



Security.Improved

Quality Schedule

**The NSI Quality Schedule for the application of BS EN ISO
9001:2015 to the NSI Fire Gold Emergency Lighting Certification
Scheme**

ELSQS 122.4

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NSI Fire Gold for Emergency Lighting is an approval scheme combining Quality Management System (QMS) Certification and Product Certification (PC). The NSI Fire Gold Scheme holds Accreditation from the United Kingdom Accreditation Service (UKAS) for both QMS and PC.

The QMS element of the Fire Gold scheme calls for compliance with BS EN ISO 9001, the British, European, International Standard for QMS. The ISO 9001 Standard can be applied to any organization, whether they are manufacturing a product or supplying a service, and is mandatory for any UKAS Accredited Certification of QMS.

The PC element of the Fire Gold scheme for emergency lighting systems calls for compliance with the BAFE Fire Protection Industry document SP203-4 and satisfies the BAFE requirement that certification bodies operating an emergency lighting assessment scheme must demonstrate and maintain a specific UKAS PC Accreditation for BAFE SP203-4.

The BAFE SP203-4 document and the NSI requirements require that emergency lighting systems are designed, installed, commissioned, handed over and maintained by trained, and where required security screened, personnel to the appropriate product standards such as BS 5266 and BS 7858.

The NSI Fire Gold Scheme also holds UKAS Accreditation under the BAFE (British Approvals for Fire Equipment) Fire Protection Industry Scheme SP203 (Parts 1 and 3) for the design, installation, commissioning and maintenance of fire detection, alarm and suppression systems.

This Issue 4 edition of the Quality Schedule reflects changes that have taken place with the introduction of BS EN ISO 9001:2015 and provides guidance and clarification on the application of BS EN ISO 9001:2015 in relation to BAFE SP203-4.

Compliance with BS EN ISO 9001:2015, this Quality Schedule, and BAFE SP203-4 is a condition of any NSI Fire Gold approval for emergency lighting systems.

1 Introduction

1.1 Quality Schedules are designed for particular sectors of industry and are used to amplify the requirements of the QMS Standard (BS EN ISO 9001) and to provide an agreed basis for audit.

1.2 The 2015 standard is based on the quality management principles described in ISO 9000, which are customer focus, leadership, engagement of people, process approach, improvement, evidence-based decision making and relationship management.

There is now a stronger focus on leadership and commitment to the quality management system (see BS EN ISO 9001:2015 Clause 5).

1.3 The concept of risk-based thinking has been implicit in previous editions of ISO 9001. However the risk-based thinking applied to the 2015 edition has enabled greater flexibility to be applied to the requirements for processes, documented information and organizational responsibilities.

The requirement to maintain six documented procedures has been removed and is replaced with a requirement to maintain documented information required by the Standard and documented information determined to be necessary to ensure the effectiveness of the quality management system (see BS EN ISO 9001:2015 Clause 7.5).

1.4 The terms 'documented procedure' and 'record' have been replaced throughout by the term, 'documented information'.

Where BS EN ISO 9001:2008 would have referred to 'documented procedures' to define control or support a process, this is now expressed as the requirement to 'maintain' documented information.

Where BS EN ISO 9001:2008 would have referred to 'records' this is now expressed as the requirement to 'retain' documented information.

Documented information required by the 2015 standard includes: (1) the scope of the of the quality management system, (2) information necessary to support the operation of processes, which will probably require maintained information (documented procedures) and retained information (records), (3) the quality policy and (4) where appropriate organizational knowledge.

More detailed information on the structure, terminology and concepts can be found in BS EN ISO 9001:2015 Annex A.

1.5 Use of a NSI Fire Gold approved company (called "you" or "organization" in this Quality Schedule) provides a high level of assurance that:

- a) the Emergency Lighting System has been designed, installed, commissioned and handed over by trained and, where required by client contract, security screened personnel to the appropriate product standard, such as BS 5266, and that contractual agreements are fulfilled.
- b) there is a commitment to customer satisfaction and continual business improvement derived from the implementation of a QMS designed specifically to meet the needs of the emergency lighting industry, such needs having been agreed in consultation with insurers, fire and rescue services, building control, installers, trade associations and professional institutions.

1.6 The scope of the organization's approval is detailed on the NSI Certificate of Approval, and is referenced to this Quality Schedule.

2 Scope

2.1 Compliance with this Quality Schedule is a condition of NSI Fire Gold approval for Emergency Lighting Systems.

2.2 This Quality Schedule sets out the criteria for auditing the QMS of organizations engaged in the design, installation, commissioning, handover and maintenance of Emergency Lighting Systems and does not in any way diminish the NSI Regulations or the defined Scheme Criteria.

2.3 In common with previous practice, this Quality Schedule retains alignment with the main clause numbers of the BS EN ISO 9001 Standard. Where special application of the Standard is considered necessary, this is stated.

2.4 The requirements of this Quality Schedule you must satisfy are shown in normal text and are further emphasised by the use of "shall" or "must". Additional guidance is reproduced in italics and is often further emphasised by the use of "may" or "can" within the text.

3 Definitions

In addition to the definitions in BS EN ISO 9000, the following definitions also apply:

3.1 complaint means an expression of dissatisfaction made to an organization, related to its product or service, or the complaints-handling process itself, where a response or resolution is explicitly or implicitly expected

3.2 security screened means having been adjudged suitable for working in the Emergency lighting industry following completion of security screening

See BS 7858 regarding completion of limited security screening, pending completion of full security screening.

3.3 sub-contractor means an individual or company external to the organization that enters into an agreement or contract with the organization to supply processes, products and/or services

This definition applies, irrespective of the contractual arrangements or parties involved, to all individuals performing work for your organization who are not staff personnel.

