Level 2 & 3 NVQs for Providing Security, Emergency and Alarm Systems (1882)



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Standards and assessment requirements Level 2 - 100/6155/1 Level 3 - 100/6156/3

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Standards and assessment requirements

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1 Introduction

About this document

This document provides details that centres and candidates will need in order to assess, verify and collect evidence for these NVQ qualifications and includes:

- the requirements for occupational competence for all those involved in the assessment process
- the assessment methods and requirements
- the national occupational standards and unit evidence requirements
- progression routes.

Other sources of essential information

This document has been designed to be used with the City & Guilds N/SVQ Guide which is made up of:

- Centre guide containing information specifically for centres (EN-12-0001)
- Candidate guide containing information specifically for candidates (TS-12-0001)
- Recording forms containing a set of recording forms for centres and candidates to use for recording assessments and evidence. (TS-33-0001)

Visit the City & Guilds website (www.cityandguilds.com) for the latest versions of these documents.

There are also other City & Guilds documents which contain the latest information regarding the assessment of NVQs:

- Providing City & Guilds qualifications a guide to centre and qualification (scheme) approval
- Ensuring quality containing updates on assessment and policy issues
- City & Guilds centre toolkit additional information on running City & Guilds qualifications is given in a CD-ROM, which links to the internet for access to the latest documents, reference materials and templates.

Details of general regulations, registration and certification procedures, including fees, are included in the City & Guilds *Directory of qualifications*. This information appears on the online qualification administration service for City & Guilds approved centres, the Walled Garden, at www.walledgarden.com.

If there are any differences between the *N/SVQ Centre Guide* or the *N/SVQ Candidate Guide* and this *Standards and Assessment Requirements* document, this document has the more up-to-date information.

2 The Standards Setting Body and the National Occupational Standards

Background to the National Occupational Standards (NOS) development

The review and updating of the National Occupational Standards (NOS) resulting in NVQs was undertaken by Skills For Security. NVQs are well established in the security sector and the new Level 2 and 3 NVQ in Providing Security Emergency and Alarm Systems builds on a strong history replacing two NVQS;

The Level 2 Fire, Security and Emergency Alarm Systems (1870) and The Level 3 Security Systems Technical Services (1866)

Contacting the Standards Setting Bodies

The Standards Setting Body (SSB) responsible for having developed the National Occupational Standards (NOS) on which this N/SVQ is based is:

Name of SSB Skills For Security

Address Barbourne Road, Worcester, WR1 1RS

Telephone 08450 750111 Fax 01905 724949

e-mail info@skillsforsecurity.org.uk
URL www.skillsforsecurity.org.uk

Imported units

The following units in this NVQ have been imported from the National Occupational Standards (NOS) developed by other Standards Setting Bodies (SSBs):

Name of SSC Marketing and Sales Standards Setting Body

Address The Chartered Institute of Marketing

Moor Hall Cookham Berkshire SL6 9QH

Telephone 01628 427106
Fax 01628 427399
e-mail chahid@msssb.org
URL www.msssb.org

Name of SSC Construction Industry Council

Address 26 Store Street

London WC1E 7BT

Telephone 020 7399 7400
Fax 020 7399 7425
e-mail info@cic.org.uk
URL www.cic.org.uk

Name of SSC Chartered Management Institute (formerly MCI, formerly METO)

Address 3rd Floor

Savoy House

Strand London WC2R 0EZ

Telephone 020 7497 0580 Fax 020 7497 0463

e-mail <u>enquiries@managers.org.uk</u>
URL www.managers.org.uk

Candidates who have achieved these units as part of another qualification may bring them forward as APEL. However, some pc's and range statements with imported units have been tailored to meet **Skills for Security** requirements. Therefore, centres and candidates must ensure that evidence brought forward from prior achievement meet the full requirements of the standards as they appear in this qualification (1882).

Apprenticeship framework

For information about apprenticeship frameworks in the security sector, please contact:

Skills For Security
Barbourne Road, Worcester, WR1 1RS
08450 750111
01905 724949
info@skillsforsecurity.org.uk
www.skillsforsecurity.org.uk

3 Candidate entry and progression

Candidate work role requirements

These NVQs are for those employed in the security industry, involved in Security Emergency and Alarm systems.

Candidate entry requirements

There are no formal entry requirements for candidates undertaking these NVQs: however centres must ensure that candidates have the potential and opportunity to gain evidence for the qualification in the workplace.

Age restrictions

These NVQs are not approved for the use of those who are under 16 years of age.

For funding purposes, centres are reminded that candidates should not be entered for a qualification of the same type, level and content as that of a qualification they already hold.

Progression routes

On completion of these qualifications candidates may progress on to the following qualifications

- Level 3 Security & Emergency Alarm Systems
- City & Guilds Level 3 Certificate in the Knowledge of Security and Emergency Alarm systems (1852).

4 Centre resource requirements

In addition to the resources required for centre approval some N/SVQ schemes have requirements with which centres must comply:

Site agreements

The NVQ code of Practice 2002, QCA Appendix 2, Approved Centre Criteria 1.1.3 make it explicit that centres must ensure that all assessment sites clearly understand their roles, responsibilities, authorities and accountabilities. It would therefore be advisable for centres to have documented and signed (Partnership) agreements with all assessment sites. The content of such agreements must be devised on an individual centre basis but consideration should be given to the inclusion of the following areas:

- Centres membership requirements/criteria. By implication this might mean the rejection of some applicants where they cannot or will not meet the centre membership requirements. eg participating in assessment activities including attending standardisation meetings
- Commitment to centre policies and practices eg policy for candidates appeals/complaints and access to fair assessment
- Access to workplace and protocols for peripatetic assessors
- Responsibilities for ensuring that candidates are operating in a work place where the standards of practice fully support candidates to demonstrate their competence.

This list is not exhaustive but may assist centres in identifying areas which need an explicit statement of commitment from member assessment sites/satellites in order to avoid future problems.

Registration period

Registration will be for 3 years or until **31/05/2009**, which ever is the sooner.

Please check the *Directory of qualifications* for the latest information on length of registration and the last registration and certification dates.

Where the period of access to assessment offered by a centre is less than the period covered by the candidates' registration with City & Guilds, centres must ensure that this is understood by the candidates.

5 Assessment method requirements

This guidance is based on and amplifies the assessment strategy developed for the NVQs in Providing Security, Emergency and Alarm systems Level 2 and 3.

External quality control

External quality control is provided by the usual City & Guilds external verification process which includes the use of the electronically scannable report form which is designed to provide an objective risk analysis of individual centre assessment and verification practice.

Imported units

Some units in the new NVQ qualifications have been imported from existing NVQs for example:

SYS 1 (SLP01) minimise and respond to Health and Safety Risks in your work place. Please refer to the table in Section 9 The Qualification Structure and Standards.

Therefore some candidates may have completed units as part of another NVQ, which can be transferred directly into this qualification by presenting the original certificate to the centre. The original unit previously achieved should be identical to the unit in the Providing Security, Emergency and Alarm Systems qualification and authenticity should be established.

External verifiers will carry out checks to ensure centres have appropriately applied this process.

Accreditation of Prior Experience and Learning (APEL)

Some candidates for this qualification may have undertaken training in the past and will be experienced in Providing Security Emergency and Alarm systems. Therefore all centres delivering the qualification should provide the opportunity for candidates' prior experience and learning to be assessed and accredited. This should form part of the candidate's initial assessment.

Should any opportunities for APEL be identified it is important that a complete process of accreditation of prior experience and learning is undertaken by ensuring that:

- it covers relevant or appropriate experience from previous activities as well as accredited learning and qualifications
- it is incorporated into the assessment planning with details of how this will take place. Mapping of prior learning to the National Occupational Standards to identify gaps is documented and auditable.
- assessment methods or process for accreditation of prior experience and learning are documented and made available to the external verifier.
- the audit trail covers the whole process and methodology of accreditation of Prior Experience and Learning
- the authenticity and currency of presented evidence is established by the assessor
- where observation or expert witness testimony is a unit assessment method requirement, this activity is undertaken after candidate registration for qualification.

In considering the appropriateness of any single piece of evidence the following should be considered.

- Content the degree to which the content of any previous evidence accredited learning meets the requirements of the National Occupational Standards against which it is being presented as evidence.
- Comprehensiveness of Assessment ensure that all the learning derived from the content has been assessed. If only a proportion has been assessed, the learning for the 'non-tested' areas cannot be assumed.
- Level the degree to which the level of learning offered and tested, relates to that required by the Providing Security, Emergency and Alarm Systems NVQs.
- Performance and Knowledge the degree to which the previous learning covered both performance and knowledge. Some learning will only have offered and tested the latter, in which case the Accreditation of Prior Learning can only cover this aspect. Performance will require further assessment. Although unlikely, the reverse (performance tested but not knowledge) could be true in which case knowledge and understanding would need further assessment.
- Model of learning difficulties can arise in mapping learning gained from non-competence based learning programmes into competence based models.
- Relevance of context the degree to which the context of the learning gained and assessed
 relates to the current context of candidates' work roles. If the context was different, assessors
 will need to satisfy themselves of candidates' ability to transfer the learning gained into the
 current setting.
- Currency how recently the learning was gained. Candidates would need to demonstrate current knowledge and understanding of areas such as legislation, policy and practice etc, which may have changed since the previous learning programme was undertaken.
- Authenticity how the ownership of the evidence is established to ensure it was generated by the candidate.

Performance evidence requirements

Usually evidence of candidate performance will be derived from assessor observation and/or testimony from an expert witness of the candidate carrying out work activities in the workplace.

Detailed additional guidance, is provided on a unit basis for the use of these or other acceptable performance assessment methods.

Knowledge evidence requirements

Candidates must be able to apply the specified knowledge and understanding to their work practice and therefore most usually knowledge and understanding will be apparent in candidates' performance evidence. If the assessor cannot positively infer the knowledge and understanding from candidates' work practice they should question candidates or, if appropriate, use professional discussion to elicit the required knowledge. Assessors must retain records of questions and answers or focus and outcomes of professional discussion.

Professional discussion, where used, must be conducted by candidates' assessors and is most appropriately used in the Providing Security, Emergency and Alarm Systems NVQs to elicit underpinning knowledge, explain how to deal with contingencies and clarify or expand on evidence presented in portfolios. Professional discussion must be included in candidates' assessment plans and thereby agreed in advance with candidates. The assessor should not use professional discussion merely to ask a set of prescribed knowledge questions.

A summary of the areas covered and the outcomes of the discussion must be recorded. If audio visual recording is used it must be of a good enough quality to be clearly heard/seen. Tapes must be referenced and marked to allow verifiers quick access to the evidence they have planned to sample. The evidence must be trackable and accessible.

Independent assessment requirements

There is no independent assessment for this qualification

Simulation

Simulation is allowed in some of the units in this qualification:

SYS 1 Element SYS 1.2	Simulation is allowed
SYS 11 Element SYS 11.2	Simulation is allowed
SYS 12 Element SYS 12.2	Simulation is allowed
SYS 14 Element SYS 14.1 and SYS 14.2	Simulation is allowed

The overarching principle to be applied to units identified as suitable for simulation is that it should only be undertaken in a minority of cases where:

- there is a high risk to the security or safety of the candidate, individuals, key people in their lives and others
- the opportunity to present evidence from work-based practice happens infrequently and therefore insisting that candidates wait for such an occurrence would be unreasonable or create blockages in the assessment system and might carry the risk of de-motivating candidates
- there would otherwise be a breach of confidentiality or privacy.

6 Roles and occupational expertise requirements

Assessors

The gathering and judging of evidence should be entrusted to personnel who are not only trained and qualified as assessors but who are occupationally competent in the tasks that they are assessing.

To this end, centres must ensure that assessors are occupationally competent, are suitably qualified, and be able to demonstrate current occupational experience within the sector they will be assessing. Examples of current occupational experience may be evidenced by production of an authenticated CV. This may include appropriate industry-related qualifications, although this is not mandatory.

They must also:

- demonstrate their ability and commitment to maintain their occupational competence
- have a minimum of six months experience at a supervisory, or equivalent, position
- be able to relate the national occupational standards against which they will be assessing candidates, to activities in the workplace.

They must also provide evidence that they:

- understand the structure of standards and S/NVQs;
- can interpret the standards in accordance with awarding body requirements
- recognise acceptable sources of evidence for the award; and
- can implement the recording procedures required by the awarding body
- can implement the awarding body quality assurance and administration procedures.
- be in regular contact with the candidates and the internal verifier; and
- hold the appropriate assessor award (as defined by the regulatory authorities) or have a clear plan for achieving the award(s) within 18 months of commencing assessments.

Evidence of individuals meeting all of the above criteria should be confirmed through the external verifier. Evidence of meeting criteria d and e above may be provided as a result of successfully completing a relevant training course, on which attendance is not mandatory but is strongly recommended.

Criteria for the Appointment of Internal Verifiers

Centres must ensure that internal verification is undertaken by persons who are able to make valid judgements on assessment decisions made by assessors.

To this end, centres must ensure that internal verifiers are occupationally competent and are suitably

qualified, in accordance with all of the criteria specified below:

- be able to demonstrate current occupational knowledge of the sector for which they will be verifying assessments. Examples of current occupational knowledge may be evidenced by production of an authenticated CV. This may include appropriate industry-related qualifications, although this is not mandatory
- demonstrate their ability and commitment to maintain their occupational competence*
- have a minimum of six months experience at a senior, or equivalent, position*
- be able to relate the national occupational standards for which they will be verifying assessments, to activities in the workplace.*

They must produce evidence that they:

- understand the structure of standards and S/NVQs;*
- can interpret the standards in accordance with awarding body requirements*
- can recognise acceptable sources of evidence for the award*
- can implement the recording procedures required by the awarding body*
- can implement the awarding body quality assurance and administration procedures*
- demonstrate their ability to maintain their sector competence*
- be in regular contact with the assessor(s) and external verifier*
- hold the appropriate (as defined by the regulatory authorities) internal verifier qualification, or have a clear plan for achieving this qualification within 12 months of commencing verifying duties.*

It is recommended that internal verifiers hold the appropriate assessor qualification.

Evidence of individuals meeting all of the above criteria should be confirmed through the external verifier.

*Evidence of meeting these criteria may be provided as a result of successfully completing a relevant training course, on which attendance is not mandatory but is strongly recommended.

Witnesses

Within a security services environment it is not always possible or practical to observe all the situations described in the standards. It is frequently more practical and cost effective to get feedback from your colleagues. This may be your manager or first line supervisor.

A witness testimony is a statement confirming that you have competently performed the activities described. The witness testimony is used to justify your claim to competence. An assessor cannot always be there when situations arise that a candidate wishes to include as evidence of their competence.

In order to ensure that the witness testimony is of value to you, it is necessary for it to identify clearly which part of the standards has been observed. The witness testimony provides evidence, which the assessor can then *judge* to enable an *assessment decision* to be made.

Guidance should be given to the witness to ensure that there is sufficient evidence for the assessors to make an assessment decision.

7 Recording assessment and evidence

7.1 Confidentiality and prviacy

Where commercially sensitive or confidential documents are to be presented as evidence assessors should discuss and agree, with all interested parties, whether they may be

a) included in the candidate portfolio, so long as they are anonymised,

or

b) left in situ with access assured for the assessors and verifiers.

Recording forms for use

City & Guilds has developed a set of *Recording forms* including examples of completed forms, for new and existing centres to use as appropriate (see NVQ Guide for centres and candidates - Recording forms, available on the City & Guilds website). Although it is expected that new centres will use these forms (see Appendix 2 and 3), centres may devise or customise alternative forms, which must be approved for use by the external verifier, before they are used by NVQ candidates and assessors at the centre. City & Guilds also endorses the electronic recording systems Quick Step and Paper Free.

Amendable (MS Word) versions of the forms are available on the City & Guilds website.

8 The qualification structure

8.1 Qualification structure

These units cover occupational competence associated with providing security, emergency and alarm systems, typically at craft and technician levels. The suite of standards provides for qualifications at levels 2 and 3 in the National Qualification Framework. Both qualifications therefore share the same suite of national occupational standards.

To receive a full qualification, candidates are required to achieve all the mandatory units for the relevant level, plus at least four of the optional units for a level 2 qualification (total units for level 2 = seven), and at least ten optional units for a level 3 qualification (total units for level 3 = fourteen). Credit will be given for units achieved in a level 2 qualification towards a level 3.

QCA unit reference	City & Guilds Unit number	[SSB / SSC] [number / reference]	Unit title	Excluded combination of units	[SSB / SSC] reference for imported units
Level 2 units					
Candidates mus	st select all of	these:			
L/102/3453	001	SYS1	Minimise and respond to health and safety risks in your workplace		SLP01 (Skills for Security (formally SITO))
R/102/3454	002	SYS2	Communicate effectively in the workplace		SLP02 (Skills for Security (formally SITO))
D/103/7325	003	SYS3	Contribute to maintaining effective working relationships		
Candidates mus	st select any f o	our of these:			
11/4 02/7222	000	CVCO	Mala		
H/103/7333	008	SYS8	Make preparations and arrangements to install security, emergency or alarm		

K/103/7330	009	SYS9	Install cabling for security, emergency or alarm systems	
M/103/7331	010	SYS10	Install security, emergency or alarm equipment	
T/103/7332	011	SYS11	Test and confirm operation of security, emergency or alarm systems	
T/103/7332	012	SYS12	Commission and hand over security, emergency or alarm systems	
F/103/7334	013	SYS13	Maintain the performance of security, emergency or alarm systems	
J/103/7335	014	SYS14	Diagnose and rectify faults on security, emergency or alarm systems	
Level 3 units Candidates mu	ust select all	of these		
L/102/3453	001	SYS1	Minimise and respond to health and safety risks in your workplace	SLP01 (Skills for Security (formally SITO))
R/102/3454	002	SYS2	Communicate effectively in the workplace	SLP02 (Skills for Security (formally SITO))

D/103/7325	003	SYS3	Contribute to maintaining effective working relationships
H/103/7326	006	SYS6	Plan the installation of security, emergency or alarm systems and services
Candidates mu	ıst select any	two of these:	
K/103/7327	004	SYS4	Survey sites to prepare specifications of security, emergency or alarm systems
M/103/7328	005	SYS5	Prepare quotations for providing security, emergency or alarm systems
T/103/7329	007	SYS7	Audit security, emergency or alarm systems
Candidates mu	ıst select any	six of these:	
H/103/7333	008	SYS8	Make preparations and arrangements to install security, emergency or alarm systems
K/103/7330	009	SYS9	Install cabling for security, emergency or alarm systems
M/103/7331	010	SYS10	Install security, emergency or alarm equipment

T/103/7332	011	SYS11	Test and confirm operation of security, emergency or alarm systems	
T/103/7332	012	SYS12	Commission and hand over security, emergency or alarm systems	
F/103/7334	013	SYS13	Maintain the performance of security, emergency or alarm systems	
J/103/7335	014	SYS14	Diagnose and rectify faults on security, emergency or alarm systems	
Candidates mu	ust select an y	two of these:		
L/103/7353	015	SYS15	Make presentations to sell security, emergency or alarm systems	Marketing and Sales Standard Setting Board C58 Note – the wording of this unit was changed to fit in with Skills for Security (formally SITO)'sstandards, particularly the performance criteria and range statements
R/103/7354	016	SYS16	Negotiate sales of security, emergency or alarm systems	Marketing and Sales Standard Setting Board C53 Note — the wording of this unit was changed to fit in with Skills for Security (formally SITO)'sstandards,

				no ortigulo oli ette o	
				particularly the performance	
				criteria and	
				range	
				statements	
L/103/7336	017	SYS17	Demonstrate		_
			the use of		
			and hand over of		
			security,		
			emergency or		
			alarm		
			systems to		
		C) (C1.0	customers		
	018	SYS18	Lead the work of	MCI C12	
			teams and	Note – the wording of this	
			individuals to	unit was	
			achieve	changed to fit in	
			objectives	with Skills for	
				Security (formally SITO)'sstandards,	
				particularly the	
				performance	
				criteria and	
				range statements	
	010	CVC10			
Y/103/7355	019	SYS19	Control contract	CIC D31 Note – the fifth	
			work	element from	
				D31 was not	
				imported into	
				Skills for Security	
				(formally SITO)'sSYS 19 as	
				it was not	
				relevant to the	
				installation of	
				security, emergency, or	
				alarm systems.	
				The wording of	
				the four	
				imported elements was	
				tailored to fit in	
				with Skills for	
				Security (formally	
				SITO)'sstandards,	
				particularly the knowledge	
				criteria	
D/103/7356	020	SYS20	Implement	CIC D25	
2110317330	020	31320	works to	The wording of	
			meet	this unit was	
			installation	tailored to fit in	
			requirements	with Skills for	

Security (formally SITO)'sstandards, particularly the title and knowledge criteria

9 About the standards

Availability of standards

The Standards and Assessment Requirements (SAR) document and a full set of units will be available in PDF format on the City & Guilds website **www.cityandguilds.com**.

10 The National Occupational Standards and unit evidence requirements

These standards are intended for people who are employed in the security industry, involved in security emergency and alarm systems. The suite of standards recognises four significant occupational areas associated with this employment sector. The following framework shows the coverage of the national standards.

The occupational areas covered by these standards are:

- Intruder alarms
- Fire detection & alarms
- Access control
- Closed circuit television

The units in this qualification are as follows:

SYS 1 Minimise and respond to health and safety risks in your workplace

SYS 1.1	Contribute to	maintaining a sat	ie workplace
---------	---------------	-------------------	--------------

SYS 1.2 Recognise and respond to risks in your workplace

SYS 2 Communicate effectively in the workplace

SYS 2.1	Provide written information related to your work
SYS 2.2	Communicate effectively to work with others
SYS 2.3	Communicate using telecommunications

SYS 3 Contribute to maintaining effective working relationships

		_
SYS 3.1	Work with your colleagues and o	customer
SYS 3.2	Plan and organise your work act	ivities
SYS 3.3	Present a positive image to cust	omers

SYS 4 Survey sites to prepare specifications of security, emergency or alarm systems

SYS 4.1	Survey sites to collect information for the design and installation of systems
SYS 4.2	Produce designs and specifications of systems and their installation

SYS 5 Prepare quotations for providing security, emergency or alarm systems

SYS 5.1	Determine costs of systems and their installation
SYS 5.2	Determine the costs of maintaining the performance of systems
SYS 5.3	Produce quotations for systems, their installation and their maintenance

SYS 6 Plan the installation of security, emergency or alarm systems and services

SYS 6.1	Confirm details of system requirements
SYS 6.2	Plan and co-ordinate the use of resources to install systems
SYS 6.3	Organise first fixes of installations

SYS 7 Audit security, emergency or alarm systems

SYS 7.1 Carry out technical audits of systems

SYS 8 Make preparations and arrangements to install security, emergency or alarm systems Confirm plans and agreements for installations SYS 8.1 SYS 8.2 Confirm the availability of equipment and materials SYS 8.3 Contribute to the preparation of installations SYS 9 Install cabling for security, emergency or alarm systems Prepare to install cabling SYS 9.1 SYS 9.2 Install cable and wiring containment systems Install cables and wires SYS 9.3 Restore sites after installing cabling SYS 9.4 SYS 10 Install security, emergency or alarm equipment SYS 10.1 Install system equipment Terminate cables and wires to equipment SYS 10.2 SYS 10.3 Restore sites after installing equipment SYS 11 Test and confirm operation of security, emergency or alarm systems Carry out tests to confirm required system operation SYS 11.1 SYS 11.2 Carry out data transmission tests SYS 11.3 Prepare for system commission and handover SYS 12 Commission and hand over security, emergency or alarm systems Bring systems into operation SYS 12.1 SYS 12.2 Hand over systems to customers SYS 13 Maintain the performance of security, emergency or alarm systems Carry out preventative maintenance on systems SYS 13.1 Restore system performance after component replacement or adjustment SYS 13.2 Liaise with customers during service visits SYS 13.3 SYS 14 Diagnose and rectify faults on security, emergency or alarm systems SYS 14.1 Identify causes of unacceptable system performance Rectify faults in systems SYS 14.2 Liaise with customers during repair visits SYS 14.3 SYS 15 Make presentations to sell security, emergency or alarm systems SYS 15.1 Prepare to make sales presentations SYS 15.2 Give sales presentations SYS 16 Negotiate sales of security, emergency or alarm systems SYS 16.1 Prepare to negotiate sales SYS 16.2 Prepare sales proposals Negotiate and agree terms of sales SYS 16.3 SYS 17 Demonstrate the use and hand over of security, emergency or alarm systems to customers SYS 17.1 Prepare to demonstrate the use and operation of systems SYS 17.2 Instruct users in the operation of systems

Hand over systems to customers

SYS 17.3

SYS 18 Lead the work of teams and individuals to achieve objectives

SYS 18.1	Plan work for teams and individuals
SYS 18.2	Assess the work of teams and individuals
SYS 18.3	Provide feedback on work to teams and individuals

SYS 19 Control contract work

SYS 19.1	Control contracts against agreed quality standards
SYS 19.2	Maintain contract compliance with legal and statutory requirements
SYS 19.3	Control contract progress against agreed programmes
SYS 19.4	Control contract quantities and costs

SYS 20 Implement works to meet installation requirements

SYS 20.1	Co-ordinate site preparation
SYS 20.2	Co-ordinate work control

Issue: 2.0

Date: April 2004

Overview

This unit defines the national standard of occupational competence covering the broad area of health and safety in the workplace and applies to people who could be in paid, unpaid, full or part time employment. Health and safety legislation applies to all persons in the workplace and seeks to secure the health, safety and welfare of people while they are at work. This unit therefore encourages you to know and meet your own responsibilities for health and safety, by setting the standard for you to:

Element SYS 1.1 Contribute to maintaining a safe workplace

• Element SYS 1.2 Recognise and respond to risks in your workplace

You must always carry out your work activities safely, following the relevant health and safety regulations, instructions and guidelines. These include using personal safety equipment, and keeping your work area free from unnecessary hazards. You must also not do anything that puts yourself or others in unnecessary danger.

You must be able to recognise actual and potential risks from hazards in your workplace and take effective action to minimise the potential harm from these hazards. Any action you take should be within your responsibility, authority and ability. You may have to give information or instructions to other people, such as colleagues or the emergency services in which case, this information or these instructions should be clear and sufficient for them to take the appropriate action.

The knowledge that you must have to be competent in the workplace includes understanding the current health and safety legislation relevant to what you do and your workplace; typical hazards and risks associated with your workplace; and your responsibilities for health and safety at work. You must also know from where to get help when you need it and how to get this help, possibly using alarm systems.

This unit is from the approved Skills for Security (formally SITO) suite of national occupational standards for Security and Loss Prevention (unit SYS 1). No changes to the original standards have been made for use in this suite of standards.

Element SYS 1.1 Contribute to maintaining a safe workplace

Performance criteria

You must be able to:

- a carry out your work activities at all times in line with the relevant health and safety legislation, codes of practice and guidelines
- b use your personal safety equipment and clothing in line with your instructions and guidelines
- c maintain your personal conduct so as not to endanger yourself or other people
- d keep work areas for which you are responsible free from unnecessary hazards and risks
- e keep emergency and escape routes free from obstructions
- f report hazards that could endanger the safety of the workplace to the relevant person, giving full and accurate details
- report difficulties you have in keeping to your organisation's health and safety policies, instructions or guidelines to the relevant person, giving full and accurate details.

Knowledge criteria

You must know and understand:

- 1 current legislation, codes of practice and guidelines relating to health and safety in your workplace, particularly your responsibilities, and how to comply with these requirements
- 2 why it is important to maintain a safe workplace and what you can do to help
- 3 what personal safety equipment and clothing you must use, when and how to use it
- 4 how the way you work and your personal conduct affect the health and safety of your workplace
- 5 where and how to get help if you need it to maintain safety in your workplace
- 6 the details that you must record and report relating to hazards in your workplace.

Range statement

You must be competent to deal with the following types of:

- 1 **legislation, codes of practice and guidelines**, covering: safe work practices; safe use of hazardous substances; emergency action; your personal conduct
- hazards could arise from: features of where you work; work activities; dangerous situations; using equipment; materials: substances

Element SYS 1.2 Recognise and respond to risks in your workplace

Performance criteria

You must be able to:

- a recognise actual and potential **risks** to health and safety in your normal work area
- b take immediate and effective **action** to limit the effects of risks, without putting yourself or others in danger
- c be certain that action you take is within the limits of your authority, responsibility and ability
- d get immediate help from **other people** if you cannot deal effectively with the danger
- e give clear information or instructions to other people to allow them to take appropriate action
- f report fully and accurately to the appropriate person the details of risks and the action you took.

Knowledge criteria

You must know and understand:

- 1 current legislation, codes of practice and guidelines relating to health and safety in your workplace, particularly your responsibilities, and how to comply with these requirements
- 2 typical risks and dangers to health and safety likely to happen in your normal workplace
- 3 the limits of your responsibility and ability in taking immediate action to reduce the effects of risks
- 4 how to use appropriate equipment and alarm systems to limit danger
- 5 how and from where to get help to deal with dangerous situations
- 6 the details that you must record and report relating to risks, dangers and action taken.

Range statement:

You must be competent to deal with the following types of:

- 1 **risks** to: life; property; the workplace
- 2 **action** that you could take: directly yourself to limit risks; get help from other people; start evacuation procedures; give first aid; summons first aid
- 3 **other people** from whom you could get help, give information or instructions: colleagues; emergency services

Unit Evidence Requirements

Qualification Title Level 2 and 3 NVQ in Providing Security & Emergency Alarm Systems

Unit Number SYS 1

Unit Title: Minimise and respond to health and safety risks in your workplace.

Evidence Requirements for this unit:

You must provide your assessor with evidence for **all** the performance criteria and **all** the knowledge and in accordance with the range statement.

The evidence must be provided in the following ways taking into account any of the special considerations below

Special Considerations

Simulation is permitted for Element 1.2 only for this unit.

The following range requirement may be difficult to evidence by observation of naturally occurring activities in the workplace because they refer to contingencies or infrequently occurring activities.

