognised that there could be benefits in being able to give information to parts of the R & A Department which had not yet commenced implementation. The new handbook, therefore, is intended not only to provide support to awareness training sessions but also to give an introduction to BS5750 to staff for whom quality system implementation might still be some time off.

4.3

Alpha Flight Services

Registered to BS5750 Part 2 in September 1993, Alpha Flight Services provide in-flight catering services to numerous airlines. Although the company operates from a number of sites, only their Gatwick operation has been registered to date. At the time of assessment, approximately four hundred and thirty staff were employed at the Gatwick site

Following the decision to implement a quality system a steering group of senior managers was established in the autumn of 1992, with the primary task of overseeing the broad perspective of the implementation process. This group set up a Task Force later that year, made up of the thirteen departmental managers based at Gatwick, including the QA Manager, which was responsible for the overall supervision of procedure drafting. Individual groups from each department were charged with the actual drafting, and gradually these groups grew into departmental Quality Circles responsible for identifying and resolving problems associated with the drafting and introduction of their procedures. The first full drafts of procedures were issued in January 1993.

The following month, six management staff undertook a one day internal auditor course run by external trainers. Although the primary aim of the course was to have trained auditors to carry out the internal quality audits required by BS5750, it also gave a degree of training in the background and requirements of the Standard.

On completion of this course, these auditors immediately began to carry out audits of the Gatwick site against the requirements of the recently issued draft procedures. It was during these initial audits that it became apparent that there were very poor levels of BS5750 awareness amongst staff generally, a lack of knowledge identified at the same time by QA staff who attended the departmental quality circles. The basic problem appeared to be a lack of awareness of what BS5750 was, what it involved, and why the company were implementing it. In retrospect, the company recognised that up to that point all awareness was concentrated amongst management staff, and that in the start up of the implementation process it had neglected to give sufficient information to those on the 'shopfloor'.

Having identified this problem, the company began a series of 'roadshows' in March 1993, with the intention of explaining to shopfloor staff what BS5750 was, how it was being implemented into the company, and why it was being implemented. These roadshows involved principally members of the QA staff taking a flipchart into production areas, gathering groups of about twenty staff around, and explaining BS5750 and the implementation process. This training method had been used by the company previously for other subjects and had been considered to be very successful. Although initially the flipcharts were written on by the trainers during each session, gradually eye-catching pictures and charts pre-prepared 'in-house' were used. Lasting about ten minutes, these roadshows were run once a day for about four months and covered a total of six different BS5750 related topics.

Although primarily intended to raise BS5750 awareness levels, in the period immediately prior to the on-site assessment their emphasis was changed. These later roadshows concentrated on the assessment process itself; what it involved, why it was being carried out, and what involvement the shopfloor staff were likely to have. These specific roadshows have continued to be used since registration, carried out before each of the regular assessing body monitoring visits and covering similar topics; what these monitoring visits entail and how the staff will be involved.

In addition to these roadshows, the company undertook a series of formal awareness training sessions for all shopfloor and supervisory staff. Undertaken in ten person groups by the QA staff, these one hour

sessions began shortly after the roadshows started. Two sessions were held for these staff, and were principally used to give more specific instruction than that contained in the roadshows, concentrating on the procedures pertinent to the departmental personnel being trained. Management staff were excluded from this training as it was considered that their awareness levels, both in terms of general and procedure specific awareness was already satisfactory.

To coincide with the roadshow training, a handbook was introduced at the same time as these sessions started. Produced 'in-house', this handbook was given to all members of staff, and was intended to back-up general awareness levels by explaining the requirements of BS5750 in simple terms.

The company has its own monthly staff news-sheet, and in the six months prior to assessment each issue had a page dedicated to BS5750 news. In the main this was given over to updates on departmental progress towards implementation, but additional, more general information on BS5750 was also included. These articles were written in several languages because of the diverse ethnic backgrounds of staff. Shortly before the on-site assessment, a whole issue of the news-sheet was given over to BS5750 related articles.

In addition to this information, each issue contained quizzes on BS5750 and the company procedures which staff were encouraged to complete and had in. Additionally, in certain monthly issues there were essay competitions on the same topics. Prizes were awarded for all competitions and quizzes; usually gift vouchers, bottles of wine, and so on.

Posters were used extensively by the company during the implementation process, but their type and use fell into three distinct groups and phases. The first posters were purchased externally off the shelf at the same time as the first roadshows started, and were basically of the simple slogan type; 'Quality Comes First', for example. Although these were not the type that the company wanted to use particularly, it was conscious of the need to adopt some form of workplace awareness aid as soon as possible, and purchasing these posters from a catalogue was considered the most expedient method at the time. These posters were displayed throughout the shopfloor and offices of the company.

The second phase of the poster campaign was generated in house, and these posters were generally more informative, using cartoons and catchphrases that it was hoped the staff would more readily recognise. Part of this element of the programme involved the phased introduction of certain posters over a six week period closer to the time of the assessment. Six posters, in both A4 and A3 sizes, were used over a six week period, with two at a time being introduced to the workplace and offices every two weeks, so that by the end of the six week period all six posters were on display.

Finally, in the last ten days before assessment, a series of 'countdown' posters were used, with a new poster displayed each day right up to the first day of the assessment. On that day, in addition to posting around the company workplace, all cars in the employee carpark had copies of a 'Today's Audit Day' poster placed on their windscreens. As with all the posters the overall aim was to maintain the momentum of the awareness campaign, but these countdown posters were also intended to heighten excitement in the period leading up to assessment.

Although the posters used during the implementation of the quality system have been discontinued since registration as they were considered to be too specific to that phase, the company has continued to use posters to maintain awareness levels. After the assessment ten special large poster frames were purchased externally, and each month ten different posters are supplied for those frames.

In the final week before assessment the company blocked off direct access to the staff cafeteria, and all personnel had to detour through the company training room at meal times. This was known as the 'quality street', with all the posters produced by the company on display, a ten minute video on BS5750 purchased from the company's QA consultants playing on continuous loop, copies of quality manuals and procedures on display, together with information on the assessing body supplied by them. As staff exited, they were all given boxes and bags of Quality Street chocolates.

Throughout the implementation process the company organised a number of 'quality fun days' for the staff, one of which involved a raft race between rafts built by each of the departmental quality circles. All these

days were intended to both foster increased awareness and engender a quality team spirit amongst employees.

Although no formal monitoring of awareness levels were undertaken in, the form of employee questionnaires for example, the company felt that it was able to satisfactorily gauge staff understanding and knowledge (and thus measure the success of the awareness programme) through feedback from internal audits, quality circle meetings, and the formal training sessions.

Since registration all new staff are given an awareness induction, but help in understanding the company's procedures and their role is now the responsibility of the departmental quality circle members. These staff have also been charged with aiding existing employee understanding of procedural changes and revisions, by filtering understanding down through the quality circles.

Chapter 5

ASSESSOR QUESTIONNAIRES

5.1 The Role of the Certification Bodies

5.2 Methodology

5.3 Questionnaire Analysis

5.1

THE ROLE OF THE CERTIFICATION BODIES

In order to fully understand the role of Certification Bodies it is important to recognise their position within the wider scope of quality system assessment. Although assessments carried out by these bodies might be regarded as the highest level of assessment of a company's or organisation's quality system that can be carried out, there are essentially three types of quality system assessment that may be undertaken.

First-Party Assessment

Any companies or organisations which implement a quality system can elect to monitor it themselves, though it should be noted that if the quality system is instigated in accordance with the provisions of BS5750 Part 1 or Part 2 then they are obliged to do so anyway (see sections 4.18 and 4.17 respectively, relating to Internal Auditing). The advantages of this self-assessment are obvious, since it offers the company or organisation the opportunity to monitor its compliance with its quality system and enables any areas which do not comply to be identified.

The disadvantages for a company or organisation are primarily twofold. Firstly, there is always the danger that the company or organisation, by being so 'close' to the system being assessed, may fail to accurately judge compliance levels, or may not recognise faults within the quality system itself. Secondly, a potential customer, whilst accepting that the company or organisation has implemented a quality system, may not be prepared to take the company's or organisation's word that the system is working effectively, or that the system in place will assure the quality of products and/or services required.

Second-Party Assessment

Since customers may not be willing to accept a company's or organisation's quality system at face value, those customers may require

potential or existing suppliers to undergo further assessment. Essentially, this will involve the customer carrying out its own assessment of a suppliers quality system (though in some cases they will subcontract out the actual assessment). Only when a company or organisation has undergone such an assessment will the customer be in a position to judge whether the quality system implemented is working effectively, or able to assure the quality of goods and/or services required.

There are numerous examples of these second-party assessment schemes such as Ministry of Defence's AQAP Standards, and the Ford Motor Company's Q1 assessment. Second-party assessments do not have to be carried out against a specific scheme or standard, however, since they may seek to judge effectiveness or the assurance of quality based on other criteria. Equally, they may themselves assess the company or organisation against the requirements of BS5750.

The advantages of these types of assessment are that they give the company or organisation being assessed the benefit of another (though not necessarily disinterested) 'pair of eyes' assessing their quality system, and they extend the recognition of the effectiveness of the quality system beyond the boundaries of the company or organisation itself. That said, however, the principal disadvantage of second-party assessments is that they tend to confer limited approval of a quality system. There is no guarantee that the approval of a company's or organisation's quality system will be recognised by any customer other than the one carrying out the assessment.

Regardless of whether commercial rivalries play their part, it may well be that a company or organisation has to undergo numerous, repetitive assessments by several of its customers, all wishing to establish compliance with their own perception of what is an effective quality system able to assure the quality levels required. That is not to say that compliance with a particular second-party scheme will not be recognised by other customers. Satisfactory assessment against one of the MOD's AQAP Standards, for example, generally confers a high degree of credibility for the assessed quality system amongst a wide range of other customers, but there is still a case for yet wider recognition of the effectiveness of a quality system.

Third-Party Assessment

There are clear advantages for a company or organisation if it is able to undergo assessment by a third party which itself does not trade with either the company/organisation or its potential or existing customers. Such a scheme would give independent evaluation of a quality system, and more importantly would offer the opportunity for wider recognition of the effectiveness of the system assessed. In order for any third party scheme to be successful, however, there are two essential criteria which must be met. Firstly, the assessment must be against a standard which is recognised by a wide range of a company's or organisation's customers, and secondly it must be carried out by an assessing body whose independence and competence is recognised by those customers.

BS5750 has gained acceptance as the type of recognised standard indicated above, and since this recognition extends beyond customers in the UK alone since in its ISO9000 and EN29000 guises it is accepted across the world as an indication of a credible quality system. Satisfactory assessment against the requirements of BS5750, therefore, represents an opportunity for a company or organisation to gain the widest available recognition of quality system credibility.

