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Foreword

The Government of Ireland through the Private Security Services Act, 2004, established the Private Security Authority (PSA) as the national regulatory and licensing body for the private security industry. Amongst the functions of the PSA are:

- The controlling and supervising of persons providing security services and maintaining and improving standards in the provision of those services.
- Specifying standards to be observed in the provision of security services.
- Specifying qualifications or requirements for the granting of licences.

This document has been developed by the PSA for the licensing of contractors in the Access Control sector. It sets out the requirements which contractors are expected to meet and maintain in order to comply with the licensing regulations of the PSA.

The PSA would like to acknowledge the contribution of all those who participated in the development of this document and to thank the National Security Inspectorate (NSI) who provided us with permission to reproduce in full and part extracts from their Code of Practice (NCP109.2)

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Contents

SCOPE	4
PART 1 – ACCESS CONTROL – SPECIFIC PROVISIONS	5
PART 2 – ACCESS CONTROL – GENERAL PROVISIONS	7
2. DEFINITIONS	7
3. GRADING OF ACCESS POINTS	9
4. LOCATION SURVEY	10
5. SYSTEM DESIGN	12
6. EQUIPMENT SELECTION AND INSTALLATION	14
7. TEST, COMMISSIONING, MAINTENANCE AND CERTIFICATION	21
8. AS FITTED DOCUMENT	25
Annex 1	26
Annex 2	27

SCOPE

This standard provides a specification for compliance with licensing by the Private Security Authority and applies to organisations seeking licences to provide electronic security services as Access Control contractors. Organisations seeking an Access Control licence will also be required to comply with PSA 74:2019 – Licensing Requirements for Security Service Providers.

Organisations may choose between the European Standard ISO EN 60839-11-2 or the requirements set out in Part 2 of this document. Organisations choosing ISO EN 60839-11-2 will need to be familiar with ISO EN 60839-11-1. Organisations should read this document carefully and ensure they meet the requirements of whichever option they choose.

Organisations licensed by the Private Security Authority and those seeking a licence from the PSA must comply with this standard. Only auditing bodies approved by the PSA to audit for this standard may provide auditing services for licensing purposes.

By applying for and holding a licence, organisations agree to the sharing of information relating to this document, the contents herein and any audit (including audit reports) undertaken for the purposes of PSA licensing between the PSA and the organisation's auditing body. Where an organisation fails to comply with the requirements of this standard, the auditing body is obliged to notify the PSA.

This document is for the purpose of licensing by the PSA and should not be interpreted as meeting any other statutory obligations of an organisation. It is not a technical reference. Organisations seeking a licence in the Access Control sector must also comply with the PSA Licensing Requirements for Security Service Providers (PSA74:2019).

Only the most recent edition of the standard specified by the PSA shall apply for licensing purposes. To ascertain the edition applicable visit the PSA website, www.psa-gov.ie.

PART 1 – ACCESS CONTROL – SPECIFIC PROVISIONS

1.1 Standards Required For Licensing

- **1.1.1** Subject to the provisions of **1.1.2**, the following standards shall apply to organisations providing a security service in the Installer of Security Equipment (Access Control) sector:
 - PSA 74:2019 Licensing Requirements For Security Service Providers
 - PSA 67:2021 Licensing Requirements For Electronic Security Access Control (Part 1)
 - •I.S. EN 60839-11-2
 - •I.S. EN 179
 - •I.S. EN 1125
 - •I.S. EN 13637
- **1.1.2** An organisation who, on the 31st May 2022, is the holder of a Private Security Services Licence in the Installer of Security Equipment (Access Control) sector may opt to comply with the standards specified at Clause **1.1.1** or the standards specified at Clause **1.1.3**.
- **1.1.3** An organisation who meets the requirements of **1.1.2** and opts not to comply with the provisions of **1.1.1** shall be subject to the following standards when providing a security service in the Installer of Security Equipment (Access Control) sector:
 - PSA 74:2019 Licensing Requirements For Security Service Providers
 - PSA 67:2021 Licensing Requirements For Electronic Security Access Control (Parts 1 and 2)
 - I.S. EN 179
 - I.S. EN 1125
 - I.S. EN 13637
- **1.1.4** An organisation who meets the requirements of **1.1.2** and who obtains certification from an approved auditing body in accordance with the provisions of **1.1.1** shall not revert to the provisions of **1.1.3**.
- **1.1.5** The provisions of **1.1.3** shall cease on the 1st November 2025. From that date all organisations shall comply with the requirements of **1.1.1**.