Actions taken (eg giving first aid, handling the outbreak of fire).

The nature of this unit means that **most** of your evidence must come from real work activities. However simulation may only be used so long as it meets the criteria for its use. You will find this in the assessment guidance for this S/NVQ qualification.

The evidence must reflect, at all times, the policies and procedures of the workplace, as linked to current legislation and the values and principles for good practice in the security, emergency and alarm systems industry.

Required sources of performance and knowledge evidence

Observation is the **required** assessment method to be used to evidence some part of each element in this unit.

Usually, your assessor will observe you in real work activities and this is likely to provide most of the evidence for the performance criteria and range for the elements in this unit. Your assessor will also decide what knowledge and understanding you have demonstrated through your work practice.

Other sources of performance and knowledge evidence

Your assessor will identify other sources of performance and knowledge evidence

Either

Where assessor observation was not required

Or

Where assessor observation has been used but your assessor needs to ensure that any outstanding performance criteria and knowledge requirements are met and that your performance is consistent

Witness Testimony: Occupational experts, colleagues, allied professionals and customers may be able to provide testimony of your performance. Your assessor will help you to identify the appropriate use of witnesses.

Work Products: These are non-confidential records made, or contributed to, by you eg Health and Safety procedures, damaged equipment reports

Confidential Records: These may be used as evidence but must not be placed in your portfolio, they must remain in their usual location and be referred to in the assessor records in your portfolio. eg Accident reports/records, Risk assessment documentation

Questioning/Professional Discussion: Questions may be oral or written. In each case the question and your answer will need to be recorded. Professional discussion should be in the form of a structured review of your practice with the outcomes captured by means of audiotape or a written summary. These are particularly useful to provide evidence that you know and understand principles which support practice, policies, procedures and legislation, and that you can critically evaluate their application eg Safe practices and current regulations associated with the erection of access equipment commonly used when installing security systems.

Original Certificates: Certificates of training, awards and records of attendance must be authentic, current and valid. Your assessor will also want to check the content of such training so that this can be matched to the standards and confirm that you have retained and can apply learning to practice, eg Fire training certificates, Health & Safety certificates, City and Guilds Knowledge of Security and Emergency Alarm Systems (1852) level 3 qualification.

Case Studies, projects, assignments and candidate/reflective accounts of your work. These methods are most appropriately used to cover any outstanding areas in the knowledge requirement of your qualification. Occasionally, because an event happens rarely or may be difficult to observe, you may be able to use a candidate/ reflective account to provide some of the performance evidence for this unit.

Unit SYS 2 Communicate effectively in the workplace

Issue: 2.0 Date: April 2004

Overview

This unit defines the national standard of occupational competence covering communicating information effectively in the workplace. The information could be communicated in writing, or using telecommunications such as the telephone, fax, e-mail, radio or pagers.

The unit also covers communicating effectively to work with other people. This unit therefore sets the standard for you to:

Element SYS 2.1 Provide written information related to your work
 Element SYS 2.2 Communicate effectively to work with others
 Element SYS 2.3 Communicate using telecommunications

When you give information to others, you must make sure it is sufficient, current and correct. You must only give work-related information to people who are authorised to have that information. Your writing should be clear: legible and use approved styles and format. You must also make sure you understand any information or instructions that you receive, particularly if you need this information in order to do your job.

When you use telecommunications, you must make sure that the equipment is working properly and report any malfunctions to the relevant person to get it fixed. You must also use telecommunications facilities in line with your organisation's policies, including for private use.

The knowledge that you must have to be competent in the workplace includes understanding the limits of your authority and responsibility for passing on information; formats you must use, including phonetic alphabets: call signs, passwords and identification; and how to confirm understanding of information by both yourself and others.

This unit is from the approved Skills for Security (formally SITO) suite of national occupational standards for Security and Loss Prevention (unit SYS 2). No changes to the original standards have been made for use in this suite of standards.

Element SYS 2.1 Provide written information related to your work

Performance criteria

You must be able to:

- a make sure you have all the necessary correct and current **information** that you need
- b write clearly and legible, giving all the essential information needed
- c use approved styles and formats for written communication
- d pass on written information only to those people authorised to receive it and within agreed timescales
- e keep the information in **written documents** as required by your organisation
- f maintain the confidentiality of information in line with your instructions and organisations' procedures.

Knowledge criteria

You must know and understand:

- 1 what information you need and where to get it
- 2 how to make sure information is correct and current
- 3 the approved styles and formats that you must use for written information
- 4 why and how you must maintain confidentiality of information
- 5 the different documents that you are required to keep
- 6 your organisation's procedures and policies for preparing and passing on written information.

Range statement

- 1 **information** from: note books; witnesses; report books; registers
- 2 **written documents**: report books; registers; memos; incident reports (ie. accident, fire, intruder)

Element SYS 2.2 Communicate effectively to work with others

Performance criteria

You must be able to:

- a accurately interpret and act upon **instructions** that you receive
- b understand instructions, getting clarification when you need to
- c carry out your **tasks** promptly, and with the minimum of supervision
- d help **other people** in performing tasks in a positive manner and without prompting
- e consult with and help your team members to maximise efficiency in carrying out tasks
- f give instructions to others clearly, at a pace and in a manner that helps them to understand.

Knowledge criteria

You must know and understand:

- 1 how you must contribute to the work of your organisation
- 2 how to carry out the tasks that you would normally be given
- 3 who to ask if you need to clarify something: or ask questions about your work
- 4 how to talk and work with others to work efficiently, without adversely affecting your own work
- 5 the limits of your responsibility and authority.

Range statement

- 1 **instructions** you receive: orally; in writing
- 2 **tasks** to be carried out: on your own', in a group or team; in training situations
- **other people**: supervisory staff; members of your team; contractor or client's management staff; customers; visitors; emergency services; any other relevant persons

Element SYS 2.3 Communicate using telecommunications

Performance criteria

You must be able to:

- a make sure the **communications equipment** you use is working properly
- b respond to and acknowledge incoming communication promptly and clearly, using **appropriate terminology**
- c pass on information to persons who require it and who are authorised to receive it, within agreed timescales
- d use outgoing communication equipment in line with your organisation's procedures and guidelines
- e confirm the information you give is understood by the people receiving it
- f report faults with equipment promptly to an appropriate person
- g take prompt and effective action when there is difficulty in transmission or reception of information.

Knowledge criteria

You must know and understand:

- 1 how to make sure your communication equipment is working property and what to do if it isn't
- 2 the limits of your authority and responsibility for passing on information
- 3 the regulations or policies that you must follow for using communications systems, including for private use:
- 4 what to do if there are problems in using communications equipment: and the location of alternatives that you could use: and
- 5 the terminology that you must use: such as the phonetic alphabet, the 24 hour clock, call signs, caller identification and passwords

Range statement

- 1 **communication equipment**: telephone systems (fixed and mobile); e-mail; fax; pagers
- 2 **appropriate terminology**: phonetic alphabet; call signs; caller identification; passwords

Unit Evidence Requirements

Qualification Title Level 2 and Level 3 NVQ in Providing Security & Emergency Alarm Systems

Unit Number SYS 2

Unit Title Communicate effectively in the work place

Evidence Requirements for this unit:

You must provide your assessor with evidence for **all** the performance criteria and **all** the knowledge and in accordance with the range statement.

The evidence must be provided in the following ways taking into account any of the special considerations below

Special Considerations:

Simulation is not permitted for this unit

The nature of this unit means that **all** of your evidence must come from real work activities.

The evidence must reflect, at all times, the policies and procedures of the workplace, as linked to current legislation and the values and principles for good practice in the security, emergency and alarm systems industry.

Required sources of performance and knowledge evidence:

Observation is the **required** assessment method to be used to evidence some part of each element in this unit.

Usually, your assessor will observe you in real work activities and this is likely to provide most of the evidence for the performance criteria and range for the elements in this unit. Your assessor will also decide what knowledge and understanding you have demonstrated through your work practice.

Other sources of performance and knowledge evidence:

Your assessor will identify other sources of performance and knowledge evidence

Either

Where assessor observation was not required

Or

Where assessor observation has been used but your assessor needs to ensure that any outstanding performance criteria and knowledge requirements are met and that your performance is consistent

Witness Testimony: Occupational experts, colleagues, allied professionals and customers may be able to provide testimony of your performance. Your assessor will help you to identify the appropriate use of witnesses.

Work Products: These are non-confidential records made, or contributed to, by you, eg Audio/Video recordings, presentation documentation.

Confidential Records: These may be used as evidence but must not be placed in your portfolio, they must remain in their usual location and be referred to in the assessor records in your portfolio. eg Correspondence/report, Maintenance records, Internal audit reports, Handover documentation, Personal development reviews.

Questioning/Professional Discussion: Questions may be oral or written. In each case the question and your answer will need to be recorded. Professional discussion should be in the form of a structured review of your practice with the outcomes captured by means of audiotape or a written summary. These are particularly useful to provide evidence that you know and understand principles which support practice, policies, procedures and legislation, and that you can critically evaluate their application. eg communicating effectively with colleagues, and other trades' personnel.

Original Certificates: Certificates of training, awards and records of attendance must be authentic, current and valid. Your assessor will also want to check the content of such training so that this can be matched to the standards and confirm that you have retained and can apply learning to practice, eg Communication Skills certificate, Interpersonal Skills training certificate.

Case Studies, projects, assignments and candidate/reflective accounts of your work. These methods are most appropriately used to cover any outstanding areas in the knowledge requirement of your qualification. Occasionally, because an event happens rarely or may be difficult to observe, you may be able to use a candidate/ reflective account to provide some of the performance evidence for this unit.

Issue:2.0

Date: April 2004

Overview

This unit defines the national standard of occupational competence covering effective work relationships with both colleagues and customers. Work relationships are effective through the way in which you work, through the way you plan your work and the image you give to customers. This unit therefore sets the standard for you to:

Element SYS 3.1 Work effectively with colleagues and customers

Element SYS 3.2 Plan and organise your work activities
 Element SYS 3.3 Present a positive image to customers

When working with other people, your behaviour should encourage good and effective working relations. This means giving accurate information when needed by others, who could be from your own organisation or your customers'. It also means helping colleagues when necessary, but without adversely affecting your own work progress. You should meet agreements you make to colleagues and customers in relation to getting work done.

Effective working relationships include planning your work, especially with colleagues and customers. You will need to be able to plan your work in a way that makes the best use of time and other resources, particularly when this involves working with others. You should give full details to the relevant people of any planned work activities that could pose a risk to health and safety.

You should be courteous to your customers and respond to enquiries from then promptly, fully and accurately. You should also comply with your organisation's standards of appearance and behaviour at all times.

Element SYS 3.1 Work effectively with colleagues and customers

Performance criteria

You must be able to:

- a provide **information** to the **relevant people**, clearly, accurately and when requested
- b behave towards colleagues and customers in a way that promotes and maintains good working relationships
- c respond positively to requests from colleagues and customers for assistance where this falls within your own area of competence, but where your own progress will not be adversely affected
- d request assistance from colleagues when needed in a way that encourages their positive response
- e meet undertakings given to colleagues and customers within the agreed timescale and manner
- f respect the rights of colleagues as individuals at all times
- g resolve difficulties in working relationships promptly to the satisfaction of those involved, or report to appropriate person where you cannot resolve the difficulties.

Knowledge criteria

You must know and understand:

- 1 your organisation's policies, procedures and requirements for preparing and passing on information
- 2 current legislation relevant to respecting the rights of individuals in the workplace
- 3 your organisation's code of conduct relevant to working with colleagues and customers
- 4 the limits of your responsibility and authority relating to work activities
- 5 how to talk and work with others to work efficiently, without adversely affecting your own work
- 6 who and how to ask for assistance when you need it
- 7 who and how to ask for help in resolving work relationship difficulties.

Range statement

- 1 information provided: verbally; in writing
- 2 **information** about: progress; problems; system operation and performance
- 3 **information** that is beneficial to: your organisation; the customer
- 4 relevant people: your own organisation; the customer

Element SYS 3.2 Plan and organise your work activities

Performance criteria

You must be able to:

- a organise your own **work activities** in a way that makes the best use of time and resources
- b make sure your planned work activities comply with agreed procedures and are within the limits of your own responsibility, authority and competence
- c confirm the collective responsibility you have with others with whom you are required to work to effectively achieve the required outcomes
- d adapt your work activities to meet **changing circumstances** as required
- e let the **relevant people** know of you work plans within timescales that meet their requirements
- f give full details to the relevant people of any planned work activities that could pose a **risk to health and safety**, in sufficient time for appropriate precautions to be taken.

Knowledge criteria

You must know and understand:

- 1 the limits of your responsibility and authority relating to work activities
- 2 your responsibilities under current health and safety legislation and guidelines relevant to your work activities, and general health and safety in the workplace
- 3 what work activities and resources are necessary to complete your work tasks
- 4 typical times required to complete your work activities, including travel time
- 5 how to schedule and prioritise work activities to achieve your work tasks
- 6 current health and safety legislation and guidelines relevant to your work activities
- 7 how to optimise the needs of your organisation and your customers in relation to planning work.

Range statement

- 1 work activities that are: short-term; long-term
- 2 **changing circumstances** through: non-availability of colleagues or customers; unforeseen work difficulties; travel problems; change of building use
- 3 **relevant people**: management; colleagues; customers
- 4 **health and safety risks**, relevant to: work area access and egress; personal safety; waste disposal

Element SYS 3.3 Present a positive image to customers

Performance criteria

You must be able to:

- a confirm work activity arrangements with customers that are effective to complete work tasks and are mutually acceptable
- b give full details to customers of any planned work activities that could pose **health and safety risks**, in sufficient time for appropriate precautions to be taken
- c treat customers in a courteous and helpful manner at all times
- d respond to enquiries from customers promptly, fully and accurately
- e comply with your organisation's standards of appearance and behaviour at all times
- f make sure you have all the necessary documents and supplies relevant to customers when you need them.

Knowledge criteria

You must know and understand:

- 1 your responsibilities under current health and safety legislation and guidelines relevant to your work activities, and general health and safety in the workplace
- 2 how to discuss and negotiate work arrangements with customers, to achieve mutual satisfaction
- 3 how to assess the potential risks to health and safety associated with your work activities, and what precautions should be taken
- 4 your organisation's policies and standards relevant to appearance, behaviour, vehicles and use of personal safety equipment.

Range statement

You must be competent to deal with the following types of:

1 health and safety risks, relevant to: work area access and egress; personal safety; waste disposal

Unit Evidence Requirements

Qualification Title Level 2 and 3 NVQ in Providing Security& Emergency Alarm Systems

Unit Number SYS 3

Unit Title Contribute to maintaining effective working relationships

Evidence Requirements for this unit

You must provide your assessor with evidence for **all** the performance criteria and **all** the knowledge and in accordance with the range statement.

The evidence must be provided in the following ways taking into account any of the special considerations below

Special Considerations

Simulation is not permitted for this unit

The nature of this unit means that **all** of your evidence must come from real work activities.

The evidence must reflect, at all times, the policies and procedures of the workplace, as linked to current legislation and the values and principles for good practice in the security, emergency and alarm systems industry.

Required sources of performance and knowledge evidence

Observation is the **required** assessment method to be used to evidence some part of each element in this unit.

Usually, your assessor will observe you in real work activities and this is likely to provide most of the evidence for the performance criteria and range for the elements in this unit. Your assessor will also decide what knowledge and understanding you have demonstrated through your work practice.

Other sources of performance and knowledge evidence:

Your assessor will identify other sources of performance and knowledge evidence

Either

Where assessor observation was not required

Or

Where assessor observation has been used but your assessor needs to ensure that any outstanding performance criteria and knowledge requirements are met and that your performance is consistent

Witness Testimony: Occupational experts, colleagues, allied professionals and customers may be able to provide testimony of your performance. Your assessor will help you to identify the appropriate use of witnesses.

Work Products: These are non-confidential records made, or contributed to, by you, eg Health and Safety procedures

Confidential Records: These may be used as evidence but must not be placed in your portfolio, they must remain in their usual location and be referred to in the assessor records in your portfolio. eg Minutes of meetings/correspondence, Handover documentation, Personal development reviews.

Questioning/Professional Discussion: Questions may be oral or written. In each case the question and your answer will need to be recorded. Professional discussion should be in the form of a structured review of your practice with the outcomes captured by means of audiotape or a written summary. These are particularly useful to provide evidence that you know and understand principles which support practice, policies, procedures and legislation, and that you can critically evaluate their application. eg Skills required when working with colleagues and customers.

Original Certificates: Certificates of training, awards and records of attendance must be authentic, current and valid. Your assessor will also want to check the content of such training so that this can be matched to the standards and confirm that you have retained and can apply learning to practice, eg Interpersonal Skills training certificate, permits/licences, Certificate in Conflict Management.

Case Studies, projects, assignments and candidate/reflective accounts of your work: These methods are most appropriately used to cover any outstanding areas in the knowledge requirement of your qualification. Occasionally, because an event happens rarely or may be difficult to observe, you may be able to use a candidate/ reflective account to provide some of the performance evidence for this unit.

Unit SYS 4 Survey sites to prepare specifications of security, emergency or alarm systems

Issue: 2.0 Date: April 2004

Overview

This unit defines the national standard of occupational competence for carrying out surveys in order to prepare specifications for security, emergency or alarm systems. The purpose of the surveys will be to collect information to help with the design and specification of systems and their installation. This unit therefore sets out the standards for you to:

 Element SYS 4.1 Survey sites to collect information for the design and installation of systems

• Element SYS 4.2 Produce designs and specifications of systems and their installation

You must make sure you use survey methods that are appropriate to the type of system involved, and take account of characteristics of sites that could impact on designs, specifications or installation. The designs and specifications that you produce should be capable of meeting their performance requirements, as well as the relevant legislation, regulations and codes of practice. You must respect and maintain the confidentiality of any information that you collect about customers, sites and systems.

You must know and comply with the relevant laws, regulations, standards and codes of practice that are relevant to the systems for which you carry out surveys and produce designs and specifications. You will also need to know how to read and interpret drawings, take measurements, how to produce designs and specifications that meet the requirements of the person who needs them.

Unit SYS 4 Survey sites to prepare specifications of security, emergency or alarm systems

Element SYS 4.1 Survey sites to collect information for the design and installation of systemss

Performance criteria

You must be able to:

- a confirm you have all the necessary and correct details of customer **requirements** to carry out site surveys
- b use survey methods that are appropriate to the type of **system**, **site** and customer requirements
- c recognise and record accurate and sufficient **factors** and **site characteristics** that could impact on designs, specifications and installation
- d record sufficient accurate details and data on which designs and specifications can be produced and installations can be carried out
- e complete surveys within agreed timescales
- f carry out surveys in line with relevant codes of practice
- g maintain the confidentiality of information, sites and systems in line with relevant codes of practice

Knowledge criteria

You must know and understand:

- 1 the details you need for preparing system designs and specifications, and from where to get these details
- 2 why you must have accurate and up to date details of systems, sites and customer requirements
- 3 when you might need to liaise with other people to survey sites
- 4 current legislation, regulations and codes of practice relevant to the system to be installed
- 5 how to carry out surveys, take appropriate measurements and record relevant details of surveys
- 6 how to read and interpret architectural and similar drawings
- 7 how to recognise factors that could affect system installation or operation, and how to record the details fully and accurately.

Range statement

- 1 requirements: specified in advance; not specified in advance; site details; system performance
- 2 **systems**: new installations; extensions; modifications; on one of the following systems Intruder Alarms; CCTV; Access control; Fire detection & Alarms
- 3 **sites**: commercial; industrial; retail; domestic; public premises

- 4 **factors**: use; occupancy; access; anticipated alterations to the site
- **site characteristics**: physical (number of floors, construction, condition, access, special features); environmental (temperature, humidity, heat sources, noise levels, light levels and sources, electromagnetic radiation, vibration, static electricity, use, throughput of people)

Unit SYS 4

Survey sites to prepare specifications of security, emergency or alarm systems

Element SYS 4.2

Produce designs and specifications of systems and their installation

Performance criteria

You must be able to:

- a confirm that you have sufficient correct information to design and specify **systems** that meet **requirements**
- b design systems that meet required performance using **data and information** provided through surveys
- c produce system designs and specifications that optimise costs and that are appropriate to installation **sites**
- d provide designs and **specifications** which enable successful installation and operation of systems
- e produce designs and specifications for systems that meet the requirements of relevant **laws**, **regulations**, **standards and codes of practice**
- f provide designs and specifications in agreed formats, within required timescales and to the appropriate person
- g maintain the confidentiality of information, sites and systems in line with relevant codes of practice.

Knowledge criteria

You must know and understand:

- 1 why it is important to have and use sufficient valid, accurate and up to date information from surveys
- 2 current laws, regulations, standards and codes of practice relevant to the installation and operation of systems
- 3 the limits, constraints and capabilities of organisation involved in the installation and operation of systems
- 4 the performance, limitations and availability of systems, equipment and components that you could specify in your designs
- 5 formats of and information required for designs and specifications
- 6 typical timescales and activities involved in the installation of systems, including manpower requirements
- 7 the licences and approvals required for systems and how to obtain these.

Range statement

- **systems**: new installations; extensions; modifications; on one of the following systems: Intruder Alarms; CCTV; Access control; Fire detection & Alarms
- **requirements**: system performance; regulations; customers'
- **data and information**: measurements; physical characteristics of sites; environmental characteristics of sites
- **sites**: commercial; industrial; retail; domestic; public premises
- **specifications** of: equipment; cables; fixings; installation schedules; licences and approvals
- laws, regulations, standards and codes of practice relevant to: health and safety; relevant local by-laws; electricity; fire; your organisation's policies

Unit SYS 4 Survey sites to prepare specifications of security, emergency or alarm systems

Unit Evidence Requirements

Qualification Title Level 3 NVQ in Providing Security & Emergency Alarm Systems

Unit Number SYS 4

Unit TitleSurvey sites to prepare specifications of security and emergency alarm systems

Evidence Requirements for this unit

You must provide your assessor with evidence for **all** the performance criteria and **all** the knowledge and in accordance with the range statement.

The evidence must be provided in the following ways taking into account any of the special considerations below

Special Considerations:

Simulation is not permitted for this unit

The nature of this unit means that **all** of your evidence must come from real work activities.

The evidence must reflect, at all times, the policies and procedures of the workplace, as linked to current legislation and the values and principles for good practice in the security, emergency and alarm systems industry.

Required sources of performance and knowledge evidence:

Observation is the **required** assessment method to be used to evidence some part of each element in this unit.

Usually, your assessor will observe you in real work activities and this is likely to provide most of the evidence for the performance criteria and range for the elements in this unit. Your assessor will also decide what knowledge and understanding you have demonstrated through your work practice.

Other sources of performance and knowledge evidence:

Your assessor will identify other sources of performance and knowledge evidence

Either

Where assessor observation was not required

Or

Where assessor observation has been used but your assessor needs to ensure that any outstanding

performance criteria and knowledge requirements are met and that your performance is consistent

Witness Testimony: Occupational experts, colleagues, allied professionals and customers may be able to provide testimony of your performance. Your assessor will help you to identify the appropriate use of witnesses.

Work Products: These are non-confidential records made, or contributed to, by you, eg Manufacturers certification.

Confidential Records: These may be used as evidence but must not be placed in your portfolio, they must remain in their usual location and be referred to in the assessor records in your portfolio. eg Survey documentation, Minutes of meetings/correspondence, Permits/licences, Performance development reviews.

Questioning/Professional Discussion: Questions may be oral or written. In each case the question and your answer will need to be recorded. Professional discussion should be in the form of a structured review of your practice with the outcomes captured by means of audiotape or a written summary. These are particularly useful to provide evidence that you know and understand principles which support practice, policies, procedures and legislation, and that you can critically evaluate their application. eg Codes of practice and regulations to be observed when conducting an alarm system survey.

Original Certificates: Certificates of training, awards and records of attendance must be authentic, current and valid. Your assessor will also want to check the content of such training so that this can be matched to the standards and confirm that you have retained and can apply learning to practice, eg City and Guilds Knowledge of Security and Emergency Alarm Systems (1852) Level 3 qualification.

Case Studies, projects, assignments and candidate/reflective accounts of your work. These methods are most appropriately used to cover any outstanding areas in the knowledge requirement of your qualification. Occasionally, because an event happens rarely or may be difficult to observe, you may be able to use a candidate/reflective account to provide some of the performance evidence for this unit

Issue: 2.0

Date: April 2004

Overview

This unit defines the national standard of occupational competence for providing quotations for new systems, extensions or other modifications to existing security, emergency or alarm systems. Providing quotations will include determining the costs of systems, equipment, their installation and their maintenance. This unit therefore sets out the standards for you to:

Element SYS 5.1 Determine costs of systems and their installation

• Element SYS 5.2 Determine the costs of maintaining the performance of systems

• Element SYS 5.3 Produce quotations for systems, their installation and their maintenance

You must make sure that you have all the necessary information about the systems and sites for which you prepare quotations, making sure that it is correct. Your calculations must be based on specified and approved costs, be accurate and capable of being confirmed, possibly through an audit.

The quotations that you produce should have all the relevant information needed by customers, and take account of the type of contract involved. You must respect and maintain the confidentiality of any information that you collect about customers, costs, sites and systems.

You must know and comply with the relevant laws, regulations, standards and codes of practice that are relevant to calculating and providing quotations, in addition to those of your own organisation. You will also need to know the current costs of system components, labour, overheads and profit margins.

Element SYS 5.1 Determine costs of systems and their installation

Performance criteria

You must be able to:

- a clarify any **anomalies** that appear in site or **system** information before calculating costs
- b calculate costs only on **data and information** in the relevant system specification
- c base your calculations on suppliers' prices, approved unit costs for labour, and profit margins
- d calculate costs accurately, fully and in a way that can be confirmed
- e record details of any deviations from original specifications clearly and accurately
- f maintain the confidentiality of information, sites and systems in line with relevant codes of practice.

Knowledge criteria

You must know and understand:

- 1 why it is important to clarify anomalies, and record deviations when you are calculating costs
- 2 the information that you need to calculate the costs of providing systems and installations
- 3 what system components are needed to provide systems that meet the specified requirements
- 4 how to select the best option from a number of possibilities of components and system arrangements
- 5 where to find costs of system components (eg suppliers' catalogues and price lists), labour rates and profit margins
- 6 the different formats for calculating and presenting costings, and when to use them.

Range statement

- 1 **anomalies**: errors; omissions; variations
- 2 **systems**: new installations; extensions; modifications; on one of the following systems: Intruder Alarms; CCTV; Access control; Fire detection & Alarms
- 3 **data and information**: measurements; physical characteristics of sites; environmental characteristics of sites

Element SYS 5.2 Determine the costs of maintaining the performance of systems

Performance criteria

You must be able to:

- a confirm the details of system **performance specifications** before calculating costs
- b confirm that **systems** are capable of meeting performance specifications
- c determine accurate details of **activities** and labour times required to maintain system performance
- d base your calculations on agreed responsibilities, approved unit costs for labour, and profit margins
- e calculate costs accurately, fully and in a way that can be confirmed
- f take account of your **organisations' abilities** to maintain systems, and contractual commitments where these exist
- g record details of any deviations from customers' specifications clearly and accurately
- h maintain the confidentiality of information, sites and systems in line with relevant codes of practice.

Knowledge criteria

You must know and understand:

- 1 why it is important to confirm the requirements of customers and system performance when you are calculating costs
- 2 the information that you need to calculate the costs of maintaining systems performance
- 3 what consumable or replacement components are needed to maintain systems performance, their costs and availability
- 4 how to select the best option from a number of possibilities of arrangements to maintain system performance
- 5 where to find details of labour rates and profit margins
- 6 the different formats for calculating and presenting costings, and when to use them.

Range statement

- 1 **performance specifications** that are : customers'; technical; operational
- 2 **systems**: new installations; extensions; modifications; on one of the following systems: Intruder Alarms; CCTV; Access control; Fire detection & Alarms
- 3 activities: planned; contingency
- 4 **organisation's abilities**: resources; knowledge; experience

Element SYS 5.3 Produce quotations for systems, their installation and their maintenance

Performance criteria

You must be able to:

- a provide all the relevant **information** in your quotations that is required to meet **system** specifications
- b provide information clearly, completely and accurately in approved formats and within required timescales
- c provide clear details of the responsibilities of your organisation, **customers** and third parties where these exist
- d clarify any potential areas of misunderstanding or confusion in terms that your customers can understand
- e produce quotations that take account of the type of **contract** involved
- f maintain the confidentiality of information, sites and systems in line with relevant codes of practice.

Knowledge criteria

You must know and understand:

- 1 the processes and procedures involved in preparing quotations
- 2 the current laws, regulations and codes of practice relevant to providing quotations
- 3 your organisation's policies and requirements for providing quotations
- 4 why you must provide specific details of variations, special system facilities, installation arrangements, or other factors that could affect quotations
- 5 why you must maintain confidentiality of information, sites and systems.

Range statement

- 1 **information**: costs, installation schedules; maintenance schedules; responsibilities; specific details (eg variations, special system facilities, installation arrangements)
- 2 **systems**: new installations; extensions; modifications; on one of the following systems: Intruder Alarms; CCTV; Access control; Fire detection & Alarms
- 3 **customers** who have: good technical understanding of systems; no technical understanding of systems
- 4 **contracts** that are for a: private limited company; limited company; partnership; private individual; public authority; charity

Unit Evidence Requirements

Qualification Title Level 3 NVQ in Providing Security & Emergency Alarm Systems

Unit Number SYS 5

Unit Title Prepare quotations for providing security and emergency alarm systems

Evidence Requirements for this unit:

You must provide your assessor with evidence for **all** the performance criteria and **all** the knowledge and in accordance with the range statement.

The evidence must be provided in the following ways taking into account any of the special considerations below

Special Considerations:

Simulation is not permitted for this unit

The nature of this unit means that **all** of your evidence must come from real work activities.

The evidence must reflect, at all times, the policies and procedures of the workplace, as linked to current legislation and the values and principles for good practice in the security, emergency and alarm systems industry.