BS EN ISO 9001:2015, clause 8.4, uses the term "external provider" and this includes "sub-contractors".

3.4 Staff personnel means the managing partners of the organization, the sole-proprietor of the organization, or (in the case of a limited company) the directors of the organization and employees from whose remuneration the organization deducts Income Tax and National Insurance contributions.

4 Context of the organization

4.1 Understanding the organization and its context

No additional requirements apply to this clause of BS EN ISO 9001:2015.

4.2 Understanding the needs and expectations of interested parties

No additional requirements apply to this clause of BS EN ISO 9001:2015.

4.3 Determining the scope of the quality management system

Whilst there is no requirement in BS EN ISO 9001:2015 to hold a quality manual there is a requirement to maintain documented information that describes the scope of the QMS. When determining the scope you must consider the following:

- a) the internal and external issues affecting the QMS (clause 4.1),

Issues to consider are for example, changes in technology, the introduction of new standards, or changes to standards, new legislation and personnel changes.

- b) the requirements of any relevant interested parties affecting the QMS (clause 4.2),

Interested parties may include shareholders, trade bodies, certification bodies, fire & rescue services and insurers.

and

- c) the organization's products and services affected by the QMS.
plus
- d) any justifications where the organization has determined that requirements of the standard are not applicable to the scope of the QMS (clause 4.3).

BS EN ISO 9001:2008 permitted organizations to apply exclusions to parts of clause 7.3 (Design and development) if the requirements could not be applied to the organization's QMS due to the nature of the product or service. Therefore the previous issue of ELSQS 122 accepted the exclusion of the development aspects of clause 7.3, but not the design aspects.

Under BS EN ISO 9001:2015, organizations may omit any requirement not applicable to the determined scope of the QMS and not affecting the organization's ability or responsibility to ensure the conformity of its products and services and the enhancement of customer satisfaction. Where you determine that a specific requirement does not apply to the scope of the QMS you must include the justification within the scope of the QMS.

4.4 Quality management system and its processes

No additional requirements apply to this clause of BS EN ISO 9001:2015.

5 Leadership

5.1 Leadership and commitment

5.1.1 General

No additional requirements apply to this clause of BS EN ISO 9001:2015.

5.1.2 Customer focus

No additional requirements apply to this clause of BS EN ISO 9001:2015.

5.2 Policy

5.2.1 Establishing the quality policy

In addition to the requirements of this clause of BS EN ISO 9001:2015, the Quality Policy must include a commitment to comply with this Quality Schedule, industry agreed Codes of Practice, any relevant Product Standards, and applicable legal and/or statutory requirements.

For any certification of management systems, Accredited Certification Bodies (CBs) must comply with UKAS requirements to withhold or withdraw approval from organizations if

any breaches of applicable legislation are found. This is reflected in BS EN ISO 9001:2015 where an organization is required to identify and comply with all relevant statutory requirements applicable to product(s) and/or service(s) provided (also expressed as legal requirements).

As a UKAS Accredited CB, NSI does not recommend approval (or continued approval) to BS EN ISO 9001 if there are known breaches of legal requirements that relate directly to the product or service provided.

You must include a commitment in your Quality Policy that it is your intention to comply with applicable legal requirements and periodically to evaluate compliance with the same as an input to management review. Appropriate management must also demonstrate they are generally aware of the prime legislation that impinges on their area of responsibility and authority.

For example if an operations manager deploying installation engineers was unaware of the health & safety legislation relating to working at height then it could hardly be argued they are competent to perform their duties. This would not only be an issue in terms of the potential for legal nonconformity, but also in terms of compliance with clause 7.2 Competence.

Where you incorporate the requirements of the BAFE Scheme Document SP203-4, the Policy Statement must also include a reference to the modules of work that the QMS covers.

5.2.2 Communicating the quality policy

No additional requirements apply to this clause of BS EN ISO 9001:2015.

5.3 Organizational roles, responsibilities and authorities

As detailed within the ISO 9001 Standard, you must define and communicate responsibilities and authorities within your organization.

The size and complexity of an organization has a bearing on how such responsibilities and authorities are defined.

In a large organization with various departmental interfaces, responsibilities and authorities can be defined through documented job descriptions, a schedule of key personal responsibilities in the quality manual and/or inclusion within the documented procedures. In a very small family run organization, provided management and staff can demonstrate on interview a common understanding of everyone's prime responsibilities and authorities, it may not be necessary to have them fully documented.

BS EN ISO 9001:2008 required that an individual from within the organization's management team be nominated to act as the Quality Management Representative (QMR). The 2015 Standard does not make the appointment of a QMR a specific requirement. However there remains a need for top management to assign the responsibility and authority for maintaining the QMS.

Whilst this does not forbid the organization from appointing a sub-contracted quality consultant into this role, top management within the organization should consider the potential risks associated with managing the appointment in this way and identify the means to ensure the QMS is maintained and operated to the requirements of the organization.

Notwithstanding the above, the NSI Fire Gold Emergency Lighting Scheme specifically requires that certain responsibilities and authorities for the 'Named Designer(s)' are clearly assigned (see 8.3).

'Named Designers' are responsible for authorising all emergency lighting system designs.

In addition, you must clearly assign responsibilities and authorities for any 'Nominated Design Technician(s)' (see 8.3).

6 Planning

6.1 Actions to address risks and opportunities

No additional requirements apply to this clause of BS EN ISO 9001:2015.

6.2 Quality objectives and planning to achieve them

No additional requirements apply to this clause of BS EN ISO 9001:2015.

6.3 Planning of changes

No additional requirements apply to this clause of BS EN ISO 9001:2015.