1.2 Compliance with Standards

- **1.2.1** Organisations shall maintain compliance with this standard during the term of the licence. Failure to maintain compliance may result in the PSA taking action against the licensee up to and including the revocation of the licence.
- **1.2.2** Organisations shall be subject to an audit by an approved auditing body at least once during each calendar year or at such intervals as the PSA may prescribe. The purpose of the audit is to verify compliance with the specified standards.
- **1.2.3** An audit report shall be completed by the approved auditing body for each audit undertaken and the organisation shall agree to the auditing body providing a copy of the report to the PSA.
- **1.2.4** Organisations shall give their permission to the approved auditing body to provide the PSA with information in accordance with provisions **1.2.5** and **1.2.6**.
- **1.2.5** Where an organisation fails to undertake or complete an audit the auditing body shall notify the PSA of the failure and the reason for same.
- **1.2.6** Where an organisation is found to be non-compliant with a standard the auditing body shall notify the PSA of the reason for the non-compliance and any resulting action taken against the organisation.

PART 2 – ACCESS CONTROL – GENERAL PROVISIONS

2. DEFINITIONS

- **2.1** Access Control. The control or recording of access by persons or vehicles to or within premises by means of:
 - a) Personal identity verification, including by means of biometrics
 - b) Vehicle identification
 - c) Numerical codes
 - d) Alphabetical codes
 - e) Access or other card management,
 - f) Electronic key management, or any combination of such means.

Licensable activity includes the installation, maintenance, repair and servicing of all hardware, software (including programming), access control media, locks, door operators and closers, intercom systems or other components that form part of the access control system.

Access control media includes card, fob, numerical or digital keypad, biometrics, electronic key, remote control, mobile phone or other remote device whether installed in a domestic or commercial setting.

- **2.2** Access point. The position at which access/egress can be controlled to a door or turnstile.
- **2.3 ACU.** Access control unit, a device which processes data from the reader to authorise or reject access.
- **2.4 Approved Auditing Body.** An auditing body approved by the PSA to provide auditing services in respect of Access Control.
- **2.5 Biometric.** A measurable, unique physiological characteristic or personal trait that is used as a credential.
- **2.6 Client.** Individual or organisation retaining and maintaining a security service covered by this standard to carry out agreed services in accordance with an agreed contract or other form of oral or written agreement to provide such services.

- **2.7 Contract.** Document, agreed and signed by both the service provider and the client, setting out the proposed services to be supplied and the details of the quotation, terms, conditions, responsibilities and undertakings.
- **2.8 Controlled Area.** The area to which access is permitted through the presentation of a valid credential.
- **2.9 Credential.** Any token or memorised information or biometric used to identify an individual to an access control system in order to verify user access.
- **2.10 Data bus.** A system within a computer or device, consisting of a connector or set of wires, that provides transportation for data.
- **2.11 Fail locked.** The securing of a locking mechanism at an access point in the event of identified system failures.
- **2.12 Fail unlocked.** The release of a locking mechanism at an access point in the event of identified system failures.
- **2.13 Organisation**. A limited or unlimited company, a partnership or sole trader providing services installing, maintaining, repairing or servicing electronic security equipment, for which a PSA Installer of Security Equipment (Access Control) licence is required.
- **2.14 Private Security Authority (PSA).** The regulatory and licensing authority for the private security industry in the Republic of Ireland.
- **2.15** Reader. Equipment for the extraction of data from a token/card or other means.
- **2.16 Security Service.** The provision of access control services for which a PSA licence is required.
- **2.17 Site.** The premises, property, area or complex at which the service is carried out.
- **2.18 Token.** A device such as an electronic key or card which is assigned to a user and which generates an authentication code which allows access.