Required sources of performance and knowledge evidence:

Observation is the **required** assessment method to be used to evidence some part of each element in this unit.

Usually, your assessor will observe you in real work activities and this is likely to provide most of the evidence for the performance criteria and range for the elements in this unit. Your assessor will also decide what knowledge and understanding you have demonstrated through your work practice.

Other sources of performance and knowledge evidence:

Your assessor will identify other sources of performance and knowledge evidence

Either

Where assessor observation was not required

Or

Where assessor observation has been used but your assessor needs to ensure that any outstanding performance criteria and knowledge requirements are met and that your performance is consistent

Witness Testimony: Occupational experts, colleagues, allied professionals and customers may be able to provide testimony of your performance. Your assessor will help you to identify the appropriate use of witnesses

Work Products: These are non-confidential records made, or contributed to, by you

Confidential Records: These may be used as evidence but must not be placed in your portfolio, they must remain in their usual location and be referred to in the assessor records in your portfolio eg Quotation documentation, Contractual documentation, Costing/pricing documentation, Personal development reviews.

Questioning/Professional Discussion: Questions may be oral or written. In each case the question and your answer will need to be recorded. Professional discussion should be in the form of a structured review of your practice with the outcomes captured by means of audiotape or a written summary. These are particularly useful to provide evidence that you know and understand principles which support practice, policies, procedures and legislation, and that you can critically evaluate their application. eg Codes of practice to be observed when preparing a quotation for the installation of an alarm system.

Original Certificates: Certificates of training, awards and records of attendance must be authentic, current and valid. Your assessor will also want to check the content of such training so that this can be matched to the standards and confirm that you have retained and can apply learning to practice, eg Certificate in Sales and Sales Management.

Case Studies, projects, assignments and candidate/reflective accounts of your work. These methods are most appropriately used to cover any outstanding areas in the knowledge requirement of your qualification. Occasionally, because an event happens rarely or may be difficult to observe, you may be able to use a candidate/ reflective account to provide some of the performance evidence for this unit.

Issue: 2.0

Date: April 2004

Overview

This unit defines the national standard of occupational competence for planning the installation of security, emergency and alarm systems to ensure the compliance with current regulations and industry codes of practice. This unit therefore sets out the standards for you to:

• Element SYS 6.1 Confirm details of system requirements

• Element SYS 6.2 Plan and co-ordinate the use of resources to install systems

• Element SYS 6.3 Organise first fixes of installations

You must make sure that you have all the information you need about the systems and sites to plan installations. You should confirm that systems are compatible with the site characteristics and that systems are capable of meeting their operational requirements. It is important that you are able to agree installation arrangements with customers, and particularly make alternative arrangements for any foreseeable problems.

You should know how to read and interpret technical specifications and customers' requirement. You should also know how to use common planning tools, such as Gantt, PERT and resource usage charts. This means that you know what activities are involved in installation systems, and typical times needed for their completion.

Element SYS 6.1 Confirm details of system requirements

Performance criteria

You must be able to:

- a confirm that you have all the **information and details** required to plan **system** installations and that it is current and accurate
- b confirm that specified systems are compatible with **site characteristics** and are capable of meeting operational requirements
- c confirm the availability of system equipment, cables and associated components
- d record details of **variations** from original specifications accurately and fully.

Knowledge criteria

You must know and understand:

- 1 current laws, regulations, standards and codes of practice relevant to the installation and operation of systems
- 2 how to read and interpret technical specifications and customers' requirements relevant to security, emergency or alarm systems
- 3 the principles of system design and installation, including how environmental factors can affect the operation of systems
- 4 the performance, limitations and availability of systems, equipment and components that are used in systems
- 5 the properties of commonly used building materials and how these could influence installation work
- 6 how to communicate with others to confirm details of system requirements.

Range statement

- information and details: technical specifications (including equipment and cable types); position of equipment and cable routes; customers' requirements; site details (including layout and measurements); contractual responsibilities
- 2 **systems**: new installations; extensions; modifications; on one of the following systems: Intruder Alarms; CCTV; Access control; Fire detection & Alarms
- 3 **site characteristics**: physical (number of floors, construction, condition, access, special features); environmental (temperature, humidity, heat sources, noise levels, light levels and sources, electromagnetic radiation, vibration, static electricity, use, throughput of people
- 4 variations in: systems equipment; site characteristics; customer requirements

Element SYS 6.2 Plan and co-ordinate the use of resources to install systems

Performance criteria

You must be able to:

- a confirm that you have all the relevant details of work activities required to plan system installations, and that they are accurate and complete
- b agree **working arrangements** with customers and third parties where necessary, that are mutually acceptable
- c confirm that all necessary **resources** will be available when required
- d anticipate and plan contingency action to deal with **potential problems** with work schedules or arrangements
- e produce **project plans** that are complete, accurate and feasible, and in formats that are suitable for their purpose.

Knowledge criteria

You must know and understand:

- 1 why it is important to have full and feasible plans in order to carry out efficient and effective installations
- 2 how to read and interpret technical specifications and customers' requirements relevant to security, emergency or alarm systems
- 3 the principles of project planning and how to use common planning tools, such as Gantt, PERT, resource and task usage charts
- 4 installation activities, their typical timescales, and how to plan and co-ordinate them
- 5 how to match skill requirements for installation with the skills of available personnel
- 6 the typical problems that can occur and how to plan to deal with them
- 7 how to communicate with others to plan and co-ordinate the use of resources.

Range statement

- 1 **working arrangements**: timescales; access; accommodation for stores and personnel (where required); availability of other trades people
- 2 resources: personnel; tools, equipment, cables and ancillary materials; licences and approval documents
- 3 potential problems related to: lack of resources; third party availability; access; site services
- 4 **project plans**: work schedules; supply of tools, equipment, cables and ancillary materials; informal

Element SYS 6.3 Organise first fixes of installations

Performance criteria:

You must be able to:

- a select the correct types, sizes and quantities of cables, containments and fixings to suit **systems** being installed, **site characteristics** and any special requirements of installations
- b select the correct types and sizes of cables to suit the electrical and signalling requirements and **complexity** of systems being installed
- c make available the correct quantities of cables, containments and fixings when required on sites
- d plan cable routes that take account of site characteristics and types of **building materials**
- e provide details of first fixes to the people involved with installations, in suitable formats and within agreed timescales.

Knowledge criteria:

You must know and understand:

- 1 current laws, regulations, standards and codes of practice relevant to cabling security, emergency or alarm systems
- 2 how to read and interpret technical specifications and site information relevant to selecting types, sizes and quantities of cable, containments, fixings and ancillary materials
- 3 electrical, signalling and transmission principles relevant to cabling security, emergency or alarm systems
- 4 the uses of different types of cables, containments and fixings commonly used in installations
- 5 the properties of typical building materials that could affect the fixing of cables.

Range statement

- **systems**: new installations; extensions; modifications; on one of the following systems: Intruder Alarms; CCTV; Access control; Fire detection & Alarms
- 2 **site characteristics**: physical layout and dimensions; use; construction materials; environmental factors; services isolation points
- 3 **complexity** of systems: point-to-point; multiple branching
- 4 **building materials**: hard (masonry, brick, concrete; metal); soft (plasterboard, timber, plastic)

Unit Evidence Requirements

Qualification Title Level 3 NVQ in Providing Security & Emergency Alarm Systems

Unit Number SYS 6

Unit Title Plan the Installation of security and emergency alarm systems and services

Evidence Requirements for this unit:

You must provide your assessor with evidence for **all** the performance criteria and **all** the knowledge and in accordance with the range statement.

The evidence must be provided in the following ways taking into account any of the special considerations below

Special Considerations:

Simulation is not permitted for this unit.

The nature of this unit means that **all** of your evidence must come from real work activities.

The evidence must reflect, at all times, the policies and procedures of the workplace, as linked to current legislation and the values and principles for good practice in the security, emergency and alarm systems industry.

Required sources of performance and knowledge evidence:

Observation is the **required** assessment method to be used to evidence some part of each element in this unit.

Usually, your assessor will observe you in real work activities and this is likely to provide most of the evidence for the performance criteria and range for the elements in this unit. Your assessor will also decide what knowledge and understanding you have demonstrated through your work practice.

Other sources of performance and knowledge evidence:

Your assessor will identify other sources of performance and knowledge evidence

Either

Where assessor observation was not required

Or

Where assessor observation has been used but your assessor needs to ensure that any outstanding performance criteria and knowledge requirements are met and that your performance is consistent

Witness Testimony: Occupational experts, colleagues, allied professionals and customers may be able to provide testimony of your performance. Your assessor will help you to identify the appropriate use of witnesses.

Work Products: These are non-confidential records made, or contributed to, by you, eg Health and Safety procedures, Manufacturers certificates.

Confidential Records: These may be used as evidence but must not be placed in your portfolio, they must remain in their usual location and be referred to in the assessor records in your portfolio. eg Specifications/revised specification, Contractual documentation, Permits/licences, Work schedules.

Questioning/Professional Discussion: Questions may be oral or written. In each case the question and your answer will need to be recorded. Professional discussion should be in the form of a structured review of your practice with the outcomes captured by means of audiotape or a written summary. These are particularly useful to provide evidence that you know and understand principles which support practice, policies, procedures and legislation, and that you can critically evaluate their application. eg Planning an alarm system installation to comply with the current regulations.

Original Certificates: Certificates of training, awards and records of attendance must be authentic, current and valid. Your assessor will also want to check the content of such training so that this can be matched to the standards and confirm that you have retained and can apply learning to practice, eg City and Guilds Knowledge of Security and Emergency Alarm Systems (1852) level 3 qualification.

Case Studies, projects, assignments and candidate/reflective accounts of your work: These methods are most appropriately used to cover any outstanding areas in the knowledge requirement of your qualification. Occasionally, because an event happens rarely or may be difficult to observe, you may be able to use a candidate/ reflective account to provide some of the performance evidence for this unit.

Issue: 2.0

Date: April 2004

Overview

This unit defines the national standard of occupational competence for carrying out audits of security, emergency or alarm systems and preparing reports of audits. The purpose of these audits will be to confirm system compliance with operational requirements and laws, regulations and codes of practice. This unit therefore sets out the standards for you to:

• Element SYS 7.1 Carry out technical audits of systems

Element SYS 7.2 Produce audit reports

You must be able to carry out sufficient and approved checks, tests and inspections to decide whether systems comply with their specification, operational and legal requirements, as well as relevant regulations and codes of practice. You should be able to recognise incidents of non-compliance and record accurate and complete details of your findings.

The audit reports that you prepare should provide all the required details, be accurate and in the approved format. The reports should also contain sufficient information about what corrective action is required to bring non-compliant systems into compliance. It is also important that you maintain the confidentiality of information, sites and systems.

You should know and understand the current laws, regulations and codes of practice against which audits must carried out. You should also know how to relate audits to system specifications and operational requirements.

Element SYS 7.1 Carry out technical audits of systems

Performance criteria

You must be able to:

- a carry out sufficient checks to determine whether installations comply with their specifications
- b carry out sufficient tests to determine whether **systems** meet their operational requirements
- c inspect systems to determine whether they comply with relevant current laws, regulations, standards and codes of practice
- d carry out all system audit checks, tests and inspections in line with approved procedures
- e recognise incidents of non-compliance of systems against specifications, operational requirements, relevant current laws, regulations, standards or codes of practice
- f record the results of your audit accurately and fully, including details of variances that affect system performance.

Knowledge criteria

You must know and understand:

- 1 current laws, regulations, standards and codes of practice relevant to the system being audited, and how to relate them to technical audits
- 2 how to relate technical audits to systems' specifications and their operational requirements
- 3 how to carry out technical audits of systems, using approved procedures
- 4 areas of common non-compliance of systems
- 5 why it is important to record accurate details of technical audits
- 6 what documents you need and what information you must record in them.

Range statement

You must be competent to deal with the following types of:

systems: new installations; extensions; modifications; on one of the following systems: Intruder Alarms; CCTV; Access control; Fire detection & Alarms

Element SYS 7.2 Produce audit reports

Performance criteria

You must be able to:

- a produce technical audit reports in the required **formats**
- b report all relevant findings of audits
- c give accurate and full details of audits, including corrective action to the **relevant person**, using **approved documents** and within required timescales
- d determine what corrective action should be taken to bring **non-compliant** systems into compliance
- e maintain the confidentiality of information, sites and systems in line with relevant codes of practice.

Knowledge criteria

You must know and understand:

- 1 how to relate technical audits to systems' specifications and their operational requirements
- 2 how to report technical audits of systems, using approved procedures
- 3 what types of corrective action can be taken to deal with non-compliances and how to report this
- 4 how to communicate verbally and in writing.

Range statement

- 1 **formats**: written; verbal
- 2 **relevant person**: your manager; customers; component manufacturers or suppliers
- 3 **approved documents**: quality assurance records; system records; work sheets
- 4 **non-compliant** through: mechanical faults; electrical faults; operational performance; equipment position

Unit Evidence Requirements

Qualification Title Level 3 NVQ in Providing Security & Emergency Alarm Systems

Unit Number SYS 7

Unit Title Audit security and emergency alarm systems

Evidence Requirements for this unit:

You must provide your assessor with evidence for **all** the performance criteria and **all** the knowledge and in accordance with the range statement.

The evidence must be provided in the following ways taking into account any of the special considerations below

Special Considerations:

Simulation is not permitted for this unit

The nature of this unit means that **all** of your evidence must come from real work activities.

The evidence must reflect, at all times, the policies and procedures of the workplace, as linked to current legislation and the values and principles for good practice in the security, emergency and alarm systems industry.

Required sources of performance and knowledge evidence:

Observation is the **required** assessment method to be used to evidence some part of each element in this unit.

Usually, your assessor or expert witness will observe you in real work activities and this is likely to provide most of the evidence for the performance criteria and range for the elements in this unit. Your assessor will also decide what knowledge and understanding you have demonstrated through your work practice.

Other sources of performance and knowledge evidence:

Your assessor will identify other sources of performance and knowledge evidence

Either

Where assessor observation was not required

Or

Where assessor observation has been used but your assessor needs to ensure that any outstanding performance criteria and knowledge requirements are met and that your performance is consistent

Witness Testimony: Occupational experts, colleagues, allied professionals and customers may be able to provide testimony of your performance. Your assessor will help you to identify the appropriate use of witnesses.

Work Products: These are non-confidential records made, or contributed to, by you.

Confidential Records: These may be used as evidence but must not be placed in your portfolio, they must remain in their usual location and be referred to in the assessor records in your portfolio. eg Audit reports, Inspection reports, Maintenance reports.

Questioning/Professional Discussion: Questions may be oral or written. In each case the question and your answer will need to be recorded. Professional discussion should be in the form of a structured review of your practice with the outcomes captured by means of audiotape or a written summary. These are particularly useful to provide evidence that you know and understand principles which support practice; policies, procedures and legislation, and that you can critically evaluate their application. eg Recognising incidents of non compliance when conducting an alarm system audit.

Original Certificates: Certificates of training, awards and records of attendance must be authentic, current and valid. Your assessor will also want to check the content of such training so that this can be matched to the standards and confirm that you have retained and can apply learning to eg Certificate in Technical Audit.

Case Studies, projects, assignments and candidate/reflective accounts of your work: These methods are most appropriately used to cover any outstanding areas in the knowledge requirement of your qualification. Occasionally, because an event happens rarely or may be difficult to observe, you may be able to use a candidate/ reflective account to provide some of the performance evidence for this unit.

Unit SYS 8 Make preparations and arrangements to install security, emergency or alarm systems

Issue: 2.0

Date: April 2004

Overview

This unit defines the national standard of occupational competence for preparing for and arranging the installation of security, emergency or alarm systems. This unit therefore sets out the standards for you to:

Element SYS 8.1 Confirm plans and agreements for installations
 Element SYS 8.2 Confirm the availability of equipment and materials
 Element SYS 8.3 Contribute to the preparation of installations

You must confirm working arrangements with customers and other third parties where necessary, including making sure that health and safety requirements will be met. Pre-installation preparations will also include making sure that the site services and facilities needed will be available.

You will have to confirm the availability of system equipment, material, tools and equipment. The tools and equipment should be in good working order, suitable for the work to be carried out and meet safety requirements. You should also make sure that you have all the documents you need for installations.

Your contribution to the preparation of installations requires you to confirm that the locations of system equipment and components comply with those specified. It is also for you to confirm that cable containments, routes and openings meet their specifications. You should set up safe and secure work areas, and erect any temporary access equipment as necessary.

Unit SYS 8

Make preparations and arrangements to install security, emergency or alarm systems

Element SYS 8.1

Confirm plans and agreements for installations

Performance criteria

You must be able to:

- a confirm **working arrangements** with customers and third parties where necessary, that are mutually acceptable
- b confirm access arrangements are suitable for installation staff, equipment and vehicles where required
- c confirm that **health and safety requirements** will be met
- d confirm the availability of suitable public services and **site** facilities that you need during installation work
- e make sure you have all the necessary **information** you need to carry out installations
- f anticipate and plan contingency action to deal with **potential problems** with installation work.

Knowledge criteria

You must know and understand:

- 1 why it is important to confirm and agree working arrangements with customers and third parties
- 2 why it is important to confirm suitable access for staff, equipment and vehicles
- 3 current laws, regulations, standards and codes of practice relevant to working on sites to install systems
- 4 the requirements of safe and secure storage of equipment and materials
- 5 what information you require to carry out installations, and what to do if it is not all available to you
- 6 the relevant health and safety requirements for working on sites
- 7 how to communicate with customers and third parties, and maintain their goodwill, particularly to avoid unnecessary disruption to customers' normal work activities.

Range statement

- 1 **working arrangements**: timescales; access; accommodation for stores and personnel (where required); availability of other trades people
- 2 **health and safety requirements** relevant to: legislation and regulations; site policies; your organisation
- 3 **sites**: commercial; industrial; retail; domestic; public premises
- 4 **information**: installation schedules; project plans; installation and operating manuals; licences; approvals; third party details
- 5 **potential problems** related to: lack of resources; third party availability; access; site services; disruption to customers' normal work activities

Unit SYS 8

Make preparations and arrangements to install security, emergency or alarm systems

Element SYS 8.2

Confirm the availability of equipment and materials

Performance criteria

You must be able to

- a confirm that all **system equipment and materials** needed for installations are available and match system specifications
- b confirm that all necessary **tools and equipment** are available, in good working order, are suitable for the job and comply with relevant safety requirements
- c report the details of faulty or dangerous tools or equipment to the relevant person
- d make sure you have all the necessary **documents** required to carry out installations
- e deal with any discrepancies in the availability of the correct system components, equipment, tools or documents before starting installation work.

Knowledge criteria

You must know and understand:

- 1 why it is important for the correct system components and ancillary materials to be correct and available, and how to confirm this
- 2 why it is important to check the safe and correct operation of tools and equipment, how to do this and how to deal with any that do not meet requirements
- 3 the capabilities and limitation of the tools and equipment that you use, and why it is important to use the correct tools and equipment
- 4 what documents you need to install systems and how you must use them.

Range statement

- 1 **system equipment and materials**: components; cables, containments fixings and ancillary materials
- 2 **tools and equipment**: hand tools; power tools; personal safety equipment; consumable items
- documents: system specifications; equipment schedules; administration (time sheets, stock control, accident and incident reports, quality assurance)

Unit SYS 8

Make preparations and arrangements to install security, emergency or alarm systems

Element SYS 8.3

Contribute to the preparation of installations

Performance criteria

You must be able to:

- a confirm locations of system equipment and components comply with those specified
- b confirm **cable containments**, routes and openings comply with those specified
- c select suitable fixing devices and methods that are appropriate to **sites** and **building materials**
- d set up safe and secure work areas that are convenient to installation staff and customers
- e erect **temporary access equipment** in line with safe practice, regulations and customers' restrictions
- f anticipate problems in preparing for installations and resolve them promptly in line with your organisations' procedures and guidelines.

Knowledge criteria

You must know and understand:

- 1 how to relate physical locations for system equipment and cabling arrangements to technical documents (installation specifications, cable and wiring diagrams, architectural and similar drawings, configuration charts)
- 2 the different devices and methods for fixing system components and cabling to typical building materials
- 3 current health and safety requirements relevant to working on installation sites, particularly working in confined spaces, working at heights, permits to work)
- 4 the different temporary access equipment available, and how to erect and use them safely
- 5 why it is important to set up safe and secure work areas, including for equipment, tools, etc
- 6 how to communicate with customers and maintain their goodwill.

Range statement:

- 1 **cable containments**: trunking; conduit; ducting; ceiling voids; trays; surface mounted
- 2 **sites**: commercial; industrial; retail; domestic; public premises
- 3 **building materials**: hard (masonry, brick, concrete; metal); soft (plasterboard, timber, plastic)
- 4 **temporary access equipment**: ladders; scaffolding; trestles; access towers

Unit SYS 8 Make preparations and arrangements to install security, emergency or alarm systems

Unit Evidence Requirements

Qualification Title Level 2 and 3 NVQ in Providing Security & Emergency Alarm Systems

Unit Number SYS 8

Unit TitleMake preparations and arrangements to install security and emergency alarm

systems

Evidence Requirements for this unit:

You must provide your assessor with evidence for **all** the performance criteria and **all** the knowledge and in accordance with the range statement.

The evidence must be provided in the following ways taking into account any of the special considerations below

Special Considerations:

Simulation is not permitted for this unit

The nature of this unit means that **all** of your evidence must come from real work activities.

The evidence must reflect, at all times, the policies and procedures of the workplace, as linked to current legislation and the values and principles for good practice in the security, emergency and alarm systems industry.

Required sources of performance and knowledge evidence:

Observation is the **required** assessment method to be used to evidence some part of each element in this unit.

Usually, your assessor will observe you in real work activities and this is likely to provide most of the evidence for the performance criteria and range for the elements in this unit. Your assessor will also decide what knowledge and understanding you have demonstrated through your work practice.

Other sources of performance and knowledge evidence:

Your assessor will identify other sources of performance and knowledge evidence

Either

Where assessor observation was not required

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Where assessor observation has been used but your assessor needs to ensure that any outstanding performance criteria and knowledge requirements are met and that your performance is consistent

Witness Testimony: Occupational experts, colleagues, allied professionals and customers may be able to provide testimony of your performance. Your assessor will help you to identify the appropriate use of witnesses.

Work Products: These are non-confidential records made, or contributed to, by you, eg Health and Safety procedures.

Confidential Records: These may be used as evidence but must not be placed in your portfolio, they must remain in their usual location and be referred to in the assessor records in your portfolio. eg Work schedules/plans, Specifications/Variations, Minutes of meetings, Work diaries.

Questioning/Professional Discussion: Questions may be oral or written. In each case the question and your answer will need to be recorded. Professional discussion should be in the form of a structured review of your practice with the outcomes captured by means of audiotape or a written summary. These are particularly useful to provide evidence that you know and understand principles which support practice, policies, procedures and legislation, and that you can critically evaluate their application, eg Ensuring the availability of public services and site facilities during security system installation work.

Original Certificates: Certificates of training, awards and records of attendance must be authentic, current and valid. Your assessor will also want to check the content of such training so that this can be matched to the standards and confirm that you have retained and can apply learning to practice, eg City and Guilds Knowledge of Security and Emergency Alarm Systems (1852) level 3 qualification, Manufacturers product training certificate.

Case Studies, projects, assignments and candidate/reflective accounts of your work. These methods are most appropriately used to cover any outstanding areas in the knowledge requirement of your qualification. Occasionally, because an event happens rarely or may be difficult to observe, you may be able to use a candidate/ reflective account to provide some of the performance evidence for this unit.

Issue: 2.0

Date: April 2004

Overview

This unit defines the national standard of occupational competence for installing the cabling and wiring for security, emergency or alarm systems. This unit therefore sets out the standards for you to:

Element SYS 9.1 Prepare to install cabling

Element SYS 9.2 Install cable and wiring containment systems

• Element SYS 9.3 Install cables and wires

Element SYS 9.4 Restore sites after installing cabling

Preparing to install cables and wiring means that you should make sure you have all the necessary information, cables, tools and equipment that you need. You should plan how you are going to install the cabling and wiring, and deal with any potential problems that could arise.

You must route and secure all cable containments, cables and wires according to system specifications, relevant regulations ands codes of practice, and without avoidable damage to building structures or surfaces. The fixing devices that you use must be suitable and appropriate for sites and building materials. Cables and wires must be free from damage or other factors that could impair their performance, and you should confirm they meet their operational requirements by applying appropriate tests. You must label installed cables and wires according to requirements and make sure that all containments are properly closed.

After installing cables, you must make good any damage to building structures and surfaces in line with agreed specifications. You should remove all unwanted tools, equipment, cable, waste and debris from sites and make permanent any temporary site arrangements that were necessary to install system cabling.

Element SYS 9.1 Prepare to install cabling

Performance criteria

You must be able to:

- a make sure you have the information you need to install cabling for **systems** and that it is accurate and complete
- b confirm that you have sufficient **cabling components** to complete the installation, including **cable types** and quantities
- c confirm that all necessary **tools and equipment** are available, in good working order, are suitable for the job and comply with relevant safety requirements
- d prepare **plans of action** for installing cable support and containment systems that comply with systems' specifications, relevant regulations and codes of practice
- e anticipate **potential problems** related to preparing to cable systems, and resolve them promptly in line with your organisations' procedures and guidelines.

Knowledge criteria

You must know and understand:

- 1 how to relate physical locations for system cabling arrangements to technical documents (installation specifications, cable and wiring diagrams, architectural and similar drawings, configuration charts)
- 2 why you need to think about how you are going to install cabling support and containment systems, particularly anticipating potential problems
- 3 the limits of your authority and responsibility, and how to get help when you need it
- 4 why it is important to check the safe and correct operation of tools and equipment, how to do this and how to deal with any that do not meet requirements
- 5 the capabilities and limitation of the tools and equipment that you use, and why it is important to use the correct tools and equipment
- 6 what documents you need to install systems and how to use them.

Range statement

- **systems**: new installations; extensions; modifications; on one of the following systems: Intruder Alarms; CCTV; Access control; Fire detection & Alarms
- 2 **cable types:** copper; coaxial; mineral
- 3 **cabling components**: cable; trunking; conduit; trays; fixings and fittings
- **4 tools and equipment**: hand tools; power tools; templates; personal safety equipment; consumable items
- 5 **plans of action**: sequence of preparing and installing cabling components; sketches; schedules of work

6	potential problems related to: lack of resources; access; site services; difficulties in preparing or installing cabling components

Element SYS 9.2 Install cable and wiring containment systems

Performance criteria

You must be able to:

- a route and secure all **cable containments** in line with **system** installation specifications, relevant regulations and codes of practice
- b use suitable containment fixing devices and methods that are appropriate to **sites** and **building materials**
- c make sure that installed containments are free from damage or internal obstruction so that **cables** can be installed without damage
- d use the correct **tools and equipment** safely to cut, assemble, join and de-burr containments
- e avoid unnecessary damage to building structures and surfaces
- f comply with relevant health and safety requirements while installing cable containments.

Knowledge criteria

You must know and understand:

- 1 how to relate physical locations for cable containment arrangements to technical documents (installation specifications, cable and wiring diagrams, architectural and similar drawings, configuration charts)
- 2 current regulations and codes of practice relevant to installing cable containments
- 3 how to measure typical cable containments, allowing for bends and joining, and minimising waste
- 4 the different types of cable containment fixing devices, how to select and use them
- 5 the properties of typical building materials and how to fix containments to them safely and securely
- 6 how to safely handle, cut, drill, join, assemble, de-burr and fix containments
- 7 the capabilities and limitation of the tools and equipment that you use, and why it is important to use the correct tools and equipment.

Range statement

- 1 **cable containments**: trunking; conduit; ducting; ceiling voids; trays; surface mounted
- 2 **systems**: new installations; extensions; modifications; on one of the following systems: Intruder Alarms; CCTV; Access control; Fire detection & Alarms
- 3 **sites**: commercial; industrial; retail; domestic; public premises
- 4 **building materials**: hard (masonry, brick, concrete; metal); soft (plasterboard, timber, plastic)
- 5 **cable** types: copper; coaxial; mineral

6	tools and equipment : hand tools; power tools; templates; personal safety equipment; consumable items

Element SYS 9.3 Install cables and wires

Performance criteria

You must be able to:

- a route and secure **cables** and **wires** in line with **system** installation specifications, relevant regulations and codes of practice
- b make sure that installed cables and wires are free from damage or any other factor that could impair their performance, or that of other equipment
- c confirm cables and wires meet their required operating performance, using approved testing methods
- d label installed cables and wires in line with relevant regulations, codes of practice and your organisation's requirements
- e comply with relevant health and safety requirements while installing cables and wires.

Knowledge criteria

You must know and understand:

- 1 how to relate physical locations for cables, wiring and termination points to technical documents (installation specifications, cable and wiring diagrams, architectural and similar drawings, configuration charts)
- 2 current regulations and codes of practice relevant to installing, terminating and labelling cables and wires
- 3 why it is important to comply with segregation requirements (for power and signalling)
- 4 how to measure cable and wires, allowing for bends and terminating, and minimising waste
- 5 the properties, handling requirements, and methods of securing the different types of cables and wires used in systems
- 6 how to test cables and wires against their required operating performance and what to do when these requirements are not met.

Range statement

- 1 **cable** types: copper; coaxial; mineral
- 2 wires: single strand; multi-strand
- **systems**: new installations; extensions; modifications; on one of the following systems: Intruder Alarms; CCTV; Access control; Fire detection & Alarms

Element SYS 9.4 Restore sites after installing cabling

Performance criteria

You must be able to:

- a close and seal cable containments and openings securely, in line with relevant codes of practice and suppliers' guidelines
- b make good any damage to building structures or **surfaces** in line with agreed specifications
- c report the details to the relevant person of any damage that you cannot repair
- d remove installation **tools and equipment** from sites after use, reporting the details to the relevant person of any that are unserviceable
- e return spare or reusable equipment and materials to their designated locations
- f dispose of **waste**, **debris and surplus** materials in line with approved procedures and relevant regulations and codes of practice
- g make permanent any temporary site arrangements on completion of installation work
- h comply with relevant health and safety requirements while restoring installation sites.