However the following are examples of situations where changes to the QMS should be considered:

- *acquisitions and joint ventures*
- *introduction of new technologies*
- *organizational restructuring*
- *use of sub-contractors*
- *changes within legislation*

7 Support

7.1 Resources

7.1.1 General

Whilst you must maintain adequate and competent resources to achieve the requirements, you may not always be able to provide a complete service using your own staff personnel and you may have to use sub-contractors (see also 8.4.1).

7.1.2 People

You must adopt a documented policy statement in relation to the security screening of personnel who visit customers' premises for the purpose of selling, designing, installing, commissioning, handover and/or maintenance of emergency lighting systems. The documented policy statement must cover staff personnel and also sub-contract personnel. A copy must be available to customers and prospective customers on request.

The NSI Fire Gold Emergency Lighting Scheme is not prescriptive as to the content of the policy statement. However, you must be clear to your customers whether or not you ensure all personnel visiting customers' sites, or having access to confidential information, are security screened in accordance with BS 7858 or to another security screening standard as may be required under contractual obligations.

Your internal procedures and practices must ensure that any contractual obligations regarding use of security screened personnel are met.

Identity cards

All staff, including sub-contractors, coming into contact with customers and their representatives must carry an identity card or other equivalent means of identification. Such identity cards must as a minimum include a current photograph of the individual, the name of the organization represented and a contact telephone number for verification purposes.

You must have evidence of control in respect of issue, control and withdrawal of identity cards.

Dependent upon the client base and the type of sites visited you may also need to consider incorporating additional information on the identity cards, for example issue and expiry dates, signature and so on, and have clearly defined procedures to recover identity cards from leavers.

If you permit another company to issue identity cards for the sub-contractors they are supplying to your organization, you must ensure (for example through written

agreement with the other company and subsequent audit) that identity cards are properly issued, controlled and withdrawn.

7.1.3 Infrastructure

No additional requirements apply to this clause of BS EN ISO 9001:2015.

7.1.4 Environment for the operation of processes

No additional requirements apply to this clause of BS EN ISO 9001:2015. However we draw your attention to the following note in the standard:

The environment for the operation of processes can include physical, social, psychological, environmental and other factors (such as temperature, humidity, ergonomics and cleanliness).

Specific aspects of legislation may apply in some cases and NSI approval will not normally be granted if there are any areas of nonconformity with regard to applicable legislation.

7.1.5 Monitoring and measuring resource

You must maintain a register of all instruments and equipment used for measurement, inspection and testing purposes and where relevant you must retain up-to-date records of calibration.

7.1.6 Organizational knowledge

No additional requirements apply to this clause of BS EN ISO 9001:2015.

7.2 Competence

In accordance with clause 7.2 of BS EN ISO 9001:2015, you must determine the necessary competence of persons doing work under your control that affects the performance and effectiveness of the QMS and you must ensure these persons are competent on the basis of appropriate education, training and experience.

Where applicable, you must take actions to enable people to acquire the necessary competence and you must evaluate the effectiveness of the actions taken.

You must retain appropriate documented information as evidence of competence.

The fact that someone receives training does not guarantee they will be competent in carrying out their duties and therefore there has to be a system for confirming competency.

We suggest you should consider a probationary period for all new people and review their competency formally before granting confirmed employment. The objective here is to

identify and address any areas where competency is not immediately indicated and which could indicate a need for further training/development. Thereafter, you should have a process for verifying on-going competency which could include feedback from internal and external audit, formal staff appraisal/evaluation and so on.

You must define and document your processes for determining both initial and on-going competency and ensure that such processes are subject to periodic internal audit.

In determining and being able to demonstrate the availability of the necessary competence within your organization a training programme must be established that includes, where relevant:

- surveying skills
- installation skills
- inspection and test skills (commissioning and handover)
- maintenance and service skills
- quality procedures and/or documentation appropriate to business processes
- company standards for quality and in particular control over requirements
- internal auditing skills
- product specific training

Training records must be available for review and you must be able to demonstrate the effective operation of the above training programme and provide assurance as to who attended the training.

Training records must include evidence to substantiate that staff have the technical capability to work upon the equipment or systems used.

Minimum levels of qualifications are identified within the four modules of work documented in the BAFE Scheme Document SP203-4, for example the qualifications for designers of Emergency Lighting Systems are to be found at clause 6.2.1 of BAFE SP203-4. The BAFE SP203-4 document also identifies qualifications for installing, commissioning and maintenance personnel.

Sub-contractors

The BAFE SP203-4 scheme recognises that some individuals may be employed on a part time, temporary, or sub-contracted basis.

For the avoidance of doubt, a sub-contractor does not have to be registered with the BAFE SP203-4 scheme but must comply with the requirements of the scheme through a formal agreement with your organization as the main contractor (who will be registered to BAFE SP203-4).

You must use sub-contractors only as permitted by the BAFE SP203-4 scheme and only where the individuals involved are adequately skilled, experienced, trained, briefed, organised, supervised and monitored. If you engage one or more sub-contractors directly, or you engage an individual or other company to supply sub-contractors, you must ensure there are suitable and adequate procedures and controls in place within the QMS to ensure adequate skill, experience, training and so on.

In principle only the installation module of work can be subcontracted to an organisation that is in itself not BAFE SP203-4 approved for emergency lighting system work.

You must have written agreements with the sub-contractors covering confidentiality of information, training and assignment to agreed tasks.

You must retain sufficient in-house expertise to verify an acceptable service has been provided and have evidence to show the adequacy of sub-contractors' work is validated periodically.

By adequacy we mean compliance with all the relevant Product Standards, such as BAFE SP203-4 and BS 5266, and with all your organization's procedures and requirements.