Regardless of the acceptance given to BS5750 itself, however, customers may not be prepared to accept assessment against the Standard as credible unless carried out by bodies in which they also have confidence. Since any company or organisation wishing to undergo assessment to BS5750/EN29000/ISO9000 will normally have to pay for that assessment itself, this question of confidence and credibility has an added significance. The certifying body carrying out the assessment to BS5750, therefore, needs to be accepted nationally, and preferably internationally, and the responsibility for establishing this credibility currently rests with the National Accreditation Council for Certification Bodies (NACCB). Launched by the DTI in 1985, the NACCB was charged with establishing and maintaining confidence in certification bodies, not only to ensure the credibility of those bodies through NACCB 'accreditation', but also to increase the status and utility of certification itself.

Any certification body wishing to be 'accredited' must itself be assessed and regularly monitored by the NACCB against predetermined criteria. Only when a certification body has satisfied those criteria is it issued with

an Accreditation Certificate and added to the DTI list of Accredited Independent Third Party Certification Bodies.

Certification

Since 1983, the DTI has published an annual Register of Quality assured Firms, and entry onto this register can be achieved through third-party certification by an approved body. It should be noted, however, that the DTI also recognises other certification bodies not accredited by the NACCB, including industry specific non-accredited Third Part Certification Bodies such as the Water Industry Certification Scheme and the National Approval Council for Security Systems, and certain Second Party Certification Bodies such as British Gas, British Nuclear Fuels and the Ministry of Defence.

Assessment of a company's or organisation's quality system by a Certification Body is usually a two-stage process. Firstly, their documented quality system is submitted to the Certification Body for assessment against the requirements of BS5750. Sometimes referred to as the 'desk study', this stage is intended to establish whether all the appropriate requirements of the Standard have been addressed within the documented system. It should be noted, however, that it will not be possible to be certain that a company or organisation is satisfactorily complying with the requirements of the Standard. Although a documented quality system may appear to address all the requirements, assessors will only be in a position to ascertain the company's or organisation's compliance after completion of the next stage of the assessment.

Subject to satisfactory completion of the desk study, the second stage in the process is the on-site assessment. This stage involves assessors from the Certification Body visiting the company's or organisation's offices/premises/sites in order to satisfy themselves that the company or organisation is in fact complying with both the requirements of the Standard, and with the requirements of its documented quality system.

Dependent on the assessors' findings during the on-site assessment they will decide whether registration and the issuing of a Certificate should be recommended or not. They will only recommend registration either where they have found no discrepancies between what the company or organisation is doing and what its documented quality system procedures

say it ought to be doing, or where any discrepancies found are not considered serious enough to prevent registration being recommended. A failure to recommend registration will occur, however, where a total breakdown of the quality system is evident, and where any discrepancies found are considered serious enough to prevent the recommendation of registration.

In addition to being eligible for inclusion onto the DTI QA Register, any company or organisation which has been successfully assessed is entitled to use the registration logo appropriate to the Certification Body carrying out their assessment. Both inclusion on the Register and the use of the logo will demonstrate to other companies, organisations and customers that they have been satisfactorily assessed by a recognised Certification Body; giving the widest available assurance that the company's or organisation's quality system complies with BS5750/ISO9000/EN29000.

Satisfactory assessment, certification and registration is not the end of the process, however, since the company or organisation will be subject to periodic monitoring of their compliance with their quality system. The frequency of this monitoring will vary depending on the Certification Body, but during this monitoring (sometimes referred to as 'surveillance' visits) assessors from the Certification Body will again visit the offices/premises/sites to satisfy themselves that the company or organisation is still complying with its documented system.

5.2

METHODOLOGY

As was indicated earlier, one of the selection criteria when choosing companies and organisations for the first element of this study was the Certification Bodies which had carried out their assessment. By ensuring that overall those selected covered several different bodies it was hoped to ascertain whether interpretation of the requirement for raising quality awareness varied between them. If the companies and organisations who responded to the questionnaires indicated a wide range of steps taken or methods used for raising awareness this might suggest that the Certification Bodies were interpreting the requirement differently. However, it might equally be indicative of the fact that *all* Certification Bodies accepted a wide range of steps or methods when evaluating whether or not a company or organisation had satisfied the requirement.

In order to ascertain this distinction, additional information was required specifically geared towards establishing how the assessors themselves interpreted this requirement. To do this, a questionnaire (see Appendix 3) was sent out to BS5750 assessors employed by Accredited Third Part Certification bodies. In addition to indicating how assessors are interpreting the obligation imposed by the Standard, it was also hoped that their responses to the questions would identify any evidence of contradictory interpretation between the assessors and the companies and organisations satisfactorily assessed.

The role of assessors is crucial to the assessment, certification and registration process, since it is they who determine during an assessment whether a company or organisation has satisfactorily met the requirements of BS5750. How they construe those requirements is critical, therefore, since their interpretation of the requirements of BS5750 will clearly have a bearing on whether the actions taken by a company or organisation are deemed by the assessors to fulfil those

requirements. There would be a clear advantage, therefore, in ensuring common interpretation of the requirements of the Standard amongst persons carrying out assessments, not least of which would be the knowledge that all companies and organisations could expect a universal interpretation regardless of which assessing body or assessor(s) was used.

The National Registration Scheme for Assessors of Quality Systems operated by the Institute of Quality Assurance (IQA) is intended to establish the competence and integrity of assessors. However, in overseeing the qualification and registration of assessors, the IQA is primarily concerned with ensuring the ability of assessors to co-ordinate and control assessment work undertaken by them individually or by a team of assessors under their leadership. The difference between the IQA and the NACCB is that the former is primarily concerned with the conduct of individual assessors, and the latter with the conduct of the Certification Bodies.

Qualification to the status of Provisional Assessor, Assessor or Lead Assessor primarily involves the satisfactory experience and completion of assessments, whilst any training or guidance on the interpretation of the Standard remains the province of any Certification Body by whom they are employed. If they are not, or never have been, directly employed by a Certification Body (and the sub-contracting of assessments to non-directly employed assessors is common practice amongst some assessing organisations), then they may well have never received any specific guidance or training on interpreting the requirements of BS5750, and consequently their own interpretations may well carry greater personal influence.

In practice, individual assessors can have a large degree of discretion when it comes to interpreting the various sections of the Standard. Although they may receive training from their employers on how they should interpret parts, or all of BS5750, situations may arise during actual assessments where individual preference or interpretation may determine whether a company or organisation is deemed to be complying with a particular requirement of the Standard.

Quality Assessment Schedules (QAS) have been drawn up for a number of sectors and/or industries by the Certification Bodies in consultation

with those sectors/industries. Intended to give guidance on the interpretation of BS5750 for a particular sector/industry, they are available to both assessors and companies/organisations seeking assessment. Similarly, other non-QAS guidance documentation is available from other industries and/or major purchasing authorities. Where such guidance is available it is supposed to be used by assessors to help them decide whether a company or organisation is complying with the requirements of the Standard. However, this QAS and non-QAS guidance cannot be regarded as exhaustive, and questions of interpretation may arise which is not covered by it. Similarly, where no such guidance is available for a particular company and/or organisation, individual assessor preference or interpretation may determine whether it is deemed to be complying with a particular requirement of the Standard.

The Certification Bodies may seek to police their assessors' interpretations through individual assessor audits; accompanying assessors on assessments to ascertain whether their interpretations are in accordance with those adopted by the Certification Body. Equally, however, where such auditing is carried out, it may only be used to ascertain whether an assessor is conducting assessments in accordance with the Certification Body's own documented assessment procedures, and the question of interpretation may not be raised.

The NACCB may also elect to accompany Certification Body assessors on assessments as part of its own regular monitoring of Certification Body conduct and adherence to procedures. However, the sheer volume of assessors (currently almost four thousand Registered Lead Assessors alone) compared with the small number of NACCB personnel means that individual assessors may be accompanied by the NACCB very infrequently, if at all.

As has already been mentioned, the IQA is primarily concerned with ensuring the ability of assessors to co-ordinate and control assessment work undertaken by them individually or by a team of assessors under their leadership. An individual assessor's interpretation of the requirements of BS5750 is outside their jurisdiction. Once registered with the IQA, assessors maintain that registration merely by carrying out a requisite number of assessments per year and payment of an annual subscription. The IQA does not accompany assessors on assessments.

Clearly, therefore, the possibility exists for a wide variance of interpretation of what the requirement to ensure that the quality policy is *"...understood, implemented and maintained at all levels in the organisation"* actually entails. As was indicated earlier, it is to establish whether this variance exists that this aspect of the research was included.

Assessor Questionnaires

It was considered appropriate to send the questionnaire to individual assessors rather than to the Certification Bodies themselves in order to ensure that responses were from the persons actually carrying out the assessments. The perceived danger in sending questionnaires solely to the Certification Bodies was that the responses might only represent that body's policy on the requirement within the Standard.

The assessors chosen for this part of the survey were selected from The National Register for Assessors of Quality Systems. This Register is drawn up by the Registration Board for Assessors which operates under the jurisdiction of the IQA. Included are registered assessors of quality systems who have satisfied the RBA's qualification and experience requirements for registration. The Register details not only the names of the registered assessors but also their employers, and as a result it was possible to ensure that the assessors selected to complete the questionnaires come from a range of assessing bodies.

Question 1 on the questionnaire was intended to establish whether the assessors themselves considered that there was a requirement within BS5750 to raise staff/employee awareness levels. Clearly, if assessors do not regard companies and/or organisations as being under an obligation to seek to raise awareness levels then they are less likely to investigate staff/employee awareness during an assessment. The steps that companies and organisations might undertake to raise awareness levels are listed in question 2 in an effort to identify those, if any, which assessors consider most appropriate or important.

Questions 3 to 5 were included to identify whether assessors attached any importance to who was trained, and when, and although assessors might consider awareness training as essential, question 7 was intended

to ascertain whether they attached any importance to the content of that training. The elements of post-registration awareness training were covered by questions 6 and 8.

It was hoped that question 9 would indicate both whether assessors actually do assess awareness levels, and how they determine whether the awareness levels are satisfactory. In part it was hoped to ascertain whether any steps taken by companies and organisations were taken into account by assessors. Following on from this, question 10 was included to examine whether assessors formally identified any unsatisfactory levels of staff/employee awareness, and question 11 sought to identify whether assessors continued to assess awareness levels post-registration.

Finally, question 12 was included in order to examine whether the assessors considered that who carried out awareness training had any bearing on its success.

Throughout the questionnaire the word '**MUST**' was used in an effort to indicate to assessors that, where appropriate, they should give responses which indicated actions that had to be taken to satisfy the requirement within the BS5750 to raise staff/employee awareness levels, if they considered that such a requirement exists. By adopting this particular term, it was hoped to avoid the situation where assessors only gave responses to questions which indicated what they thought was 'a good idea' or the best way of approaching awareness programmes.