Knowledge criteria

You must know and understand:

- 1 why it is important to close all cable containment openings, and how to do this
- 2 why you must remove all unwanted items from sites after installation of cabling is complete
- 3 the house-keeping requirements at the sites where you install cabling
- 4 current regulations and codes of practice relevant to handling waste or debris material
- 5 why it is important to dispose of waste, debris and surplus material safely and in line with the relevant regulations and codes of practice
- 6 methods of repairing typical building surfaces and the standard of finish required (by customers or specifications.

Range statement

- 1 **surfaces**: hard (masonry, brick, concrete; metal); soft (plasterboard, timber, plastic)
- 2 **tools and equipment**: hand tools; power tools; temporary access equipment; personal safety equipment; consumable items
- 3 waste, debris and surplus that is: non-hazardous; hazardous

Unit Evidence Requirements

Qualification Title Level 2 and 3 NVQ in Providing Security and Emergency Alarm Systems

Unit Number SYS 9

Unit Title Install cabling for security and emergency alarm systems

Evidence Requirements for this unit:

You must provide your assessor with evidence for **all** the performance criteria and **all** the knowledge and in accordance with the range statement.

The evidence must be provided in the following ways taking into account any of the special considerations below

Special Considerations:

Simulation is not permitted for this unit

The nature of this unit means that **all** of your evidence must come from real work activities.

The evidence must reflect, at all times, the policies and procedures of the workplace, as linked to current legislation and the values and principles for good practice in the security, emergency and alarm systems industry.

Required sources of performance and knowledge evidence:

Observation is the **required** assessment method to be used to evidence some part of each element in this unit.

Usually your assessor will observe you in real work activities and this is likely to provide most of the evidence for the performance criteria and range for the elements in this unit. Your assessor will also decide what knowledge and understanding you have demonstrated through your work practice.

Other sources of performance and knowledge evidence:

Your assessor will identify other sources of performance and knowledge evidence

Either

Where assessor observation was not required

Or

Where assessor observation or has been used but your assessor needs to ensure that any outstanding performance criteria and knowledge requirements are met and that your performance is consistent

Witness Testimony: Occupational experts, colleagues, allied professionals and customers may be able to provide testimony of your performance. Your assessor will help you to identify the appropriate use of witnesses.

Work Products: These are non-confidential records made, or contributed to, by you, eg Health and Safety procedures.

Confidential Records: These may be used as evidence but must not be placed in your portfolio, they must remain in their usual location and be referred to in the assessor records in your portfolio. eg System records, Work schedules/plans, Specifications/Revisions/Variations.

Questioning/Professional Discussion: Questions may be oral or written. In each case the question and your answer will need to be recorded. Professional discussion should be in the form of a structured review of your practice with the outcomes captured by means of audiotape or a written summary. These are particularly useful to provide evidence that you know and understand principles which support practice, policies, procedures and legislation, and that you can critically evaluate their application. eg Planning the installation of security system cabling to comply with the current regulations.

Original Certificates: Certificates of training, awards and records of attendance must be authentic, current and valid. Your assessor will also want to check the content of such training so that this can be matched to the standards and confirm that you have retained and can apply learning to practice, eg City and Guilds Knowledge of Security and Emergency Alarm Systems (1852) level 3 qualification, Manufacturers product training certificates.

Case Studies, projects, assignments and candidate/reflective accounts of your work. These methods are most appropriately used to cover any outstanding areas in the knowledge requirement of your qualification. Occasionally, because an event happens rarely or may be difficult to observe, you may be able to use a candidate/ reflective account to provide some of the performance evidence for this unit.

Issue: 2.0

Date: April 2004

Overview

This unit defines the national standard of occupational competence for installing the equipment for security, emergency or alarm systems. This unit therefore sets out the standards for you to:

Element SYS 10.1 Install system equipment

Element SYS 10.2 Terminate cables and wires to equipment
 Element SYS 10.3 Restore sites after installing equipment

You must be able to position and mount system equipment according to installation specifications, using the correct fixing devices and methods. The position of equipment should optimise the operational requirements, maintenance access and customer requirements.

You should terminate cables and wires according to operational requirements, using approved termination methods, after which you should make sure that all terminations are electrically and mechanically sound. Where required, you should make certain that details of cable terminations are recorded fully and accurately.

After installing equipment, you must make good any damage to building structures and surfaces in line with agreed specifications. You should remove all unwanted tools, equipment, waste and debris from sites and make permanent any temporary site arrangements that were necessary to install system cabling.

Element SYS 10.1 Install system equipment

Performance criteria

You must be able to:

- a position and mount specified equipment in line with **system** installation specifications, relevant regulations and codes of practice
- b use suitable fixing devices and methods that are appropriate to the equipment, **sites** and **building materials**
- c make sure that the position of equipment optimises operational requirements, maintenance access and customer requirements
- d use the correct **tools and equipment** safely to position and mount equipment
- e make sure that equipment and mounting surfaces are unmarked or damaged after installation
- f comply with relevant health and safety requirements while installing system equipment.

Knowledge criteria

You must know and understand:

- 1 how to relate equipment and their physical locations to technical documents (installation specifications, cable and wiring diagrams, architectural and similar drawings, configuration charts)
- 2 current regulations and codes of practice relevant to installing equipment
- 3 the different types of devices and methods for mounting equipment, how to select and use them
- 4 the properties of typical building materials and how to fix equipment to them safely and securely
- 5 how to safely handle equipment during installation
- 6 the capabilities and limitation of the tools and equipment that you use, and why it is important to use the correct tools and equipment.

Range statement

- systems: new installations; extensions; modifications; on one of the following systems: Intruder Alarms; CCTV; Access control; Fire detection & Alarms
- 2 **sites**: commercial; industrial; retail; domestic; public premises
- 3 **building materials**: hard (masonry, brick, concrete; metal); soft (plasterboard, timber, plastic)
- 4 **tools and equipment**: hand tools; power tools; templates; personal safety equipment; consumable items

Element SYS 10.2 Terminate cables and wires to equipment

Performance criteria

You must be able to:

- a make sure you have the information you need to terminate **cables** and **wires** to **system** equipment
- b terminate cables and wires at correct termination points, using approved **termination methods**
- c confirm that all terminations are electrically and mechanically sound
- d comply with relevant regulations and codes of practice for terminating cables and wires
- e record details of terminations fully and accurately, including variations from original specifications.

Knowledge criteria

You must know and understand:

- 1 how to relate termination points to technical documents (installation specifications, cable and wiring diagrams, architectural and similar drawings, configuration charts)
- 2 current regulations and codes of practice relevant to terminating cables and wires
- 3 the properties of the different cables and wires used in systems, particularly how to handle them during terminating operations
- 4 the different methods for terminating cables and wires
- 5 how to confirm terminations are electrically and mechanically sound, and what to do if they are not
- 6 why it is important to record accurate and full details of terminations.

Range statement

- 1 **cable** types: copper; coaxial; mineral
- 2 wires: single strand; multi-strand
- **systems**: new installations; extensions; modifications; on one of the following systems: Intruder Alarms; CCTV; Access control; Fire detection & Alarms
- 4 **termination methods**: screw; insulation displacement; solder; wire-wrap; crimp; clamped

Element SYS 10.3 Restore sites after installing equipment

Performance criteria

You must be able to:

- a make good any damage to building structures or **surfaces** in line with agreed specifications
- b report the details to the relevant person of any damage that you cannot repair
- remove installation **tools and equipment** from sites after use, reporting the details to the relevant person of any that are unserviceable
- d return spare or reusable equipment and materials to their designated locations
- e dispose of **waste**, **debris and surplus** materials in line with approved procedures and relevant regulations and codes of practice
- f make permanent any temporary site arrangements on completion of installation work
- g comply with relevant health and safety requirements while restoring installation sites.

Knowledge criteria

You must know and understand:

- 1 why you must remove all unwanted items from sites after installation of equipment is complete
- 2 the house-keeping requirements at the sites where you install equipment
- 3 current regulations and codes of practice relevant to handling waste or debris material
- 4 why it is important to dispose of waste, debris and surplus material safely and in line with the relevant regulations and codes of practice
- 5 methods of repairing typical building surfaces and the standard of finish required (by customers or specifications.

Range statement

- 1 **surfaces**: hard (masonry, brick, concrete; metal); soft (plasterboard, timber, plastic)
- 2 **tools and equipment**: hand tools; power tools; temporary access equipment; personal safety equipment; consumable items
- 3 waste, debris and surplus that is: non-hazardous; hazardous

Unit Evidence Requirements

Qualification Title Level 2 and 3 NVQ in Providing Security and Emergency Alarm Systems

Unit Number SYS 10

Unit Title Install security and emergency alarm systems equipment

Evidence Requirements for this unit:

You must provide your assessor with evidence for **all** the performance criteria and **all** the knowledge and in accordance with the range statement.

The evidence must be provided in the following ways taking into account any of the special considerations below

Special Considerations:

Simulation is not permitted for this unit

The nature of this unit means that **all** of your evidence must come from real work activities. The evidence must reflect, at all times, the policies and procedures of the workplace, as linked to current legislation and the values and principles for good practice the security, emergency and alarm systems industry.

Required sources of performance and knowledge evidence:

Observation is the **required** assessment method to be used to evidence some part of each element in this unit.

Usually, your assessor will observe you in real work activities and this is likely to provide most of the evidence for the performance criteria and range for the elements in this unit. Your assessor will also decide what knowledge and understanding you have demonstrated through your work practice.

Other sources of performance and knowledge evidence:

Your assessor will identify other sources of performance and knowledge evidence

Either

Where assessor observation was not required

Or

Where assessor observation or has been used but your assessor needs to ensure that any outstanding performance criteria and knowledge requirements are met and that your performance is consistent

Witness Testimony: Occupational experts, colleagues, allied professionals and customers may be able to provide testimony of your performance. Your assessor will help you to identify the appropriate use of witnesses.

Work Products: These are non-confidential records made, or contributed to, by you, eg Health and Safety procedures.

Confidential Records: These may be used as evidence but must not be placed in your portfolio, they must remain in their usual location and be referred to in the assessor records in your portfolio, eg Specifications/revised specification, Work schedules Progress documentation.

Questioning/Professional Discussion: Questions may be oral or written. In each case the question and your answer will need to be recorded. Professional discussion should be in the form of a structured review of your practice with the outcomes captured by means of audiotape or a written summary. These are particularly useful to provide evidence that you know and understand principles which support practice, policies, procedures and legislation, and that you can critically evaluate their application. eg Optimising satisfactorily the needs of the customer and the operational requirements when installing an alarm system.

Original Certificates: Certificates of training, awards and records of attendance must be authentic, current and valid. Your assessor will also want to check the content of such training so that this can be matched to the standards and confirm that you have retained and can apply learning to practice, eg City and Guilds Knowledge of Security and Emergency Alarm Systems (1852) level 3 qualification, Manufacturers product training certificates.

Case Studies, projects, assignments and candidate/reflective accounts of your work. These methods are most appropriately used to cover any outstanding areas in the knowledge requirement of your qualification. Occasionally, because an event happens rarely or may be difficult to observe, you may be able to use a candidate/ reflective account to provide some of the performance evidence for this unit.

Unit SYS 11 Test and confirm operation of security, emergency or alarm systems

Issue: 2.0

Date: April 2004

Overview

This unit defines the national standard of occupational competence for confirming that security, emergency or alarm systems meet their operational requirements, and are ready for commissioning and handover. This unit therefore sets out the standards for you to:

- Element SYS 11.1 Carry out tests to confirm required system operation
- Element SYS 11.2 Carry out data transmission tests
- Element SYS 11.3 Prepare for system commission and handover

You must confirm that you have all the necessary information and equipment, which should be calibrated where necessary, that you need for carrying out operational tests on systems and equipment. The tests that you carry out should be appropriate for the systems and equipment and follow approved procedures and codes of practice. Where tests confirm that systems or equipment do not meet their required operational requirements, you must be able to take the appropriate action to remedy the situation. This could be something you did yourself, or reporting the details to another person for them to deal with.

When you prepare for systems commissioning and handing over, you must make sure that the system has been fully installed and meets its operational specification. All the necessary documents must be available, both for the system and for organisational administration. The site must be clear of tools, equipment, waste and surplus materials. You should be able to give customers and other third parties where necessary, full and accurate details of the arrangements for handover, maintenance and further work if appropriate.

Unit SYS 11 Test and confirm operation of security, emergency or alarm systems

Element SYS 11.1 Carry out tests to confirm required system operation

Performance criteria

You must be able to:

- a make sure you have full details of the **tests** that you are to carry out on **systems**
- b make sure that **test equipment** is working properly and calibrated where necessary before starting tests
- c confirm testing arrangements with customers and third parties where necessary, that are mutually acceptable
- d carry out required tests in line with approved procedures and codes of practice
- e take appropriate **action** to remedy situations where systems or equipment that do not meet their operational requirement
- f record **tests results** accurately and fully, using the approved recording methods and formats
- g provide tests results in the approved format to the relevant person, within agreed timescales
- h comply with relevant health and safety requirements while testing systems.

Knowledge criteria

You must know and understand:

- 1 the tests relevant to the systems and equipment you test
- 2 the expected operation of systems and equipment being tested, including the expected results of the tests you carry out
- 3 why it is important to make sure test equipment is working properly, and calibrated where necessary
- 4 the purpose of and how to use the relevant test equipment and interpret results
- 5 sufficient relevant electrical, electronic and systems theory for you to understand the purpose and results of the tests you carry out
- 6 the limits of your authority and responsibility in taking direct action to deal with equipment that does not meet its operational requirement
- 7 current regulations and codes of practice relevant to the operation and testing of systems
- 8 why it is important to record accurate details of test results and make them available to the relevant person
- 9 how to communicate with customers and third parties, and maintain their goodwill.

Range statement

- **tests**: visual; electrical; operational; induced faults
- **systems**: new installations; extensions; modifications; on one of the following systems: Intruder Alarms; CCTV; Access control; Fire detection & Alarms
- **test equipment**: insulation resistance; continuity; polarity; multi-meter; earth loop impedance; oscilloscope; sound level; data logging; specialised test equipment
- **action**: adjustment, repair or replacement you carry out; report details to another person
- **tests results**: acceptable; non-acceptable

Unit SYS 11 Test and confirm operation of security, emergency or alarm systems

Element SYS 11.2 Carry out data transmission tests

Performance criteria

You must be able to:

- a make sure you have full details of the **tests** that you are to carry out on **systems**
- b make sure that test equipment is working properly and calibrated where necessary before starting tests
- c confirm testing arrangements with customers and third parties where necessary, that are mutually acceptable
- d set up the correct **transmission** protocols to suit the system and equipment you are testing
- e carry out required tests in line with approved procedures and codes of practice
- f take appropriate **action** to remedy situations where systems or equipment that do not meet their operational requirement
- g record tests results accurately and fully, using the approved recording methods and formats
- h provide tests results in the approved format to the relevant person, within agreed timescales
- i comply with relevant health and safety requirements while testing systems.

Knowledge criteria

You must know and understand:

- 1 the tests relevant to the systems and equipment you test
- 2 the expected operation of systems and equipment being tested, including the expected results of the tests you carry out
- 3 why it is important to make sure test equipment is working properly, and calibrated where necessary
- 4 the purpose of and how to use the relevant test equipment and interpret results
- 5 sufficient relevant electrical, electronic and data transmission theory for you to understand the purpose and results of the tests you carry out
- 6 the limits of your authority and responsibility in taking direct action to deal with equipment that does not meet its operational requirement
- 7 current regulations and codes of practice relevant to the operation and testing of data transmission systems
- 8 why it is important to record accurate details of test results and make them available to the relevant person
- 9 how to communicate with customers and third parties, and maintain their goodwill.

Range statement

- **tests**: electronic; signalling; physical
- **systems**: new installations; extensions; modifications; on one of the following systems: Intruder Alarms; CCTV; Access control; Fire detection & Alarms
- **transmission** by: PSTN; ISDN; radio; direct wire
- **action**: adjustment, repair or replacement you carry out; report details to another person
- **tests results**: acceptable; non-acceptable

Unit SYS 11 Test and confirm operation of security, emergency or alarm systems

Element SYS 11.3 Prepare for system commission and handover

Performance criteria

You must be able to:

- a confirm that **systems** have been fully installed and meet the relevant operational specification
- b confirm that all **system documents** have been completed, collated and are available for handing over to the relevant person
- c confirm that all **administration documents** required by your organisation are complete, accurate and passed to the relevant person
- d confirm that **sites** are clear of tools, equipment, **waste** and surplus materials when systems are handed over to customers
- e give full and accurate information to customers and third parties where necessary about arrangements for handover, maintenance, further work and complaints
- f give the required details of systems and handover arrangements to alarm receiving centres where necessary.

Knowledge criteria

You must know and understand:

- 1 how to confirm that systems, their associated equipment and operational performance meet their specification
- 2 what documents and information should be given to customers and why it is important that customers have this
- 3 what administration documents are required by your organisation after completed installations and why it is important that these documents are complete and accurate
- 4 your organisation's arrangements for site clearance and restoration, handovers, maintenance, further work and customer complaints
- 5 how to communicate with customers, colleagues and third parties, such as alarm receiving centre staff.

Range statement

- systems: new installations; extensions; modifications; on one of the following systems: Intruder Alarms; CCTV; Access control; Fire detection & Alarms
- 2 **system documents** relating to: user operation (users' manuals); maintenance; special information
- 3 **administration documents**: time sheets; stock control; accident and incident reports; quality assurance
- 4 **sites**: commercial; industrial; retail; domestic; public premises

waste that is: non-hazardous; hazardous

Unit SYS 11 Test and confirm operation of security, emergency or alarm systems

Unit Evidence Requirements

Qualification Title Level 2 and 3 NVQ in Providing Security and Emergency Alarm Systems

Unit Number SYS 11

Unit Title Test and confirm operation of security and emergency alarm systems

Evidence Requirements for this unit:

You must provide your assessor with evidence for **all** the performance criteria and **all** the knowledge and in accordance with the range statement.

The evidence must be provided in the following ways taking into account any of the special considerations below

Special Considerations:

Simulation **is permitted** for parts of element 11.2 of this unit.

The following range requirement may be difficult to evidence by observation of naturally occurring activities in the workplace because they refer to contingencies or infrequently occurring activities. Tests/Transmissions/Signalling: eg establishing alarm receiving centre linkages.

The nature of this unit means that **most** of your evidence must come from real work activities. However simulation may only be used so long as it meets the criteria for its use. You will find this in the assessment guidance for this S/NVQ qualification.

The evidence must reflect, at all times, the policies and procedures of the workplace, as linked to current legislation and the values and principles for good practice in the security, emergency and alarm systems industry.

Required sources of performance and knowledge evidence:

Observation is the **required** assessment method to be used to evidence some part of each element in this unit.

Usually, your assessor will observe you in real work activities and this is likely to provide most of the evidence for the performance criteria and range for the elements in this unit. Your assessor will also decide what knowledge and understanding you have demonstrated through your work practice.

Other sources of performance and knowledge evidence

Your assessor will identify other sources of performance and knowledge evidence **Either**

Where assessor observation testimony was not required

Or

Where assessor observation has been used but your assessor needs to ensure that any outstanding performance criteria and knowledge requirements are met and that your performance is consistent

Witness Testimony: Occupational experts, colleagues, allied professionals and customers may be able to provide testimony of your performance. Your assessor will help you to identify the appropriate use of witnesses.

Work Products: These are non-confidential records made, or contributed to, by you, eg Health & Safety procedures.

Confidential Records: These may be used as evidence but must not be placed in your portfolio, they must remain in their usual location and be referred to in the assessor records in your portfolio. eg ARC statement, Commissioning sheet, System records.

Questioning/Professional Discussion: Questions may be oral or written. In each case the question and your answer will need to be recorded. Professional discussion should be in the form of a structured review of your practice with the outcomes captured by means of audiotape or a written summary. These are particularly useful to provide evidence that you know and understand principles which support practice, policies, procedures and legislation, and that you can critically evaluate their application. eg Procedures for recording test results to accord with current regulations.

Original Certificates: Certificates of training, awards and records of attendance must be authentic, current and valid. Your assessor will also want to check the content of such training so that this can be matched to the standards and confirm that you have retained and can apply learning to practice, eg City and Guilds Knowledge of Security and Emergency Alarm Systems (1852) level 3 qualification, Manufacturers product training certificates.

Case Studies, projects, assignments and candidate/reflective accounts of your work. These methods are most appropriately used to cover any outstanding areas in the knowledge requirement of your qualification. Occasionally, because an event happens rarely or may be difficult to observe, you may be able to use a candidate/ reflective account to provide some of the performance evidence for this unit.

Overview

This unit defines the national standard of occupational competence for bringing security, emergency or alarm systems into operational use by the customer, or user. This unit therefore sets out the standards for you to:

Element SYS 12.1 Bring systems into operation
 Element SYS 12.2 Hand over systems to customers

You should make sure that systems comply with their specification and are ready to be made operational. When you bring a system into use, you should make sure that it causes minimal disruption to customers and other relevant parties. You should follow approved commissioning procedures and take effective action to deal with any problems that arise through the commissioning process.

You should confirm suitable arrangements with customers and users for the handing over of systems, which includes demonstrating the use of systems. Your explanation of how to use systems should help users to become competent and confident in using the system. This means that you will have to give demonstrations and instructions at levels suitable to the abilities and authorities of intended users. After confirming that customers and users are ready to accept responsibility for a system, you should make sure that all relevant handover documents are completed and passed to the relevant persons.

Element SYS 12.1 Bring systems into operation

Performance criteria

You must be able to:

- a confirm that **systems** comply with their specification and are ready to be made operational
- b make sure you have all the relevant **documents** and information you need to commission systems
- c commission systems in line with approved procedures and sequence of operation
- d take suitable action to minimise potential disruption to customers' and other relevant third parties' normal work activities
- e take effective action to deal with any problems that arise during commissioning operations
- f complete commissioning documents as required and make them available to the relevant person within required timescale.

Knowledge criteria

You must know and understand:

- 1 what information you need to confirm systems are ready to be commissioned, and from where you get this information
- 2 how to confirm that systems and their performance meet the required operational specification
- 3 the operation of the systems that you commission
- 4 the processes and procedures you must use to bring systems into operation, and why you must apply them, including completing commissioning documents
- 5 how to communicate and work with other people who are involved in commissioning activities
- 6 what actions you can take to minimise disruption to customers and third parties
- 7 what action you can take to deal with problems that arise during commissioning operations.

Range statement

- systems: new installations; extensions; modifications; on one of the following systems: Intruder Alarms; CCTV; Access control; Fire detection & Alarms
- 2 **documents**: system specifications; checklists; user information

Element SYS 12.2 Hand over systems to customers

Performance criteria

You must be able to:

- a confirm arrangements have been made with **customers** to train **system users**, that are mutually acceptable
- b demonstrate and explain the operation of **systems** in a manner that helps users to become competent and confident in using the system effectively
- c encourage system users to demonstrate their ability to operate the system in a positive and supporting manner
- d give **demonstrations and instructions** at levels that are suitable to the abilities and authorities of intended users
- e confirm that customers are ready to accept responsibility for systems, in line with your organisation's procedures
- f make sure relevant **handover documents** are completed and passed to the relevant person within required timescales.

Knowledge criteria

You must know and understand:

- 1 the operation and features of the systems that you commission, and how to explain them to users, particularly in respect of users' authority
- 2 how to demonstrate the operation of systems to users in ways that encourage their confidence
- 3 how to make sure users are competent to use systems, and how to encourage users to clarify anything they do not fully understand
- 4 how to give instructions and demonstrations in a logical and methodical manner
- 5 how to communicate with customers and users, and maintain their goodwill.

Range statement

- 1 **customers**: existing; new
- 2 **system users**: individuals; groups; people with experience of the type of system being handed over; people with no experience of the type of system being handed over
- **systems**: new installations; extensions; modifications; on one of the following systems: Intruder Alarms; CCTV; Access control; Fire detection & Alarms
- **demonstrations and instructions** that are to: individuals; groups; people with experience of the type of system being handed over; people with no experience of the type of system being handed over
- 5 **handover documents**: users' instruction information; system records

Unit Evidence Requirements

Qualification Title Level 2 and 3 NVQ in Providing Security and Emergency Alarm Systems

Unit Number SYS 12

Unit Title Commission and handover security and emergency alarm systems

Evidence Requirements for this unit:

You must provide your assessor with evidence for **all** the performance criteria and **all** the knowledge and in accordance with the range statement.

The evidence must be provided in the following ways taking into account any of the special considerations below

Special Considerations:

Simulation **is permitted** for element 12.2 of this unit.

The following range requirement may be difficult to evidence by observation of naturally occurring activities in the workplace because they refer to infrequently occurring situations. Systems users: with experience of the type of system being handed over.

The nature of this unit means that **most** of your evidence must come from real work activities. However simulation may only be used so long as it meets the criteria for its use. You will find this in the assessment guidance for this S/NVQ qualification.

The evidence must reflect, at all times, the policies and procedures of the workplace, as linked to current legislation and the values and principles for good practice in the security, emergency and alarm systems industry.

Required sources of performance and knowledge evidence:

Observation is the **required** assessment method to be used to evidence some part of each element in this unit.

Usually your assessor will observe you in real work activities and this is likely to provide most of the evidence for the performance criteria and range for the elements in this unit. Your assessor will also decide what knowledge and understanding you have demonstrated through your work practice.

Other sources of performance and knowledge evidence:

Your assessor will identify other sources of performance and knowledge evidence

Either

Where assessor observation was not required

Or

Where assessor observation has been used but your assessor needs to ensure that any outstanding performance criteria and knowledge requirements are met and that your performance is consistent

Witness Testimony: Occupational experts, colleagues, allied professionals and customers may be able to provide testimony of your performance. Your assessor will help you to identify the appropriate use of witnesses.

Work Products: These are non-confidential records made, or contributed to, by you, eg Health and Safety procedures.

Confidential Records: These may be used as evidence but must not be placed in your portfolio, they must remain in their usual location and be referred to in the assessor records in your portfolio. eg Handover document, Commissioning sheet, System records.

Questioning/Professional Discussion: Questions may be oral or written. In each case the question and your answer will need to be recorded. Professional discussion should be in the form of a structured review of your practice with the outcomes captured by means of audiotape or a written summary. These are particularly useful to provide evidence that you know and understand principles which support practice, policies, procedures and legislation, and that you can critically evaluate their application. eg Handing over a new system to customers with no previous user experience.

Original Certificates: Certificates of training, awards and records of attendance must be authentic, current and valid. Your assessor will also want to check the content of such training so that this can be matched to the standards and confirm that you have retained and can apply learning to practice.eg Interpersonal Skills training certificate, Communication Skills certificate, Customer Service qualification.

Case Studies, projects, assignments and candidate/reflective accounts of your work. These methods are most appropriately used to cover any outstanding areas in the knowledge requirement of your qualification. Occasionally, because an event happens rarely or may be difficult to observe, you may be able to use a candidate/ reflective account to provide some of the performance evidence for this unit.

Unit SYS 13 Maintain the performance of security, emergency or alarm systems

Issue: 2.0

Date: April 2004

Overview

This unit defines the national standard of occupational competence for maintaining the operational performance of security, emergency or alarm systems. This could be through carrying out preventative maintenance, or carrying out component replacement of adjustment. It is also probable that you will have to liaise with customers or users during service visits. This unit therefore sets out the standards for you to:

•	Element SYS 13.1	Carry out preventative maintenance on systems
•	Element SYS 13.2	Restore system performance after component replacement or adjustment

Element SYS 13.3 Liaise with customers during service visits

You should make sure that you have all the information, tools and equipment necessary, and confirm suitable arrangements with customers, to carry out preventative maintenance. The maintenance that you carry out should be in line with agreed schedules, approved procedures and codes of practice. You should confirm that systems meet the relevant specification after carrying out maintenance.

You should always minimise the threat to the safety of security of premises whenever you carry out maintenance activities, as well as minimise the disruption to customers' normal business. This means that you should liaise with customers before and during service visits, particularly if anything you do could cause potential disruption to business, or if there is a reduction in system integrity.

Unit SYS 13 Maintain the performance of security, emergency or alarm systems

Element SYS 13.1 Carry out preventative maintenance on systems

Performance criteria

You must be able to:

- a make sure you have full details of the **maintenance** that you are to carry out on **systems**
- b make sure that **test equipment** is working properly and calibrated where necessary before starting tests
- c confirm maintenance arrangements with customers and third parties where necessary, that are mutually acceptable
- d carry out preventative maintenance at times that are convenient to your customers and that do not compromise safety or security of premises
- e carry out required maintenance in line with agreed schedules, approved procedures and codes of practice
- f recognise and report to the **relevant person** details of **operational changes** and component deterioration that could affect the performance of systems
- g confirm that system performance meets the relevant specification after maintenance activities
- h record results of tests and inspections accurately and fully, using the approved recording methods and formats
- i comply with relevant health and safety requirements while carrying out system maintenance.

Knowledge criteria

You must know and understand:

- 1 the tests and maintenance procedures relevant to the systems and equipment you maintain
- 2 the expected operational performance of systems and equipment being tested, including the expected results of the tests you carry out
- 3 why it is important to make sure test equipment is working properly, and calibrated where necessary
- 4 the purpose of and how to use the relevant test equipment and interpret results
- 5 sufficient relevant electrical, electronic and systems theory for you to understand the purpose and results of the tests you carry out
- 6 current regulations and codes of practice relevant to the operation, testing and maintenance of systems
- 7 why it is important to record accurate details of test results and maintenance visits, and make them available to the relevant person
- 8 how to communicate with customers and maintain their goodwill.