7.3 Awareness

No additional requirements apply to this clause of BS EN ISO 9001:2015.

7.4 Communication

No additional requirements apply to this clause of BS EN ISO 9001:2015.

7.5 Documented information

7.5.1 General

You must have the documented procedures required by BAFE SP203-4.

7.5.2 Creating and updating

No additional requirements apply to this clause of BS EN ISO 9001:2015.

7.5.3 Control of documented information

Within the general practices of controlling documented information:

- a) You must make provision to list the issue status of external documents including those called up in the NSI Regulations and Scheme Criteria, Building Control Regulations and other applicable Standards, Regulations, Codes of Practice and so on.

- b) You must make provision to list the issue status of internal documents pertinent to your QMS, including procedures, process maps and so on.
- c) If documented information is held electronically, you must observe the following safeguards and protocols:

- (1) Where a document includes a customer signature, the document must be held electronically as a facsimile copy, including a facsimile copy of the signature.

Alternatively, traceability from a customer signature on a hard copy to an electronically held document will be acceptable. Where documents held electronically require authorisation (say customer specification) then issue status must be allocated and access rights controlled by password entry at appropriate levels of authorisation.

If you introduce other arrangements, you must demonstrate that the above principles of authorisation and agreement are upheld.

It is your responsibility to determine whether specific contractual documents are required to be held as originals for legal purposes.

- (2) You must have robust and secure backup arrangements and you must keep to these arrangements.
- (3) You must hold backups of retained information securely (preferably in a fire-resistant container or at a secure off-site location).

We draw your attention to the Data Protection Act (DPA) and to the Information Commissioner's Office (ICO) guidance on the use of cloud computing services in relation to compliance with the DPA.

- (4) You must have ready access to all documentation and records for the purposes of receiving NSI Fire Gold audits and so on.

Control of retained documents

You must include information security policies for the protection of retained information held on portable electronic devices (such as laptops, tablets, memory sticks) and you must ensure your personnel, including any sub-contractors, keep to these policies.

For example devices should be password protected and/or have their hard drives encrypted. Also there should be restrictions on leaving devices unattended in vehicles and/or in premises that are not alarmed.

Contract information

You must retain documented information in respect of contracts (including survey, design, quotations, installation, commissioning, verification, handover, modification and 'as-fitted drawings') for a minimum of 12 years from the date of handover or until some other organisation, for example the owner of the installation, takes formal responsibility for their ongoing storage and maintenance.

You must retain documented information in respect of system records for maintenance and disconnection and historical records for the life of the contract plus a minimum of 2 years, except where permitted otherwise in the relevant Product Standard.

Complaint information

You must retain documented information in respect of complaints for the life of the contract plus a minimum of 2 years.

Training information

See BS EN ISO 9001:2015 clause 7.2 for training information.

Security screening information

For security screening information see clause 7.1.2 of this schedule.

8 Operation

8.1 Operational planning and control

You must develop processes for the design, installation, commissioning & handover, verification and maintenance of emergency lighting systems to take into account the need to integrate the technical and regulatory requirements of the emergency lighting industry with the requirements of the QMS. The extent and form of the documentation required must take account of the need to provide evidence:

- that contractual obligations are agreed and understood by all parties
- that system design specifications and drawings reflect the level of life safety required
- of the competency of staff
- of the components used on installations meet the technical requirements of the industry
- of in-process, commissioning and handover inspections including regulatory handover and maintenance documentation
- of adequate planning and monitoring of installation work and commissioning work including project management techniques where appropriate

- of adequate administrative and technical support to installation personnel on site
- of the appropriate level of on-site supervision, particularly on long running contracts

Activities for process control must be consistent with the specified requirements for Emergency Lighting Systems.

Typical standards that may apply to emergency lighting systems are BS 5266-1, BS EN 1838 and BS 5266-8. Emergency lighting products should meet the requirements of BS EN 60598-2-22 and EN 62034.

The requirements set out in European Standards (ENs) apply when called up by the contract or additionally advised by NSI.

8.2 Requirements for products and services

8.2.1 Customer communications

The following requirements apply in addition to the requirements of this clause of BS EN ISO 9001:2015.

Management of complaints

You must deal promptly with all complaints and in an appropriate manner including sending the complainant an acknowledgment the matter is receiving timely attention.

You must have a suitable register of complaints, which must include the date of receipt, complainant details, summary of the complaint, and a complaint reference number or code.

You must register all complaints promptly and then investigate and action them at an appropriate level of seniority.

You must find the root causes of complaints so that corrective actions are effective in preventing further occurrences. The decision on the appropriate course of action (or actions) must be documented.

When all reasonable steps have been taken to restore confidence, complaints must be closed down by entering a date of closure in the complaint register.

Complaints must be included in the review of nonconformities (see 9.3.2) and consequently clauses 10.1 and 10.2 of BS EN ISO 9001:2015.

We draw your attention to the guidelines in BS ISO 10002:2014 – Quality management – Customer satisfaction – Guidelines for complaints handling in organizations, including guidance for small businesses given in Annex A of BS ISO 10002:2014.

BS ISO 10002 defines "complaint" as "expression of dissatisfaction made to an organization, related to its products, or the complaints-handling process itself, where a response or resolution is explicitly or implicitly expected".

Such expressions of dissatisfaction could be made in a number of different ways for example in writing, including email, or orally on the telephone.