3. GRADING OF ACCESS POINTS

- 3.1 Access points are graded by the requirements for successful legitimate access (see Grade I, Grade II, Grade III and Grade IV below). Grading is related to the level of security provided for each access point and the grade may change according to the time of day or night.
- **3.2** For each grade, access may be granted by the use of credentials permitted at higher grades, but not by the use of credentials permitted at lower grades.
- 3.3 Organisations shall determine the grading of each access point during the design stage, this shall be done in conjunction with the client and should be sufficient for the client's requirements.
- 3.4 Organisations shall include the location and grading of each of the access points making up an access control system in the system design proposal and in the asfitted document.
 - a) Grade I (low risk)

At an access point to grade I, access will only be granted following:

 The input of a correct common code (or the input of a correct PIN code) of not less than 10,000 differs.

Note: 10,000 differs requires a 4 digit code number such as 1234.

b) Grade II (low to medium risk)

At an access point to grade II, access will only be granted following:

- Option A the input of a correct PIN code of not less than 1,000,000 differs; or
- Option B the presentation of a valid unique token to a reader.

Note: 1,000,000 differs requires a 6 digit code number such as 123456.

c) Grade III (medium to high risk)

At an access point to grade III, access will only be granted following:

- Option A the input of a correct PIN code of not less than 10,000 differs AND the presentation of a valid unique token to a reader, or
- Option B the presentation of a valid biometric to a reader.
- d) Grade IV (high risk)

At an access point to grade IV, access will only be granted following:

- Option A the presentation of a valid biometric to a reader AND the presentation of a valid unique token using radio frequency identification (RFID)*, comparative alternatives or
- Option B the presentation of a valid biometric to a reader AND the presentation of a valid unique token to a reader AND the presentation of a correct PIN code of not less than 10,000 differs.
- * RFID shall not rely on recognising the Chip Serial Number (CSN) only. Also the code to be read shall be stored in the memory of the card.

4. LOCATION SURVEY

- 4.1 The organisation shall on the first visit to the site where the service is to be provided assess the clients requirements against the agreed contracted service and the physical environment.
- 4.2 Where the assessment at 4.1 identifies a weakness in any agreed contracted service this should be advised to the client and a decision sought on how to proceed. A record of this decision should be recorded before any work commences and the client advised of any revised costs.
- 4.3 Clients shall be provided with the manufacturers' product information and user information on any product provided to the client.
- 4.4 Where relevant, organisations shall consult with relevant managers such as those responsible for information technology and human resources at the client's premises.
- 4.5 In carrying out a location survey the following elements shall be fully taken into account and the results documented:
 - a) The degree of physical security and the anticipated number of users and the duty cycle of the access point to which they are fixed;
 - b) Environmental factors, particularly when planning to use mechanisms externally:
 - temperature
 - humidity
 - corrosion

- vibration
- dust and other contamination
- physical abuse
- c) The degree to which external factors will affect the level of security required such as:
 - the existing physical strength of the access point, such as doors and frames.
 - the transfer of electrical connections onto doors shall be via suitable flexible cables or other means of adequate reliability.
 - appropriate hardware shall be used where rebated and double-rebate doors are controlled.
 - necessary safety precautions shall be taken where all-glass or other special doors are controlled.
 - door closing devices shall be sufficient to close and lock the door under normal circumstances, but without undue impact upon the components of an access control system.
 - Where adverse air pressure exists, organisations should provide means for relief of the air pressure.
 - doors shall be a satisfactory fit in the frame.

security in some circumstances.

- hinges, frame and fixings shall be adequate for the weight and proposed usage of a door.
 - Organisations should follow manufacturers' recommendations for turnstiles and similar barriers, and their release mechanisms.
- where manual or automatic override features are used, continuously rated releases will be required.
 Access point hardware alone may not provide sufficient physical

The degree of physical security is related to the grading of access points. An

access point to a higher grade will usually require greater physical security than an

access point of a lower grade.

Organisations should select the necessary locking mechanisms appropriate to the strength of a door and its frame. These should not reduce the physical strength of the access point significantly when fitting the mechanisms.