Range statement

You must be competent to:

1 **maintenance**: measurements, adjustments, calibrations, physical inspections, replacements

- **systems**: new installations; extensions; modifications; on one of the following systems: Intruder Alarms; CCTV; Access control; Fire detection & Alarms
- **test equipment**: insulation resistance; continuity; polarity; multi-meter; earth loop impedance; oscilloscope; sound level; data logging; specialised test equipment
- **relevant person**: customer; system users; in your organisation; third parties
- **operational changes**: customer use; site conditions

Unit SYS 13 Maintain the performance of security, emergency or alarm systems

Element SYS 13.2 Restore system performance after component replacement or adjustment

Performance criteria

You must be able to:

- a carry out **adjustments or replacements** at times that are convenient to your customers and that do not compromise safety or security of premises
- b carry out adjustments and replacements in line with approved procedures and codes of practice
- c make sure that equipment replacements and adjustments enable **systems** to meet the relevant performance requirement
- d label replaced components and remove from customers' premises, in line with approved procedures
- e record details of component replacements and adjustments accurately and fully, using the approved recording methods and formats
- f comply with relevant health and safety requirements while replacing system components or making adjustments.

Knowledge criteria

You must know and understand:

- why and how you must carry out adjustments and replacements to systems with minimum inconvenience to customers, as well as maintain the safety and security of premises
- 2 what adjustments and replacements you are authorised to make, and how to carry them out
- 3 the expected operation of systems and equipment on which you carry out adjustments and replacements
- 4 sufficient relevant electrical, electronic and systems theory for you to understand the purpose of the adjustments and replacements you carry out
- 5 current regulations and codes of practice relevant to the operation, testing and maintenance of systems
- 6 why it is important to record accurate details of adjustments, replacements and maintenance visits, and make them available to the relevant person
- 7 how to communicate with customers and maintain their goodwill.

Range statement

- 1 **adjustments or replacements** that: require system shutdown; can be carried out on live systems
- 2 **systems**: new installations; extensions; modifications; on one of the following systems: Intruder Alarms; CCTV; Access control; Fire detection & Alarms

Unit SYS 13 Maintain the performance of security, emergency or alarm systems

Element SYS 13.3 Liaise with customers during service visits

Performance criteria

You must be able to:

- a give customers sufficient warning of any action you are about to take so that potential disruption to their normal work activities is minimised
- b give customers sufficient details of any reduction of **system** integrity during **service activities** in order to minimise risks to safety and security of premises
- c provide customers or users with details of service activities you have carried out that they need to be aware of
- d advise customers of potential changes to system performance as a result of **operational changes** or component deterioration
- e maintain the goodwill of customers and users during service visits.

Knowledge criteria

- 1 You must know and understand:
- 2 how to communicate with customers and system users, and maintain their goodwill
- 3 your organisation's policy and procedures relevant to working at customer's premises
- 4 why and how You must carry service activities with minimum inconvenience to customers, as well as maintain the safety and security of premises
- 5 how system performance can be affected by operational changes or deterioration in system components
- 6 what information You must give customers or users about service activities that you have carried out.

Range statement

- **systems**: new installations; extensions; modifications; on one of the following systems: Intruder Alarms; CCTV; Access control; Fire detection & Alarms
- 2 **service activities**: disabling systems (partially or fully); changes to system configuration or operation; component replacements or adjustments
- 3 **operational changes**: customer use; site conditions

Unit SYS 13 Maintain the performance of security, emergency or alarm systems

Unit Evidence Requirements

Qualification Title Level 2 and 3 NVQ in Providing Security and Emergency Alarm Systems

Unit Number SYS 13

Unit TitleMaintain the performance or security and emergency alarm systems

Evidence Requirements for this unit:

You must provide your assessor with evidence for **all** the performance criteria and **all** the knowledge and in accordance with the range statement.

The evidence must be provided in the following ways taking into account any of the special considerations below

Special Considerations:

Simulation is not permitted for this unit

The nature of this unit means that **all** of your evidence must come from real work activities.

The evidence must reflect, at all times, the policies and procedures of the workplace, as linked to current legislation and the values and principles for good practice in the security, emergency and alarm systems industry.

Required sources of performance and knowledge evidence:

Observation is the **required** assessment method to be used to evidence some part of each element in this unit.

Usually, your assessor will observe you in real work activities and this is likely to provide most of the evidence for the performance criteria and range for the elements in this unit. Your assessor will also decide what knowledge and understanding you have demonstrated through your work practice.

Other sources of performance and knowledge evidence:

Your assessor will identify other sources of performance and knowledge evidence

Either

Where assessor observation was not required

Or

Where assessor observation has been used but your assessor needs to ensure that any outstanding performance criteria and knowledge requirements are met and that your performance is consistent

Witness Testimony: Occupational experts, colleagues, allied professionals and customers may be able to provide testimony of your performance. Your assessor will help you to identify the appropriate use of witnesses.

Work Products: These are non-confidential records made, or contributed to, by you, eg Health and Safety procedures.

Confidential Records: These may be used as evidence but must not be placed in your portfolio, they must remain in their usual location and be referred to in the assessor records in your portfolio. eg Audit reports, Preventative maintenance reports, Corrective maintenance reports.

Questioning/Professional Discussion: Questions may be oral or written. In each case the question and your answer will need to be recorded. Professional discussion should be in the form of a structured review of your practice with the outcomes captured by means of audiotape or a written summary. These are particularly useful to provide evidence that you know and understand principles which support practice, policies, procedures and legislation, and that you can critically evaluate their application. eg Expected operational performance and test results for a security system undergoing preventative maintenance.

Original Certificates: Certificates of training, awards and records of attendance must be authentic, current and valid. Your assessor will also want to check the content of such training so that this can be matched to the standards and confirm that you have retained and can apply learning to practice. eg Manufacturers system training certificates.

Case Studies, projects, assignments and candidate/reflective accounts of your work. These methods are most appropriately used to cover any outstanding areas in the knowledge requirement of your qualification. Occasionally, because an event happens rarely or may be difficult to observe, you may be able to use a candidate/ reflective account to provide some of the performance evidence for this unit.

Issue: 2.0

Date: April 2004

Overview

This unit defines the national standard of occupational competence for diagnosing and rectifying faults on security, emergency or alarm systems, and liaising with customers during repair visits. This unit therefore sets out the standards for you to:

Element SYS 14.1 Diagnose causes of unacceptable system performance

• Element SYS 14.2 Rectify faults in systems

• Element SYS 14.3 Liaise with customers during repair visits

You should make sure that you have all the information, tools and equipment necessary, and confirm suitable arrangements with customers, to carry out repairs. The diagnoses and repairs that you carry out should be in line with approved procedures and codes of practice. In particular, you should be able to use systematic and logical processes to carry out fault diagnoses. Any actions that you take to restore system performance should be suitable for the fault identified. You should confirm that systems meet the relevant specification after carrying out maintenance.

You should always minimise the threat to the safety of security of premises whenever you carry out repair activities, as well as minimise the disruption to customers' normal business. This means that you should liaise with customers before and during repair visits, particularly if anything you do could cause potential disruption to business, or if there is a reduction in system integrity

Element SYS 14.1 Diagnose causes of unacceptable system performance

Performance criteria

You must be able to:

- a confirm the **nature** of unacceptable **system** performance before diagnosing causes
- b make sure that **test equipment** is working properly and calibrated where necessary before starting diagnostic tests
- c take suitable action to minimise potential disruption to customers' normal work activities
- d carry out **diagnoses** to identify most likely causes of faults using logical and systematic processes
- e get help to diagnose causes of faults from appropriate persons when you need it
- f record diagnostic tests and results fully and accurately
- g comply with relevant health and safety requirements while diagnosing unacceptable system performance.

Knowledge criteria

You must know and understand:

- 1 why it is important to get sufficient information about system performance before starting to diagnose faults
- 2 why it is important to make sure test equipment is working properly, and calibrated where necessary
- 3 the required operational performance of systems and their components
- 4 what tests You must use to diagnose reported faults, how to carry them out, and how to use the appropriate test equipment
- 5 sufficient relevant electrical, electronic and systems theory for you to understand the purpose and results of the tests you carry out
- 6 current regulations and codes of practice relevant to the operation and testing of systems
- why it is important to record accurate details of reported faults, tests carried out and results, and make them available to the relevant person
- 8 how to communicate with customers and maintain their goodwill.

Range statement

- 1 **nature** of faults: permanent; intermittent; partial failure; full failure
- 2 **systems**: new installations; extensions; modifications; on one of the following systems: Intruder Alarms; CCTV; Access control; Fire detection & Alarms

- **test equipment**: insulation resistance; continuity; polarity; multi-meter; earth loop impedance; oscilloscope; sound level; data logging; specialised test equipment
- **diagnoses** through reference to: data logging equipment; users' reports; test results

Element SYS 14.2 Rectify faults in systems

Performance criteria

You must be able to:

- a confirm you have the **authority** to rectify faults before taking any **action**
- b carry out actions to restore performance at times that are convenient to your customers and that do not compromise safety or security of premises
- c carry out actions that are suitable to identified **faults** to restore system performance, in line with approved procedures
- d make sure **systems** meet the relevant performance requirement after rectifying faults
- e label replaced components and remove from customers' premises, in line with approved procedures
- f record details of action taken accurately and fully, using the approved recording methods and formats
- g comply with relevant health and safety requirements while rectifying faults in systems.

Knowledge criteria

You must know and understand:

- 1 what actions to rectify faults you are authorised to take, and how to carry them out
- 2 the expected operation of systems and equipment on which you rectify faults
- 3 sufficient relevant electrical, electronic and systems theory for you to rectify faults
- 4 current regulations and codes of practice relevant to the operation, testing and fault rectification of systems
- 5 why it is important to record accurate details of fault rectification, and make them available to the relevant person
- 6 how to communicate with customers and maintain their goodwill.

Range statement

- 1 **authority** from: customers; your organisation; third parties
- 2 **action** to restore performance: replacements; repairs; adjustments; reprogramming; reconfiguration
- **faults** in: control equipment; signalling equipment; detection devices; power supplies; cabling and wiring; software
- 4 **systems**: new installations; extensions; modifications; on one of the following systems: Intruder Alarms; CCTV; Access control; Fire detection & Alarms

Element SYS 14.3 Liaise with customers during repair visits

Performance criteria

You must be able to:

- 1 give customers sufficient warning of any action you are about to take so that potential disruption to their normal work activities is minimised
- 2 give customers sufficient details of any reduction of **system** integrity during **repair actions** in order to minimise risks to safety and security of premises
- 3 provide customers or users with details of repair activities you have carried out that they need to be aware of
- 4 advise customers of potential changes to system performance as a result of **operational changes** or component deterioration
- 5 maintain the goodwill of customers and users during service visits.

Knowledge criteria

You must know and understand:

- 1 how to communicate with customers and system users, and maintain their goodwill
- 2 your organisation's policy and procedures relevant to working at customer's premises
- why and how you must carry repair activities with minimum inconvenience to customers, as well as maintain the safety and security of premises
- 4 how system performance can be affected by operational changes or deterioration in system components
- 5 what information you must give customers or users about repair activities that you have carried out.

Range statement

- 1 **systems**: new installations; extensions; modifications; on one of the following systems: Intruder Alarms; CCTV; Access control; Fire detection & Alarms
- 2 **repair actions** to restore performance: replacements; repairs; adjustments; reprogramming; reconfiguration
- 3 **operational changes**: customer use; site conditions

Unit Evidence Requirements

Qualification Title Level 2 and 3 NVQ in Providing Security and Emergency Alarm Systems

Unit Number SYS 14

Unit Title Diagnose and rectify faults on security and emergency alarm systems

Evidence Requirements for this unit:

You must provide your assessor with evidence for **all** the performance criteria and **all** the knowledge and in accordance with the range statement.

The evidence must be provided in the following ways taking into account any of the special considerations below

Special Considerations:

Simulation is permitted for elements 14.1 and 14.2 of this unit.

The following range requirements may be difficult to evidence by observation of naturally occurring activities in the workplace because they refer to contingencies or infrequently occurring activities Ref.14.1. Nature of faults: Diagnoses, Ref.14.2. Faults in: Action to restore performance.

The nature of this unit means that **most** of your evidence must come from real work activities. However simulation may be used so long as it meets the criteria for its use. You will find this in the assessment guidance for this S/NVQ qualification.

The evidence must reflect, at all times, the policies and procedures of the workplace, as linked to current legislation and the values and principles for good practice in the security, emergency and alarm system industry.

Required sources of performance and knowledge evidence:

Observation is the **required** assessment method to be used to evidence some part of each element in this unit.

Usually, your assessor will observe you in real work activities and this is likely to provide most of the evidence for the performance criteria and range for the elements in this unit. Your assessor will also decide what knowledge and understanding you have demonstrated through your work practice.

Other sources of performance and knowledge evidence

Your assessor will identify other sources of performance and knowledge evidence

Either

Where assessor observation was not required

Or

Where assessor observation has been used but your assessor needs to ensure that any outstanding performance criteria and knowledge requirements are met and that your performance is consistent

Witness Testimony: Occupational experts, colleagues, allied professionals and customers may be able to provide testimony of your performance. Your assessor will help you to identify the appropriate use of witnesses.

Work Products: These are non-confidential records made, or contributed to, by you, eg Health and Safety procedures.

Confidential Records: These may be used as evidence but must not be placed in your portfolio, they must remain in their usual location and be referred to in the assessor records in your portfolio. eg ARC statements, Corrective maintenance reports, Internal audit reports.

Questioning/Professional Discussion: Questions may be oral or written. In each case the question and your answer will need to be recorded. Professional discussion should be in the form of a structured review of your practice with the outcomes captured by means of audiotape or a written summary. These are particularly useful to provide evidence that you know and understand principles which support practice, policies, procedures and legislation, and that you can critically evaluate their application eg Current regulations and codes of practice to be observed when testing and rectifying a security system fault.

Original Certificates: Certificates of training, awards and records of attendance must be authentic, current and valid. Your assessor will also want to check the content of such training so that this can be matched to the standards and confirm that you have retained and can apply learning to practice, eg Manufacturers system training certificates.

Case Studies, projects, assignments and candidate/reflective accounts of your work. These methods are most appropriately used to cover any outstanding areas in the knowledge requirement of your qualification. Occasionally, because an event happens rarely or may be difficult to observe, you may be able to use a candidate/ reflective account to provide some of the performance evidence for this unit.

Issue: 2.0

Date: April 2004

Overview

This unit defines the national standard of occupational competence for preparing and giving presentations to sell security, emergency or alarm systems. This unit therefore sets out the standards for you to:

Element SYS 15.1 Prepare to make sales presentations

• Element SYS 15.2 Give sales presentations

You should be able to confirm and clarify the needs of your customers, and plan to use presentational structures, methods and materials that are appropriate to addressing these needs. You should also be able to confirm that the resources you will need, such as audio-visual aids, flip charts, samples of products, or even help from colleagues, are available when you need them, as well as arrange for suitable backups when required. The presentation style could be formal or informal and be to existing or potential customers, but should contain all the relevant information needed to help customers make a decision about purchasing systems.

During presentations, you should give information clearly and in styles that are appropriate to your customers, as well as use presentation aids effectively. You would be expected to encourage customers to ask questions, your responses to which should promote purchasing decisions. Also during presentations you should be able to deal effectively with customers' objections and any issues that could prevent successful sales.

In addition to knowing how to prepare for and give presentations, you should know how to communicate with potential customers and encourage them to purchase your systems and services. You should therefore evaluate your presentations and identify areas where they could be improved.

Note:

This unit was imported from the Marketing and Sales Standards Setting Board (ref; C58) (The wording has been tailored to blend in with Skills for Security (formally SITO)'s standards, particularly the performance criteria, which were originally written in the passive voice. Also, range statements have been made more explicit, again to blend with Skills for Security (formally SITO)'s presentation of national occupational standards)

Element SYS 15.1 Prepare to make sales presentations

Performance criteria

You must be able to:

- a confirm and clarify your customers' particular needs and interests in products and services, to help prepare effective presentations
- b use **presentation variables** effectively when preparing presentations
- c make sure that the objectives of your presentations are clear and address the needs of your customers
- d prepare **presentations** that meet the requirements and expectations of your **customers**, and conform to your organisation's style
- e use structures, **methods** and materials that are appropriate to your presentations, and maximise the impact of the information that you provide
- f confirm the availability of **resources** that you need for presentations, including backups and alternatives
- g make sure that your presentations contain sufficient necessary **information**, suggestions and ideas to help customers make purchase decisions
- h make effective preparations to deal with potential variations and divergences from planned presentations.

Knowledge criteria

You must know and understand:

- 1 how to identify the objectives of sales presentations
- 2 how to prepare and structure sales presentations
- 3 the differences between formal and informal presentations
- 4 the differences between presenting to existing and potential customers
- 5 the variables that apply to presentations and how to use them effectively
- 6 the different resources that you could and should use for effective presentations
- 7 your organisation's products and services

Range statement

You must be competent to:

- 1 presentation variables related to presentation: length; objectives; audience size and composition
- 2 **presentations**: formal; informal
- 3 **customers**: existing; potential
- 4 **methods**: discussion; audio-visual; case studies; questions and answers

- **resources**: audio-visual aids; handouts; flip-charts and wipe boards; product samples; colleagues
- 6 **information**: copies of presentation material; technical specifications; proposals; customer testimonies.

Element SYS 15.2 Give sales presentations

Performance criteria

You must be able to:

- a present information clearly and in a style and manner that are appropriate to your **customers** and inspires their confidence
- b make sure the length, structure and content of your presentations conform to your plans
- c use appropriate **methods** and **resources** that enhance your **presentations**
- d encourage and respond to customers' questions and comments in a manner that promotes purchase decisions
- e provide or arrange for further **information** to be supplied to customers when this is appropriate
- f take opportunities where possible to gain commitments to purchase, or progress sales
- g evaluate your presentations against your objectives and plan to improve your future presentations.

Knowledge criteria

You must know and understand:

- 1 how to gain the confidence of your customers through your manner, appearance, knowledge and skills
- 2 the products and services that are the subject of your sales presentations
- 3 how to use presentation aids effectively and confidently
- 4 how to anticipate and respond to customers' questions and comments
- 5 how to recognise and deal effectively with customers' objections and issues that could prevent them making purchases
- 6 how to recognise and make use of selling opportunities
- 7 how to evaluate your presentations against their objectives and identify areas that could be improved.

Range statement

- 1 **customers**: existing; potential
- 2 **methods**: discussions, audio-visual; case studies; questions and answers
- 3 **resources**: audio-visual aids; handouts; flip-charts and wipe boards; product samples; colleagues
- 4 **presentations**: formal; informal
- 5 **information**: copies of presentation material; technical specifications; proposals; customer testimonies

Unit Evidence Requirements

Qualification Title Level 3 NVQ in Providing Security and Emergency Alarm systems

Unit Number SYS 15

Unit TitleMake presentations to sell security and emergency alarm systems

Evidence Requirements for this unit:

You must provide your assessor with evidence for **all** the performance criteria and **all** the knowledge and in accordance with the range statement.

The evidence must be provided in the following ways taking into account any of the special considerations below

Special Considerations:

Simulation is not permitted for this unit

The nature of this unit means that **all** of your evidence must come from real work activities.

The evidence must reflect, at all times, the policies and procedures of the workplace, as linked to current legislation and the values and principles for good practice in the security, emergency and alarm systems industry.

Required sources of performance and knowledge evidence:

Observation is the **required** assessment method to be used to evidence some part of each element in this unit.

Usually, your assessor or expert witness will observe you in real work activities and this is likely to provide most of the evidence for the performance criteria for the elements in this unit. Your assessor will also decide what knowledge and understanding you have demonstrated through your work practice.

Other sources of performance and knowledge evidence:

Your assessor will identify other sources of performance and knowledge evidence

Either

Where assessor observation was not required

Or

Where assessor observation has been used but your assessor needs to ensure that any outstanding performance criteria and knowledge requirements are met and that your performance is consistent

Witness Testimony: Occupational experts, colleagues, allied professionals and customers may be able

to provide testimony of your performance. Your assessor will help you to identify the appropriate use of witnesses.

Work Products: These are non-confidential records made, or contributed to, by you, eg Audio/Video presentation evidence, Presentation copies/documentation.

Confidential Records: These may be used as evidence but must not be placed in your portfolio, they must remain in their usual location and be referred to in the assessor records in your portfolio. eg Survey documentation, Costing/pricing documentation, Contractual documentation, Personal development reviews.

Questioning/Professional Discussion: Questions may be oral or written. In each case the question and your answer will need to be recorded. Professional discussion should be in the form of a structured review of your practice with the outcomes captured by means of audiotape or a written summary. These are particularly useful to provide evidence that you know and understand principles which support practice, policies, procedures and legislation, and that you can critically evaluate their application. eg Responding effectively to customers questions, comments and concerns.

Original Certificates: Certificates of training, awards and records of attendance must be authentic, current and valid. Your assessor will also want to check the content of such training so that this can be matched to the standards and confirm that you have retained and can apply learning to practice, eg Certificate in Sales and Sales Management.

Case Studies, projects, assignments and candidate/reflective accounts of your work. These methods are most appropriately used to cover any outstanding areas in the knowledge requirement of your qualification. Occasionally, because an event happens rarely or may be difficult to observe, you may be able to use a candidate/ reflective account to provide some of the performance evidence for this unit.

Issue: 2.0

Date: April 2004

Overview

This unit defines the national standard of occupational competence for negotiating sales of security, emergency or alarm systems, from preparation to agreeing terms of sales. This unit therefore sets out the standards for you to:

Element SYS 16.1 Prepare to negotiate sales
 Element SYS 16.2 Prepare sales proposals

Element SYS 16.3 Negotiate and agree terms of sale

Before negotiating sales of systems, you should confirm the levels of authority and responsibility of the customers' representatives with whom you will be negotiating. You should be certain that you have sufficient information about customers' requirements, and have pre-determined negotiating areas, to achieve successful sales agreements.

You should be able to prepare sales proposals that meet your customer's requirements, and provide full and accurate details of how your proposals will meet these requirements. Your sales proposals should take account of any areas where customers' requirements cannot be met, as well as anticipating any areas where concessions could be made. Proposals for systems should ensure that current legal and regulatory requirements are met, and comply with relevant codes of practice.

During actual negotiations, you should have all the information that you need, and act in a manner that enhances the image of your organisation. Be prepared to respond to customers' queries, resistance or objections, as well as situations where original requirements have changed. You should use negotiating strategies that have the potential to achieve successful sales to the mutual satisfaction of your customers and your organisation.

Note:

This unit was imported from the Marketing and Sales Standards Setting Board (ref; C53)

(The wording has been tailored to blend in with Skills for Security (formally SITO)'s standards, particularly the performance criteria, which were originally written in the passive voice. Also, range statements have been made more explicit, again to blend with Skills for Security (formally SITO)'s presentation of national occupational standards)

Element SYS 16.1 Prepare to negotiate sales

Performance criteria

You must be able to:

- a confirm the roles and levels of responsibility of **customers** representatives with whom you will negotiate sales
- b confirm you have sufficient and correct **customer information** to enable you to prepare and negotiate proposals that have the potential to result in sales
- c make sure the objectives for the outcomes of your sales negotiations are clear and comply with your organisation's requirements
- d decide the **negotiating areas** where concessions could be made to encourage your customers to purchase
- e confirm the availability of **resources** that you need for negotiating sales, including backups and alternatives
- f decide on negotiating strategies that are definite and have the potential for successful sales
- g comply with legal, regulatory and your organisation's requirements for advance proposals made to customers.

Knowledge criteria

You must know and understand:

- 1 how to confirm the roles and responsibilities of those with whom you negotiate sales, and why this is important
- 2 how to identify your customers' main requirements
- 3 why it is helpful to have additional information about your customers, particularly their negotiating position, where to get this information and how to use it in your negotiations
- 4 how to evaluate the potential of sales and develop strategies to support successful negotiations
- 5 the limits of your authorities in deciding what concessions you can make, and where you get other authorisation when necessary
- 6 how to decide what resources you could use in your negotiations and how to arrange their availability
- 7 the current legal and regulatory requirements for advance proposals made to customers, as well as those of your organisation.

Range statement

You must be competent to deal with the following types of:

1 **customers**: existing; potential

- **customer information**: system requirements; negotiating position; potential resistance to purchase; relevant background information
- **negotiating areas**: system specification; price; delivery; terms of payment; after sales service
- **resources**: audio-visual aids; handouts; flip-charts and wipe boards; product samples; colleagues

Element SYS 16.2 Prepare sales proposals

Performance criteria

You must be able to:

- a prepare proposals that meet your **customers'** requirements for **systems** and also support your organisation's sales objectives
- b get **agreement** for concessions where necessary before negotiating sales
- c provide full and accurate details of how your proposals will meet your customers' stated requirements
- d anticipate and prepare for any **negotiating areas** where concessions could be made to encourage your customers to purchase
- e anticipate and prepare for any areas where your proposals do not match your customers' requirements, or where there might be customer resistance
- f make sure that your proposals meet current legislation and regulatory requirements and comply with the relevant codes of practice
- g prepare sales proposals in **formats** that are appropriate for their purpose.

Knowledge criteria

You must know and understand:

- 1 your organisation's procedures and policies for making sales proposals, including levels of authority for concessions and related negotiating factors
- 2 current laws, regulations, standards and codes of practice relevant to the installation and operation of systems
- 3 the performance, costs, limitations and availability of systems, equipment and components that you could specify in your proposals
- 4 how to prepare sales proposals that contribute to successful sales of systems or services
- why it is important to be prepared and able to deal effectively with customers' potential queries, resistance or objections during sales negotiations.

Range statement

- **systems**: new installations; extensions; modifications; on one of the following systems: Intruder Alarms; CCTV; Access control; Fire detection & Alarms
- 2 customers: existing; potential
- 3 **agreement** from: your management; technical specialists
- 4 **negotiating areas**: system specification; price; delivery; terms of payment; after sales service **formats** of proposals: written; verbal

Element SYS 16.3 Negotiate and agree terms of sale

Performance criteria

You must be able to:

- a have all the relevant information that you need to negotiate sales of **systems**
- b carry out **sales negotiations** in a manner that enhances the image of your organisation and promotes goodwill with **customers**
- c provide **sales information** to customers clearly, accurately and fully
- d respond to customers' queries, resistance or objections positively and in a manner that helps customers to understand your proposals
- e recognise situations where customers' stated requirements have changed and respond in a manner that does not compromise your organisation
- f use negotiating strategies that are definite and have the potential for meeting your sales objectives
- g reach agreements on the supply of systems or services to the mutual satisfaction of your customers and your organisation
- h record the **outcomes** of your negotiations accurately, fully and in line with your organisation's requirements, particularly relating to confidentiality
- i pass on the details of sales negotiations to the relevant person and within required timescales.

Knowledge criteria

You must know and understand:

- 1 your organisation's procedures and policies for negotiating sales, including levels of authority for concessions and related negotiating factors
- 2 current laws, regulations, standards and codes of practice relevant to negotiating the sale of systems and their maintenance
- 3 the negotiating skills required to sell security systems
- 4 how to encourage customers to commit to making purchases
- 5 how to create conditions for successful sales, particularly in satisfying the needs of your customers and your organisation
- 6 how to recognise and resolve potential barriers to completing successful sales
- 7 what details of negotiations You must record, how they should be recorded and on to whom they should be passed.

Range statement

You must be competent to deal with the following types of:

systems: new installations; extensions; modifications; on one of the following systems: Intruder Alarms; CCTV; Access control; Fire detection & Alarms

- **sales negotiations** that are: verbal; written
- **customers**: existing; potential
- **sales information** related to: system specification; price; delivery; terms of payment; after sales service
- **outcomes** which are: successful sales; unsuccessful sales; arrangements for follow-up action

Unit Evidence Requirements

Qualification Title Level 3 NVQ in Providing Security and Emergency Alarm Systems

Unit Number SYS 16

Unit Title Negotiate sales of security and emergency alarm systems

Evidence Requirements for this unit:

You must provide your assessor with evidence for **all** the performance criteria and **all** the knowledge and in accordance with the range statement.

The evidence must be provided in the following ways taking into account any of the special considerations below

Special Considerations:

Simulation is not permitted for this unit

The nature of this unit means that **all** of your evidence must come from real work activities.

The evidence must reflect, at all times, the policies and procedures of the workplace, as linked to current legislation and the values and principles for good practice in security, emergency and alarm systems industry.

Required sources of performance and knowledge evidence:

Observation is the **required** assessment method to be used to evidence some part of each element in this unit.

Usually, your assessor or expert witness will observe you in real work activities and this is likely to provide most of the evidence for the performance criteria and range for the elements in this unit. Your assessor will also decide what knowledge and understanding you have demonstrated through your work practice.

Other sources of performance and knowledge evidence:

Your assessor will identify other sources of performance and knowledge evidence

Either

Where assessor observation was not required

Or

Where assessor observation has been used but your assessor needs to ensure that any outstanding performance criteria and knowledge requirements are met and that your performance is consistent

Witness Testimony: Occupational experts, colleagues, allied professionals and customers may be able to provide testimony of your performance. Your assessor will help you to identify the appropriate use of witnesses.

Work Products: These are non-confidential records made, or contributed to, by you, eg Presentation documentation.

Confidential Records: These may be used as evidence but must not be placed in your portfolio, they must remain in their usual location and be referred to in the assessor records in your portfolio. eg Correspondence, Quotations documentation, Costing/pricing documentation, Personal development reviews.

Questioning/Professional Discussion: Questions may be oral or written. In each case the question and your answer will need to be recorded. Professional discussion should be in the form of a structured review of your practice with the outcomes captured by means of audiotape or a written summary. These are particularly useful to provide evidence that you know and understand principles which support practice, policies, procedures and legislation, and that you can critically evaluate their application. eg Negotiating skills required to sell security systems.

Original Certificates: Certificates of training, awards and records of attendance must be authentic, current and valid. Your assessor will also want to check the content of such training so that this can be matched to the standards and confirm that you have retained and can apply learning to practice, eg Certificate in Sales and Sales Management, Certificate in Negotiating Skills.

Case Studies, projects, assignments and candidate/reflective accounts of your work. These methods are most appropriately used to cover any outstanding areas in the knowledge requirement of your qualification. Occasionally, because an event happens rarely or may be difficult to observe, you may be able to use a candidate/ reflective account to provide some of the performance evidence for this unit.