The statistical analysis of assessor responses is the same as that used for the company and organisation questionnaires. 95% confidence intervals have again been established for those questions which could illicit either a positive or negative response, and where questions are wholly or partly multiple choice a Chi-square test has again been used.

5.3

QUESTIONNAIRE ANALYSIS

This section details the responses to the questions posed in the questionnaire, together with an analysis of those responses. It should be noted, however, that since not all questions were fully responded to in all the questionnaires returned, the percentages indicated in the analysis represent the proportion of the total who did provided a response. Of the two hundred questionnaires sent out, eighty were returned; giving an overall response rate of 40%. Twelve different certification bodies were represented amongst the respondents.

	YES	NO
<i>1.Do you consider that BS5750 Parts 1 & 2 require companies and organisations seeking registration to raise Quality/BS5750 awareness levels amongst their staff/employees?</i>	95%	5%

95% confidence interval: 90.22% - 99.78%

Any analysis of how assessors interpret the requirement within BS5750 to raise awareness levels has to begin by ascertaining whether assessors actually consider that such an obligation exists. The figures above suggest that the majority of assessors who responded believed that the Standard does impose such an obligation on companies and organisations, though there were number of respondents did not.

An assessor’s interpretation of this aspect of the Standard is important for companies and organisations since it may have a direct bearing on whether their assessment is successful or not. Any company or organisation which has not sought to raise staff/employee awareness levels may fall foul of an assessor who considers that BS5750 requires that they should have done. Conversely, if their assessors do not consider that this requirement exists then it would seem unlikely to make any difference to the success of their assessment.

Interestingly, two of the respondents indicated that the need to raise awareness would be dependent on existing staff/employee quality awareness levels. What they appear to be saying is that if a company or organisation's workforce already has a good appreciation of the importance of quality (even if there is no documented quality system in place), then there is no need to raise awareness during any subsequent implementation of BS5750. This view would appear to be at variance with the specific requirements of BS5750, since companies and organisations seeking assessment against the Standard are obliged to comply with those requirements. The need within BS5750 to raise awareness is specific to the quality policy, and even if such a policy already existed prior to implementation and assessment the Standard still appears to require staff awareness to be at an acceptable level. In fairness, however, if a pre-BS5750 documented quality policy existed, and staff/employee awareness levels were satisfactory then it might reasonably be assumed that there was no need to 're-invent the wheel'.

2. Listed below are a number of possible steps that a company or organisation could take in order to raise Quality/BS5750 awareness levels amongst staff/employees. Please tick any which you consider MUST be undertaken in order to satisfy the requirement within BS5750 to raise staff/employee awareness levels.

(a) Posting copies of the Quality Policy throughout the company or organisation; on staff/employee notice boards, on workplace walls, etc.?	32.5%
(b) Use of Quality/BS5750 awareness poster campaigns?	6%
(c) Issuing of Quality/BS5750 awareness handbooks to staff/employees?	14%
(d) Quality/BS5750 awareness training courses, seminars or briefings?	66%
(e) Other steps? (see below)	9%
(f) None of the above?	27.5%

$\chi^2 = 74.99$ ($\alpha < 0.05$); suggesting that the responses are not random, and are significantly different from a uniform pattern of preferences.

These figures suggest that 72.5% of assessors (95% confidence interval: 62.66% - 82.34%) consider that some positive step or steps must be taken by companies and/or organisations to raise staff/employee awareness levels, with the remainder indicating that they did not consider such action had to be taken in order to satisfy the requirements of BS5750.

Awareness training courses, seminars or briefings appear were considered the most important step that could be taken, with two-thirds of assessors indicating that these must be undertaken. Next in importance, favoured by a third of assessors was the posting of the quality policy throughout the company or organisation. The 'other steps' insisted upon by assessors included the issuing of copies of procedures to staff, training in procedures, the issuing of copies of the quality policy to all employees, and internal auditor training. 2.5% of respondents indicated that any of the methods of raising awareness listed would suffice, provided at least one was adopted.

The respondents divided almost equally between those who considered that one of the steps listed must be undertaken, and those insisting on a combination of the methods indicated. Interestingly, none of the assessors considered that either the use of poster campaigns or the issuing of staff/employee handbooks on their own were sufficient. 31% (95% confidence interval: 20.8% - 41.2%) indicated that awareness training courses, seminars or briefings could be used in isolation, but only 2.5% of respondents regarded the posting of the quality policy throughout the company or organisation as a satisfactory method on its own.

Of those assessors who insisted on a combination of methods being used, 22.5% considered that both the posting of the quality policy and awareness courses, seminars or briefings must be undertaken, with 15% requiring one of the other possible combinations. Only 4% indicated that all four of the steps a) - d) must be undertaken.

The inference that may be drawn is that approaching three-quarters of assessors who responded wanted to see some positive indication of companies and organisations having sought to raise awareness levels, and by inference it could be that the absence of one or more of the steps listed could have a detrimental effect on their chances of successful assessment. If an assessor considers that one or more of the steps listed must be undertaken, and a company or organisation has not undertaken them (though it may have undertaken one or more of the others) then the assessor may consider that they have not complied with the requirement.

It may be the case, therefore, that the companies and/or organisations being assessed to BS5750 not only have to ensure that they comply with

the requirement within the Standard to raise awareness levels, but also with their assessors' perception of the steps that must be taken. The following table compares the way in which the respondents to the company/organisation questionnaires indicated that they had addressed the requirement with the steps that the responding assessors considered must be taken.

	<i>Comp/Org</i>	<i>Assess</i>
<i>Staff training courses/meetings?</i>	97.1%	66%
<i>Poster campaigns?</i>	31.1%	6%
<i>Issuing of staff handbooks?</i>	33.6%	14%

On the face of it there would appear to be no disparity between what assessors require and what the companies and/or organisations had done. In all three cases, the proportion of assesseees who had undertaken the steps common to both questionnaires were in excess of the proportion of assessors who indicated that they must be undertaken. Whilst it is true that none of the respondents to the company/organisation questionnaires indicated that they had posted copies of their quality policy (which a third of assessors indicated must be done), that particular option was not listed in their questionnaire and may not have been regarded by companies and/or organisations which had done so as an 'other step'. That said, however, the relatively high proportion of assessors who indicated that it must be done suggests that it might reasonably have been expected to appear in the company/organisation questionnaires.

Similarly, the proportion of companies and/or organisations who indicated that they used a combination of the steps listed (51.5%), was greater than the number of assessors who considered that a combination of methods must be adopted (41.5%). Equally, 46.8% of companies and/or organisations used only one awareness raising method (with 44% using only training courses/seminars/briefings) whilst only 33.5% of assessors indicated that this would be acceptable (with 31% indicating that training courses/seminars/briefings were acceptable in isolation).

Since it is not possible to ascertain whether any of the assessors had assessed any of the companies and/or organisations who responded, it is impossible to compare 'like for like'; what the assessor indicated must be done with the steps that the company or organisation had in fact

undertaken. Nevertheless, it would appear that generally there is no discrepancy between the two. Of more concern, however, is the apparent lack of consistency between assessors. The suggested differences between what individual assessors consider must be done implies that a company or organisations compliance with the requirement within BS5750 may well be judged on individual assessor perception of what steps must be undertaken rather than the overall success of the company or organisation in raising awareness levels.

	YES	NO
3.If a company or organisation seeking registration has carried out Quality/BS5750 awareness training courses, seminars or briefings, would you consider that <u>All</u> staff/employees <u>MUST</u> attend them?	76.3%	23.7%

95% confidence interval: 67% - 85.6%

Although the responses suggest that the majority of assessors considered that all staff/employees must attend any awareness courses, seminars, and/or briefings, almost a quarter of respondents did not. Even if one takes the lowest range of the confidence interval, the indication is that a third of assessors did not consider that all staff/employees had to attend. Again, this appears to reinforce the apparent inconsistency suggested by the responses to the previous question and indicates once more that compliance with the requirement to raise awareness levels tends to be determined by assessor preference. Clearly a company or organisation which does not include all staff is more likely to be judged not to be in compliance if its assessor(s) fall into the majority group of respondents.

If you answered NO please indicate below any staff/employees who you consider MUST attend awareness training courses, seminars or briefings:

<i>Senior Management</i>	57.9%
<i>Operational Management</i>	57.9%
<i>Administrative Staff</i>	26.3%
<i>Supervisory Staff</i>	47.4%
<i>Shopfloor Staff/Operatives</i>	36.8%

Although these figures suggest that even where the assessors who responded do not consider that all staff/employees must attend awareness courses/seminars briefings there is a disparity as to which

staff/employees must attend, it should be noted that $\chi^2 = 3.31$ ($\alpha > 5$) and so there is no evidence to suggest that the pattern of preference is other than uniform.

	YES	NO
4.If a company or organisation seeking registration has carried out Quality/BS5750 awareness training courses, seminars or briefings, would you consider that <u>All staff/employees MUST attend them before the assessment?</u>	65%	35%

95% confidence interval: 54.55% - 75.45%

If you answered NO please indicate below any staff/employees who you consider MUST attend awareness training courses, seminars or briefings before the assessment:

Senior Management	39.5%
Operational Management	42.1%
Administrative Staff	13.2%
Supervisory Staff	39.5%
Shopfloor Staff/Operatives	34.2%

The apparent lack of consistency between assessors is again noticeable when it comes to those who consider that all staff/employees must attend awareness training prior to assessment. Even allowing for the range of confidence interval, the figures suggest that between approaching a half and three-quarters of assessors consider that all staff/employees should attend prior to assessment. Presumably, this can only serve to increase the likelihood that a company or organisation may have an assessor who takes a different view from them on the issue.

Although the staff/employee groups identified as having to attend prior to assessment by assessors who answered NO to in the first part of the question suggests further disparity amongst those who responded, in this case $\chi^2 = 4.22$ ($\alpha > 5$) and so there is no evidence to suggest that the pattern of preference is other than uniform.

	YES	NO
5.If a company or organisation seeking registration has carried out Quality/BS5750 awareness training courses, seminars or briefings, would you consider that <u>All</u> staff/employees <u>MUST</u> receive the same training?	11.3%	88.7%

95% confidence interval: 4.36% - 18.24%

The responses suggest that there is a belief amongst the assessors who responded that it is not essential that all staff/employees receive the same training. There is a large difference, however, between the proportion of companies and/or organisations who indicated that the same training was given to all and the assessors who considered that this must be done; 72.7% and 11.3% respectively. It is not clear, of course, whether the majority of assessors considered the giving of the same training to everybody as merely unnecessary, or whether they considered such action as positively detrimental to the success of the awareness programme.

	YES	NO
6.If staff/employees attended awareness training courses, seminars or briefing sessions prior to assessment, do you consider that they <u>MUST</u> receive any further Quality/BS5750 related training after registration?	80%	20%

95% confidence interval: 71.24% - 87.24%

It is clearly the belief of the majority of assessors questioned that 'quality' training is not a 'one off' exercise, and that the need to develop awareness training sessions extend past registration, but equally there are a number who do not consider that further training must be undertaken.

