
Overview

This NOS sets out the skills, knowledge and understanding for you to collect and record information for the design and specification of electronic security systems and their installation. Electronic security systems is a generic term that includes: intruder, fire, cctv, access, remote monitoring systems and other types of protective installations. It also encompasses the integration of existing and new systems.

These standards are aimed at people who work with electronic security systems, this includes roles such as: surveyor, technical sales, system designer, installer, maintenance engineer, service engineer, commissioning engineer.

You must know and comply with the legislation, regulations, standards and codes of practice that are relevant to the systems for which you carry out surveys and produce designs and specifications.

This NOS covers the following activities:

1. Survey sites to collect information for the design, installation and maintenance of electronic security systems
2. Produce designs and specifications for electronic security systems and their installation

Performance criteria

You must be able to:

Survey sites to collect information for the design, installation and maintenance of electronic security systems

- P1 confirm you have all necessary and correct details of customer requirements to carry out site survey
- P2 use survey methods that are appropriate to the type of system, and customer requirements, including risk assessments and any specific health and safety requirements
- P3 recognise and record accurate and relevant factors that could impact on designs, specifications and installation
- P4 record relevant accurate details on which designs and specifications can be produced and installations can be carried out
- P5 complete surveys within agreed timescales
- P6 carry out site surveys that include, where appropriate, the integration of electronic security systems in line with relevant codes of practice
- P7 carry out site surveys based on risk, customer and insurers' requirements
- P8 maintain the confidentiality of information, sites and systems in line with relevant legislation, codes of practice

Produce designs and specifications for electronic security systems and their installation

- P9 confirm that you have sufficient correct information and have had relevant consultations to design and specify systems that meet customers' requirements
- P10 design systems that meet required performance using data and information provided through surveys
- P11 produce system designs and specifications that optimise costs and that are appropriate to installation sites
- P12 provide designs and specifications which enable successful and safe installation and operation of systems
- P13 produce designs and specifications for systems that meet the

requirements of relevant legislation, regulations, standards and codes of practice

P14 provide designs and specifications in agreed formats, within required timescales and to the appropriate person

P15 maintain the confidentiality of information, sites and systems in line with relevant regulations, legislation and codes of practice

P16 identify specialised contractors where required

P17 obtain or produce approvals and certification required for systems

Knowledge and understanding

You need to know and understand:

Legal and Organisational requirements

K1 current relevant legislation, regulations, standards and codes of practice relating to the system to be installed

K2 how to identify and control risks to health and safety during survey and installation activities

Survey sites to collect information for the design, installation and maintenance of electronic security systems

K3 the details you need for preparing system designs and specifications, and from where to get these details

K4 why you must have accurate and up to date details of systems, sites and customer requirements

K5 when you might need to liaise with other people to survey sites

K6 how to carry out surveys, take appropriate measurements and record relevant details of surveys based on risk, customer and insurers' requirements

K7 how to read and interpret architectural and similar drawings

K8 how to recognise factors that could affect system installation, integration, transmission, storage or operation (including, where appropriate, the application of cloud based systems) and how to record the details fully and accurately

K9 how to communicate and work with other people

Produce designs and specifications for electronic security systems and their installation

K10 why it is important to have and use sufficient valid, accurate and up to date information from surveys

K11 the limits, constraints and capabilities of organisations involved in the installation and operation of systems

K12 the performance, limitations, cost, and availability of systems, equipment and components that you could specify in your designs
K13 formats of and information required for designs and specifications
K14 typical timescales and activities involved in the installation of systems, including manpower requirements

Scope/range

Competency must be demonstrated in two of the seven areas including at least one of the core areas:

Core areas

- Intruder
- Fire Alarm
- CCTV
- Access Control

Other areas

- Nurse Call
- EAS Systems
- Cloud Based System

Glossary

In these National Occupational Standards;

Electronic security systems: a generic term that includes: intruder, fire, cctv, access, remote monitoring systems and other types of protective installations. It also encompasses the integration of existing and new systems.

factors: local conditions of the site that could affect or influence the design or installation. For example (but not exhaustive) environmental; use; occupancy; access; structure

integration: the linking of new or existing systems with new or existing IT and other systems and networks

site characteristics: physical layout, dimensions, structure and use

sites: premises of installations. For example (but not exhaustive) commercial; industrial; retail; domestic; governmental

specification: the specific detail containing design, installation, commissioning or maintenance requirements

storage: this includes cloud based systems

systems: a set of components working together as an interconnecting network. For example (but not exhaustive) new installations; extensions; modifications

transmission: the means by which system components communicate. This includes, for example: wired, wireless, Bluetooth, networking

Developed by	Skills for Security
Version Number	2
Date Approved	October 2018
Indicative Review Date	October 2023
Validity	Current
Status	Original
Originating Organisation	Skills For Security
Original URN	SFS SYS 4
Relevant Occupations	Security Managers; Security and Emergency Comms System Installation Installer and Engineer
Suite	Electronic Security Systems
Keywords	survey; system; site; design; performance; information; installation; maintenance; electronic; security; transmission, integration, communication