5. SYSTEM DESIGN

- **5.1** A system design proposal which shall take into account the findings of the location survey shall be prepared and agreed with the client.
- 5.2 The system design proposal shall include a site plan which shall detail the physical environment and the location of all access points.
- **5.3** Organisations shall ensure that access points:
 - do not conflict with fire regulations
 - do not restrict exit in such a way as to endanger people in an emergency
 - are fitted with a 'break glass' door release on all doors leading to an exit route.
- **5.4** All installations, repairs and servicing shall be conducted in accordance with building, electrical and fire regulations.
- 5.5 Any electrical installation or connection required shall comply with current national and site regulations and the electrical work shall be carried out in accordance with the National Rules for Electrical Installations (I.S 10101). Electrical work shall be carried out by technicians who are qualified to undertake such work.
- **5.6** All installations, repairs and servicing of equipment connected with escape routes shall be conducted in accordance with EN179, EN1125, EN 13637 and such other requirements as prescribed by law.
- **5.7** Organisations shall consider the following aspects when preparing the system design proposal:
 - how access points will operate in the event of mains power failure and the period, or number of transactions, required in such circumstances;
 - whether access points should fail locked or fail unlocked;
 - whether secondary non-controlled locking devices should be fitted on external doors that fail unlocked;
 - whether a key override is required for any critical doors to facilitate access in an emergency;
 - whether ACUs will retain data in the event of data bus or power failure until the central computer or processor is operational;

- whether standby power is needed for the database (for example if held on a computer) to maintain its integrity during power failure;
- the choice of access control technology to provide an appropriate level of security for the risk to be protected;
- the choice of electronic equipment and its siting, taking into account environmental conditions and the potential for vandalism;
- the selection of access point hardware, taking into account the volume of traffic, environmental conditions and the level of physical security required;
- the number of users, access levels and time zones required, taking into account both present and predicted numbers of users and their needs;
- whether certain equipment needs to be protected against malicious damage;
- the need to site equipment such as controllers and printers in a secure area;
- the number of access points required, taking into account peak periods of use;
- whether an existing client local area network (LAN) should be used;
- ease of access to ACUs and power supplies for preventative and corrective maintenance.
- **5.8** The system design proposal shall contain the network security specifications for data protection.

6. EQUIPMENT SELECTION AND INSTALLATION

- **6.1** Except where otherwise specified, equipment shall be selected and installed to withstand the following air temperatures:
 - Internally sited equipment, 0 °C to +40 °C
 - Externally sited equipment, -20 °C to +50 °C
- 6.2 Equipment exposed to direct sunlight can exceed these temperatures and appropriate shielding may be required in such circumstances. When the temperature is not well maintained internally in premises, temperature may vary between -10 °C to +40 °C and organisations should consider using equipment suitable for external use or similar. In all cases equipment should be suitable for use in the environment in which it is installed.
- 6.3 Organisations shall use environmental housings according to EN 60529 so as to afford appropriate protection (for example to IP54 or IP65 as applicable) where the possibility of penetration by solid objects, dust or water exists.

6.4 Credentials

Credentials may be thought of in terms of:

- something you know (code),
- something you have (token) or
- something you are (biometric).
- **6.4.1** The security, size and durability of a credential are dependent upon the technology used to encode it and the equipment required to read it.
- **6.4.2** Credential technology should be selected as appropriate to the risk being considered and the needs of the client.
- **6.4.3** Several types of credential are available including:
 - a) memorized information such as common codes and PIN codes, which are input by hand to a keypad;
 - b) magnetic token, including Wiegand effect;

 Where magnetic tokens are powerful enough to corrupt other magnetically

 stored data in their immediate vicinity they should carry a printed warning to this

 effect.

- c) infra-red token;
- d) hologram token;
- e) proximity tokens using technologies such as radio or induction to allow the encoded data to be read within a specified operating range;
- f) biometric.

When selecting a battery powered active token the life span of the battery and the environment in which the token will be required to operate and the frequency of its use shall be taken into account.

6.5 Readers

- **6.5.1** Readers shall be mounted:
 - securely in position.
 - adjacent to their access points and in positions convenient for all users to use, including those with disabilities.
- **6.5.2** Organisations shall provide a reader or controller and/or its associated access point hardware or a central control with the following features:
 - an indication for access granted.
 - variable time available for access to be made.
 - tamper detection to detect access to the lock in circumstances where the lock can then be controlled from the insecure side.
 - response within 2 seconds of the valid completion of the necessary data entry associated with the credential.
 - Processing of more complex data such as those associated with biometric credentials may take longer than 2 seconds and this is acceptable provided the length of time is appropriate to the needs of the client.
 - re-locking of an access point if it is not used within a predetermined time.
- 6.5.3 When biometrics are used, the False Acceptance Rate (FAR) and the False Rejection Rate (FRR) should be balanced to reflect the need for security on the one hand and the need for operability on the other hand. If the FAR is high then it will be more likely that an unauthorised person will be able to gain access using their biometric. Accordingly, clients should not normally be provided with the means to adjust biometric readers as this could seriously weaken the security of the access control system.