We draw your attention to the guiding principles given in clause 4 of BS ISO 10002:2014, which are recommended for effective handling of complaints:

- *visibility (well publicised information about where to complain)*
- *accessibility (easily accessible to all complainants)*
- *responsiveness (immediate acknowledgement and addressed promptly)*
- *objectivity (equitable, objective and unbiased)*
- *charges (free of charge)*
- *confidentiality (protected from disclosure except where consented)*
- *customer-focused approach (open to feedback and commitment to resolve)*
- *accountability (for and reporting on the organization's actions and decisions)*
- *continual improvement (permanent objective of the organization)*

8.2.2 Determining the requirements related to products and services

No additional requirements apply to this clause of BS EN ISO 9001:2015.

8.2.3 Review of requirements related to products and services

The formal contract review process is set out below. Associated practices in respect of the agreement for the system design specification are set out in clause 8.3.

Relevant requirements may be found in BS 5266-1, BS EN 1838 and BS 5266-8.

a) General

The identity of the persons allocated responsibility and authority to carry out contract reviews must be clearly defined and communicated within the organization (clause 5.3 of BS EN ISO 9001:2015 refers).

b) Review

Reviews must be undertaken:

- (1) Before submission of any tender or quotation, to confirm the requirements are adequately defined and documented and your organization has the capability and resources to meet the requirements including any statutory and regulatory requirements.
- (2) After receipt of the customer's reply to any tender or quotation, or on receipt of purchase order; to ensure any changes requested by the customer are resolved.

There must be evidence, by means such as stamp, signature or electronic authorisation, of all reviews.

You must make clear in appropriate documentation whether or not your organization accepts oral confirmation of orders and, if so, your policy must require you to send a written statement to the customer stating your understanding of the agreement and confirming this will be taken as the agreement unless the customer notifies otherwise in writing.

c) Amendment to contract

On completion of the installation (or the relevant module of work), your procedures must ensure all amendments are agreed, recorded and authorized and the requirements of the contract are completed.

d) Documented information

You must retain documented evidence of contract reviews for the life of the contract plus a minimum of 2 years.

Certain contract information may need to be held for a longer period to satisfy HM Revenue and Customs and VAT requirements and so on.

e) Customer liaison

You must maintain effective customer liaison through the life of the contract.

Clause 8.2.2 of BS EN ISO 9001:2015 is clear that statutory and regulatory requirements must be determined and a NOTE in the Standard references that supplementary services such as recycling or final disposal are post-delivery activities and must also be considered.

With any accredited management system certification there is increasing recognition that certification ought to give a level of assurance that the approved organization is aware of relevant legislation and is essentially compliant. The reference to recycling or final disposal is a useful pointer to the increasing amount of environmental legislation that applies to organizations whether or not they choose to implement an Environmental Management

System. For example electronic and electrical equipment can no longer be sent to landfill (the WEEE Regulations apply) and manufacturers of certain types of equipment are obliged to have or participate in a take back scheme for the old equipment.

We recommend you should maintain a consolidated list of the legislation you believe is relevant to your organization (see also clause 7.5.1).

8.2.4 Changes to requirements for products and services

No additional requirements apply to this clause of BS EN ISO 9001:2015.

8.3 Design and development of products and services

8.3.1 General

The design of emergency lighting systems usually involves the selection, placement and configuration of existing products together with interconnections to meet specified requirements and we accept this does not involve development.

Examples of development could include the creation of a new product, such as a luminaire, and/or new software, not on the market, to assist in the design of emergency lighting systems.

8.3.2 Design and development planning

We draw attention to the design requirements in British Standard Code of Practice BS 5266-1, BS EN 1838 and BS 5266-8.

The relevant design requirements in other British Standards and/or Industry Codes of Practice must be considered where these are called up within the contract.

The design planning arrangements given below in 8.3.2 are those expected to be followed normally. We will consider different design planning arrangements provided you can demonstrate that the arrangements adopted ensure the provisions of BS EN ISO 9001:2015 and the relevant standards, codes of practice and regulatory requirements are met.

If you wish to adopt arrangements alternative to those given below in 8.3.2 you must write to us giving details.

- a) You must establish controls to ensure:
- the appropriate stages of system design (including design planning, design inputs, design outputs, design review, design verification, design validation and control of design changes; see 8.3 of BS EN ISO 9001:2015) are followed

- the customer is made aware of and agrees to any other limitations (if any) of the demands of the appropriate technical Standard and regulatory requirements of other interested parties (for example local building control authority, fire brigade officers, insurers)
- the customer is made aware of and agrees to any other limitations of the design (or to the proposed design) in terms of adequacy of detection/control and warning/signalling capability
- the requirements of the customer are translated into a system design specification that is appropriate to the premises (or site) where the emergency lighting system is to be installed and that lists the equipment and components to be supplied, detailing their proposed locations and containing a general indication of their coverage and purpose
- the system design specification contains within it a Design Statement, which includes information on any limitations to the design in terms of adequacy of lighting and signage capability

Alternatively, the Design Statement may be a separate document, provided it is clearly referenced within the system design specification.

- there is consideration of any deviations and amendments in the customer requirements as installation proceeds (or arising from practicalities coming to notice as installation proceeds) and the recording of such deviations or amendments between the customer and your organization, in the system design specification, or in properly issued amendments to the system design specification, or in an "as fitted system record

The "as fitted" system record must include an "as fitted" drawing and, where appropriate, the drawing must be to scale. Agreed deviations (agreed by the customer with your organization) from the requirements of the relevant standard (for example BS 5266) must be documented as a list.

- b) In discharging your responsibility (see 8.3.2 of BS EN ISO 9001:2015) to define the responsibilities and authorities for design, and to manage the interfaces between different groups involved in design:

- (1) You must designate one or more suitably competent individual(s) as "Named Designer(s)".

