



Security.Improved

NSI Code of Practice for the design, installation, commissioning and maintenance of Access Control Systems

NCP 109 Issue 3

June 2021

EXTRACTS FROM NCP 109 ISSUE 3 RELATING TO MAINTENANCE ONLY

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- c) The type and location of power supplies.
- d) Power supply standby periods where relevant.
- e) Details of those access points which the customer has the facility to override.
- f) The type and location of any warning device.
- g) Configuration settings.
- h) Manufacturer's documentation relating to equipment, software, operation and security functions.
- i) Details of the methods adopted for emergency override for safe escape.
- j) Details of any mechanical components in an ACS, such as locks and hinges, which may require routine preventive maintenance by the user more frequently than once per year.
- k) Firmware and software versions installed.
- l) The as-fitted document must be agreed with the user or their representative and a copy provided to them.

Some of the information required for the as-fitted document may be provided in the form of a diagram of the installed system.

The customer should be advised to keep all documentation for the ACS in a place where access is restricted to authorised people.

9 Maintenance

9.1 Resources

9.1.1 General

It is advisable the installing company should also carry out the maintenance.

IMPORTANT →

The organisation responsible for the maintenance of the ACS must have the means, including spare parts and documentation to comply with this Code of Practice.

This recommendation does not place an obligation upon customers to have their ACS maintained, maintenance is a matter of agreement between the installing company and the customer or between the customer and a separate maintenance company. However, where an ACS controls access points that are also fire exits the customer should be advised to put a maintenance agreement in place to ensure the system continues to operate correctly.

HEALTH & SAFETY →

Where a computer based system is installed, the customer should be advised to consider having a support agreement with the software supplier, where the organisation

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responsible for the maintenance of the ACS does not provide the necessary software support this is to ensure updates to the application and technical support can be provided.

The organisation responsible for the maintenance of the ACS must ensure the safe custody and control of all equipment and documentation pertaining to installations, which is within their control.

9.1.2 Test equipment

ALL MODERN ACCESS CONTROL IS CLOUD-BASED

Each service technician must have access to tools, test instruments and other equipment to enable them to perform their functions satisfactorily. Specialist tools, test equipment and plant must be available as required.

Not all eventualities can be foreseen and, in exceptional circumstances, a system or part(s) of a system may have to be left inoperable or disconnected whilst tools or replacement components are obtained.

9.2 Preventive maintenance

9.2.1 Frequency of visits

Preventive maintenance visits must be carried out every twelve months (+/- one month) from the month of commissioning

A greater frequency may be required due to user requirements, environmental conditions or issues identified in the risk assessment.

IMPORTANT

Where there are any mechanical components in an ACS, such as locks and hinges, which may require routine preventive maintenance by the user; this should be documented in the system design proposal and/or the as-fitted documentation.

9.2.2 Inspection

During each preventive maintenance visit, the following should be inspected and any necessary corrective action should be carried out in agreement with the customer:

HAS ANYTHING BEEN CHANGED FROM THE ORIGINAL INSTALLATION?

- a) The installation, location and siting of all equipment and devices against the as-fitted document (see 8.3).
- b) The satisfactory operation of all equipment.
- c) All flexible connections.
- d) The normal and standby power supplies, for correct functioning.
- e) The control equipment, in accordance with your procedure.
- f) The operation of any warning device in the system
- g) The correct operation of all system security functions

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- CLOUD** →
- h) System application and operating software is at the correct version with the latest security patches and critical updates installed, subject to any software configuration controls the customer may have in place.
 - i) Verify customer responsibilities have been carried out, and inform the customer of any required corrective actions.

Those items of inspection and rectification which are not carried out during the preventive maintenance visit must be documented and agreed with the customer. These should be completed as soon as practicable, subject to the customer agreement.

Any reduction in the level of security identified during the preventative maintenance visit must:

- be recorded on the maintenance visit;
- be subject to a review of the risk assessment; and
- be rectified as soon as is practicable.