6.5.4 If the client is provided with means to adjust biometric readers then access to the means of adjustment shall be protected against unauthorised change (for example by requiring an authorised person/manager to enter a password) and the client shall be provided with sufficient information to enable them to understand the consequences of making adjustments. For example, the client might be provided with information about the adjustments of their biometric readers that are acceptable and/or unacceptable for their security application.

6.6 Access point hardware

- **6.6.1** Organisations shall select access point hardware:
 - a) In accordance with the degree of physical security and the anticipated number of users and the duty cycle of the access point to which they are fixed;
 - b) With regard to the following, particularly when planning to use mechanisms externally:
 - temperature
 - humidity
 - corrosion
 - vibration
 - dust and other contamination
 - physical abuse
 - c) Taking into account the following with regard to the nature of the access point:
 - the existing physical strength of the access point, such as doors and frames.
 - the transfer of electrical connections onto doors shall use suitable flexible cables or other means of adequate reliability.
 - appropriate hardware shall be used where rebated and double-rebate doors are controlled.
 - necessary safety precautions shall be taken where all-glass or other special doors are controlled.
 - door closing devices shall be sufficient to close and lock the door under normal circumstances, but without undue impact upon the components of an access control system.
 - Where adverse air pressure exists, a means for relief of the air pressure should be provided.
 - doors shall be a satisfactory fit in the frame.

- hinges, frame and fixings shall be adequate for the weight and proposed usage of a door.
- d) Organisations shall follow manufacturers' recommendations for turnstiles and similar barriers, and their release mechanisms.

Where manual or automatic override features are used, continuously rated releases will be required.

6.6.2 Access point hardware alone may not provide sufficient physical security in some circumstances.

The degree of physical security is related to the classification of access points. An access point to a higher grade will usually require greater physical security than an access point of a lower grade.

Organisations should select the necessary locking mechanisms appropriate to the strength of the door and its frame and should not reduce the physical strength of the access point significantly when fitting the mechanisms.

- **6.6.3** The physical strength of an access point should be reinforced if this is likely to be unduly reduced by the attachment of the access control hardware. If this is not possible for any reason, the facts of the situation shall be provided in writing to the client.
- **6.6.4** Where access point monitoring is of critical importance, consideration should be given to monitoring the locked / unlocked state of the access point, in addition to any monitoring by means of a separate protective switch.
- 6.6.5 Locking mechanisms can have two modes of operation under system failure conditions, 'failed unlocked' and 'fail locked'. Where exit is available by purely mechanical means, the fail locked mode may be acceptable but where exit is granted by electrical means, the 'fail unlocked' mode may be mandatory to meet safety legislation.
- **6.6.6** In the case of a complete power failure it may be necessary to provide a key override to a critical door (or doors) with the key (or keys) kept in a safe place outside the controlled door (or doors).

- **6.6.7** The suitability of any access control system shall be considered in relation to the fire risk assessment for the premises and the need for safe exit in emergency situations.
- 6.6.8 Where applicable, agreement shall be reached on what methods are to be used to release all the access points (for example green coloured single action emergency exit buttons, or break glass units, on the secure sides of access points) and these methods shall be documented in the system design proposal and the as-fitted document.