If you answered YES please indicate below what sort of further training you consider that they MUST receive:

Auditing courses	20.3%
Training in new/revised procedures	75%
Ongoing awareness training	60.9%
Awareness refresher training	34.4%
Other Quality Management Training (eg. TQM)	18.8%
Other training (See below)	7.8%

$\chi^2 = 61.59$ ($\alpha < 0.05$); suggesting that the responses are not random, and are significantly different from a uniform pattern of preferences.

Auditing courses were included as an option because of the frequency with which it occurred in company/organisation questionnaires. However, whilst a number of assessor respondents considered that they must be undertaken, the specialised nature of the activity would seem to preclude all staff/employees undertaking such courses. It may be that assessors included it to draw attention to the fact that companies and/or organisations must maintain sufficient numbers of internal auditors to ensure that the ongoing monitoring of the quality system required by BS5750 is maintained. The 'other training' included training in new technology, contracts, new and revised Standards, training arising out of any changes to business objectives and policy, and training in any new processes.

The fact that a quarter of assessors did not consider that staff/employees must be trained in any new or revised procedures, however, seems more difficult to explain. The ongoing success of any quality system would appear to depend on all staff/employees maintaining their awareness of the importance of their roles within it. Consequently, it would be difficult to see how this could be accomplished if they were not aware of any new or revised procedures directly affecting their work. It hardly seems credible that an assessor would take no notice of a member or staff or employee who was unaware that a procedure which directly affected them had been altered or introduced.

Half of the respondents indicated that either ongoing awareness training or awareness refresher training must be undertaken. Whilst undeniably more subjective in its applicability, dependent on the levels of awareness that are maintained as time progresses, the fact that 50% of assessors considered it essential rather suggests that they consider it unlikely that awareness levels can be maintained without some form of 'follow-up' training. We can only presume, given the level of inconsistency amongst assessors identified so far, that the frequency with which this follow-up training must take place will also vary from one assessor to another.

It is interesting that approaching one in five assessors considered that some form of other quality management training (such as TQM) must take place. Although there would appear to be a benefit in having a documented, assessed quality system as part of a broader quality management structure (including TQM, for example), it would seem reasonable to assume that any other quality management training would

only be appropriate if the company or organisation intended to travel that particular quality management route. It hardly seems fair that an assessor might want evidence of other quality management training if the company or organisation had no intention of undertaking such a journey.

More than a third of respondents who considered that some form of further training must be undertaken (37.5%) indicated that only one of the options listed must be undertaken, with training in revised procedures being the preferred choice. 20.3% of assessors who answered YES to question 6 indicating that this was the only further training that must be taken, whilst 11% considered that only ongoing awareness training was necessary. No assessors indicated that other quality management training alone should be undertaken.

The remaining 62.5% of assessors who answered YES considered that a combination of more than one option must be undertaken. No particular combination was particularly evident; 9.3% indicated a combination of training in new/revised procedures, ongoing awareness training, and awareness refresher training; the same proportion in favour of a combination of training in new/revised procedures and ongoing awareness training. 4.6% indicated that all five listed training options must be undertaken; the same proportion considered that all but internal auditor training should be adopted; and 6.3% indicated that training in new/revised procedures should be carried out along with awareness refresher training.

This all serves to highlight the different approaches taken by different assessors, and this disparity is heightened when one compares the actions which assessors consider must be taken with those indicated as having been taken in the company/organisation questionnaires. (The figures indicated for companies and/or organisations are the overall totals combining the responses from both the pilot and main questionnaires)

	Comp/Org	Assess
<i>Auditing courses</i>	74%	20.3%
<i>Training in new/revised procedures</i>	38.4%	75%
<i>Ongoing awareness courses</i>	33.3%	60.9%
<i>Refresher courses</i>	14.6%	34.4%
<i>Other Quality Management training (eg. TQM)</i>	26.5%	18.8%

Although the proportion of assessors who considered that auditing courses and/or other quality management training must be carried out was less than the number of companies and/or organisations who indicated that they had undertaken them, the picture is reversed for the three other further training options. In all three cases, the number of assessors who considered that they must be undertaken is approaching or more than double the proportion of companies and/or organisations who indicated that they had done so.

Although, as has already been mentioned, it is not possible to exactly compare companies/organisations with assessors since there is no way of knowing whether any of the assessors who responded assessed any of the companies/organisation respondents, there would still appear to be a disparity between the two. Given the relatively high proportion of assessors who considered, for example, that training in new/revised procedures and/or ongoing awareness courses must be undertaken, one might reasonably have expected the proportion of companies and/or organisations who indicated that they had done so to be closer to the assessor figures. If a company or organisation's assessor(s) considered that a further training option must be undertaken then it would seem reasonable to assume that the company or organisation would do so; if it did not then during post-assessment monitoring visits its assessor(s) might well judge that it was not in compliance with the requirement to ensure that its quality policy was "understood, implemented and maintained".

No obvious explanation for this difference is immediately apparent. It might be, of course, that the responses given by both companies and/or organisations and assessors did not reflect what was done in practice. Companies and/or organisations might have given more post-registration training than they indicated, though this would seem unlikely since there would be no obvious reason for companies and/or organisations to hide their light under a bushel when making their responses.

Equally, there is the possibility that the responses given by the assessors did not reflect what they in fact insisted on in practice. It is possible that the responses that they gave reflected what they considered to be the 'right' answers rather than what they insisted, or did not insist upon, but again there is no obvious reason why they should do so. The questionnaires were both confidential, and untraceable to them

individually, with no likelihood of any sanction being imposed upon them if they gave the 'wrong' answers. However, even if it was the case that they gave what they considered to be the 'right' responses then the figures indicate that there is a considerable difference both between assessors as to what they consider to be the 'right' answers, and with the responses given by companies and/or organisations.

Similarly, it is possible that, as indicated at the end of the Methodology section, assessors gave responses which indicated what they thought was 'a good idea', or the best way of approaching awareness programmes, rather than what they considered '**MUST**' be done. If this was the case, then the apparent disparity between company/organisation and assessor responses is more easily explained. If an assessor considered a post-registration option to be 'best practice', but did not insist upon it, then there would be no non-compliance sanction hanging over a company or organisation which did not undertake that option, and consequently no reason for them to do so if they did not wish to.

	YES	NO
<i>7. Would you consider the content of any training courses, seminars or briefings to be an assessable element?</i>	72.5%	27.5%

95% confidence interval: 62.7% - 82.3%

The importance of these figures to companies and/or organisations is that, depending on their assessor(s), the content of their training might be subject to scrutiny at assessment, and again there is a difference in the approaches taken by individual assessors. As was seen from the responses to question 15 in the company/organisation questionnaires, there were a wide range of different elements covered in individual company and organisation training courses/seminars/briefings. Whilst some, such as an outline of the requirements of BS5750, were included by the majority of respondents, this was not always the case and certain aspects of the awareness training were included by only a small proportion of respondents.

This being the case, there is the possibility that a company and/or organisation may be judged not to be in compliance with BS5750 if their assessor(s) consider it appropriate to assess the content of their training courses/seminars/briefings. Given the differences between assessors identified already, it is not beyond the realms of possibility that the

content of their courses/seminars/briefings may not accord with what the assessor(s) consider must be included.

	YES	NO
8. Following successful registration, do you consider that all new employees who join the company or organisation <u>MUST</u> receive some form of awareness training?	96.3%	3.7%

95% confidence interval: 92.16% - 100%

Whilst the vast majority of respondents clearly considered that new employee awareness training must be undertaken, there was still a small element which considered it unnecessary. As was indicated in the Introduction and discussed in relation to question 21 of the company/organisation questionnaires, the Guidelines to BS5750 only suggest that awareness training *might* be extended to new employees. However, if companies and organisations do not extend awareness training to new employees there is an obvious danger that those new employees will not contribute to the efficiency of the quality system as effectively as those who received their training prior to registration.

Although the majority of company/organisation respondents (88.3%) indicated that new employees were, or would be, given awareness training, this is still a smaller proportion than the 96.3% of assessors who indicated that this must be undertaken.

	YES	NO
9. When carrying out assessments to BS5750, do you <u>always</u> assess whether the company or organisation has sought to raise Quality/BS5750 awareness amongst its staff/employees?	93.8%	6.2%

95% confidence interval: 88.48% - 99.12%

There is a clear majority of respondents who indicated that they always assessed company/organisation awareness levels during assessments, and the fact that not all indicated that they did is not surprising given that not all respondents considered that BS5750 Parts 1 and 2 required companies and/or organisations to raise quality/BS5750 awareness levels amongst their staff/employees (see question 1). However, whilst it might reasonably be expected for the proportion of negative responses for both questions to be the same, there is in fact a disparity between the two; 6.2% here, and 5% in question 1 (2.5% if we exclude the assessors who indicated that there is no requirement where existing awareness levels are already satisfactory).

This suggests a discrepancy in responses between the two questions, which is demonstrated by a closer analysis of the particular answers given. Of the assessors who indicated that they did not consider that the Standard obliged companies and/or organisations to raise awareness levels, only one claimed not to always to assess awareness levels during assessments. All the others indicated that they did. Obviously these contradictory responses are confusing since an assessor who always assesses company/organisation awareness levels might reasonably be assumed to consider that this requirement is present in BS5750; why else assess it?

Equally confusing is the fact that 4.1% of assessors who considered that the requirement did exist indicated that they did not in fact always assess awareness levels during assessments. An assessor's role is to gauge compliance with the requirements of BS5750, and the company or organisation's documented procedures, and to make a recommendation as to registration based on the levels of compliance found. If assessors consider that a requirement exists within the Standard, one might reasonably have assumed that they were duty bound to assess compliance with that requirement.

Again, this would appear to confirm the existence of a disparity of interpretation between assessors suggested by responses to earlier questions. A company or organisation which has not sought to raise awareness levels may not be penalised by assessors who, whilst considering that such a requirement does exist, do not assess awareness levels; but may well be penalised by assessors who do assess awareness levels even though they do not consider that the requirement exists.

If you answered YES please indicate how you would ascertain whether a company or organisation had satisfactorily sought to raise staff/employee awareness levels:

<i>General impression gained during the assessment?</i>	56.7%
<i>By asking or interviewing staff/employees?</i>	81.3%
<i>Evidence of one or more of the steps listed in question 2 having been undertaken?</i>	62.7%
<i>Other methods (See below)</i>	4%

$\chi^2 = 47.37$ ($\alpha < 0.05$); suggesting that the responses are not random, and are significantly different from a uniform pattern of preferences.