- (2) Each individual designated as a "Named Designer" must be competent to undertake tasks including:
- (i) Acting as the focal point for matters of the design of the emergency lighting system.
 - (ii) Assessing the fire risk factors (for example relating to adequacy of lighting and signage capability influencing the design).
 - (iii) Being conversant with the products and systems specified, and with any significant limitations inherent in such products and systems.
 - (iv) Ensuring that the content of quotations and system design specifications is compatible with the requirements of the applicable Technical Standards and NSI Gold Codes of Practice.
 - (v) "Signing Off" designs on behalf of the organization.
 - (vi) Being conversant with installation requirements such that system design specifications are professionally compiled and finalised in a manner that gives clear and unambiguous information to the customer and to the technicians who install and commission.
- c) *There should be evidence that "Named Designers" are willing to seek advice and guidance as required from other companies (such as equipment manufacturers) and organisations, and to develop and to keep up to date their skills by such means as reading fire magazines and journals, attending conferences and workshops.*
- (1) *You may choose to designate one or more suitably competent individuals as "Nominated Design Technicians".*
 - (2) In respect of all functions relevant to the design process (but not necessarily in respect to their other functions) each "Nominated Design Technician" must be responsible to, and work under, the authority and supervision of a "Named Designer".
 - (3) Each "Nominated Design Technician" must be competent (within the range of types of work where they act as a "Nominated Design Technician") to undertake tasks that include those listed in (ii), (iii), (iv), (v) and (vi) of 8.3.1 b)(2) above, except that competence in respect of (vi) is not necessary where there is evidence:

- a “Named Designer” has considered the effects of new technologies, technical standards, national implementation of EU Directives, and so on, relevant to the design processes
 - the constraints within which the “Nominated Design Technician” operates are such as to ensure that these matters are adequately taken into account in the designs prepared and/or “signed off” by the “Nominated Design Technician”
- d) In all cases a “Named Designer” or a “Nominated Design Technician” must carry out a site survey (preferably at initial enquiry stage, or at some other stage prior to issue of a quotation and system design proposal, but always at a stage prior to actual commencement of installation). A site survey must be completed before final “sign off” of the system design proposal.

The requirements in d) immediately above apply to retrofitting emergency lighting systems to existing buildings and do not apply to new builds on green or brown field sites.

8.3.3 Design and development inputs

No additional requirements apply to this sub-clause of BS EN ISO 9001:2015.

8.3.4 Design and development controls

No additional requirements apply to this sub clause of BS EN ISO 9001:2015.

8.3.5 Design and development outputs

The original design, and any subsequent changes to the original design, must be verified throughout the installation, commissioning and handover process in order that the completed emergency lighting system is confirmed as fit for purpose. This must be an ongoing process for all systems whether contracted to a single organization or to more than one organization (a modular approach).

In the modular approach you should identify the person or organization responsible for verification at the commencement of the installation work.

In-process inspection and testing (for example during commissioning), and final inspection and testing (for example at handover), must be consistent with the requirements of the appropriate Standards (for example BS 5266) and with specific contract requirements.

The following processes are also applicable to the “commissioning and handover module” (as outlined in the relevant BAFE SP203-4 scheme document).

- a) Commissioning engineers must have a good working knowledge of the design of emergency lighting systems in order that design verification can be carried out during the commissioning process.
- b) Particular attention must be given to the issue of NSI/BAFE Certificates of Compliance, Modular Certificates of Compliance and Modification Certificates.
- c) Documentation related to the inspection and test status of emergency lighting systems must include and provide information as follows:
 - The "as fitted drawings" preferably to scale.
 - Loop resistance and cable insulation readings.
 - Customer log books.
 - M & E manuals where appropriate.

8.3.6 Design and development changes

No additional requirements apply to this sub-clause of BS EN ISO 9001:2015.

8.4 Control of externally provided processes, products and services

8.4.1 General

You must establish criteria for selection, evaluation and re-evaluation of suppliers and keep records of the results including any necessary actions arising from evaluation and re-evaluation.

You must evaluate and select suppliers (including sub-contractors and companies who provide sub-contractors) based on their ability to supply product or service in accordance with your requirements, the requirements of this Quality Schedule, and the requirements of BAFE SP203-4.

If you sub-contract any of the work to provide emergency lighting systems you must retain sufficient in-house expertise to verify that all systems, and all subsequent assessments, meet the relevant standards, in particular BAFE SP203-4.

8.4.2 Type and extent of control

You may use sub-contractors only as permitted by the BAFE SP203-4 scheme document and you must:

- a) Maintain a register of all sub-contractors, which must show clearly the services they can supply.

- b) Record clearly the basis of selection of all sub-contractors.
- c) Conclude formal agreements that adequately cover the services to be provided and make it clear services can only be delivered by named individual sub-contractors who have been security screened (where required) and whose competency is demonstrated;
- d) Audit and monitor sub-contractors on the same basis as staff personnel;
- e) Brief sub-contractors on your organization's policies, procedures, work instructions and records to be completed to verify completion of assigned tasks or service delivery;
- f) Retain overall responsibility for all sub-contracted services even if extensive use is made of sub-contractors;
- g) Allow us to have the right to audit the work carried out by sub-contractors and interview such sub-contractors to confirm their competence.

If you carry out component and equipment repairs, you must carry out these repairs in accordance with UK Regulations covering Electromagnetic Compatibility and then only if you are the component manufacturer, the manufacturer's appointed repair agent, or you have a facility that has been assessed satisfactorily against BS EN ISO 9001 (or an equivalent specification) by a recognised, third-party certification body.

8.4.3 Information for external providers

No additional requirements apply to this clause of BS EN ISO 9001:2015.

8.5 Production and service provision

8.5.1 Control of production and service provision

You must ensure that all electrical wiring and installation is in accordance with good safety practice and in compliance with applicable standards and regulations (e.g. BS 7671).