6.7 Power supplies

- **6.7.1** Organisations shall ensure the power supply to meet the largest load likely to be placed upon it under normal operational conditions is selected.
- 6.7.2 Any electrical installation or connection required shall comply with current national and site regulations and the electrical work shall be carried out in accordance with the National Rules for Electrical Installations (I.S 10101). Electrical work shall be carried out by technicians who are qualified to undertake such work.
- **6.7.3** All equipment housings shall be clearly marked with the operating, or supplied voltage. Where ACUs use external power supplies, ACU input voltages should not exceed 50V or 75VDC unless unauthorized access to both power supply and ACU are prevented.
- **6.7.4** Certain release mechanisms associated with an access control system, such as those forroller shutters, may operate at mains voltage and specific electrical safety requirements will apply to these.
- 6.7.5 Where safety and security considerations do not require continued operation of a system during a mains supply failure, the public mains supply via a safety isolating transformer may be the sole supply for the system. A 'clean' source for this may be required in electrically noisy environments.

6.7.6 Organisations shall:

- locate power supply units within controlled areas and in positions secure from tampering;
- consider additional security for power supply units that incorporate fail unlock hardware:
- connect the mains power supply permanently to the access control system via a fused outlet, not by plug and socket;
- not bring extra low voltage cables into a power supply container through the same entry point as any mains cables (except where impractical to avoid doing so).
- **6.7.7** Where continued operation of the access control system is essential during mains supply failure, a standby power supply shall be used having the necessary capacity to support the system for not less than the minimum period as agreed with the client.

6.8 Cables

- **6.8.1** Where practicable, cables shall be installed within controlled areas.
- **6.8.2** Where practicable, cables shall be concealed.
- **6.8.3** Where cables are exposed to possible mechanical damage or tampering, or are outside controlled areas, they shall be protected by suitable conduit, trunking, or armour.
- **6.8.4** Where an access point release signal passes outside of a controlled area, metal conduit (or equivalent protection) shall be used.
- **6.8.5** All interconnecting wiring shall be supported and its installation shall conform to good working practice.
- 6.8.6 Any electrical installation or connection required shall comply with current national and site regulations and the electrical work shall be carried out in accordance with the National Rules for Electrical Installations (I.S 10101). Electrical work shall be carried out by technicians who are qualified to undertake such work.

- **6.8.7** All extra low voltage cable joints shall be made in suitable junction boxes using either soldered, crimped, or screw-terminals. Alternatively plugs and sockets can be used provided fire safety is not compromised.
- **6.8.8** Extra low voltage signal cables shall not run in close proximity to mains power cables or other low or high voltage cables.
- **6.8.9** Signal cables for the transmission of data or other low level signals shall be of a type and size compatible with the rate of data transfer and anticipated levels of electromagnetic interference.
- **6.8.10** Low voltage cables from both mains and standby power supplies to remote equipment shall be of sufficient rating to permit satisfactory operation of the equipment at the end of any proposed length of cable run.

6.9 Control

- **6.9.1** Organisations shall consider the following when selecting controls:
 - operational requirements of the associated controllers;
 - protection against unauthorised interference with the system database or programme;
 - logging of transactions;
 - annunciation of alarms:
 - blocking, validation and deletion of tokens;
 - database for the retention of token holder details with back-up copies of corruptible data to facilitate re-establishment of the system in the event of a failure;
 - programming of access levels and time zones;
 - period of operation following mains failure and/or storage of data by non-volatile means:
 - ease of access for maintenance and serviceability.
- **6.9.2** The following shall be taken into consideration when siting control equipment:
 - ventilation:
 - access for maintenance:
 - user access for archiving;
 - physical security and supervision;
 - general visibility to unauthorized people of any displayed data.

7. TEST, COMMISSIONING, MAINTENANCE AND CERTIFICATION

7.1 Test

- **7.1.1** Organisations must check and test the following during commissioning and record the results which shall be signed by the person commissioning the system :
 - all wiring is correctly terminated;
 - alignment and operation of access point hardware and of release and closure mechanisms at each access point is correct;
 - emergency release mechanisms at all the access points are in full working order;
 - operation of each reader is correct;
 - release time for each door is correct;
 - door held open signal, if specified, is present;
 - correct authorisation of access is verified by the input of appropriate data;
 - access control system continues to work when mains supply disconnected (if specified).