The 'other methods' used to ascertain whether a company/organisation had sought to raise awareness levels were "evidence of compliance with the quality system" (by which we must assume that satisfactory awareness levels can be inferred by general compliance with the company or organisation's documented system); and the use of "information supplied by companies who used assessed company as a supplier" (ie. vendor audits of the assessed company or organisation by others, though it is not immediately obvious how assessors would have access to this information).

With reference to the actual methods adopted by assessors, 29.3% indicated that they relied on only one of those listed; 18.6% solely by asking or interviewing staff/employees, and 9.3% solely from evidence of one or more of the steps listed in question 2 having been undertaken. Whilst there would appear to be nothing fundamentally wrong with using a single method to judge awareness levels, there might be a potential danger where the only method adopted was evidence of one or more of the steps listed in question 2 having been undertaken. To do so does not appear to make allowance for the fact that the awareness programme, in whatever form, might not have been successful in raising awareness levels. The inherent danger in this approach is reinforced by the fact that 42.8% of assessors who used training evidence as their sole means of judging awareness levels indicated that they did not consider the content of any training courses to be an assessable element.

All other assessors who indicated that they always assessed awareness levels indicated that they used a combination of methods; 37.3% of all assessors used all three of the specifically listed methods, 14.6% indicated that they based their judgement on both the general impression gained during the assessment and by asking and/or interviewing staff/employees; and 10.6% of all assessors asked and/or interviewed staff/employees and sought evidence of one or more of the steps in question 2 having been undertaken.

Whilst not wishing to comment on the particular assessing techniques employed by individual assessors, since the means they adopt will obviously be a matter of personal preference, there is some disparity between the methods adopted and the steps indicated that must be done in response to question 2. Of the 27.5% of assessors who did not consider that any of the listed steps must be undertaken, half indicated in

question 9 that they used evidence of one or more of those steps having been undertaken when deciding whether awareness levels were satisfactory, with one of those assessors indicating that this was the only method used. Whilst it may seem odd that they should not insist on those steps being taken and yet use evidence of those steps when making their judgement, there would appear to be no reason why they should not use evidence of them having been undertaken if they were. Merely because assessors do not insist on them would not seem to be a valid argument for excluding them from the decision making process.

Conversely, of the 37.3% of respondents who indicated that they did not use evidence of awareness training programmes when deciding whether a company or organisation had sought to raise awareness levels 65.4% had indicated that one or more of the steps listed in question 2 must be undertaken. It seems a little strange that assessors could consider that certain steps must be undertaken in order for a company or organisation to comply with the requirement to raise staff/employee awareness levels, and yet not wish to see evidence that they had. Whilst assessors might be able to infer that they had taken place if both the general impression gained during the assessment and the responses given when asking or interviewing staff/employees, there is no guarantee that this would be the case.

	YES	NO
10. Have you ever raised a Deficiency Notice, Corrective Action Request, or similar during an assessment (or refused to recommend registration) because you considered that awareness levels amongst a company or organisation's staff/employees were not satisfactory?	76.3%	23.7%

95% confidence interval: 67% - 85.6%

	YES	NO
<u>If you answered NO.</u> would you do so if you considered that awareness levels in a company or organisation were not satisfactory?	68.4%	31.6%

95% confidence interval: 48.3% - 88.5%

Regardless of the benefits to the overall effectiveness of quality system implementation that might accrue to a company and/or organisation through a staff/employee awareness programme, the requirement within BS5750 is, as was indicated in the Introduction, an assessable one. Consequently, a failure to do so may result in assessors regarding this as

a failure to comply with the requirements of the Standard and perhaps not recommend registration. It is of crucial importance, therefore, to ascertain whether assessors do regard a failure to raise awareness levels satisfactorily as sufficient cause to penalise companies and/or organisations.

The figures above suggest that they do, even if 7.5% of respondents indicated that they had not, and would not do so, though given the width of the confidence intervals this proportion might be as high as 17%. The fact that slightly more than three-quarters of respondents indicated that they had penalised companies and/or organisations in the past would seem to suggest that they will identify non-compliances when found, and the majority of those who had not done so to date indicated that they would do so if the situation arose.

Given the fact that a large majority demonstrated a willingness to raise Deficiency Notices, Corrective Action Requests, or similar during assessment (or refused to recommend registration), the degree of inconsistency in interpretation, or approach, suggested by the responses analysed so far might reasonably be viewed with concern by companies and/or organisations awaiting assessment to BS5750. It is one thing to have an assessors who do not necessarily agree with the awareness programme undertaken, but quite another if that disagreement results in the company/organisation being penalised at assessment, or not being recommended for registration.

	YES	NO
11. During subsequent surveillance or follow-up visits following registration do you always continue to assess employee awareness levels?	82.5%	17.5%

95% confidence interval: 74.12% - 90.83%

Although a majority of respondents indicated that they always continued to assess staff/employee awareness levels, the proportion who indicated that they did is less (by 11.3%) than those who indicated that they always assessed awareness levels at assessment. This would seem to suggest that those respondents who did not continue to assess awareness levels regarded staff/employee awareness programmes as a 'one-off', only appropriate pre-registration. This might be because they considered that the Standard did not oblige companies and/or organisations to *maintain* awareness levels, of course, though this would

appear to ignore the requirement for quality policy maintenance indicated in section 4.1.1. Equally, it might be that those assessors considered that once staff/employee awareness had reached a satisfactory level (before registration presumably), it was unlikely to subsequently drop below that level and consequently did not need maintaining or reinforcing.

Either of these approaches might explain why 64.3% (95% confidence interval: 39.2% - 89.4%) of assessors who indicated that they did not continue to assess awareness levels after registration did assess them at assessment. Less easily understood is why one respondent should indicate that whilst awareness levels were not assessed at assessment, they were at subsequent surveillance or follow-up visits after registration. Perhaps even more interesting is the fact that 78.6% (95% confidence interval: 57.1% - 100%) of the respondents who did not continue to assess awareness levels considered that all new employees who joined the company or organisation after registration must receive some form of awareness training. It is not clear from the responses, of course, how they intended to ascertain that new employee awareness levels were satisfactory if they did not continue to monitor awareness levels after registration.

12.If a company or organisation has undertaken staff/employee awareness training courses, seminars or briefing sessions, do you consider it most advantageous for them to use external trainers or their own personnel to carry out the training?

<i>External trainers</i>	1.2%
<i>Own personnel</i>	12.5%
<i>Combination of both</i>	45%
<i>Either</i>	41.3%

$\chi^2 = 44.3$ ($\alpha < 0.05$); suggesting that the responses are not random, and are significantly different from a uniform pattern of preferences.

As was indicated in the Methodology section, this question was included in order to examine whether assessors thought that who carried out awareness training had any bearing on its success. At the time of its inclusion in the questionnaire, it was intended to give a guide to the professional opinion of assessors as to which training personnel option they considered most effective. Assessors do see the results of a great

many awareness programmes and might reasonably be assumed to be well placed to venture such an opinion. Given that questions 9, 12, 18 and 24 in the company/organisation questionnaires asked respondents to indicate whether 'in-house' and/or external resources had been utilised in the elements of their awareness programmes, the intention was to compare what those companies and/or organisations had done with what assessors considered 'best practice'.

Unlike the majority of other questions the word '**MUST**' was not used, since at the time it was not considered appropriate to try to ascertain whether assessors considered that only one of the options had to be used. In view of the variations in responses identified in the previous questions, it might, in retrospect, have been enlightening to do so.

The figures suggest generally the respondents did not specifically favour either of the single source options (a) or (b), and two out of five respondents did not consider that there was any particular benefit to be gained whichever option was chosen. Whilst a similar proportion viewed a combination of sources as the most effective option, the figures do not, of course, identify whether assessors have any particular preference as to whether either source should be employed for a particular aspect of an awareness programme, or whether they consider that a combination of sources should be used for all elements.

CONCLUSIONS

BS5750 does not specifically oblige anyone implementing the Standard to undertake a quality awareness programme. It does not stipulate how companies and organisations should ensure that their Quality Policy is "*...understood, implemented and maintained at all levels in the organisation*", though the Guidelines do offer some indications as to what *might* be involved. The need for an awareness programme *may* be inferred from the Standard and its Guidelines, but the only obligation that companies and organisations are under is to be able to demonstrate that their Quality Policy has been *implemented and maintained*, and that it is *understood* by their staff/employees.

The fact that the vast majority of respondent companies and organisations had undertaken some form of awareness programme does not necessarily indicate that they had all *inferred* the need from BS5750. For the reasons suggested by the authorities discussed in the Literature Review they might equally have decided that an awareness programme was necessary for the successful implementation of their quality system, regardless of any perceived requirement within the Standard.

It may be that awareness programmes offer the best opportunity for raising staff employee understanding of the Quality Policy and its objectives (and the high incidence of awareness programmes amongst the respondents may be indicative of this), but clearly they are not the only

option available. There were, after all, some respondents (admittedly a very small percentage) who indicated that they had not undertaken any steps towards raising awareness, and yet they too were able to satisfactorily demonstrate compliance with the requirement to their assessors and achieve registration.

There may, of course, be no real distinction between the specific understanding, implementation and maintenance of the Quality Policy required by BS5750 and that required by any other, unassessed quality system implementation programme. Whilst it may be that staff/employee understanding of the Quality Policy is an integral part of the overall quality system implementation, it may equally be true that the Quality Policy itself cannot be understood without reference to the wider context of the quality system. The two may to all intents and purposes be indivisible, since the ability to demonstrate compliance with this particular requirement of BS5750 might rest on a company or organisations' ability to demonstrate compliance with their whole quality system, which in turn may hinge on the general level of 'quality' awareness amongst employees.

That said, however, as has been mentioned on numerous occasions throughout this study, the requirement within the Standard to ensure that the Quality Policy is *understood, implemented and maintained at all levels in the organisation* is an assessable element in the same way that the other requirements of BS5750 are. The purpose of the research was not to discover whether companies, organisations, and assessors, considered awareness awareness programmes beneficial to BS5750 implementation, but rather to ascertain how they translated the provisions of the Standard with regard to quality policy awareness amongst staff/employees.

As was indicated in the Introduction, neither the Standard or its ancillary guidance documentation offer concrete information on how the requirement *must* be satisfied, merely giving some indications as to how this *might* be accomplished. Whilst there is a hint of the imperative in the indication in section 4.1.1 of the Part 4 guide that the quality policy *should be published throughout the organisation*, the Guide is only that, and cannot carry the same weight as the Standard itself. In any event, the responses to the questionnaires suggested that none of the companies and/or organisations had done so (admittedly not listed as a possible step in question 9, but none of the respondents included it under

'other steps'), and only a third of assessors considered that it must be done.