8.5.2 Identification and traceability

You must maintain a system of uniquely identifying equipment and documentation to minimise the potential for misfiling and to ensure documentation in relation to each contract can be achieved readily in compliance with the QMS.

Unless customers impose special contractual conditions, your procedures must reflect the extent of traceability of equipment and/or components, required for your own purposes, such as for reasons of a warranty.

8.5.3 Property belonging to customers or external providers

In addition to the requirements of BS EN ISO 9001:2015, you must hold an appropriate "Scope of Approval" in respect of the BAFE SP203-4 Scheme before a NSI/BAFE certificate of approval can be issued.

The BAFE SP203-4 Scheme requirements need to be read and understood.

A note in BS EN ISO 9001 reminds organizations that "customer property can include intellectual property and personal data".

8.5.4 Preservation

No additional requirements apply to this clause of BS EN ISO 9001:2015.

It is important that manufacturers' instructions are followed particularly in relation to the use of batteries and the use of electronic components that are sensitive to electrostatic charge. The "first in, first out" system of stock control is recommended for batteries.

8.5.5 Post-delivery activities

Maintenance must be carried out in accordance with published requirements (for example for emergency lighting systems, BS 5266-8, Clause 7).

You must provide adequate administrative and technical support to service personnel including any sub-contractors engaged in maintenance and service.

For component and equipment repairs see 8.4.2 of this Quality Schedule.

The following specific requirements apply to maintenance and servicing of emergency lighting systems. The following processes are also applicable to the Maintenance Module (as applicable through the BAFE SP203-4 Scheme Document).

a) Corrective maintenance

You must:

- (1) Retain documented information for the date and time of receipt of every emergency call, together with the date and time of the engineer's arrival on site and the completion of any necessary corrective action. You must keep this information for at least two years after the event to which it refers and you must provide the customer with a copy of the information.
- (2) Retain documented information for authorisation from the customer for any temporary disconnection. You must keep this information for at least 3 months after reconnection.

- (3) Have adequate access to spares at all times.
- (4) Audit every technician's holdings of spares to ensure continued adequate provision (see also 8.2.2 of this Quality Schedule).

b) Preventative maintenance

You must maintain documented information for the planning, scheduling and implementation of preventative maintenance and also for the review of preventative maintenance performance.

We draw attention to the recommendations contained in NSI Technical Memorandum NATM.7 "Guidelines Concerning Routine Maintenance Performance of Installers/Maintainers of Intruder Alarms. This document may be reissued, in due course, to include Maintainers of Emergency Lighting Systems.

8.5.6 Control of changes

No additional requirements apply to this clause of BS EN ISO 9001:2015.

8.6 Release of products and services

No additional requirements apply to this clause of BS EN ISO 9001:2015.

8.7 Control of nonconforming outputs

Your retained documentation for control of nonconforming output must provide for identification of:

- emergency lighting systems giving repeated problems (troublesome systems)
- inadequate preventative maintenance performance
- temporary disconnections
- defective components
- any other type of nonconforming output as determined by the organization

Means for identifying nonconforming product may be found in other parts of the QMS, for example through technical auditing of systems and through investigation of customer complaints.

Non-conformance may be identified by a modular contractor with work carried out by an earlier modular contractor. This may arise through the verification process. The nonconformity should be documented and resolved through a process of consultation.

Corrective action forms under a corrective action procedure may be used as a means for recording the existence of nonconforming product and ensuring appropriate corrective action is taken.

You must be able to show how non-conformance is controlled and who has responsibility to deal with each situation. It must be possible to identify the available options, in each situation, to assist in determining the correct course of action.

9 Performance evaluation

9.1 Monitoring, measurement, analysis and evaluation

9.1.1 General

You must have a process for the management of complaints (see clause 8.2.1). This process must cover all complaints whether they are from directly contracted customers or from other parties. This process (or a separate one) must also cover situations where we contact you about a complaint made to us about your organization.

The process for management of complaints can be included in the process (or processes) for the control of nonconforming outputs (see 8.7) or can be a stand-alone process.

9.1.2 Customer satisfaction

You must monitor customer perceptions of the degree to which requirements have been met.

Sources of information on customer perception could include:

- *the outcome of customer satisfaction surveys*
- *the number of sales arising from recommendations*
- *the number of installations taken over by competitors*
- *the number of installations deemed as "troublesome" for reasons attributable to your organization (including shortcomings in sub-contracting arrangements)*
- *complaints against your organization*
- *letters of commendation received from satisfied customers*
- *retention of contracts*
- *warranty claims*
- *other sources as determined by you*

The maintenance of good relationships with customers is a significant factor affecting the success and growth of any business. Concern for the customer should be part of the overall business strategy.

You should set out to avoid complaints. When complaints do occur, the objective should be to come out of each situation, wherever possible, with a strengthened relationship with whoever is complaining.

9.1.3 Analysis and evaluation

Your analysis of data must include provision of information relating to:

- customer satisfaction (see clause 9.1.2)
- suppliers of products (including services) (see clause 8.4)
- core business processes

For the installation and maintenance of emergency lighting systems you must analyse and evaluate the following:

- The level of achievement for preventative (routine) maintenance performance. The information recorded must also form part of Management Review (as well as providing the information necessary to deliver any corrective actions that may arise.
- The level of achievement in respect to any timed response to requests for corrective (emergency) maintenance determined by contracts. The information recorded must also form part of Management Review (as well as providing the information necessary to deliver any corrective actions that may arise.

In relation to customer satisfaction, you must analyse the causes of complaints. The analysis must form part of the input to management review (see clause 9.3.2).