7.2 Commissioning

- **7.2.1** At handover, organisations shall complete the following procedures, and have an acknowledgement of completion with the client's name and signature:
 - provide a system log book to the client and explain how to record/report problems;
 - demonstrate all aspects of the system operation to the client, including any necessary safety precautions and any standby powerfacilities;
 - ensure that the correct documentation is given to the client to enable the system to be operated, adjusted and maintained;
 - ensure that clients are advised on the importance of changing access codes including default codes and the necessary instruction provided;
 - train the users in the correct operation of the system and arrange for any further training if necessary;

- for PC based systems, train the users on how to produce a system back-up and recommend that back-ups are carried out on a regular basis.
- ensure that users know the procedure for summoning assistance in the event of system malfunction;
- advise the client to establish whether personal information held within the system requires registration under the Data Protection Act.

Where an access control system is managed remotely, details of this should be included in the documentation, for example the method of control and where control is carried out.

7.3 Maintenance

- **7.3.1** Where a client decides not to enter into a maintenance contract this shall be recorded in the as-fitted document.
- **7.3.2** Where an organisation enters into a maintenance contract with a client it shall be documented and shall specify the schedule of maintenance agreed.
- **7.3.3** During each maintenance visit, inspection of the following, with all necessary tests, and those rectifications which are practical at the time, must be carried out:
 - a) the installation, location and siting of all equipment and devices against the as-fitted document,
 - 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,
 - f) the operation of any warning device in the system,
 - g) the correct operation of all system security functions,
 - h) system application and operating software is at the correct version with any outstanding application and security patches and updates installed, subject to any software configuration controls the client may have in place.

Repairs which were not carried out during the scheduled maintenance visit shall be completed as soon as is practicable, subject to the agreement of any charges which may be applicable.

- **7.3.4** All procedures used in the maintenance, servicing and repair of access control shall be in accordance with manufacturer's policy and instruction and meet manufacturer's specifications.
- 7.3.5 Any repairs or alterations to the system necessary following maintenance are to be performed in such a way as to return the system to the same level of service or better, as provided before the maintenance. Alterations shall be in accordance with the manufacturer's technical document. Where this is not possible, the client is to be advised and direction sought.
- 7.3.6 Any component replaced shall be of the same or increased level of security as the original component and shall not impact on the functionality or safety of the system. Where the client requests a component of a lower level of security this request shall be made in writing. Such a request shall be retained on the file of the organisation.
- **7.3.7** A record of all maintenance visits and of the work carried out shall be maintained.

7.4 Certification

- **7.4.1** The organization shall provide the client with a certificate of conformance confirming that the access control system has been installed and tested in accordance with the as-fitted document and the date on which the next service/maintenance visit is due.
- **7.4.2** The certificate of conformance shall contain the following details;
 - a) Name of the organisation
 - b) PSA licence number of the organization,
 - c) Name of client,
 - d) Address at which the service was provided,
 - e) The nature of the service provided (installation, maintenance, repair),
 - f) Date service was provided,
 - g) Grade of system,
 - h) Details of any alterations, changes or other modifications to the system,
 - i) Date of next scheduled maintenance visit,
 - j) Name of person issuing certificate on behalf of organization,
 - k) Date on which certificate issued,
 - I) Date on which certificate expires,

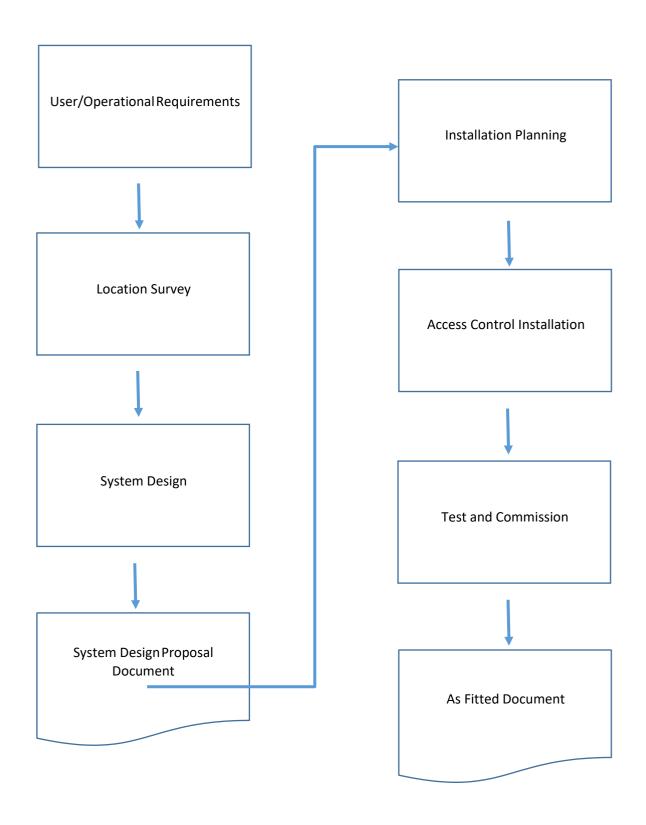
- 7.4.3 Modifications made to the access control system or its configuration, shall be documented and notified in writing to the client and an inspection test shall be carried out on the relevant components or parts of the system. The documentation should be appended to the as-fitted document. A new certificate of conformance which shall include the date of the next service/maintenance visit shall be issued.
- 7.4.4 At each service/maintenance visit the client shall receive a new certificate of conformance confirming that the access control system continues to meet the requirements of the as-fitted document including any modifications made. A new certificate of conformance which shall include the date of the next service/maintenance visit shall be issued.