Issue: 2.0

Date: April 2004

Overview

This unit defines the national standard of occupational competence for demonstrating to customers and other users, how to operate security, emergency or alarm systems, as well as handing over systems to customers. This unit therefore sets out the standards for you to:

• Element SYS 17.1 Prepare to demonstrate the use and operation of systems

Element SYS 17.2 Instruct users in the operation of systems

Element SYS 17.3 Hand over systems to customers

Before you demonstrate or hand over a system to customers, you should confirm that the system is ready for handing over and that all the relevant documents are available. You should make the necessary arrangements with customers, and other third parties such as alarm receiving centre staff.

When you instruct and demonstrate to others how to use a system, your explanation should help users to become competent and confident in using the system. This means that you will have to give demonstrations and instructions at levels suitable to the abilities and authorities of intended users. You should also encourage users to demonstrate their ability to operate the system in a positive and supportive manner.

When you hand over a system to the customer, you should make sure that the site is clear of all installation waste, debris and surplus material, and that the relevant system documents are left with customers. You should give full and accurate information to customers and third parties where necessary, about arrangements for after-installation support. It is also important that throughout the demonstration and hand over process, that you maintain positive and professional relations with your customers

Element SYS 17.1 Prepare to demonstrate the use and operation of systems

Performance criteria

You must be able to:

- a confirm that **systems** and **sites** are ready for demonstration and hand over to customers
- b confirm that all relevant **documents** are complete and available before demonstration and handover
- c confirm **demonstration arrangements** with customers and third parties where necessary, that are mutually acceptable
- d organise **demonstrations and instructions** of system features and operations that are suitable to the abilities and authorities of intended users
- e make sure that **third parties** where appropriate, are informed of intended start and end of demonstrations
- f maintain the confidentiality of information, sites and systems in line with relevant codes of practice.

Knowledge criteria

You must know and understand:

- what you must do to make sure that systems are ready to be demonstrated and handed over to customers, including what documents you need
- 2 why you must have minimal interruptions to your demonstrations, and to the normal business of your customers, and how to arrange this
- 3 how to arrange demonstrations to users of different knowledge and experience of security, emergency or alarm systems, and why this is important
- 4 how to communicate with customers and third parties, and maintain their goodwill.

Range statement

- **systems**: new installations; extensions; modifications; on one of the following systems: Intruder Alarms; CCTV; Access control; Fire detection & Alarms
- 2 **sites**: commercial; industrial; retail; domestic; public premises
- 3 **documents**: system users' information; checklists; your own briefing notes
- 4 **demonstration arrangements**: timescales; access; minimal interruptions to demonstration and customers' normal business; names of those people attending; roles and levels of responsibility of people attending; availability of third parties where required

- **demonstrations and instructions** that are to: individuals; groups; people with experience of the type of system being handed over; people with no experience of the type of system being handed over
- 6 **third parties**: alarm receiving centre staff; other people who are not directly involved, but who could be affected by alarm activation

Element SYS 17.2 Instruct users in the operation of systems

Performance criteria

You must be able to:

- a confirm arrangements have been made with customers to instruct **system** users, that are mutually acceptable
- b make sure that **third parties** where appropriate, are informed of intended start and end of instructions and activation of alarms
- c demonstrate and explain the features and operation of systems in a manner that helps users to become competent and confident in using the system
- d encourage system users to demonstrate their ability to operate the system in a positive and supporting manner
- e give **demonstrations and instructions** that are suitable to the abilities and authorities of intended users.

Knowledge criteria

You must know and understand:

- the operation and features of the systems that you commission, and how to explain them to users, particularly in respect of users' authority
- 2 how to demonstrate the operation of systems to users in ways that encourage their confidence
- 3 how to make sure users are competent to use systems, and how to encourage users to clarify anything they do not fully understand
- 4 how to give instructions and demonstrations in a logical and methodical manner
- 5 how to communicate with customers and users, and maintain their goodwill.

Range statement

- **systems**: new installations; extensions; modifications; on one of the following systems: Intruder Alarms; CCTV; Access control; Fire detection & Alarms
- 2 **third parties**: alarm receiving centre staff; other people who are not directly involved, but who could be affected by alarm activation
- demonstrations and instructions to: individuals; groups; people with experience of the type of system being handed over; people with no experience of the type of system being handed over

Element SYS 17.3 Hand over systems to customers

Performance criteria

You must be able to:

- a confirm that sites have been cleared of all waste, debris and surplus material
- b confirm that customers are satisfied with finish to surfaces damaged during installation, or are satisfied with agreed action to make good any unsatisfactory work
- c confirm that all **system documents** have been completed, collated and are available for handing over to the relevant person
- d confirm that all **administration documents** required by your organisation are complete, accurate and passed to the relevant person within required timescales
- e give full and accurate information to customers and third parties where necessary about arrangements for after-installation support
- f confirm that customers accept responsibility for systems, in line with your organisation's procedures
- g maintain positive and professional relations with customers at all times.

Knowledge criteria

You must know and understand:

- 1 why it is important that sites are cleared of all waste, debris and material before handing systems over to customers
- 2 what documents have to be completed on handover, and who has which documents
- 3 why it is important that your organisation's administration documents are completed and passed to the relevant person within required timescales
- 4 how to deal with potential problems relating to system features or operation, and issues relating to installation work
- why it is important and how to maintain positive and professional relationships with customers, including confirming what after-installation support is made available to them by your organisation.

Range statement

- 1 **sites**: commercial; industrial; retail; domestic; public premises
- 2 waste, debris and surplus material that is: non-hazardous; hazardous
- 3 **system documents** relating to: user operation (users' manuals); maintenance; special information

4	administration documents relating to: completion; users' agreements; service contracts; quality assurance

Unit Evidence Requirements

Qualification Title Level 3 in Providing Security and Emergency Alarm Systems

Unit Number SYS 17

Unit Title Demonstrate the use and handover of security and emergency alarm systems to

customers

Evidence Requirements for this unit:

You must provide your assessor with evidence for **all** the performance criteria and **all** the knowledge and in accordance with the range statement.

The evidence must be provided in the following ways taking into account any of the special considerations below

Special Considerations:

Simulation is not permitted for this unit

The nature of this unit means that **all** of your evidence must come from real work activities.

The evidence must reflect, at all times, the policies and procedures of the workplace, as linked to current legislation and the values and principles for good practice in the security, emergency and alarm systems industry.

Required sources of performance and knowledge evidence:

Observation is the **required** assessment method to be used to evidence some part of each element in this unit.

Usually your assessor or expert witness will observe you in real work activities and this is likely to provide most of the evidence for the performance criteria for the elements in this unit. Your assessor will also decide what knowledge and understanding you have demonstrated through your work practice.

Other sources of performance and knowledge evidence:

Your assessor will identify other sources of performance and knowledge evidence

Either

Where assessor observation was not required

Or

Where assessor observation has been used but your assessor needs to ensure that any outstanding

performance criteria and knowledge requirements are met and that your performance is consistent.

Witness Testimony: Occupational experts, colleagues, allied professionals and customers may be able to provide testimony of your performance. Your assessor will help you to identify the appropriate use of witnesses.

Work Products: These are non-confidential records made, or contributed to, by you, eg Presentation documentation.

Confidential Records: These may be used as evidence but must not be placed in your portfolio, they must remain in their usual location and be referred to in the assessor records in your portfolio. eg Handover documents, User documentation, Correspondence.

Questioning/Professional Discussion: Questions may be oral or written. In each case the question and your answer will need to be recorded. Professional discussion should be in the form of a structured review of your practice with the outcomes captured by means of audiotape or a written summary. These are particularly useful to provide evidence that you know and understand principles which support practice, policies, procedures and legislation, and that you can critically evaluate their application eg Importance of having completed system and administration documentation when handing over a new or revised security system.

Original Certificates: Certificates of training, awards and records of attendance must be authentic, current and valid. Your assessor will also want to check the content of such training so that this can be matched to the standards and confirm that you have retained and can apply learning to practice, eg Certificate in Sales and Sales Management, Interpersonal Skills training Certificate.

Case Studies, projects, assignments and candidate/reflective accounts of your work. These methods are most appropriately used to cover any outstanding areas in the knowledge requirement of your qualification. Occasionally, because an event happens rarely or may be difficult to observe, you may be able to use a candidate/ reflective account to provide some of the performance evidence for this unit.

Unit SYS 18 Lead the work of teams and individuals to achieve objectives

Issue: 2.0

Date: April 2004

Overview

This unit defines the national standard of occupational competence for leading the work of installation teams. It would apply to team leaders, or installation site supervisors, as it covers planning work activities, assessing work done and giving feedback to teams. This unit therefore sets out the standards for you to:

Element SYS 18.1 Plan work for teams and individuals
 Element SYS 18.2 Assess the work of teams and individuals
 Element SYS 18.3 Provide feedback on work to teams and individuals

When planning the work for teams and individuals, you should take account of individual abilities and development needs and encourage team members to contribute. Your plans and schedules should be consistent with the team's objectives, and be realistic and achievable. You should explain plans and work activities to team members in sufficient detail to ensure they understand what is to be done.

You should be able to assess the work carried out by teams and individuals against clear and agreed criteria. After assessing work activities, you should give feedback that is objective and constructive, in a manner that encourages improvement in performance where necessary.

Note:

This unit is imported from the Management sector (ref: MCI unit C12).

(The wording has been tailored to blend in with Skills for Security (formally SITO)'s standards, particularly the performance criteria, which were originally written in the passive voice.)

Unit SYS 18 Lead the work of teams and individuals to achieve objectives

Element SYS 18.1 Plan work for teams and individuals

Performance criteria

You must be able to:

- a give opportunities to **team members** to contribute to the planning and organisation of work
- b confirm that **plans** are consistent with team objectives and cover all personnel within your area of responsibility
- c confirm plans and schedules are realistic and achievable within organisational constraints
- d take account of individuals' abilities and development needs in your plans and allocation of work activities
- e explain plans and work activities in sufficient detail and at a level and pace appropriate to the individuals concerned
- f confirm individuals' understanding of plans and work activities at appropriate intervals
- g update plans regularly and take account of individual, team and organisational changes.

Knowledge criteria

You must know and understand:

- 1 reasons why the planning of work activities is essential to organisational effectiveness and the manager's role and responsibilities in relation to this
- 2 the principles which underpin good practice in planning work activities
- 3 how to develop realistic and achievable work plans for teams and individuals both in the short and medium term
- 4 the difference between someone who is within your supervision or management control and someone for whom you have functional responsibility and the implications this difference may have for planning work.

Range statement

- 1 team members: people for whom you have a line responsibility; people for whom you have a functional responsibility
- 2 **plans**: short-term; medium-term
- 3 **organisational constraints**: organisational objectives; organisational policies; resources

Unit SYS 18 Lead the work of teams and individuals to achieve objectives

Element SYS 18.2 Assess the work of teams and individuals

Performance criteria

You must be able to:

- a communicate the **purpose** of assessment clearly to all involved
- b give opportunities to team members to assess their own work
- c carry out **assessment** of work at times most likely to maintain and improve effective performance
- d base assessments are based on sufficient, valid and reliable **information**
- e carry out assessments objectively against clear, agreed criteria.

Knowledge criteria

You must know and understand:

- 1 reasons why it is important to assess the ongoing work of teams and individuals and your role and responsibility in relation to this
- 2 how to assess the work of teams and individuals and processes in the workplace which can support such assessment
- 3 the range of purposes of work assessment, why they may play a role in an organisation and how they apply to your own situation
- 4 why it is important to be clear oneself about the purpose of assessment and to communicate this effectively to those involved.

Range statement

- 1 **purpose**: assurance of achievement of objectives; assurance of quality and meeting customer requirements; appraisal of team or individual performance; recognition of competent performance and achievement
- 2 **assessments**: specific to one activity or objective; general in respect of overall performance
- 3 **information**: qualitative; quantitative

Unit SYS 18 Lead the work of teams and individuals to achieve objectives

Element SYS 18.3 Provide feedback on work to teams and individuals

Performance criteria

You must be able to:

- a provide **feedback** to team members at a **time** and place and in a **form** and manner most likely to maintain and improve performance
- b give feedback that is clear and based on an objective assessment of team members' work
- c acknowledge achievement and provide constructive suggestions and encouragement for improving work
- d give feedback in a manner which shows respect for individuals and maintains confidentiality
- e give opportunities to team members to respond to feedback and recommend how their work could be improved.

Knowledge criteria

You must know and understand:

- 1 reasons why it is important to provide clear and accurate feedback to team members on their performance and your role and responsibilities in relation to this
- 2 methods of motivating staff and gaining their commitment
- 3 methods which may be used to provide both positive and negative feedback to staff on their performance
- 4 how to select methods of providing feedback and a time and a place which are appropriate to the people involved and the context
- 5 why good communication skills are essential when providing feedback and how to communicate effectively in these situations.

Range statement

- 1 feedback: positive; negative
- 2 **time and place**: as part of normal day-to-day activities; when required to maintain motivation, morale and effectiveness; during formal appraisals; at team meetings and briefings; during confidential discussions of work
- 3 **form** in which feedback is given: oral; written

Unit SYS 18 Lead the work of teams and individuals to achieve objectives

Unit Evidence Requirements

Qualification Title Level 3 in Providing Security and Emergency Alarm Systems

Unit Number SYS 18

Unit Title Lead the work of teams and individuals to achieve objectives

Evidence Requirements for this unit:

You must provide your assessor with evidence for **all** the performance criteria and **all** the knowledge and in accordance with the range statement.

The evidence must be provided in the following ways taking into account any of the special considerations below

Special Considerations:

Simulation is not permitted for this unit

The nature of this unit means that **all** of your evidence must come from real work activities.

The evidence must reflect, at all times, the policies and procedures of the workplace, as linked to current legislation and the values and principles for good practice in the security, emergency and alarm system industry.

Required sources of performance and knowledge evidence:

Observation is the **required** assessment method to be used to evidence some part of each element in this unit.

Usually, your assessor will observe you in real work activities and this is likely to provide most of the evidence for the performance criteria and range for the elements in this unit. Your assessor will also decide what knowledge and understanding you have demonstrated through your work practice.

Other sources of performance and knowledge evidence:

Your assessor will identify other sources of performance and knowledge evidence

Either

Where assessor observation was not required

Or

Where assessor observation has been used but your assessor needs to ensure that any outstanding performance criteria and knowledge requirements are met and that your performance is consistent

Witness Testimony: Occupational experts, colleagues, allied professionals and customers may be able to provide testimony of your performance. Your assessor will help you to identify the appropriate use of witnesses.

Work Products: These are non-confidential records made, or contributed to, by you, eg Presentation documentation, Charts/Plans.

Confidential Records: These may be used as evidence but must not be placed in your portfolio, they must remain in their usual location and be referred to in the assessor records in your portfolio. eg Work schedule, Minutes of meetings, Correspondence.

Questioning/Professional Discussion: Questions may be oral or written. In each case the question and your answer will need to be recorded. Professional discussion should be in the form of a structured review of your practice with the outcomes captured by means of audiotape or a written summary. These are particularly useful to provide evidence that you know and understand principles which support practice, policies, procedures and legislation, and that you can critically evaluate their application. eg Skills required to develop team work.

Original Certificates: Certificates of training, awards and records of attendance must be authentic, current and valid. Your assessor will also want to check the content of such training so that this can be matched to the standards and confirm that you have retained and can apply learning to practice, eg Certificate in Leadership Skills, Interpersonal Skills training certificate.

Case Studies, projects, assignments and candidate/reflective accounts of your work. These methods are most appropriately used to cover any outstanding areas in the knowledge requirement of your qualification. Occasionally, because an event happens rarely or may be difficult to observe, you may be able to use a candidate/ reflective account to provide some of the performance evidence for this unit.

Issue: 2.0

Date: April 2004

Overview

This unit defines the national standard of occupational competence for monitoring and controlling work against contractual, quality, legal and progress requirements. It would apply to team leaders, site supervisors, or anyone else having the responsibility for controlling work. This unit therefore sets out the standards for you to:

•	Element SYS 19.1	Control contracts against agreed quality standards
•	Element SYS 19.2	Maintain contract compliance with legal and statutory requirements
•	Element SYS 19.3	Control contract progress against agreed programmes
•	Element SYS 19.4	Control contract quantities and costs

Note:

This unit is based on a unit from the Construction Industry Council (ref: D31). A fifth element in the CIC standards has not been imported, as it is felt to be not relevant to the installation of security, emergency and alarm systems. This unit is therefore considered to be a new unit.

(The wording of the four imported elements has been tailored to blend in with Skills for Security (formally SITO)'s standards, particularly the knowledge criteria, which are presented as questions in the CIC standards.)

Element SYS 19.1 Control contracts against agreed quality standards

Performance criteria

You must be able to:

- a identify **quality standards** from available information and pass them to **people responsible** for their implementation, before they start work
- b specify clearly and unambiguously, the responsibilities which individuals have for maintaining **quality standards**
- c set up **systems** for inspecting and controlling the quality of **work** and recording the outcomes
- d check regularly, that **work** conforms to the design requirements and the specified **quality standards**
- e identify **work** which fails to meet the requirements and specified **quality standards** and implement corrective action
- f ask for unacceptable **quality standards** to be corrected and notify decision makers if this is not done within a reasonable time
- g inform decision makers regularly about significant variations in **quality standards**, programme and safety implications, and suggest the decisions which they need to make and actions they need to take
- h identify specifications which conflict with statutory and legal requirements and refer them to decision makers for modification
- i identify improvements from feedback received and recommend them to decision makers
- j agree amendments to the contract quality requirements and specifications and record them accurately

Knowledge criteria

- 1 what you identify as **quality standards**
- 2 what you identify as specifications which conflict with statutory and legal requirements
- 3 how to ask for unacceptable **quality standards** to be corrected and notify decision makers if **quality standards** are not corrected within a reasonable time
- 4 how to inform decision makers about significant variations in **quality standards**, programme and safety implications
- 5 how to refer specifications which conflict with statutory and legal requirements to decision makers
- 6 how to record amendments to the contract quality requirements and specifications

- how to suggest the decisions which decision makers need to make about significant variations in **quality standards** and actions they need to take
- 8 how to specify the responsibilities which individuals have for maintaining quality standards
- 9 how to agree amendments to the contract quality requirements and specifications
- 10 how to pass **quality standards** on to **people responsible** for implementing them before they start work on the contract
- 11 what to identify as improvements from feedback received
- 12 how to recommend improvements to decision makers
- 13 how to specify the responsibilities which individuals have for maintaining **quality standards**
- 14 what to identify as work which fails to meet the requirements and specified quality standards
- 15 how to check that **work** conforms to the design requirements and the specified **quality standard**
- 16 how to implement corrective action where **work** fails to meet the requirements and specified **quality standards**
- 17 how to set up **systems** for inspecting and controlling the quality of **work** and recording the outcomes

- quality standards: statutory requirements; project specifications; British Standards; International Standards; Codes of Practice; organisation standards; trade advisory guidance and best practice
- 2 **people responsible**: the client; contractors; consultants; sub-contractors; suppliers; workforce
- **systems**: visual inspection; comparison with design requirements; comparison with standard documentation; checking manufacturers documentation; checking delivery notes; sampling and mock-ups; testing; site inspection reports; contractors reports; site meetings
- 4 work: materials and components and their use; methods of construction

Element SYS 19.2 Maintain contract compliance with legal and statutory requirements

Performance criteria

You must be able to:

- a identify **legal and statutory requirements** from available information and clarify them where there is uncertainty
- b brief the workforce about their **legal and statutory responsibilities** to those responsible for implementing them before they start work on the contract
- c develop and implement **monitoring systems** , collecting information regularly and summarise it accurately
- d identify situations which do not comply with **legal and statutory requirements**, investigate the circumstances thoroughly and take appropriate **corrective action**
- e identify any new **legal and statutory requirements** which may have an impact on the project, summarise the important details and pass this on to **people who have an interest**
- f complete statutory returns accurately and on time

Knowledge criteria

- 1 what you identify as legal and statutory requirements
- 2 how to clarify **legal and statutory requirements** where there is uncertainty
- 3 how to brief the workforce on **legal and statutory responsibilities** before they start work on the contract
- 4 how to investigate the circumstances of situations which do not comply with **legal and statutory requirements**
- 5 how to develop **monitoring systems**
- 6 what to identify as situations which do not comply with **legal and statutory requirements**
- 7 how to take appropriate **corrective action** in situations which do not comply with **legal and statutory requirements**
- 8 how to complete statutory returns
- 9 what to identify as new **legal and statutory requirements** which may have an impact on the project
- 10 how to summarise the important details of any new **legal and statutory requirements** which may have an impact on the project
- 11 how to implement **monitoring systems** and collect and summarise information
- 12 how to summarise information

- legal and statutory requirements and responsibilities for: building control; environmental health; health, safety and welfare; environment; fire; utilities regulations; highways; heritage; development licences and building permits; employment practice; byelaws; non-statutory guidelines
- **monitoring systems**: visual inspection; comparison with design requirements; comparison with standard documentation; checking manufacturers documentation; checking delivery notes; sampling; testing; site inspection reports; contractors' reports; site meetings
- 3 **corrective action**: instigate contingency action and restore compliance; agree waiver
- 4 **people who have an interest**: the client; contractors; consultants; sub-contractors; suppliers; workforce

Element SYS 19.3 Control contract progress against agreed programmes

Performance criteria

You must be able to:

- a develop and implement **systems to monitor and record** the progress of the contract against the agreed **programmes**, collect information regularly and summarise it accurately
- b identify inadequately and inappropriately specified **resources**, inform **decision makers** and specify and obtain alternative **resources**
- c identify and **quantify** any **deviations** from planned progress which have occurred, or which may occur, and which could disrupt the **programme**
- d investigate the circumstances of any **deviations** thoroughly and agree and implement appropriate **corrective action**
- e recommend options which are most likely to minimise increases in cost and time and help the contract progress, and pass these on to **decision makers**
- f regularly inform **decision makers** about progress, changes to the operational programme, **resource** needs, and suggest the decisions and actions that need to be taken
- g identify improvements from feedback received and recommend them to **decision makers**

Knowledge criteria

- 1. how to implement **systems to monitor and record** the progress of the contract against the agreed **programmes**, and collect and summarise information
- 2. how to develop **systems to monitor and record** the progress of the contract against the agreed **programmes**
- 3. what you identify as inadequately and inappropriately specified **resources**
- 4. how to inform **decision makers** about inadequately and inappropriately specified **resources**, and obtain alternative **resources**
- 5. how to specify alternative **resources**
- 6. what to identify as any **deviations** from planned progress which have occurred, or which may occur, and which could disrupt the **programme**
- 7. how to **quantify** any **deviations** from planned progress
- 8. how to investigate the circumstances of any **deviations**
- 9. what to identify as improvements from feedback received
- 10. how to implement corrective action
- 11. how to implement **systems to monitor and record** the progress of the contract against the agreed **programmes**, and collect and summarise information

- 12. how to develop **systems to monitor and record** the progress of the contract against the agreed **programmes**
- 13. what you identify as inadequately and inappropriately specified **resources**
- 14. how to inform **decision makers** about inadequately and inappropriately specified **resources**, and obtain alternative **resources**
- 15. how to specify alternative **resources**
- 16. what to identify as any **deviations** from planned progress which have occurred, or which may occur, and which could disrupt the **programme**
- 17. how to **quantify** any **deviations** from planned progress
- 18. how to investigate the circumstances of any **deviations**
- 19. what to identify as improvements from feedback received
- 20. how to implement corrective action.

- 1. **systems to monitor and record**: visual inspection; resource records; site inspection reports; contractors' reports; certified payments; written and graphical records of actual work against programmed work; site meetings
- 2. **programmes**: bar charts; network analysis; critical path; line of balance; action lists; method statements; project expenditure forecasts
- 3. **resources**: people; plant and equipment; materials and components; finance; time; specialist services; public utility services; information
- 4. **quantifying**: method study; work study; production analysis
- 5. **deviations**: resource shortages; design problems and constraints; industrial disputes; lack of essential construction information; construction errors; inclement weather; physical (site) constraints; legal
- 6. **corrective action**: restore progress in accordance with agreed programme; agree new completion dates; initiate contract claim; securing additional resources; altering planned work
- 7. **decision makers**: the client; contractors; consultants; suppliers

Element SYS 19.4 Control contract quantities and costs

Performance criteria

You must be able to:

- a develop and implement appropriate **contract quantities and cost control systems** which are able to provide early warning of problems
- b collect **quantities and cost data** regularly, record it correctly and pass it on to the people who need it in time for them to be able to use it
- c calculate the correct work values and **quantities and cost data** from estimates of work quantity and payment rates
- d prepare accurate **quantities and cost data** and present it in a format which will help people to make decisions
- e identify variations and trends in **quantities and cost data** and quantify and cost them
- f investigate any variations thoroughly and agree and implement appropriate **corrective action** with **decision makers** which will restore costs and expenditure to budget
- g develop and implement systems and processes for identifying **opportunities for cost savings** and recommend them to **decision makers**
- h identify realistic **opportunities for cost savings** , cost them correctly and recommend them to **decision makers**

Knowledge criteria

- 1 how to implement appropriate **contract quantities and cost control systems** which are able to provide early warning of problems
- 2 how to develop appropriate contract **quantities and cost control** systems which are able to provide early warning of problem
- 3 what you identify as variations and trends in **quantities and cost data**
- 4 how to collect and record **quantities and cost data** and pass on the data to people who need it
- 5 how to calculate the correct work values and **quantities and cost data** from estimates of work quantity and payment rates
- 6 how to prepare and present accurate **quantities and cost data** in a format which will help people to make decision
- 7 how to quantify and cost trends in quantities and cost data
- 8 how to investigate any variations
- 9 how to implement appropriate corrective action with decision makers which will restore costs and expenditure to budget]
- 10 how to agree appropriate **corrective action** with **decision makers** which will restore costs and expenditure to budget
- 11 what to identify as realistic **opportunities for cost saving**

- 12 how to implement systems and processes for identifying **opportunities for cost savings**
- 13 how to cost opportunities for cost saving
- 14 how to develop and recommend to **decision makers** systems and processes for identifying **opportunities for cost savings**
- 15 how to recommend **opportunities for cost savings** to decision makers

- 1 contract quantities and cost control systems: contractual procedures and meetings; operational procedures and meetings
- 2 quantities and cost data: materials; plant; people; sub-contractors; dayworks; periodic valuations; retention sums; forecasts of expenditure; performance information; contract programme and progress
- 3 corrective action: regulating expenditure to conform with budgets; agreeing additional costs; making a contract claim
- 4 decision makers: the client; contractors; consultants; sub-contractors; suppliers
- opportunities for cost saving: waste reduction; resource management and logistics; applications of new technology; energy management; water; recyclable materials; alternative sources and types of materials; plant and labour which meet project requirements; variations in quality

Unit Evidence Requirements

Qualification Title Level 3 in Providing Security and Emergency Alarm Systems

Unit Number SYS 19

Unit Title Control contract work

Evidence Requirements for this unit:

You must provide your assessor with evidence for **all** the performance criteria and **all** the knowledge and in accordance with the range statement.

The evidence must be provided in the following ways taking into account any of the special considerations below

Special Considerations:

Simulation is not permitted for this unit

The nature of this unit means that **all** of your evidence must come from real work activities.

The evidence must reflect, at all times, the policies and procedures of the workplace, as linked to current legislation and the values and principles for good practice in the security, emergency and alarm system industry.

Required sources of performance and knowledge evidence:

Observation is the **required** assessment method to be used to evidence some part of each element in this unit.

Usually your assessor or expert witness will observe you in real work activities and this is likely to provide most of the evidence for the performance criteria and range for the elements in this unit. Your assessor will also decide what knowledge and understanding you have demonstrated through your work practice.

Other sources of performance and knowledge evidence:

Your assessor will identify other sources of performance and knowledge evidence

Either

Where assessor observation was not required

Or

Where assessor observation has been used but your assessor needs to ensure that any outstanding performance criteria and knowledge requirements are met and that your performance is consistent

Witness Testimony: Occupational experts, colleagues, allied professionals and customers may be able

to provide testimony of your performance. Your assessor will help you to identify the appropriate use of witnesses.

Work Products: These are non-confidential records made, or contributed to, by you, eg Charts/plans:

Confidential Records: These may be used as evidence but must not be placed in your portfolio, they must remain in their usual location and be referred to in the assessor records in your portfolio. eg Work schedules, Minutes of meetings, Correspondence, File progress documentation.

Questioning/Professional Discussion: Questions may be oral or written. In each case the question and your answer will need to be recorded. Professional discussion should be in the form of a structured review of your practice with the outcomes captured by means of audiotape or a written summary. These are particularly useful to provide evidence that you know and understand principles which support practice, policies, procedures and legislation, and that you can critically evaluate their application eg Briefing a workforce on legal and statutory responsibilities before they commence work on a security system contract.

Original Certificates: Certificates of training, awards and records of attendance must be authentic, current and valid. Your assessor will also want to check the content of such training so that this can be matched to the standards and confirm that you have retained and can apply learning to practice, eg Certificate in Sales and Sales Management.

Case Studies, projects, assignments and candidate/reflective accounts of your work. These methods are most appropriately used to cover any outstanding areas in the knowledge requirement of your qualification. Occasionally, because an event happens rarely or may be difficult to observe, you may be able to use a candidate/ reflective account to provide some of the performance evidence for this unit.

Unit SYS 20 Implement works to meet installation requirements

Issue: 2.0

Date: April 2004

Overview

This unit defines the national standard of occupational competence for implementing installation work. It would apply to team leaders, site supervisors, or anyone else having the responsibility for site preparation and controlling work. This unit therefore sets out the standards for you to:

Element SYS 20.1 Co-ordinate site preparation
 Element SYS 20.2 Co-ordinate work control

Note:

This unit is imported from the Construction Industry Council (ref: D25).

(The wording has been tailored to blend in with Skills for Security (formally SITO)'s standards, particularly the knowledge criteria, which are presented as questions in the CIC standards. The original CIC unit title has been amended, as it referred to 'construction', which is felt to be not appropriate to the installation of security, emergency or alarm systems.)