Conversely, although section 18.3.3 of the Part 0: Section 0.2 guide only suggests that awareness training *might* be extended to new employees who joined the company or organisation after registration, a large majority (95% confidence interval: 71.3% - 82.1%) of company/organisation respondents said that they had done so. An even greater proportion of assessor respondents (95% confidence interval: 92.16% - 100%) indicated that they considered that this must be done. Similarly, the same section of this guide suggests that awareness training programmes *may include periodic refresher programmes for long-standing employees*. Company/organisation responses indicated that approaching half (95% confidence interval: 44.3% - 51.7%) had undertaken ongoing awareness and/or awareness refresher training, whilst more than half the assessor respondents (95% confidence interval: 50.1% - 62.5%) considered that one or both must be carried out.

In the Introduction to this research it was stressed that BS5750 as a whole might be regarded as a framework for management control which does not specifically detail how each individual company and/or organisation must specifically regulate itself, but rather identifies the areas where that discipline must be applied. The requirement to ensure that the Quality Policy must be understood, implemented and maintained is no different in that regard. What the responses to the company/organisation questionnaires suggest is that the methods employed to satisfy this requirement can vary greatly, and the emphasis on particular elements appears to be determined by individual company/organisation preference as well as pragmatic considerations.

The responses to the company/organisation questionnaires suggest that awareness programmes are not handled exclusively 'in-house'. That said, the responses appear to indicate that the majority of companies and/or organisations made far greater use of 'in-house' resources than external (with the one exception of awareness videos). This tendency before assessment appears to continue after registration. However, the responses suggest that whilst there was a slight decrease in the use of external sources for training courses/meetings after assessment, there was a small increase in their use for posters and handbooks.

The company/organisation responses did not suggest any overriding reason for this apparent bias towards internal resourcing, with cost, the availability of resources/experience within the company/organisation, and a wish to emphasise company/employee 'ownership' of the quality system all being cited in roughly equal measure. The explanations indicated for the use of external sources, however, suggested that the most significant factor was a lack of resources/experience. Then again, either or both the need to stress the importance of the programme as a whole (or particular elements of it), and the fact that external sourcing of programme elements were available as part of any consultancy package were cited by approximately a third of respondents.

The indication from respondents is that training courses/meetings were adopted by almost all companies and/or organisations, but that approximately a third made use of either or both poster campaigns and staff handbooks. This apparent reliance on training courses is emphasised by the fact that more than a third of respondents (95% confidence interval: 37.77% - 50.23%) used it as their sole method for raising staff/employee awareness.

With regard specifically to training courses/seminars/briefings, approaching three-quarters of respondents (95% confidence interval: 66.9% - 78.5%) indicated that the same training was given to all staff. Of those who did not, the two most common differences identified between the training of different company or organisation groups was the training in only those procedures relevant to particular jobs, and that different groups received training determined by their responsibilities in relation to the quality system. When asked to indicate why different training was given, whilst motivation, intelligence and existing awareness levels were cited as factors, as well as the time available, far and away the largest factor suggested was the belief that training in procedures relevant to an individual's job was the most important. Although there was some evidence to suggest that some companies and organisations adopted the 'cascade' format to their training, there was no clear indication that this was the method favoured by the majority of respondents.

The responses also suggested that there was no one particular element common to all the company/organisation awareness training sessions. However, the respondents did appear to indicate that an outline of the

requirements of BS5750 formed at least part of the vast majority of courses/seminars/briefings (95% confidence interval: 92.64% - 95.76%).

Overall, the high proportion of respondents who indicated that they had handled all or part of their awareness programmes 'in-house' might be taken as evidence that the content and structure of those programmes were determined by the resources available. The fact that a large proportion of respondents cited cost and the availability of resources within their company/organisation as a reason for sourcing 'in-house' would appear to reinforce that view. Moreover, where external resources were used the most often identified reasons indicated, such as a lack of time or resources/experience available, that awareness packages were part of a consultancy package, or that it was merely more convenient that way, would seem to point to a pragmatic attitude towards awareness programmes. Staff/employee awareness levels have to be raised; what is the quickest, surest, least expensive way of doing it?

Whilst not wishing to demean this interpretation of the research data, it does rather overlook certain practical considerations. Time and again within this study it has been stressed that the requirement within BS5750 to ensure understanding, implementation and maintenance of the Quality Policy is an assessable one. What the Standard requires is that awareness levels are satisfactory; it does not say how this must be accomplished, or seek to question what lay behind the adoption of all/any methods undertaken.

Companies and/or organisations may implement and seek assessment to BS5750 for a variety of reasons, but in essence these would appear to come down to just two: a belief that to do so will make them more effective and efficient, and/or customer pressure. Regardless of whether one or both of these reasons are behind implementation and assessment, the requirements of the Standard are unchanged. If a company or organisation is deemed to comply with all the requirements of BS5750 at assessment then there is no reason why it should not be recommended for registration. The motives behind the company or organisation's decision for seeking assessment are not at issue, and it follows that the methods for raising awareness should not be subject to similar scrutiny.

There are those, of course, who might regard this as a failing of BS5750. Some of those authorities discussed in the Literature Review might view

an absence of 'purity' of motive as somehow devaluing the quality system as a whole. On the specific element of quality awareness programmes they might legitimately argue that the substance and methods of that training should be determined by the objectives of the programme, rather than the other way around. However, BS5750: Part 0: Section 0.2; 4.3.2 does state that the "*...calculation and evaluation of costs associated with all quality elements and objectives should always be an important consideration*". Admittedly this is specifically referenced to the objective of minimising quality losses, but there would seem to be no obvious reason why the same principles should not be adopted for elements of the quality system itself.

As was indicated in the Introduction, the assessable element of the provisions of 4.1.1 adds a further dimension to any attempts by companies and/or organisations to raise staff/employee awareness levels; the role of their assessors. Consequently an additional aim of the research was an attempt to ascertain how the external assessing bodies themselves interpret the requirement for understanding, implementation and maintenance of the Quality Policy. The responses to the assessor questionnaires suggest two principal conclusions: firstly that there is a significant level of diversity of interpretation of the requirement amongst individual assessors, and secondly that there is some discrepancy between the approaches adopted by companies and/or organisations and those adopted by the assessors.

To a certain extent the variation between assessors can be viewed as more problematic than the variations suggested by the responses to the company/organisation questionnaires. The methods or approaches adopted by companies and/or organisations might well be regarded as irrelevant provided that the end result is satisfactory awareness levels amongst staff/employees. However, any variation in interpretation by assessors might have a direct bearing on the success of any assessment. If an assessor considers that certain steps must be undertaken, and companies and/or organisations they are assessing have not done so, then this *may* influence whether they regard those companies and/or organisations as having satisfied the requirements of 4.1.1, regardless of actual staff/employee awareness levels.

It must be stressed that the majority of assessors (95% confidence interval: 76.74% - 85.86%) indicated that their decision on whether

staff/employee awareness levels were satisfactory was based at least in part by asking or interviewing those staff/employees. Whilst this would seem to lessen the chances of their decision being reached solely on the basis of preference for particular awareness raising methods, approaching two-thirds (95% confidence interval: 57.04% - 68.36%) indicated that evidence of one or more of the listed steps had some bearing on their decision, with almost one in ten of the respondents indicating that this was all they based their decision on.

Given the limitations of the research data it would be unreasonable to describe this element of the assessment as a lottery, but the responses to the assessor questionnaires suggest the possibility that assessment criteria may be influenced by personal assessor preference and/or interpretation where evidence of satisfactory compliance with the requirements of the Standard is not clear cut. The apparent contradiction within the assessment process would seem to be that whilst objective evidence of compliance with both the requirements of the Standard and a company or organisation's own quality system is required by assessors, their interpretation of what constitutes compliance appears more subjective.

As was indicated in the analysis of the assessor questionnaires it is not possible to ascertain whether any of the respondents assessed any of the companies and/or organisations who responded. Consequently one cannot make direct comparisons between those steps that the former considered must be undertaken, and those which the latter indicated they had done. Nevertheless, general comparisons would seem to suggest that there is some discrepancy between the two. This would appear to add weight to the view that whether your efforts to ensure that the Quality Policy is understood, implemented and maintained are viewed as satisfactory may depend on the assessor(s) you get.

It must be stressed, of course, that the two sample groups are small. The two hundred and forty eight companies and organisations who responded represent approximately 0.8% of the total number currently registered to BS5750, and the eighty assessors approximately 2.1% of IQA registered Lead Assessors. Consequently, the figures detailed in the research can only be regarded as suggestive of the broader picture. It must be recognised that neither samples may be indicative of a wider range of companies, organisations and assessors, and their responses

may have given a distorted view of the methods and approaches to awareness programmes taken by both groups. Furthermore, there are obvious qualifications placed on the responses from both companies/organisations and assessors by the statistical limitations identified by the confidence limits and Chi-squared tests.

The limitations of the research would suggest two principal avenues for further study. Firstly, a similar study based on increased sample size for both groups of respondents might indicate whether the conclusions suggested in this research hold true for a larger range of companies and/or organisations, as well as assessors. By analysing larger groups of respondents it could be possible to ascertain whether the figures generated by this study are an anomaly of the samples, peculiar to them alone.

Secondly, further research might broaden the scope of study to other aspects of BS5750. Given the twenty sections in Part 1 there would appear to be ample opportunity for similar analysis of approach, or methods adopted by companies and/or organisations in relation to all/any of these other requirements. In addition, given the disparity of interpretation between assessors suggested by this research, analysis of the approaches adopted by assessors in respect of other sections of the Standard might indicate whether this apparent discrepancy between them holds true in other areas.

If the results of this research are indicative of a wider variation or disparity of interpretation amongst assessors for other requirements of the Standard, then this might suggest that company/organisation compliance with all requirements of BS5750 may be judged against individual assessor criteria. If such is the case, then this calls into question the integrity of the whole assessment and certification process.

As was indicated in the section on The Role of the Assessing Bodies, regardless of the acceptance given to BS5750/EN29000/ISO900 itself, assessment against the Standard will only be regarded as a worthwhile exercise if carried out by Certification Bodies, and assessors, in whom companies and/or organisations have confidence. That credibility may be lost if they, and their customers, believe that compliance with the Standard is judged against undefined criteria; individual assessor preference or interpretation rather than the actual requirements of the

Standard. If confidence in the Certification Bodies is lost then it may be that the customers of the companies and organisations currently registered or seeking registration to BS5750/EN29000/ISO900 will no longer be prepared to accept their assessment and registration as a demonstration of satisfactory quality system implementation. In such a case, they would presumably have no option but to return to a greater amount of second-party assessment and monitoring of their suppliers.

Moreover, if a company or organisation has been successfully assessed by one assessor then their respective interpretations of what compliance with the Standard requires might reasonably be assumed to be the same. If that company or organisation is then visited by a different assessor during the subsequent monitoring phase of registration it might be the case that that assessor's interpretations are at variance both with the company/organisation and the original assessor. Consequently, the possibility would exist that two assessors from the same Certification Body had different interpretations of one or more of the requirements of the Standard. In such a situation, compliance levels judged satisfactory by the original assessor might be regarded as unsatisfactory by the later assessor. This too could only serve to devalue the assessment and certification process through reduced confidence and credibility.