8. AS FITTED DOCUMENT

- **8.1** Upon completion of the installation of the access control system an as-fitted document shall be produced including the following information:
 - the name, address and telephone number of the controlled premises;
 - the name, address and telephone number of the client;
 - the name, address and telephone number of the installer;
 - the location and classification of each access point and the type and location of each controller and its associated hardware (for example the type of token/reader technology);
 - the type and location of power supplies;
 - power supply standby periods where relevant;
 - details of those access points which the client has the facility to override;
 - the type and location of any warning device;
 - details and settings of any pre-set or adjustable controls incorporated into the system;
 - relevant documentation relating to equipment;
 - relevant documentation relating to software functions;
 - the number of keys, codes, tokens and so on for the system provided to the client;
 - details of the methods adopted for emergency override for safe escape;
 - details of maintenance schedule/requirements.
- **8.2** The as-fitted document shall be agreed with the client and a copy provided to the client.
- 8.3 Some of the information required for the as-fitted document may be provided in the form of a diagram of the installed system.
- **8.4** The client should be advised to keep all documentation for the access control system in a place where access is restricted to authorized people.
- 8.5 For PC based access control systems, the software media may be handed over to the client for safe keeping on site for use during service visits if required. A back-up of the initial system configuration (which may also include a copy of the database records) may also be handed over to the client for system recovery if necessary.

Annex 1

Flow Chart of Access Control Installations



Annex 2

Information to be included in the System Design Proposal

A system design proposal shall be prepared for the attention of the client or specifier (or his or her agent) of the Access Control system. The proposal shall include all the information necessary to enable the client or specifier to ensure the Access Control system is appropriate for the application. The information provided in the proposal shall include the following.

Client details

The name, address and the trading name (if different from the name of the client) and any other information necessary to clearly identify the client.

Organisation details

The name, address and trading name (if a trading name is used) of the organisation shall be included along with any other information necessary for the client to identify and/or contact the organisation. Headed company stationery with organisation details is acceptable in this regard.

Supervised area details

The name and address of the supervised area shall be included if different from the address of the client. This shall also include a description of the supervised area and an indication of what the area is used for.

Schedule of equipment

A schedule of the type and location of operational equipment (in words and/or diagrammatic form) shall be included.

Control

Details of the proposed control equipment shall be included.

Legislation

Details of any claims of compliance of the system components to any local or National legislation shall be included.

Annex 2(cont'd)

Standards

Details of any claims of compliance of the system components to any National or European Standards shall be included.

Other regulations

Details of any claims of compliance of systems components to any other regulations shall be included.

Certification

Details of any claims for certification of the system components shall be included.

Maintenance

The system design proposal shall include recommendations for the scheduled maintenance of the Access Control system or individual components including details of the frequency of any maintenance visits and a list of the work to be carried out during each visit.

When serviced the Access Control system shall be inspected, tested and adjusted to ensure correct operation in line with the functional requirements of the Access Control system as outlined in the As Fitted Document.

Care should be taken to ensure that the equipment is properly reinstated after testing. All maintenance shall be carried out in reference to the manufacturer's recommendations.

Repair

Details of the proposed repair service to be provided including contact names and telephone numbers.