The main purpose of the analysis is to assist you in deciding on appropriate corrective action with a view to improving customer satisfaction and reducing future incidence of complaints.

The following analysis of rectified complaints by cause code is suggested:

- a) *unsatisfactory work (relating to fixing and finishing)*
- b) *unsatisfactory installation (relating to performance or safety)*
- c) *disputed service charge*
- d) *failure to meet service contract (including corrective maintenance)*

- e) *lack of timely response to enquiries and complaints*
- f) *dispute over rental/maintenance charge*
- g) *behaviour of organization's personnel*
- h) *behaviour of sub-contractors (if used)*
- i) *accounts dispute (not emanating from one of the items listed above)*
- j) *other (use text)*

You must examine causes of complaints at appropriate intervals and make (and record) suitable decisions or recommendations regarding corrective action (for example in relation to common causes of complaint).

9.2 Internal audit

The requirements are as specified within BS EN ISO 9001:2015, with the clarification that the audit programme must include:

- a) Technical auditing of the work of each installing technician (including any sub-contractors) using appropriate installation checklists encompassing the specific requirements of the standards and codes of practice for the emergency lighting systems installed. This also applies for companies approved for just the installation module (as applied by the BAFE SP203-4 scheme document).
- b) Technical auditing of each commissioning technician (if such technicians are used solely for commissioning work) using appropriate commissioning checklists encompassing the specific requirements of the standards and codes of practice for the emergency lighting systems installed.
- c) Technical auditing of the work of each maintenance technician using appropriate maintenance schedules encompassing the specific requirements of the standards and codes of practice for the emergency lighting systems maintained, and using checklists as detailed in the two bullet points immediately above this one.

You must plan, establish, implement and maintain an internal audit programme, which must include a statement (or statements) of the frequency at which audits shall be undertaken (a minimum of one per technician over a 12 month period) and the person(s) nominated by the organization to undertake the audits. You must also define the steps to be taken if the systems selected fail to meet the specified criteria and you must include a reference to possible training needs and/or an increase in the frequency and number of audits.

Your capability to monitor standards of design, installation, commissioning and maintenance is an auditable element of the NSI Emergency Lighting Scheme and you must be able to demonstrate you are capable of identifying all your own nonconformities.

Selection, auditing and review of sub-contractors

In accordance with BS EN ISO 9001:2015, you must have thorough and effective procedures for the selection, auditing and periodic review of sub-contractors.

The level of auditing of sub-contracted work must not be less than the level of auditing that is applied to work undertaken by the organization's own staff personnel.

Where the auditing of the work of sub-contractors is undertaken by a sub-contractor company by, through or under which the sub-contractor is engaged, you must inspect the audit records and carry out audits of emergency lighting systems to verify the standard of the sub-contracted audits. Periodically you must accompany the sub-contractor's auditor on witnessed audits. You must maintain records of the audits and checks you carry out.

9.3 Management review

9.3.1 General

The general requirements set out in clause 9.3.1 of BS EN ISO 9001:2015 apply.

We recognise there are different views as to the top management personnel who should carry out the management review. Each case has to be considered on its own merit, particularly in large multi-layered organizations such as PLC's.

For example, it may not be practical or necessary for all Directors of the organization to be present at the management review meetings if, when interviewed on actual audit, they can demonstrate awareness of all the significant issues raised at the meetings.

9.3.2 Management review inputs

Top management must review the organization's QMS, which must include, but not be limited to, the following areas as appropriate to the emergency lighting systems installed:

- the status of actions from previous management reviews
- changes in internal and external issues that are relevant to the QMS (including changes in legislation)

- information on the performance and effectiveness of the QMS including trends in:
 - customer satisfaction and feedback from relevant interested parties (including the analysis of complaints)
 - the extent to which quality objectives have been met
 - process performance and conformity of products and services (including performance and trend analysis for routine maintenance and response to emergency call outs)
 - non-conformities and corrective actions
 - monitoring and measurement results
 - results of internal and external audit
 - the performance of external providers (including suppliers and sub-contractors)
 - effectiveness of continual improvement initiatives
- adequacy of resources (including human, equipment and facilities)
- effectiveness of actions taken to address risks and opportunities
- opportunities for improvement (including assessment of new software and hardware)
- adequacy of Quality Policy and Quality Objectives
- competency evaluation and training needs including continuing professional development
- changes to infrastructure (when appropriate)
- new technology with respect to emergency lighting systems (when appropriate)
- evaluation of legal compliance

9.3.3 Management review outputs

No additional requirements apply to this clause of BS EN ISO 9001:2015.

10 Improvement

10.1 General

No additional requirements apply to this clause of BS EN ISO 9001:2015.

10.2 Nonconformity and corrective action

Clause 10.2 of BS EN ISO 9001:2015 makes clear the need to take action to eliminate the causes of nonconformities in order to prevent recurrence.

You must have an effective process (or processes) for the development and implementation of appropriate corrective actions where a nonconformity is discovered in order to prevent a recurrence of the nonconformity.

Nonconformities include substandard emergency lighting system installations, poor maintenance and service performance, and justifiable customer complaints.

You must carry out root cause analysis to find the causes of nonconformities in order to support the corrective actions taken in response to nonconformities.

You must retain sufficient documentation to provide evidence of the nature of any nonconformities identified and subsequent corrective actions and you must retain evidence of the results of this corrective action. As a minimum this retained information must include evidence of the review of audit results, service reports and customer complaints.

10.3 Continual improvement

No additional requirements apply to this clause of BS EN ISO 9001:2015.

Measures in 10.2 and 10.3 are not exhaustive. Corrective actions and opportunities for continual improvement may apply to other areas of the QMS.