The conclusions suggested by this research lead to two main recommendations, though one is to a certain extent dependent on the other. Firstly, it would appear essential that the 'interested' parties (DTI, NACCB, IQA, Certification Bodies, and companies/organisations) carry out a detailed investigation into the extent to which individual assessor interpretation of the requirements of the Standard exists, and the degree to which it influences their judgement of whether a company or organisation has complied with the requirements of the Standard. Only when this information is available (and credibility may require it to be gathered by independent researchers) will those interested parties be able to gauge whether a problem exists.

If that research shows that the conclusions drawn by this study hold true in a wider context (both in terms of sample size and with regard to the other requirements of BS5750/EN29000/ISO9000) then the second recommendation appears obvious. Those parties who can most influence individual assessors (principally the NACCB, IQA and the Certification Bodies) would need to instigate some form of training and monitoring

programme to ensure greater conformity of interpretation and a decrease in the influence of personal preference.

Although the actual methods adopted may vary, however, it would appear essential that the Certification Bodies themselves are not left to initiate such a programme unsupervised. Whilst a Certification Body may be completely successful in instigating a programme which ensures that all their assessors adopt common interpretations, the overall programme of training and monitoring would be unsuccessful if the interpretations adopted by one Certification Body were different to others. It follows from this, therefore, that organisations such as the IQA and NACCB would have an important role to play in ensuring that regardless for which Certification Body assessors carry out assessment and monitoring visits, their interpretations would be as common as possible.

BIBLIOGRAPHY

REFERENCE MATERIAL:

British Standards Institution: BSI, London (dates as indicated)

BS5750: Part 0: Section 0.1: 1987: Guide to selection and use

BS5750: Part 0: Section 0.2: 1987: Guide to quality management and quality system elements

BS5750: Part 1: 1987: Specification for design/development, production, installation and servicing

BS5750: Part 2: 1987: Specification for production and installation

BS5750: Part 3: 1987: Specification for final inspection and test

BS5750: Part 4: 1990: Guide to the use of BS5750

BS5750: Part 8: 1991: Guide to quality management and quality systems elements for services

Chartered Institute of Building: Quality Assurance in the Building Process, Alden Press, Oxford, 1990

Crosby, P B: Quality is Free: The Art of Making Quality Certain McGraw-Hill Book Company, New York, 1979

Cullen, J & Hollingum, J: Implementing Total Quality, IFS (Publications) Ltd 1987

Department of Health: Committed to Quality: Quality Assurance in Social Service Departments, HMSO, London, 1992

Department of Trade and Industry: Total Quality Management & Effective Leadership, DTI, London, 1991

Feigenbaum, A V: Quality Control: Principles, Practice & Administration, McGraw-Hill Book Company, New York, 1951

Halpin, J F: Zero Defects - A New Dimension in Quality Assurance, McGraw-Hill Book Company, New York, 1966

Marguglio, B W: Quality Systems in the Nuclear Industry, American Society for Testing & Materials, Philadelphia, 1977

Mortiboys, R J: "Quality Management for the 1990s" in Managing Quality, Dale, B G & Plunkett J J (Eds), Phillip Allen 1990,

Munro-Faure, L & M: Implementing Total Quality Management, Pitman Publishing, London, 1992

- Murphy, J A: Quality In Practice, Gill & MacMillan Ltd
Dublin, 1986
- Oakland, J S: Total Quality Management, Butterworth-Heinemann
Ltd, 1989
- Patemen, J D: "A company-wide quality awareness programme", in
Quality Assurance, Volume 15, No 4, December 1989
- Procter, D: "Training for Total Quality: British Steel shows the way",
in Quality Management Handbook, Hand, M & Plowman, B (Eds),
Butterworth-Heinemann, Oxford, 1992,
- Rothery, B: ISO 9000, Gower Publishing Company, Aldershot, 1991
- Stebbing, L: Quality Assurance: The Route to Efficiency and
Competitiveness, Second Edition, Ellis Horwood Limited,
Chichester, 1990
- The Government Centre for Information Systems: Quality Training,
Wheeler, W & J (Eds), The Quality Management Library,
HMSO, London, 1992

ASSOCIATED READING:

- Ashford, J L: The Management of Quality in Construction,
E & F N Spon Ltd, London, 1989
- Crosby, P B: Quality Without Tears, McGraw-Hill Book Company,
New York, 1984
- Dale, B G & Oakland, J S: Quality Improvement Through Standards
Stanley Thornes (Publishers) Ltd, Cheltenham, 1991
- Feigenbaum, A V: Total Quality Control, (3rd edition), McGraw-Hill
Book Company, New York, 1983
- Jackson, P & Ashton, D: Implementing Quality Through BS5750,
Kogan Page Ltd, London, 1993
- Lock, D (Ed): Gower Handbook on Quality Management, Gower
Publishing Company, Aldershot, 1990
- Hand, M & Plowman, B (Eds): Quality Management Handbook,
Butterworth-Heinemann, Oxford, 1982
- Holmes, K: Total Quality Management, Pira International,
Leatherhead, 1992
- Robson, M: The Journey To Excellence, John Wiley & Sons Ltd,
Chichester, 1986

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Appendix 1

Pilot Company/Organisation Questionnaire

GENERAL INFORMATION

Company Name:

Address:

.....

.....

Tel. No.:

Fax. No.:

To which part of BS 5750 has your company obtained registration? Please tick the appropriate box.

BS 5750: Part 1 ☐

BS 5750: Part 2 ☐

When did your company first obtain registration? Day: Month: Year: 19

Please briefly describe the products, processes and/or services which are included within your scope of registration:

.....

.....

.....

.....

What is the total number of employees covered by your registration?

Is your company part of a larger Group? YES ☐ NO ☐

(a) If YES, are any other companies within the group also registered? YES ☐ NO ☐

(b) If YES, did any achieve registration before your own company? YES ☐ NO ☐

Are full-time training personnel employed by the company? YES ☐ NO ☐

If NO, please detail below who is responsible for carrying out any 'in-house' training activities:

.....

.....

.....

.....

Does your company ever use external trainers/training organisations? YES ☐ NO ☐

Did your company use external external Quality Assurance consultants
in the period leading up to assessment and registration? YES ☐ NO ☐

QUALITY ASSURANCE AWARENESS

In the period leading up to assessment and registration, were any *formal* steps taken to raise awareness of BS 5750 within the company?

YES ☐ NO ☐

			In-house	External
(a) If YES, please indicate whether any of the steps listed were included, and whether they were handled 'in-house' or by external trainers.	(i) Staff training courses/seminars?	YES <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	(ii) Poster campaigns?	YES <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	(iii) Issuing of staff handbooks?	YES <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	(iv) Other (please specify below)	YES <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(b) If NO, please indicate why this was thought to be unnecessary:

If all or any of the items detailed in 10(a) were handled in-house, please indicate your reasons for doing so by ticking any appropriate box and/or briefly detailing any other reasons in the space provided below.	(i) Cost	YES <input type="checkbox"/>
	(ii) Resources/facilities available within the company	YES <input type="checkbox"/>
	(iii) Need to emphasise company/employee 'ownership' of your quality system	YES <input type="checkbox"/>
	(iv) Other reasons (please specify below)	YES <input type="checkbox"/>

If all or any of the items detailed in 10(a) were handled externally, please indicate briefly your reasons for going outside the company:

PRE-ASSESSMENT/REGISTRATION TRAINING

			In-house	External
If you held staff training courses/seminars, please indicate who attended them, and whether they were handled in-house or by external trainers: [If you did not hold any staff training courses/seminars, please go straight to question 25]	(i) Senior Management	YES <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	(ii) Operational Management	YES <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	(iii) Service/Support Staff	YES <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	(iv) Supervisory Staff	YES <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	(v) Shopfloor Staff/Operatives	YES <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	(vi) Other (please specify below)	YES <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

.....

.....

.....

(a) Was it compulsory for staff to attend the training? YES ☐ NO ☐

(b) Was the same training given to all personnel? YES ☐ NO ☐

If you answered NO to 14(b), please state:

(a) how the training differed:

.....

.....

.....

.....

(b) why different training was given:

.....

.....

.....

.....

Please give a brief description of the content of the training sessions held (both in-house and/or external):

.....

.....

.....

.....

.....

If you held in-house staff training courses, please indicate who was responsible for carrying out the training:

.....
.....

How were these trainers themselves instructed in Quality Assurance/ BS 5750 awareness?

.....
.....

			In-house	External
Where in-house training was carried out please indicate any training aids used, and whether these were produced by your or aquired from external sources:	(i) Videos	YES <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	(ii) Overhead projections	YES <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	(iii) Training handouts	YES <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	(iv) Other (please specify below)	YES <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

.....
.....

POST-REGISTRATION TRAINING

Since registration, have any employees covered in your pre-assessment awareness training received any further BS 5750 related training? YES ☐ NO ☐

If YES, please give a brief description of the training received:

.....
.....
.....

Have all personnel employed since registration been given BS 5750 awareness training? YES ☐ NO ☐

[Where no new personnel have been employed since registration, please indicate whether awareness training will be given to all employees joining in the future]

Is the training given the same as that given to employees leading up to assessment and registration? YES ☐ NO ☐

If NO, please outline how training for new employees differs:

.....
.....
.....

Since registration have you started/continued to use any of the steps listed, and please indicate whether they are now handled in-house or from external sources.

(a) Staff training sessions	YES <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) Poster campaigns	YES <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) Issuing of staff handbooks	YES <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d) Other (please specify below)	YES <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If any of the items listed above were carried out by external sources prior to registration, but are now handled in-house (or vice versa), please indicate why this has been changed:

Have you ever carried out any surveys into the level of Quality Assurance/BS 5750 awareness amongst your employees, either before or since registration? YES ☐ NO ☐

RESEARCH FOLLOW UP

Would you be prepared to be interviewed about your awareness training? YES ☐ NO ☐

Would you be prepared to allow any of your training materials to be included in the final research report? YES ☐ NO ☐

If there is any further information about your BS 5750 awareness training which you feel ought to be included in this questionnaire, please make use of the space provided below:

SIGNED: _____ NAME: _____

SITUATION: _____ DATE: / /

Appendix 2

Main Company/Organisation Questionnaire

QUALITY ASSURANCE AWARENESS
QUESTIONNAIRE

COMPANY NAME:

ADDRESS:

.....

TEL. No: FAX. No:

To which part of BS5750 has your company/organisation obtained registration? Please tick the appropriate box.

BS 5750: Part 1 ☐ BS 5750: Part 2 ☐

When did your company/organisation first obtain registration? Day: Month: Year:

What is the total number of employees covered by your registration?