Unit SYS 20 Implement works to meet installation requirements

Element SYS 20.1 Co-ordinate site preparation

Performance criteria

You must be able to:

- a identify any special considerations, record them and pass them on to people who may be affected
- b identify any **factors which might compromise the proposed works**, describe and summarise them accurately, and pass on the information to the appropriate authorities
- c identify access points for the site and works which are the most convenient for works traffic and which minimise disruption
- d give accurate details about the proposed work to the utility and emergency services
- e make arrangements for adequate site safety and security before work starts, and whilst working on the site
- f plan the **site layout for operational purposes** and pass on information about the plans to the people who will be working on the site
- g plan the storage and use of materials and components so that materials handling and movement is efficient and wastage is minimised
- h place and maintain notices which provide accurate information to the public and which conform to statutory requirements

Knowledge criteria

- 1 what you identify as any **special considerations**
- 2 how to record **special considerations** and pass them on to people who will be affected
- 3 what you identify and describe as factors which might compromise the proposed works
- 4 how to summarise and pass on information about any **factors which might compromise the proposed works** to the appropriate authorities
- 5 how to give details about the proposed works to the utility and emergency services
- 6 how to make arrangements for adequate site safety
- 7 how to place and maintain notices
- 8 what access points you identify for the site and works which are the most convenient for works traffic and which minimise disruption
- 9 how to pass on information about the site layout plans to the people working on the site
- 10 how to plan the site layout for operational purposes
- 11 how to plan the storage and use of materials and components

- 1 **special considerations**: occupiers; near neighbours; public access; site conditions
- 2 **factors which might compromise the proposed works**: site conditions; statutory regulations and limitations; codes of practice; health, safety and welfare; environment; hazards
- 3 **site layout for operational purposes**: storage; temporary accommodation; work areas; plant; temporary services; access; security; continuing use by occupiers

Unit SYS 20 Implement works to meet installation requirements

Element SYS 20.2 Co-ordinate work control

Performance criteria

You must be able to:

- a assemble and review relevant **information** which was used in the preparation of the project plan, clarify any **information** which is not clear and update it for production planning purposes
- b give adequate notice, as required in the contract, to all the people who will be affected about when the work will start, how long it will take and when it will finish, and confirm all the dates in writing
- c agree a programme and methods with the people who will be doing the work
- d identify, record and obtain **information** requirements before work starts
- e organise attendance for sub-contractors in accordance with contractual agreements
- f plan and obtain sufficient **resources** of the appropriate type which will meet the project requirements and timescales
- g organise and control the site and **resources** so that conditions are safe, the site is tidy and creates a favourable image of the organisation, its products and its services and the project
- h develop plans to meet **special requirements** and contingencies which are sufficient to minimise disruption to those likely to be affected by the works programme
- i identify, communicate and monitor necessary consequent actions and responsibilities for implementation.

Knowledge criteria

- 1 what you identify as **information** requirements before work starts
- 2 how to assemble relevant **information** which was used in the preparation of the project plan, and clarify and update any **information** which is not clear
- 3 how to give adequate notice, as required in the contract, to all the people who will be affected about when the work will start, how long it will take and when it will finish, and confirm all the dates in writing
- 4 how to record and obtain **information** requirements before work starts
- 5 how to review relevant **information** which was used in the preparation of the project plan
- 6 how to obtain sufficient **resources**
- 7 how to control the site and **resources** so that conditions are safe, the site is tidy and creates a favourable image of the organisation, its products and its services and the project
- 8 how to organise attendance for sub-contractors in accordance with contractual agreements
- 9 how to plan **resources**

- 10 how to organise the site and **resources** so that conditions are safe, the site is tidy and creates a favourable image of the organisation, its products and its services and the project
- 11 how to agree a programme and methods with the people who will be doing the work
- 12 what you identify as necessary consequent actions and responsibilities for implementation
- 13 how to communicate necessary consequent actions and responsibilities for implementation
- 14 how to monitor necessary consequent actions and responsibilities for implementation?
- 15 how to develop plans to meet **special requirements** and contingencies

- 1 **information**: survey reports; design; contractual; statutory consents; contractor's pre-planning information; health and safety plan
- 2 **resources**: people; plant and equipment; materials and components; sub-contractors; information
- **special requirements** relating to: occupiers; environmental considerations; vehicular access; health and safety; hazards; trespass; near neighbours; public access; site conditions; statutory regulations and limitations; codes of practice

Unit SYS 20 Implement works to meet installation requirements

Unit Evidence Requirements

Qualification Title Level 3 in Providing Security and Emergency Alarm Systems

Unit Number SYS 20

Unit Title Implement works to meet installation requirements

Evidence Requirements for this unit:

You must provide your assessor with evidence for **all** the performance criteria and **all** the knowledge and in accordance with the range statement.

The evidence must be provided in the following ways taking into account any of the special considerations below

Special Considerations:

Simulation is not permitted for this unit

The nature of this unit means that **all** of your evidence must come from real work activities.

The evidence must reflect, at all times, the policies and procedures of the workplace, as linked to current legislation and the values and principles for good practice in the security, emergency and alarm system industry.

Required sources of performance and knowledge evidence:

Observation is the **required** assessment method to be used to evidence some part of each element in this unit.

Usually your assessor or expert witness will observe you in real work activities and this is likely to provide most of the evidence for the performance criteria and range for the elements in this unit. Your assessor will also decide what knowledge and understanding you have demonstrated through your work practice.

Other sources of performance and knowledge evidence:

Your assessor will identify other sources of performance and knowledge evidence

Either

Where assessor observation was not required

Or

Where assessor observation has been used but your assessor needs to ensure that any outstanding

performance criteria and knowledge requirements are met and that your performance is consistent

Witness Testimony: Occupational experts, colleagues, allied professionals and customers may be able to provide testimony of your performance. Your assessor will help you to identify the appropriate use of witnesses.

Work Products: These are non-confidential records made, or contributed to, by you, eg Charts/plans.

Confidential Records: These may be used as evidence but must not be placed in your portfolio, they must remain in their usual location and be referred to in the assessor records in your portfolio. eg Work schedules, Minutes of meetings, Correspondence, File progress documentation.

Questioning/Professional Discussion: Questions may be oral or written. In each case the question and your answer will need to be recorded. Professional discussion should be in the form of a structured review of your practice with the outcomes captured by means of audiotape or a written summary. These are particularly useful to provide evidence that you know and understand principles which support practice, policies, procedures and legislation, and that you can critically evaluate their application.eg Briefing a workforce on legal and statutory responsibilities before they commence work on a security system contract.

Original Certificates: Certificates of training, awards and records of attendance must be authentic, current and valid. Your assessor will also want to check the content of such training so that this can be matched to the standards and confirm that you have retained and can apply learning to practice, eg Certificate in Sales and Sales Management.

Case Studies, projects, assignments and candidate/reflective accounts of your work. These methods are most appropriately used to cover any outstanding areas in the knowledge requirement of your qualification. Occasionally, because an event happens rarely or may be difficult to observe, you may be able to use a candidate/ reflective account to provide some of the performance evidence for this unit.

Appendix 1 Key Skills mapping

These qualifications provide opportunities to gather evidence for the accreditation of Key Skills as shown in the table below. However, to gain Key Skills certification, the Key Skills would need to be taken as additional qualifications.

Notes

The following matrices indicate the potential for candidates to produce evidence of the relevant key skill competence when undertaking assessment against the unit. In all other cases, there is no firm indication of the potential for candidates to produce evidence of the relevant key skill competence

- 1. Application of number There is no firm requirement for individuals to produce evidence of their competence in the application of number, as specified in the Key Skills, except for unit SYS 5, which covers preparing quotations for providing security, emergency or alarm systems.
- 2. Information technology There is no firm requirement for individuals to produce evidence of using information technology when performing the occupational functions described by these standards.
- 3. Improving own learning and performance key skills There is no firm requirement for individuals to produce evidence of improving their own learning and performance when undertaking assessment against these national occupational standards.

	Communication	Security, Emergency and Alarm Systems					
	Key Skills	1	2	3	4	5	
	✓ indicates the potential for candidates to produce evidence of the relevant key skill competence when undertaking assessment against the Skills for Security (formally SITO)unit. In all other cases, there is no firm indication of the potential for candidates to produce evidence of the relevant key skill competence.	Contribute to health and safety in the workplace	Communicate effectively in the workplace	Contribute to maintaining effective working relationships	Survey sites to prepare specifications of security, emergency or alarm systems	Prepare quotations for providing security, emergency or alarm systems	
	Level 1						
C.1.1	Take part in a one-to-one discussion and a group discussion about different, straightforward subjects.						
C1.2	Read and obtain information from two different types of documents about straightforward subjects, including at least one image.						
C1.3	Write two different types of documents about straightforward subjects. Include at						

	least one image.					
	Level 2					
C2.1a	Contribute to a discussion about a					
02.14	straightforward subject.	√	√	√		
C2.1b	Give a short talk about a straightforward subject, using an image.		√	√		
C2.2	Read and summarise information from two extended documents about a straightforward subject. One of the documents should include at least one image.	√	√	√		
C2.3	Write two different types of documents about straightforward subjects. One piece of writing should be an extended document and include at least one image.		✓	√		
	Level 3					
C3.1a	Contribute to a group discussion about a complex subject.					✓
C3.1.b	Make a presentation about a complex subject, using at least one image to illustrate complex points.					√
C3.2	Read and synthesize information from two extended documents about a complex subject. One of these documents should include at least one image.					√
C3.3	Write two different types of documents about complex subjects. One piece of writing should be an extended document and include at least one image					√
	Communication	Security,	Emergen	cy and Ala	ırm Syster	ns
	Key Skills	6	7	8	9	10
	✓ indicates the potential for candidates to produce evidence of the relevant key skill competence when undertaking assessment against the Skills for Security (formally SITO)unit. In all other cases, there is no firm indication of the potential for candidates to produce evidence of the relevant key skill competence.	Plan the installation of security, emergency or alarm systems and services	Audit Security, emergency or alarm systems	Make preparations and arrangements to install security, emergency or alarm systems	Install cabling for security, emergency or alarm systems	Install security, emergency or alarm equipment
	Level 1					
C.1.1	Take part in a one-to-one discussion and a					

	group discussion about different, straightforward subjects.					
C1.2	Read and obtain information from two different types of documents about straightforward subjects, including at least one image.					
C1.3	Write two different types of documents about straightforward subjects. Include at least one image.					
	Level 2					
C2.1a	Contribute to a discussion about a straightforward subject.			√	√	
C2.1b	Give a short talk about a straightforward subject, using an image.			✓	√	
C2.2	Read and summarise information from two extended documents about a straightforward subject. One of the documents should include at least one image.		√	√	√	
C2.3	Write two different types of documents about straightforward subjects. One piece of writing should be an extended document and include at least one image.		\			
	Level 3					
C3.1a	Contribute to a group discussion about a complex subject.					
C3.1b	Make a presentation about a complex subject, using at least one image to illustrate complex points.					
C3.2	Read and synthesize information from two extended documents about a complex subject. One of these documents should include at least one image.					
C3.3	Write two different types of documents about complex subjects. One piece of writing should be an extended document and include at least one image.					
	Communication	Security,	Emergeno	y and Ala	rm Syster	ns
	Key Skills	11	12	13	14	15

	✓ indicates the potential for candidates to produce evidence of the relevant key skill competence when undertaking assessment against the Skills for Security (formally SITO)unit. In all other cases, there is no firm indication of the potential for candidates to produce evidence of the relevant key skill competence.	Test and confirm operation of security, emergency or alarm systems	Commission and hand over security, emergency or alarm systems	Maintain the performance of security, emergency or alarm systems	Diagnose and rectify faults on security, emergency or alarm systems	Make presentations to sell security, emergency or alarm systems
C.1.1	Take part in a one-to-one discussion and a group discussion about different, straightforward subjects.					
C1.2	Read and obtain information from two different types of documents about straightforward subjects, including at least one image.					
C1.3	Write two different types of documents about straightforward subjects. Include at least one image.					
	Level 2					
C2.1a	Contribute to a discussion about a straightforward subject.	√	~	~	✓	
C2.1b	Give a short talk about a straightforward subject, using an image.	✓	✓	✓	√	
C2.2	Read and summarise information from two extended documents about a straightforward subject. One of the documents should include at least one image.	√	√	√	√	
C2.3	Write two different types of documents about straightforward subjects. One piece of writing should be an extended document and include at least one image.					
	Level 3					
C3.1a	Contribute to a group discussion about a complex subject.					✓
C3.1b	Make a presentation about a complex subject, using at least one image to illustrate complex points.					√

C3.2 Read and synthesize information from two extended documents about a complex subject. One of these documents should include at least one image. C3.3 Write two different types of documents about complex subjects. One piece of writing should be an extended document and include at least one image. Communication Key Skills Indicates the potential for candidates to produce evidence of the relevant key skill competence when undertaking assessment against the Skills for Security (formally SITO)unit. In all other cases, there is no firm indication of the potential for candidates to produce evidence of the relevant key skill competence. Level 1 C1.1.1 Take part in a one-to-one discussion and a group discussion about different types of documents about straightforward subjects. Include at least one image. C1.2 Read and obtain information from two different types of documents about straightforward subjects, including at least one image. C2.2.1 Write two different types of documents about a straightforward subject. One of the documents should include at least one image. C2.3 Write two different types of documents about straightforward subject. One of the documents should be an extended document and include at least one image. Level 3							
about complex subjects. One piece of writing should be an extended document and include at least one image. Communication Key Skills 16 17 18 19 20 Vindicates the potential for candidates to produce evidence of the relevant key skill competence when undertaking assessment against the Skills for Security (formally STO)unit. In all other cases, there is no firm indication of the potential for candidates to produce evidence of the relevant key skill competence. With the competence of the relevant key skill competence when undertaking assessment against the Skills for Security (formally STO)unit. In all other cases, there is no firm indication of the potential for candidates to produce evidence of the relevant key skill competence. Level 1 C.1.1 Take part in a one-to-one discussion and a group discussion about different, straightforward subjects, including at least one image. C1.2 Read and obtain information from two different types of documents about straightforward subjects. Include at least one image. C2.2 Read and summarise information from two extended documents about a straightforward subject. One of the documents should include at least one image. Write two different types of documents about a straightforward subject. One of the documents should include at least one image. Write two different types of documents about a straightforward subjects. One piece of writing should be an extended document and include at least one image.	C3.2	extended documents about a complex subject. One of these documents should					√
Key Skills	C3.3	about complex subjects. One piece of writing should be an extended document					√
Indicates the potential for candidates to produce evidence of the relevant key skill competence when undertaking assessment against the Skills for Security (formally SITO)unit. In all other cases, there is no firm indication of the potential for candidates to produce evidence of the relevant key skill competence. Level 1		Communication	Security,	Emergend	cy and Ala	ırm Syster	ns
Level 1 C.1.1 Take part in a one-to-one discussion and a group discussion about different, straightforward subjects. C1.2 Read and obtain information from two different types of documents about straightforward subjects, including at least one image. C1.3 Write two different types of documents about straightforward subjects. Include at least one image. C2.1a Contribute to a discussion about a straightforward subject. C2.2 Read and summarise information from two extended documents about a straightforward subject. One of the documents should include at least one image. C2.3 Write two different types of documents about straightforward subjects. One piece of writing should be an extended document and include at least one image.		Key Skills	16	17	18	19	20
C.1.1 Take part in a one-to-one discussion and a group discussion about different, straightforward subjects. C1.2 Read and obtain information from two different types of documents about straightforward subjects, including at least one image. C1.3 Write two different types of documents about straightforward subjects. Include at least one image. C2.1a Contribute to a discussion about a straightforward subject. C2.2 Read and summarise information from two extended documents about a straightforward subject. One of the documents should include at least one image. C2.3 Write two different types of documents about straightforward subjects. One piece of writing should be an extended document and include at least one image.		candidates to produce evidence of the relevant key skill competence when undertaking assessment against the Skills for Security (formally SITO)unit. In all other cases, there is no firm indication of the potential for candidates to produce evidence of the relevant	Negotiate sales of security, emergency or alarm systems	Demonstrate the use of and hand over security, emergency or alarm systems to customers	Lead the work of teams and individuals to achieve objectives	Control contract work	Implement work to meet installation requirements
group discussion about different, straightforward subjects. C1.2 Read and obtain information from two different types of documents about straightforward subjects, including at least one image. C1.3 Write two different types of documents about straightforward subjects. Include at least one image. Level 2 C2.1a Contribute to a discussion about a straightforward subject. C2.2 Read and summarise information from two extended documents about a straightforward subject. One of the documents should include at least one image. C2.3 Write two different types of documents about straightforward subjects. One piece of writing should be an extended document and include at least one image.		Level 1					
different types of documents about straightforward subjects, including at least one image. C1.3 Write two different types of documents about straightforward subjects. Include at least one image. Level 2 C2.1a Contribute to a discussion about a straightforward subject. C2.2 Read and summarise information from two extended documents about a straightforward subject. One of the documents should include at least one image. C2.3 Write two different types of documents about straightforward subjects. One piece of writing should be an extended document and include at least one image.	C.1.1	group discussion about different,					
about straightforward subjects. Include at least one image. Level 2 C2.1a Contribute to a discussion about a straightforward subject. C2.2 Read and summarise information from two extended documents about a straightforward subject. One of the documents should include at least one image. C2.3 Write two different types of documents about straightforward subjects. One piece of writing should be an extended document and include at least one image.	C1.2	different types of documents about straightforward subjects, including at least					
C2.1a Contribute to a discussion about a straightforward subject. C2.2 Read and summarise information from two extended documents about a straightforward subject. One of the documents should include at least one image. C2.3 Write two different types of documents about straightforward subjects. One piece of writing should be an extended document and include at least one image.	C1.3	about straightforward subjects. Include at					
C2.2 Read and summarise information from two extended documents about a straightforward subject. One of the documents should include at least one image. C2.3 Write two different types of documents about straightforward subjects. One piece of writing should be an extended document and include at least one image.		Level 2					
extended documents about a straightforward subject. One of the documents should include at least one image. C2.3 Write two different types of documents about straightforward subjects. One piece of writing should be an extended document and include at least one image.	C2.1a			√			
about straightforward subjects. One piece of writing should be an extended document and include at least one image.	C2.2	extended documents about a straightforward subject. One of the documents should include at least one		√			
Level 3	C2.3	about straightforward subjects. One piece of writing should be an extended document					
		Level 3					

C3.1a	Contribute to a group discussion about a complex subject.	✓		√	√	✓
C3.1b	Make a presentation about a complex subject, using at least one image to illustrate complex points.	√		✓	✓	✓
C3.2	Read and synthesize information from two extended documents about a complex subject. One of these documents should include at least one image.	√		√	✓	√
C3.3	Write two different types of documents about complex subjects. One piece of writing should be an extended document and include at least one image.	✓		✓	✓	✓
	Application of Number	Security,	Emergen	cy and Ala	ırm Syster	ms
	Key Skills	1	2	3	4	5
	✓ indicates the potential for candidates to produce evidence of the relevant key skill competence when undertaking assessment against the Skills for Security (formally SITO)unit. In all other cases, there is no firm indication of the potential for candidates to produce evidence of the relevant key skill competence.	Contribute to health and safety in the workplace	Communicate effectively in the workplace	Contribute to maintaining effective working relationships	Survey sites to prepare specifications of security, emergency or alarm systems	Prepare quotations for providing security, emergency or alarm systems
	Level 1					
N1.1	Interpret straightforward information from two different sources. At least one source should be a table, chart, diagram or line graph.					
N1.2	Carry out straightforward calculations to do with amounts and sizes, scales and proportion, handling statistics.					
N1.3	Interpret the results of your calculations and present your findings. You must use one chart and one diagram.					
	Level 2					
N2.1	Interpret information from two different sources, including material containing a graph.					

N.2.2	Carry out calculations to do with amounts and sizes, scales and proportion, handling statistics, using formulae.					√
N2.3	Interpret the results of your calculations and present your findings. You must use at least one graph, one chart and one diagram.					√
	Level 3					
N3.1	Plan, and interpret information from two different types of sources, including a large data set.					✓
N3.2	Carry out multi-stage calculations to do with amounts and sizes, scales and proportion, handling statistics, rearranging and using formulae. You should work with a large data set on at least one occasion.					
N3.3	Interpret results of your calculations, present your findings and justify your methods. You must use at least one graph, one chart and one diagram.					
	Application of Number	Security,	Emergen	cy and Ala	rm Syster	ms
	Key Skills	6	7	8	9	10
	There is no firm requirement for individuals to produce evidence of applying number when undertaking assessment against these national occupational standards.	Plan the installation of security, emergency or alarm systems and services	Audit security, emergency or alarm systems	Make preparations and arrangements to install security, emergency or alarm systems	Install cabling for security, emergency or alarm systems	Install security, emergency or alarm equipment
	Level 1					
N1.1	Interpret straightforward information from two different sources. At least one source should be a table, chart, diagram or line graph.					
N1.2	Carry out straightforward calculations to do with amounts and sizes, scales and proportion, handling statistics.					
N1.3	Interpret the results of your calculations and present your findings. You must use one chart and one diagram.					
	Level 2					
N2.1	Interpret information from two different sources, including material containing a graph.					

N.2.2 Carry out calculations to do with amounts and sizes, scales and proportion, handling statistics, using formulae.							
Interpret straightforward information from two different sources, should be a table, chart, diagram or line graph.	N.2.2	and sizes, scales and proportion, handling					
N3.1 Plan, and interpret information from two different types of sources, including a large data set. N3.2 Carry out multi-stage calculations to do with amounts and sizes, scales and proportion, handling statistics, rearranging and using formulae. You should work with a large data set on at least one occasion. N3.3.1 Interpret results of your calculations, present your findings and justify your methods. You must use at least one graph, one chart and one diagram. Application of Number Key Skills There is no firm requirement for individuals to produce evidence of applying number when undertaking assessment against these national occupational standards. Level 1 N1.1 Interpret straightforward information from two different sources. At least one source should be a table, chart, diagram or line graph. N1.2 Carry out straightforward calculations and present your findings. You must use one chart and one diagram. Level 2 N2.1 Interpret information from two different sources, including material containing a	N2.3	and present your findings. You must use at least one graph, one chart and one					
different types of sources, including a large data set. N3.2 Carry out multi-stage calculations to do with amounts and sizes, scales and proportion, handling statistics, rearranging and using formulae. You should work with a large data set on at least one occasion. N3.3 Interpret results of your calculations, present your findings and justify your methods. You must use at least one graph, one chart and one diagram. Application of Number Key Skills There is no firm requirement for individuals to produce evidence of applying number when undertaking assessment against these national occupational standards. Pupul p		Level 3					
amounts and sizes, scales and proportion, handling statistics, rearranging and using formulae. You should work with a large data set on at least one occasion. N3.3 Interpret results of your calculations, present your findings and justify your methods. You must use at least one graph, one chart and one diagram. Application of Number Key Skills There is no firm requirement for individuals to produce evidence of applying number when undertaking assessment against these national occupational standards. Level 1 N1.1 Interpret straightforward information from two different sources. At least one source should be a table, chart, diagram or line graph. N1.2 Carry out straightforward calculations to do with amounts and sizes, scales and proportion, handling statistics. N1.3 Interpret the results of your calculations and present your findings. You must use one chart and one diagram. Level 2 N2.1 Interpret information from two different sources, including material containing a	N3.1	different types of sources, including a large					
present your findings and justify your methods. You must use at least one graph, one chart and one diagram. Application of Number Key Skills There is no firm requirement for individuals to produce evidence of applying number when undertaking assessment against these national occupational standards. Level 1 N1.1 Interpret straightforward information from two different sources. At least one source should be a table, chart, diagram or line graph. Level 2 N2.1 Interpret information from two different sources, including statistics.	N3.2	amounts and sizes, scales and proportion, handling statistics, rearranging and using formulae. You should work with a large data					
There is no firm requirement for individuals to produce evidence of applying number when undertaking assessment against these national occupational standards. Level 1 N1.1 Interpret straightforward information from two different sources should be a table, chart, diagram or line graph. Carry out straightforward calculations to do with amounts and sizes, scales and proportion, handling statistics. Interpret the results of your calculations and present your findings. You must use one chart and one diagram. Level 2 N2.1 Interpret information from two different sources, including material containing a	N3.3	present your findings and justify your methods. You must use at least one graph,					
There is no firm requirement for individuals to produce evidence of applying number when undertaking assessment against these national occupational standards. Level 1 N1.1 Interpret straightforward information from two different sources. At least one source should be a table, chart, diagram or line graph. N1.2 Carry out straightforward calculations to do with amounts and sizes, scales and proportion, handling statistics. N1.3 Interpret the results of your calculations and present your findings. You must use one chart and one diagram. Level 2 N2.1 Interpret information from two different sources, including material containing a		Application of Number	Security,	Emergen	cy and Ala	ırm Syster	ns
Level 1 N1.1 Interpret straightforward information from two different sources. At least one source should be a table, chart, diagram or line graph. N1.2 Carry out straightforward calculations to do with amounts and sizes, scales and proportion, handling statistics. N1.3 Interpret the results of your calculations and present your findings. You must use one chart and one diagram. Level 2 N2.1 Interpret information from two different sources, including material containing a		Key Skills	11	12	13	14	15
Level 1 N1.1 Interpret straightforward information from two different sources. At least one source should be a table, chart, diagram or line graph. N1.2 Carry out straightforward calculations to do with amounts and sizes, scales and proportion, handling statistics. N1.3 Interpret the results of your calculations and present your findings. You must use one chart and one diagram. Level 2 N2.1 Interpret information from two different sources, including material containing a		to produce evidence of applying number when undertaking assessment against	Test and confirm operation of security, emergency or alarm systems	Commission and hand over security, emergency or alarm systems	Maintain the performance of security, emergency or alarm systems	Diagnose and rectify faults on security, emergency or alarm systems	Make presentations to sell security, emergency or alarm systems
two different sources. At least one source should be a table, chart, diagram or line graph. N1.2 Carry out straightforward calculations to do with amounts and sizes, scales and proportion, handling statistics. N1.3 Interpret the results of your calculations and present your findings. You must use one chart and one diagram. Level 2 N2.1 Interpret information from two different sources, including material containing a							
with amounts and sizes, scales and proportion, handling statistics. N1.3 Interpret the results of your calculations and present your findings. You must use one chart and one diagram. Level 2 N2.1 Interpret information from two different sources, including material containing a	N1.1	two different sources. At least one source should be a table, chart, diagram or line					
and present your findings. You must use one chart and one diagram. Level 2 N2.1 Interpret information from two different sources, including material containing a	N1.2	with amounts and sizes, scales and					
N2.1 Interpret information from two different sources, including material containing a	N1.3	and present your findings. You must use					
sources, including material containing a		Level 2					
	N2.1	sources, including material containing a					

N.2.2	Carry out calculations to do with amounts and sizes, scales and proportion, handling statistics, using formulae.					
N2.3	Interpret the results of your calculations and present your findings. You must use at least one graph, one chart and one diagram.					
	Level 3					
N3.1	Plan, and interpret information from two different types of sources, including a large data set.					
N3.2 N3.3	Carry out multi-stage calculations to do with amounts and sizes, scales and proportion, handling statistics, rearranging and using formulae. You should work with a large data set on at least one occasion. Interpret results of your calculations,					
IND.5	present your findings and justify your methods. You must use at least one graph, one chart and one diagram.					
	Application of Number	Security,	Emergeno	cy and Ala	arm Syster	ns
	Key Skills	16	17	18	19	20
	There is no firm requirement for individuals to produce evidence of applying number when undertaking assessment against these national occupational standards.	Negotiate sales of security, emergency or alarm systems	Demonstrate the use of and hand over security, emergency or alarm systems to customers	Lead the work of teams and individuals to achieve objectives	Control contract work	Implement work to meet installation requirements
	Level 1					
N1.1	Interpret straightforward information from two different sources. At least one source should be a table, chart, diagram or line graph.					
N1.2	Carry out straightforward calculations to do with amounts and sizes, scales and proportion, handling statistics.					
N1.3	Interpret the results of your calculations and present your findings. You must use one chart and one diagram.					
	Level 2					
N2.1	Interpret information from two different sources, including material containing a graph.					
N.2.2	Carry out calculations to do with amounts and sizes, scales and proportion, handling statistics, using formulae.					

N2.3	Interpret the results of your calculations and present your findings. You must use at least one graph, one chart and one diagram.			
	Level 3			
N3.1	Plan, and interpret information from two different types of sources, including a large data set.			
N3.2	Carry out multi-stage calculations to do with amounts and sizes, scales and proportion, handling statistics, rearranging and using formulae. You should work with a large data set on at least one occasion.			
N3.3	Interpret results of your calculations, present your findings and justify your methods. You must use at least one graph, one chart and one diagram.			

	Information Technology	Security,	Emergend	cy and Ala	ırm Syster	ns
	Key Skills	1	2	3	4	5
	There is no firm requirement for individuals to produce evidence of using IT when undertaking assessment against these national occupational standards.	Contribute to health and safety in the workplace	Communicate effectively in the workplace	Contribute to maintaining effective working relationships	Survey sites to prepare specifications of security, emergency or alarm systems	Prepare quotations for providing security, emergency or alarm systems
	Level 1					
IT1.1	Find, explore and develop information for two different purposes.					
IT1.2	Present information for two different purposes. Your work must include at least one example of text, one example of images and one example of numbers.					
	Level 2					
IT2.1	Search for and select information for two different purposes.					
IT2.2	Explore and develop information, and derive new information, for two different purposes.					
IT2.3	Present combined information for two different purposes. Your work must include sat least one example of text, one example of images and one example of numbers.					
	Level 3					

IT3.1	Plan, and use different sources to search for, and select, information required for two different purposes.					
IT3.2	Explore, develop, and exchange information and derive new information to meet two different purposes.					
IT3.3	Present information from different sources for two different purposes and audiences. Your work must include at least one example of text, one example of images and one example of numbers.					
	Information Tachnalogy	Cocurity	Гюськась	arand Ala	ring Cycton	

	Information Technology	Security.	Emergen	cy and Ala	ırm Syster	ns
	Key Skills	6	7	8	9	10
	There is no firm requirement for individuals to produce evidence of using IT when undertaking assessment against these national occupational standards.	Plan the installation of security, emergency or alarm systems and services	Audit security, emergency or alarm systems	Make preparations and arrangements to install security, emergency or alarm systems	Install cabling for security, emergency or alarm systems	Install security, emergency or alarm equipment
	Level 1					
IT1.1	Find, explore and develop information for two different purposes.					
IT1.2	Present information for two different purposes. Your work must include at least one example of text, one example of images and one example of numbers.					
	Level 2					
IT2.1	Search for and select information for two different purposes.					
IT2.2	Explore and develop information, and derive new information, for two different purposes.					
IT2.3	Present combined information for two different purposes. Your work must include sat least one example of text, one example of images and one example of numbers.					
	Level 3					
IT3.1	Plan, and use different sources to search for, and select, information required for two different purposes.					
IT3.2	Explore, develop, and exchange information and derive new information to meet two					

	different purposes.			
IT3.3	Present information from different sources for two different purposes and audiences. Your work must include at least one example of text, one example of images and one example of numbers.			