Rectification of any issues resulting in the reduction of the level of security may be outside of the scope of the maintenance organisation.

Where the risk assessment has not been made available to the maintenance organisation, a new assessment may need to be undertaken.

9.3 Corrective maintenance

The corrective maintenance (emergency service) facility must be so located and organised so that, under normal circumstances, the company’s technician attends the premises within the time agreed in the contract with the customer.

9.4 Records

9.4.1 General

PROOF AND EASE OF ACCESS TO RECORDS → The organisation responsible for the maintenance of the ACS must maintain records relating to the ACS it maintains, including the information required as detailed in sections 9.4.2 to 9.4.5. It is essential that these records are protected from unauthorised access.

Attention is drawn to the General Data Protection Regulation (GDPR) and the 2018 Data Protection Act (DPA). In those cases where records contain information concerning individuals.

PROOF AND EASE OF ACCESS TO RECORDS → You must retain information in respect of contracts (including survey, design, quotations, amendments and commissioning/handover documents for the life of the contract plus a minimum of two (2) years.

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9.4.2 As-fitted document

An as-fitted document will have been generated on completion of the system and may include previous information from the system design specification. The organisation responsible for the maintenance of the ACS must keep this document up to date and the document must be available to maintenance technicians for use at each maintenance visit.

The updated as-fitted document does not need to include the number of keys, codes, tokens, etc. where the customer has control of these.

VERY FEW COMPANIES ACTUALLY PRODUCE AS-FITTED DRAWINGS

When taking on a contract to maintain a system that has been installed by others, the as-fitted documentation should be obtained. Where this is not possible, a new document should be produced.

Where it is necessary for a new as-fitted document to be produced, it is preferable that this is done as soon as practicable and it is reasonable to expect that it could be done at the initial visit. However, it may be compiled over several maintenance visits, particularly in the case of large and/or complex systems.

9.4.3 Preventive maintenance record

PROPER RECORDS ARE REQUIRED

A preventive maintenance visit record must be produced for each preventive maintenance visit.

A preventive maintenance record must include the details of the work undertaken, including any modifications or remedial works.

Parts of the system that could not be fully tested should be recorded on the maintenance record, together with the reasons for their omission and the signature of the client or representative.

PROPER RECORDS ARE REQUIRED

A record of checks and work carried out must either be provided to the customer at the time of maintenance or within 10 days of the maintenance visit or as agreed with the customer.

The organisation responsible for the maintenance of the ACS must retain preventive maintenance records for a minimum period of 15 months after the preventive maintenance visit has taken place.

9.4.4 Corrective maintenance record

PROPER RECORDS ARE REQUIRED

The organisation responsible for the maintenance of the ACS must keep a record of the date and time of receipt of each request for emergency maintenance service, together with the date and time of completion of corrective maintenance and the necessary action(s) carried out.

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PROPER RECORDS REQUIRED MEANS QUICK AND EASY ACCESS TO THOSE RECORDS

A corrective maintenance visit record must be produced for each corrective maintenance visit.

A corrective maintenance visit record must include the details of the reason for the corrective maintenance visit and the work undertaken, including any modifications or remedial works.

Any corrective maintenance work not completed should be recorded, including the reason why and accepted by the client or their representative.

A record of checks and work carried out must be given to the customer at the time of maintenance or provided within 10 days or as agreed with the customer.

The organisation responsible for the maintenance of the ACS must retain corrective maintenance records for a minimum period of 15 months after the corrective maintenance visit has taken place.

If a preventive maintenance inspection is made at the same time as the corrective maintenance visit, these should be recorded as separate records.

9.4.5 Temporary disconnection record

The organisation responsible for the maintenance of the ACS must keep a record of any temporary disconnection of the system or of any component part(s) of it. This must identify which part(s) of the system and the associated equipment is not operable. The reason for the disconnection must be given and the date and time of disconnection and of subsequent reconnection. A signed authorisation for each disconnection must be obtained from the customer or their representative.

Authorisation from the customer for temporary disconnection must be kept for at least three (3) months after reconnection.

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