Is your company/organisation part of a larger group? YES ☐ NO ☐

(a) If YES, are any other parts of the group also registered to BS 5750? YES ☐ NO ☐

(b) If YES, did any achieve registration before your own company/organisation? YES ☐ NO ☐

Are full-time training personnel employed by your company/organisation? YES ☐ NO ☐

Does your company/organisation ever use external trainers or training organisations? YES ☐ NO ☐

Did your company use external Quality Assurance consultants in the period leading up to assessment and registration? YES ☐ NO ☐

In the period leading up to assessment and registration, were any steps taken to raise awareness of BS 5750 within the company/organisation? YES ☐ NO ☐

If YES, please indicate whether any of the methods listed were used, and whether they were handled by your own staff ('In-house') or by external sources/trainers.		In-house External	
		YES	NO
(i) Staff training courses/meetings?	YES	<input type="checkbox"/>	<input type="checkbox"/>
(ii) Poster campaigns?	YES	<input type="checkbox"/>	<input type="checkbox"/>
(iii) Issuing of staff handbooks?	YES	<input type="checkbox"/>	<input type="checkbox"/>
(iv) Other (please specify below)	YES	<input type="checkbox"/>	<input type="checkbox"/>

If all or any of the methods detailed in 9 were handled 'In-house', please indicate your reasons for doing so.	(i) Cost	YES <input type="checkbox"/>
	(ii) Resources/experience available within the company/organisation	YES <input type="checkbox"/>
	(iii) Need to emphasise company/employee 'ownership' of your quality system	YES <input type="checkbox"/>
	(v) Other reasons (please specify below)	YES <input type="checkbox"/>
	

If all or any of the methods detailed in 9 were handled by external sources/trainers, please indicate your reasons for going outside your company/organisation.	(i) No resources/experience available within the company/organisation	YES <input type="checkbox"/>
	(ii) Lack of time available	YES <input type="checkbox"/>
	(iii) Part of consultancy package	YES <input type="checkbox"/>
	(iv) More convenient	YES <input type="checkbox"/>
	(v) Need to stress importance	YES <input type="checkbox"/>
	(vi) Other reasons (please specify below)	YES <input type="checkbox"/>
.....		

			In-house	External
If you did hold staff training courses/meetings, please indicate who attended them, and whether they were held by your own staff or by external trainers.	(i) Senior Management	YES <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	(ii) Operational Management	YES <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	(iii) Administrative Staff	YES <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	(iv) Supervisory Staff	YES <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	(v) Shopfloor Staff/Operatives	YES <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(a) Was attendance compulsory?	YES <input type="checkbox"/>	NO <input type="checkbox"/>	(b) Was the same training given to all staff?	YES <input type="checkbox"/>	NO <input type="checkbox"/>
--------------------------------	------------------------------	-----------------------------	---	------------------------------	-----------------------------

If the same training was not given to all staff, please indicate:

(a) How the training differed:

.....

.....

(b) Why different training was given:

.....

.....

Please indicate whether the training (both in-house and/or external) included all or any of the items listed below:

- (i) Outline of requirements of BS5750

☐
- (ii) Company/organisation procedures

☐
- (iii) Auditing

☐
- (iv) Reasons for seeking BS5750 Registration

☐
- (v) Other (please specify below)

☐

.....

.....

If you held in-house training courses/meetings, please indicate who took them:

.....

.....

How were these trainers themselves instructed in Quality Assurance/BS5750?

- (i) With previous employer

☐
- (ii) External course

☐
- (iii) By consultant

☐
- (iv) No training or previous experience

☐
- (v) Other (please specify below)

☐

.....

.....

		In-house		External
Where in-house training was given, please indicate any training aids used, and whether these were produced by you or aquired from external sources.	(i) Videos	YES	<input type="checkbox"/>	<input type="checkbox"/>
	(ii) Overhead projections	YES	<input type="checkbox"/>	<input type="checkbox"/>
	(iii) Training handouts	YES	<input type="checkbox"/>	<input type="checkbox"/>
	(iv) Other (please specify below)	YES	<input type="checkbox"/>	<input type="checkbox"/>

.....

.....

Since registration, have any employees covered in your pre-assessment awareness training received any further BS5750 related training?

YES

☐

NO

☐

If yes please indicate the type of training received:

- (i) Auditing courses

☐
- (ii) Training in new/revised procedures

☐
- (iii) Ongoing awareness courses

☐
- (iv) Refresher courses

☐
- (v) Other Quality Management training (eg.TQM)

☐
- (vi) Other (please specify below)

☐

.....

.....

Have all personnel employed since registration been given BS5750 awareness training?

YES

☐

NO

☐

[Where no new personnel have been employed since registration, please indicate whether awareness training will be given to all employees joining in the future]

Is the training given the same as that given to employees leading up to registration? YES ☐ NO ☐

If No, please outline how the training for new employees differs:

- (i) More streamlined ☐ (ii) More procedure based ☐ (iii) More general ☐
(iv) One to one awareness sessions with QA Manager/Representative ☐ (v) Other (please specify below) ☐

			In-house	External
			<input type="checkbox"/>	<input type="checkbox"/>
Since registration, have you started/continued to use any of the steps listed, and please indicate whether they are now handled 'in-house' or by external trainers.	(i) Staff training courses/meetings?	YES <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	(ii) Poster campaigns?	YES <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	(iii) Issuing of staff handbooks?	YES <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	(iv) Other (please specify below)	YES <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If any of the items listed above were carried out by external sources prior to registration, but are now handled 'in-house' (or vice versa), please indicate why this has been changed.

Have you ever carried out any surveys into the level of Quality Assurance/BS5750 awareness amongst your employees, either before or since registration? YES ☐ NO ☐

Would you be prepared to be interviewed about your awareness training? YES ☐ NO ☐

Would you be prepared to allow any of your training materials to be included in the final research report? YES ☐ NO ☐

SIGNED: _____ NAME: _____

POSITION: _____ DATE: / /

Please tick this box if you wish to receive a summary of the final research report details

☐

Appendix 3

Assessor Questionnaire

Do you consider that BS5750 Parts 1 & 2 require companies and organisations seeking registration to raise Quality/BS5750 awareness levels amongst their staff/employees?

YES ☐

NO ☐

Listed below are a number of possible steps that a company or organisation could take in order to raise Quality/BS5750 awareness levels amongst staff/employees. Please tick any which you consider **MUST** be undertaken in order to satisfy the requirement within BS5750 to raise staff/employee awareness levels.

B If you consider that none of the steps listed below **MUST** be undertaken please tick (f) 'None of the above'

a) Posting copies of the Quality Policy throughout the company or organisation; on staff/employee notice boards, on workplace walls, etc.?

YES ☐

b) Use of Quality/BS5750 awareness poster campaigns?

YES ☐

c) Issuing of Quality/BS5750 awareness handbooks to staff/employees?

YES ☐

d) Quality/BS5750 awareness training courses, seminars or briefings?

YES ☐

e) Other steps? (please specify in the space provided below)

YES ☐

f) None of the above?

YES ☐

If a company or organisation seeking registration has carried out Quality/BS5750 awareness training courses, seminars or briefings, would you consider that **All** staff/employees **MUST** attend them?

YES ☐

NO ☐

If you answered **NO** please indicate below any staff/employees who you consider **MUST** attend awareness training courses, seminars or briefings:

(i) Senior Management

YES ☐

(ii) Operational Management

YES ☐

(iii) Administrative Staff

YES ☐

(iv) Supervisory Staff

YES ☐

(v) Shopfloor Staff/Operatives

YES ☐

If a company or organisation seeking registration has carried out Quality/BS5750 awareness training courses, seminars or briefings, would you consider that **All** staff/employees **MUST** attend them *before the assessment*? YES ☐ NO ☐

If you answered **NO** please indicate below any staff/employees who you consider **MUST** attend awareness training courses, seminars or briefings *before the assessment*:

- | | |
|-------------------------------|------------------------------|
| (i)Senior Management | YES <input type="checkbox"/> |
| (ii)Operational Management | YES <input type="checkbox"/> |
| (iii)Administrative Staff | YES <input type="checkbox"/> |
| (iv)Supervisory Staff | YES <input type="checkbox"/> |
| (v)Shopfloor Staff/Operatives | YES <input type="checkbox"/> |

If a company or organisation seeking registration has carried out Quality/BS5750 awareness training courses, seminars or briefings, would you consider that **All** staff/employees **MUST** receive the *same training*? YES ☐ NO ☐

If staff/employees attended awareness training courses, seminars or briefing sessions prior to assessment, do you consider that they **MUST** receive any further Quality/BS5750 related training *after registration*? YES ☐ NO ☐

If you answered **YES** please indicate below what sort of further training you consider that they **MUST** receive:

- | | |
|--|------------------------------|
| (i)Auditing courses | YES <input type="checkbox"/> |
| (ii)Training in new/revised procedures | YES <input type="checkbox"/> |
| (iii)Ongoing awareness training | YES <input type="checkbox"/> |
| (iv)Awareness refresher training | YES <input type="checkbox"/> |
| (v)Other Quality Management Training (eg. TQM) | YES <input type="checkbox"/> |
| (vi)Other training (please specify below)? | YES <input type="checkbox"/> |
-
-
-

Would you consider the **content** of any training courses, seminars or briefings to be an assessable element? YES ☐ NO ☐

Following successful registration, do you consider that all new employees who join the company or organisation **MUST** receive some form of awareness training? YES ☐ NO ☐

When carrying out assessments to BS5750, do you *always* assess whether the company or organisation has sought to raise Quality/BS5750 awareness amongst its staff/employees? YES ☐ NO ☐

If you answered YES please indicate how you would ascertain whether a company or organisation had satisfactorily sought to raise staff/employee awareness levels:

(a) General impression gained during the assessment? YES ☐

(b) By asking or interviewing staff/employees? YES ☐

(c) Evidence of one or more of the steps listed in question 2 having been undertaken? YES ☐

(d) Other methods? (please specify in the space provided below) YES ☐

.....
.....

Have you ever raised a Deficiency Notice, Corrective Action Request, or similar during an assessment (or refused to recommend registration) because you considered that awareness levels amongst a company's or organisation's staff/employees were not satisfactory? YES ☐ NO ☐

If you answered NO, would you do so if you considered that awareness levels in a company or organisation were not satisfactory? YES ☐ NO ☐

During subsequent surveillance or follow-up visits following registration, do you always continue to assess employee awareness levels? YES ☐ NO ☐

If a company or organisation has undertaken staff/employee awareness training courses, seminars or briefing sessions, do you consider it most advantageous for them to use external trainers or their own personnel to carry out the training?

NB (If you consider that there is no particular advantage to be gained whichever option they choose, please tick (d) 'Either')

(a) External trainers YES ☐

(b) Own personnel YES ☐

(c) Combination of both YES ☐

(d) Either YES ☐