	Information Technology	Security,	Emergend	cy and Ala	arm Syster	ns
	Key Skills	11	12	13	14	15
	There is no firm requirement for individuals to produce evidence of using IT when undertaking assessment against these national occupational standards.	Test and confirm operation of security, emergency or alarm systems	Commission and hand over security, emergency or alarm systems	Maintain the performance of security, emergency or alarm systems	Diagnose and rectify faults on security, emergency or alarm systems	Make presentation to sell security, emergency or alarm systems
	Level 1					
IT1.1	Find, explore and develop information for two different purposes.					
IT1.2	Present information for two different purposes. Your work must include at least one example of text, one example of images and one example of numbers.					
	Level 2					
IT2.1	Search for and select information for two different purposes.					
IT2.2	Explore and develop information, and derive new information, for two different purposes.					
IT2.3	Present combined information for two different purposes. Your work must include sat least one example of text, one example of images and one example of numbers.					
	Level 3					
IT3.1	Plan, and use different sources to search for, and select, information required for two different purposes.					
IT3.2	Explore, develop, and exchange information and derive new information to meet two different purposes.					
IT3.3	Present information from different sources for two different purposes and audiences.					_

Your work must include at least one			
example of text, one example of images and			
one example of numbers.			

	Information Technology	Security,	Emergeno	cy and Ala	ırm Syster	ms
	Key Skills	16	17	18	19	20
	There is no firm requirement for individuals to produce evidence of using IT when undertaking assessment against these national occupational standards.	Negotiate sales of security, emergency or alarm systems s	Demonstrate the use of and hand over security, emergency or alarm systems to customers	Lead the work of teams and individuals to achieve objectives	Control contract work	Implement work to meet installation requirements
	Level 1					
IT1.1	Find, explore and develop information for two different purposes.					
IT1.2	Present information for two different purposes. Your work must include at least one example of text, one example of images and one example of numbers.					
	Level 2					
IT2.1	Search for and select information for two different purposes.					
IT2.2	Explore and develop information, and derive new information, for two different purposes.					
IT2.3	Present combined information for two different purposes. Your work must include sat least one example of text, one example of images and one example of numbers.					
	Level 3					
IT3.1	Plan, and use different sources to search for, and select, information required for two different purposes.					
IT3.2	Explore, develop, and exchange information and derive new information to meet two different purposes.					
IT3.3	Present information from different sources for two different purposes and audiences. Your work must include at least one example of text, one example of images and one example of numbers.					

	Working With Others	Security, Emergency and Alarm Systems					
	Key Skills	1	2	3	4	5	
	✓ indicates the potential for candidates to produce evidence of the relevant key skill competence when undertaking assessment against the Skills for Security (formally SITO)unit. In all other cases, there is no firm indication of the potential for candidates to produce evidence of the relevant key skill competence.	Contribute to health and safety in the workplace	Communicate effectively in the workplace	Contribute to maintaining effective working relationships	Survey sites to prepare specifications of security, emergency or alarm systems	Prepare quotations for providing security, emergency or alarm systems	
	Level 1						
W01.1	Plan with others what needs to be done to achieve given objectives and confirm your understanding of responsibilities and working arrangements.						
W01.2	Work with others towards achieving the given objectives, carrying out tasks to meet your responsibilities.						
W01.3	Identify progress and ways of improving work with others to help achieve the given objectives.						
	Level 2						
W02.1	Plan the activity with others, identifying objectives and helping to allocate responsibilities and confirm working arrangements.						
W02.2	Work with others towards achieving the identified objectives, organising tasks to meet your responsibilities, and support cooperative working.						
W02.3	Exchange information on work progress and agree ways of improving work with others to help achieve objectives.						
	Level 3						
W03.1	Plan the activity with others, agreeing objectives, responsibilities and working arrangements.		✓	✓			
W03.2	Work towards achieving the agreed objectives, seeking to establish and maintain cooperative working relationships in meeting your responsibilities.		√	✓			

Review the activity with others against the agreed objectives and agree ways of enhancing collaborative work.		√	

	Working With Others	Security,	emergen	cy and alaı	m systen	ns
	Key Skills	6	7	8	9	10
	✓ indicates the potential for candidates to produce evidence of the relevant key skill competence when undertaking assessment against the Skills for Security (formally SITO)unit. In all other cases, there is no firm indication of the potential for candidates to produce evidence of the relevant key skill competence.	Plan the installation of security, emergency or alarm systems and services	Audit security, emergency or alarm systems	Make preparations and arrangements to install security, emergency or alarm systems	Install cabling for security, emergency or alarm systems	Install security, emergency or alarm equipment
	Level 1					
WO1.1	Plan with others what needs to be done to achieve given objectives and confirm your understanding of responsibilities and working arrangements.					
WO1.2	Work with others towards achieving the given objectives, carrying out tasks to meet your responsibilities.					
WO1.3	Identify progress and ways of improving work with others to help achieve the given objectives.					
	Level 2					
W02.1	Plan the activity with others, identifying objectives and helping to allocate responsibilities and confirm working arrangements.					
W02.2	Work with others towards achieving the identified objectives, organising tasks to meet your responsibilities, and support cooperative working.					
W02.3	Exchange information on work progress and agree ways of improving work with others to help achieve objectives.					
	Level 3					
W03.1	Plan the activity with others, agreeing objectives, responsibilities and working arrangements.	√		✓ 		

W03.2	Work towards achieving the agreed objectives, seeking to establish and maintain cooperative working relationships in meeting your responsibilities.	✓	✓	
W03.3	Review the activity with others against the agreed objectives and agree ways of enhancing collaborative work.			

	Working With Others	Security,	emergen	cy and ala	rm systen	าร
	Key Skills	11	12	13	14	15
	✓ indicates the potential for candidates to produce evidence of the relevant key skill competence when undertaking assessment against the Skills for Security (formally SITO)unit. In all other cases, there is no firm indication of the potential for candidates to produce evidence of the relevant key skill competence.	Test and confirm operation of security, emergency or alarm systems	Commission and hand over security, emergency or alarm systems	Maintain the performance of security, emergency or alarm systems	Diagnose and rectify faults on security, emergency or alarm systems	Make presentation to sell security, emergency or alarm systems
	Level 1					
WO1.1	Plan with others what needs to be done to achieve given objectives and confirm your understanding of responsibilities and working arrangements.					
W01.2	Work with others towards achieving the given objectives, carrying out tasks to meet your responsibilities.					
W01.3	Identify progress and ways of improving work with others to help achieve the given objectives.					
	Level 2					
W02.1	Plan the activity with others, identifying objectives and helping to allocate responsibilities and confirm working arrangements.	√	√	√	✓	
W02.2	Work with others towards achieving the identified objectives, organising tasks to meet your responsibilities, and support cooperative working.	√	√	√	✓	
W02.3	Exchange information on work progress and agree ways of improving work with others to help achieve objectives.		√	✓	✓	
	Level 3					

W03.1	Plan the activity with others, agreeing objectives, responsibilities and working arrangements.			✓
W03.2	Work towards achieving the agreed objectives, seeking to establish and maintain cooperative working relationships in meeting your responsibilities.			✓
W03.3	Review the activity with others against the agreed objectives and agree ways of enhancing collaborative work.			✓

	Mr. I Mr. Others	C				
	Working With Others		emergend	-		
	Key Skills	16	17	18	19	20
	✓ indicates the potential for candidates to produce evidence of the relevant key skill competence when undertaking assessment against the Skills for Security (formally SITO)unit. In all other cases, there is no firm indication of the potential for candidates to produce evidence of the relevant key skill competence.	Negotiate sales of security, emergency or alarm systems s	Demonstrate the use of and hand over security, emergency or alarm systems to customers	Lead the work of teams and individuals to achieve objectives	Control contract work	Implement work to meet installation requirements
	Level 1					
WO1.1	Plan with others what needs to be done to achieve given objectives and confirm your understanding of responsibilities and working arrangements.					
W01.2	Work with others towards achieving the given objectives, carrying out tasks to meet your responsibilities.					
WO1.3	Identify progress and ways of improving work with others to help achieve the given objectives.					
	Level 2					
W02.1	Plan the activity with others, identifying objectives and helping to allocate responsibilities and confirm working arrangements.					
W02.2	Work with others towards achieving the identified objectives, organising tasks to meet your responsibilities, and support cooperative working.					
WO2.3	Exchange information on work progress and agree ways of improving work with others					

	to help achieve objectives.					
	Level 3					
W03.1	Plan the activity with others, agreeing objectives, responsibilities and working arrangements.	√	<	✓	✓	✓
W03.2	Work towards achieving the agreed objectives, seeking to establish and maintain cooperative working relationships in meeting your responsibilities.	✓	✓	✓	✓	✓
W03.3	Review the activity with others against the agreed objectives and agree ways of enhancing collaborative work.	√	√	√	√	✓

	Problem solving	Security,	emergen	cy and ala	rm systen	ns
	Key Skills	1	2	3	4	5
	✓ indicates the potential for candidates to produce evidence of the relevant key skill competence when undertaking assessment against the Skills for Security (formally SITO)unit. In all other cases, there is no firm indication of the potential for candidates to produce evidence of the relevant key skill competence.	Contribute to health and safety in the workplace	Communicate effectively in the workplace	Contribute to maintaining effective working relationships	Survey sites to prepare specifications of security, emergency or alarm systems	Prepare quotations for providing security, emergency or alarm systems
	Level 1					
PS1.1	Confirm your understanding of the given problem and identify at least two options for solving it with help from an appropriate person.					
PS1.2	Plan and try out at least one option for solving the problem, using given advice and support.					
PS1.3	Follow given methods to check whether the problem has been solved and describe the results, including ways to include your approach.					
	Level 2					
PS2.1	Identify the problem and come up with at least two options for solving it.	✓		√		
PS2.2	Plan and try out at least one option for solving the problem, obtaining support and					

	making changes to your plan when necessary.	√	√	
PS2.3	Apply given method to check whether the problem has been solved and describe the results and explain your approach, including your approach to problem solving.	✓	√	
	Level 3			
PS3.1	Recognise, explore and describe the problem, and agree the standards for its solution.			√
PS3.2	Generate and compare at least two options which could be used to solve the problem, and justify the option for taking forward.			✓
PS3.3	Plan and implement at least one option for solving the problem, and review progress towards its solution.			√
PS3.4	Agree and apply methods to check whether the problem has been solved, describe the results and review the approach taken.			

	Problem solving	Security, emergency and alarm systems				
	Key Skills	6	7	8	9	10
	✓ indicates the potential for candidates to produce evidence of the relevant key skill competence when undertaking assessment against the Skills for Security (formally SITO)unit. In all other cases, there is no firm indication of the potential for candidates to produce evidence of the relevant key skill competence.	Plan the installation of security, emergency or alarm systems and services	Audit security, emergency or alarm systems	Make preparations and arrangements to install security, emergency or alarm systems	Install cabling for security, emergency or alarm systems	Install security, emergency or alarm equipment
	Level 1					
PS1.1	Confirm your understanding of the given problem and identify at least two options for solving it with help from an appropriate person.					
PS1.2	Plan and try out at least one option for solving the problem, using given advice and support.					
PS1.3	Follow given methods to check whether the problem has been solved and describe the					

	results, including ways to include your approach.				
	Level 2				
PS2.1	Identify the problem and come up with at least two options for solving it.		✓	√	
PS2.2	Plan and try out at least one option for solving the problem, obtaining support and making changes to your plan when necessary.		✓	√	
PS2.3	Apply given method to check whether the problem has been solved and describe the results and explain your approach, including your approach to problem solving.		√	√	
	Level 3				
PS3.1	Recognise, explore and describe the problem, and agree the standards for its solution.	√			
PS3.2	Generate and compare at least two options which could be used to solve the problem, and justify the option for taking forward.	√			
PS3.3	Plan and implement at least one option for solving the problem, and review progress towards its solution.	✓			
PS3.4	Agree and apply methods to check whether the problem has been solved, describe the results and review the approach taken.				

	Problem solving	Security, emergency and alarm systems					
	Key Skills	11	12	13	14	15	
	✓ indicates the potential for candidates to produce evidence of the relevant key skill competence when undertaking assessment against the Skills for Security (formally SITO)unit. In all other cases, there is no firm indication of the potential for candidates to produce evidence of the relevant key skill competence.	Test and confirm operation of security, emergency or alarm systems	Commission and hand over security, emergency or alarm systems	Maintain the performance of security, emergency or alarm systems	Diagnose and rectify faults on security, emergency or alarm systems	Make presentation to sell security, emergency or alarm systems	
	Level 1						
PS1.1	Confirm your understanding of the given problem and identify at least two options						

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	for solving it with help from an appropriate person.					
PS1.2	Plan and try out at least one option for solving the problem, using given advice and support.					
PS1.3	Follow given methods to check whether the problem has been solved and describe the results, including ways to include your approach.					
	Level 2					
PS2.1	Identify the problem and come up with at least two options for solving it.	✓	✓	✓	✓	
PS2.2	Plan and try out at least one option for solving the problem, obtaining support and making changes to your plan when necessary.	✓	✓	√	✓	
PS2.3	Apply given method to check whether the problem has been solved and describe the results and explain your approach, including your approach to problem solving.	✓	✓	✓	✓	
	Level 3					
PS3.1	Recognise, explore and describe the problem, and agree the standards for its solution.					✓
PS3.2	Generate and compare at least two options which could be used to solve the problem, and justify the option for taking forward.					✓
PS3.3	Plan and implement at least one option for solving the problem, and review progress towards its solution.					✓
PS3.4	Agree and apply methods to check whether the problem has been solved, describe the results and review the approach taken.					√

	Problem solving	Security,	emergend	cy and ala	rm systen	ns
	Key Skills	16	17	18	19	20
	✓ indicates the potential for candidates to produce evidence of the relevant key skill competence when undertaking assessment against the Skills for Security (formally SITO)unit. In all other cases, there is no firm indication of the potential for candidates to produce evidence of the relevant key skill competence.	Negotiate sales of security, emergency or alarm systems s	Demonstrate the use of and hand over security, emergency or alarm systems to customers	Lead the work of teams and individuals to achieve objectives	Control contract work	Implement work to meet installation requirements
	Level 1					
PS1.1	Confirm your understanding of the given problem and identify at least two options for solving it with help from an appropriate person.					
PS1.2	Plan and try out at least one option for solving the problem, using given advice and support.					
PS1.3	Follow given methods to check whether the problem has been solved and describe the results, including ways to include your approach.					
	Level 2					
PS2.1	Identify the problem and come up with at least two options for solving it.		✓			
PS2.2	Plan and try out at least one option for solving the problem, obtaining support and making changes to your plan when necessary.		✓			
PS2.3	Apply given method to check whether the problem has been solved and describe the results and explain your approach, including your approach to problem solving.		✓			
	Level 3					_
PS3.1	Recognise, explore and describe the problem, and agree the standards for its solution.	✓		✓	✓	✓
PS3.2	Generate and compare at least two options which could be used to solve the problem, and justify the option for taking forward.	✓		✓	√	✓
		1				

S	Plan and implement at least one option for solving the problem, and review progress towards its solution.	✓	✓	✓	✓
t	Agree and apply methods to check whether the problem has been solved, describe the results and review the approach taken.	✓	✓	√	✓

Appendix 2 Recording forms

A comprehensive set of forms is provided in the Recording Forms Document and it is expected that City & Guilds Community and Society centres will use these as described. As these forms have been developed for use in all N/SVQs offered by City & Guilds, the following additional information is provided as regards their use in the Security, Emergency and Alarm Systems NVQ.

Form N/SVQ6 – Assessment plan, review and feedback

Form used to record unit assessment plans, reviews and feedback to the candidate. The form allows for a dated, ongoing record to be developed.

Form N/SVQ7 - Performance evidence record

The column on right-hand side 'scope/range ref' only needs to be completed if coverage of the scope/range is identified as a requirement rather than as guidance. This information is available within each unit.

The Performance Evidence Record may be completed by the candidate where this is a sensible and appropriate alternative to the assessor or witness completing the PER record.

The actual work activity must be observed/witnessed by the assessor/witness and, where the assessor has agreed that the candidate may complete the PER record, the assessor/witness must;

- check it for accuracy,
- amend as necessary,
- add any omitted evidence,
- add suitable comments (witnesses should make a short summary statement at the end of the relevant PER eg 'With my amendments, Johns PER is an accurate record of the work that I have witnessed and I can confirm that all this work was competently carried out and complied with our company procedures.'
- sign and date the record if they accept it as a faithful record of the observed/witnessed event.

Form N/SVQ8 - Question record

The 'scope/range ref' column only needs to be completed, if coverage of the scope/range is identified as a requirement rather than as guidance.

Form N/SVQ9 - Professional discussion record

If audio-visual recording is used, this form may be used to summarise the content of the discussion and outcomes so as to provide sufficient information to allow access to precise parts of the recording by the external verifier. If the form is not supported by an audio-visual recording it will have to provide more written detail of candidates' contributions to the discussion.

Form N/SVQ10 – Evidence location and summary sheet

Version 1 is the most appropriate to use for units where the scope is identified as guidance only. Version 1 or 2 can be used for units where the scope is identified as a requirement. A customised version is available for the core units only and is located after each unit. Some performance criteria have sub-headings which are preceded by a letter. A (\checkmark) should be entered if the majority of the subdivisions have been covered in the piece of evidence being referenced. Alternatively, where only **some** of the subdivisions are covered, the subdivision letters should be recorded in the appropriate box as alternative to a (\checkmark).

Form N/SVQ12 - Summary of achievement

Column 3 refers to the date on which the unit was **internally** verified.

Appendix 3 Examples of completed recording forms

Overleaf are examples of completed recording forms showing the method of using the forms provided by City & Guilds for the collection of evidence in support of this qualification.

Form N/SVQ6 Assessment plan, review and feedback



Candidate name John Smith
Assessor name Alan Green
Unit number/s and title/sSYS 9 Install Cabling for Security, Emergency or Alarm Systems
This record can be used for single and multiple unit planning

Date	Assessment planning, review, feedback and judgement record	Candidate and assessor signatures	Evidence reference
10/01/06	Assessment Plan 1 John started units SYS1, SYS2 and SYS3 and is now ready to be assessed for Unit SYS 9. John and I met and discussed the performance criteria, range and knowledge specification for this unit. We agreed that I will attend his place of work on 24/01/06 so that I may observe him working on the appropriate activity. It is likely that some aspects of the range will still be outstanding and therefore these can be evidenced by witness testimony from George Allenby (senior engineer) who is a technical expert. John will also continue to write his daily work diary summaries (signed weekly by GA) to provide evidence reference and general range support	AG JS	Ref.1 Ref.2
24/01/06	Assessor Observation I observed John working with a senior engineer on the installation of an intruder alarm system extension in a primary school. His engineer had asked him to plan the route and install the specified cable and containments from the control panel to a specified position in the secretary's office, for later connection to a new PIR. John planned the route, procured the necessary tools, health & safety equipment, access equipment and safely prepared the site, before preparing cable accesses, installing cable containments and cable. John answered my questions satisfactorily and demonstrated complete competence throughout the work, he was tidy, worked safely, used access equipment correctly, selected the correct tools and thoroughly cleaned the site on completion and restored it to the satisfaction of the school staff.		Ref.1
24/01/06	Feedback/Review of Evidence I used the Evidence Location and Summary (ELS) record sheet to confirm with John that he had satisfactorily demonstrated competence across all the PCs in the four elements and also identify that some parts of the range requirements were still outstanding. As previously identified John will seek testimony from GA to cover as much as possible from the outstanding range over the next 6 weeks. I will also make a further visit to observe on 04/04/06. John also agreed to continue recording performance evidence gained from observation or witness testimony undertaken by myself or his expert witness which will include references to the relevant job specifications/ revisions, work schedules as appropriate etc. He will also maintain/organise an up to date assessment evidence portfolio for me to review at the next meeting.	AG AG JS	Ref.1 Ref.2

12/03 06	Review of Evidence		
	Read and accepted two witness testimonies presented to cover the outstanding range. These claims to competence were entered onto the ELS.		
	• Expert Witness (EW) testimony from GA 30/01/06. John had planned cable routes and installed cable and cable containments for the installation of door entry and break glass detectors, and a rear external sounder at the rear of retail premises.		Ref.2
	• Expert Witness testimony from GA 20/01/06. John had installed the complete cabling and cabling containments of an alarm system in a three bedroom residential property.		Ref.3
	The EW (GA) had also reported on John's knowledge of the relevant parts of major regulation documents eg. Health & Safety at Work Act, Intruder alarm regulations BSEN50131, PD6662 and The IEE wiring regulations BS7671.		
	John had maintained clear daily work diary entries. The PERs are a complete and faithful record of my observation on 24/01/06, and the two EW testimonies 30/01/06 and 20/01/06 respectively; both included a short EW endorsing statement.		
	Assessment Plan 2		Ref.1
	To cover the remaining range and ensure consistent practice we agreed witness testimony from GA when John will be installing a variety of cabling/containments in a large block of apartments in the process of construction. It was also agreed that I would visit him on site on 04/04/06 to observe John installing MIC and other power cable/containments with the company electrician.	AG JS	
04/04/06	Assessor Observation		
	Observed John working with the company senior electrician installing mineral insulated cable for a central battery system for emergency lighting. John was able to demonstrate competently, three MIC cable terminations and the installation of a short run of MIC cable involving two 90 degree bends and secure wall fixings.	AG JS	Ref.4
	In the same factory building I saw a spur extension, to a 13A metal clad spur box, previously installed by John. The installation involved 3 core PNE 2.5 mm2 PVC sheathed cable, routed overhead along metal tray and terminated at the spur box via steel conduit. John was able to explain the cable construction for both MIC and PVC cables and the reasons for selecting the correct core CSA. The senior engineer confirmed that the installation was entirely John's work and that he was completely satisfied with the standard of his work and understanding of the allied underpinning knowledge.		Ref.4
17/04/06	Review of Evidence Read and accepted as accurate the PER of my observation on 04/04/06. Also read and accepted the PER for the EW testimony summarised as follows		
	• Expert Witness testimony from GA 15/03/06. John installed sections of cabling in a large apartments block in the process of construction, which in parts required routing cables through pre installed ducting. At all times John had to work alongside other trades.	AG	
	Throughout all the observations John had been able to explain his procedures fully and was clearly conversant with and able to apply all the required underpinning knowledge to his practice,		Ref.4
	All performance criteria range and knowledge requirements have been met sufficiently and the evidence judged to be valid, reliable, authentic and consistent.		
	Signed unit off ready for Internal verification.	AG JS	Ref.5

Assessment plan, review and feedback (continued)

Date	Assessment planning, review, feedback and judgement record	Candidate and assessor signatures	Evidence reference

The above is an accurate record of the discussion		
Candidate signature: John Smith	. Date:	17/04/06
Assessor signature: Alan Green	Date:	17/04/06
		(photocopy as required

Form N/SVQ7 Performance evidence record



N/SVQ / unit .	SYS 9 Install cabling for security and emergency alarm systems	
Candidate nai	meJohn Smith	
Use this form	to record details of activities (tick as appropriate)	Evidence ref(s):1
\checkmark	observed by your assessor	Unit number(s): SYS 9
	seen by expert witness	
	seen by witness	
	self reflective account	

NB Your assessor may wish to ask you some questions relating to this activity. There is a separate sheet for recording these. The person who observed/witnessed your activity must sign and date overleaf.

Links t	:0		Date of Activity:	Links to	
Unit ref	Element ref	PC ref	Performance evidence	Scope/ range ref	Knowledg e / under- standing ref
			I was observed by my assessor on 24/01/06 extending an intruder alarm system in a Local authority primary school. Our company had installed the existing alarm system, so we had the primary specification (JXE1512) and the specification for the additional work (JXE1512/1a).	Intruder Alarm system	
SYS 9	1	a)	My engineer asked me to plan a cable route from the control panel to a specified position for a new PIR in a top corner of the Secretary's office, in accordance with the specification and install a 6 core PVC sheathed multi strand copper cable (7x0.2mm).	1. Extension	1
		d)	I planned a cable route which required the cable to be protected in PVC mini trunking for parts of the route, some high level wall clipping and through a roof void leading to, and above the secretary's office. Access holes to be drilled through a solid double brick wall (x1) and also through a plaster board ceiling into roof void (x2) ensuring regulation space from installed power cables.	5. 2. Copper 3. Cable, Trunking Fixings/fittings	2.

SYS 9 SYS 9 SYS 9	2 3 2	e) b) c) f) e) d)	After getting my engineer's approval of the plan I collected the materials, selected tools, access equipment and personal safety equipment for doing the work. I also taped off the working area to ensure the safety of other users of the building With the aid of pre-checked access equipment, I used a 110V power drill (which I had first checked to be in safe working order), and a long 5mm masonry drill bit, to drill through the brick wall just below ceiling level. I wore protective glasses and a dust mask for this procedure. I prepared and installed the PVC ducting vertically on the brick wall above the control panel using screws into plugged holes and along a ceiling joist (screws into wood) in the roof void. The cable was then installed from the control panel, through the ducting, access wall	3.Public Premises 4. Brick, Timber 6. Hand and Power tools Personal safety	4
SYS 9	3	a)	and ceiling holes, through ceiling ducting (approx 5m) and finally	Equipment 2. Wires	
SYS 9 SYS 9	2	c)e)	into the top corner of the secretary's office, ready for PIR connection. Care was taken to ensure there were no rough edges in contact with the cable at any point, through the roof void, I routed the cable at least 1 m		3
3137	3	D)	away from power/lighting cables to prevent signal interference. For a short length (1m approx) the cable was clipped to a wall at ceiling height, using masonry pinned PVC clips. I labelled each end of the cable.		3
SYS 9	4	a) b)	I capped/closed the trunking and sealed all cable entry/exit wall and ceiling access positions. All building and decorative damage was reinstated in accordance with requirements to prevent the spread of fire.		1
SYS 9	3	d)	The cable and containments were all installed in accordance with BS 7671 (2001), PD 6662 (2004) and the HASAW regulations for my personal safety and others. After completing the work I cleared, cleaned and restored the site to the satisfaction of the secretarial staff.		2
SYS 9	4	d)e)f)			
Leonfi	run that tha		listed is my own work and was carried out under	 	

I confirm that the evidence listed is my own work and was carried out under the conditions and context specified in the standards.

Candidate signature	Date
Assessor/Expert Witness* signatureAlan Green	17/04/06
*delete as appropriate	
Internal Verifier signature (if sampled):	

(photocopy as required)

Form N/SVQ8 Questioning record



(photocopy as required)

inks to:	Assessor's questioning record											
unit/element/ oc/scope/ range/ knowledge	Questions	Answers										
5YS 9	Why did you use an 110V power drill	 a) Because my battery drill would not have had sufficient power for the hard cement rendered wall. b) Safety regulations require reduced voltag 110V for hand held portable drills. The transformer secondary windings are centre tapped to earth, ensuring, that in the more common case of a fault i.e. to earth (eg because of damage to the cable, plug or drill case), a victim will only be subjected to 55V. 										
The above is an a	accurate record of the questioning.											

Form N/SVQ9 Professional discussion record



Candidate name:	
N/SVQ:	
Assessor name:	
Unit / Areas to be covered within the discussion element reference	Unit/s knowledge reference
Outline record of discussion content (continues overleaf, use additional sheets as required)	Counter ref (if recording

Professional discussion record (continued)

Outline record of discussion content (use additional sheets as required)

Counter ref (if recording used)

Start time:	Finish time:
The above is an accurate record of the discussion.	
Candidate signature:	Date:
Assessor signature:	Date:
Internal Verifier signature (if sampled):	Date:

Form N/SVQ10 Evidence location and summary sheet – version 2



Candidate name John Smith

Unit/element number/title ... SYS 9.1 Install cabling for security and emergency alarm systems

Item of evidence	Loc.	Ref	Link to performance criteria (✓) Link to scope / range ref (✓)											Link to knowledge ref										
				1 / a	2 / b	3 / c	4 / d	5 / e	6 / f	7 / g	8 / h	9 / i	10 / j	1 / a	2 / b	3 / c	4 / d	5 / e	6 / f	7 / g	8 / h	9 / i	10 / j	1,2,4,5,6
Observations	р	1	✓	√	✓	✓	✓						✓	✓	✓	✓	✓						1,2,4,5,6	
Expert Witness testimony	р	2	✓	√	√	✓	√						✓	✓	✓	✓							1,2,4,5,6	
Expert Witness testimony	р	3	✓	√	✓	✓	✓	•					✓	✓	✓	✓		✓					1,2,4,3,5,6	
Expert Witness testimony	р	4	✓	√	✓	✓	✓						✓	✓	✓	✓	✓	✓					1,2,4,5,6	
Observation	р	5	✓	√	✓	✓	✓	•					✓	✓	✓	✓	✓						1,2,4,5,6	

Location key: p = portfolio, o = office (add further categories as appropriate)

(photocopy as required)

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