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Dated: 27 December 2007

To: All NSI ARC Gold Approved Companies and all Applicants for ARC Gold Approval

TECHNICAL BULLETIN No. 0006

Guidance on the implementation of BS 5979:2007 British Standard Code of Practice for Remote centres receiving signals from fire and security systems (Supersedes BS 5979:2000)

British Standards Institution (BSI) has published BS 5979:2007 (Incorporating Corrigendum No. 1) "Remote centres receiving signals from fire and security systems – Code of practice". The Standard is now available through licensed outlets including NSI who can supply copies at a discounted rate.

BS 5979:2007 will now be applied to all organisations that wish to apply for, or to maintain, NSI ARC Gold approval. With immediate effect, new applicants for NSI ARC Gold approval will be assessed against BS 5979:2007 and any Improvement Needs will have to be satisfactorily addressed before approval can be granted.

31 March 2008 will be the last date on which a new certificate will be issued against the 2000 edition of BS 5979.

By 30 September 2008, all NSI approved Alarm Receiving Centres (ARCs) will be required to have achieved full compliance with the 2007 edition of BS 5979.

In the interim, Improvement Needs and/or Improvement Observations will be issued for any of the revised requirements within BS 5979:2007 that are not fully satisfied and NSI ARC Gold approval to BS 5979:2000 may continue up until 30 September 2008. Failure to satisfactorily address any Improvement Needs against BS 5979:2007 will then impact upon the on-going approval decisions.

NOTE REGARDING THE STATUS OF BS 5979:2007: Although issued as a Code of Practice by BSI, it is important to note that compliance with the recommendations given in BS 5979: 2007 is regarded as mandatory for all organisations wishing to maintain NSI ARC Gold approval, subject to any additional clarifications and guidance included within this Technical Bulletin or issued subsequently.

Therefore, the recommendations given in BS 5979:2007 must be regarded as requirements of the NSI ARC Gold approval scheme.

SUMMARY OF KEY CHANGES

(Highlighted under the clauses of the new Standard)

Comments under each clause consist of a summary of the changes introduced through BS 5979:2007 when compared with the corresponding clause within BS 5979:2000.

Where the actual wording of the Standard is quoted it is reproduced in bold text.

Where it is considered relevant to further clarify the specified requirement, additional guidance is included in italics.

It is not the intent of NSI to impose its own recommended methods of compliance with specified requirements and NSI will give consideration to any alternative methods of achieving compliance with specified requirements.

FOREWORD

The Foreword to BS 5979:2007 records:

‘This is a full revision of the standard, and introduces the following principal changes:

- ‘a) references updated;
- ‘b) removal of layered security option;

‘NOTE An ARC that became operational prior to 30 June 2008, and which relied on layered security to achieve compliance with the year 2000 edition of this standard, can continue to use layered security, provided an equivalent standard of protection is achieved compared with the physical means set out in 5.1.1.3 [of BS 5979:2007].’

1. SCOPE

The Scope is unchanged apart from an explanatory paragraph that states:

‘Annex A provides guidance for inspectorates, Annex B contains guidance on remote access to remote centre data systems, Annex C gives a recommended agreement for authorizing filtering.’

2. NORMATIVE REFERENCES

BS 5979: 2007 calls up some extra standards including the following:

‘BS 5306-8:2000, Fire extinguishing installations and equipment on premises – Part 8: Selection and installation of portable fire extinguishers – Code of practice’. This is in addition to BS 5306-3.

‘BS 5628-2, Code of practice for the use of masonry – Part 2: Structural use of reinforced and prestressed masonry’. This is in relation to item 2) of sub-clause 5.1.1.3 of BS 5979:2007.

‘BS 5839-1:2002, Fire detection and alarm systems for buildings – Part 1: Code of practice for system design, installation and servicing’. This is in place of BS 5839-1:1988.

‘BS EN 3-7:2004, Portable fire extinguishers – Part 7: Characteristics, performance requirements and test methods’. This is in place of BS EN 3-1.

‘BS EN 179:1998, Building hardware – Emergency exit devices operated by a lever handle or push pad – requirements and test methods’.

‘BS EN 50131-1, Alarm systems – intrusion systems – Part 1: General requirements’.

‘PD 6662, Scheme for the application of European Standards for intruder and hold-up alarm systems’.

‘DD 243, Installation and configuration of intruder alarm systems designed to generate confirmed alarm conditions – Code of practice’.

‘CLC/TS 50134-7:2003, Alarm systems – Social alarm systems – Part 7: Application guidelines’.

For the purposes of the relevant NSI schemes for approval, the provisions of PD 6662:2004 and the Standards called-up by PD 6662:2004, continue to apply. Therefore, until such time as PD 6662:2004 is amended or revised, prEN 50131-1:2004 continues to apply to the installation of intruder and hold-up alarm systems rather than BS EN 50131-1:2006.

3. TERMS, DEFINITIONS AND ABBREVIATIONS

The wording of some of the definitions has been changed so as to align with other relevant Standards. For details, please refer to BS 5979: 2007.

Two new abbreviations have been added to the standard:

RVRC **Remote video response centre**

I&HAS **Intruder and hold-up alarm system**

4. PLANNING

4.1 Categorization

There are no significant changes.

4.2 Site selection

There are no significant changes. However, attention is drawn to the following within 4.2:

4.2.1 Remote centres

A remote centre must be located in a building with low risk of fire, explosion, flooding, vandalism and exposure hazards from other buildings.

In the NOTE about protection against the effects of lightning strike, the reference to BS 6651:1992 has been updated to BS EN 62305. Therefore, new lightning protection systems should comply with BS EN 62305.

4.2.2 Alarm receiving centres (ARC)

4.2.2.2 Category II

The interior of the operations areas or equipment rooms must not be directly visible from outside the shell.

4.3 Consultation

There are no significant changes. However, please note that examples of other relevant interested parties (with whom appropriate consultation must be undertaken) are given as **planning authorities, utilities and telecommunication providers**.

5. CONSTRUCTION AND FACILITIES

5.1 Alarm Receiving Centres (ARCs)

5.1.1 Shell

5.1.1.1 General

There are no significant changes. However, Note 2 has been re-worded to draw attention to Department of the Environment, Transport and the Regions, Buildings Regulation 2000 – Approved Document B Fire Safety and to the LPC design guide for the fire protection of buildings.

5.1.1.2 Category I

No change.

5.1.1.3 Category II

The first paragraph states that '**All parts of the shell should be attack resistant.**'

The examples of acceptable construction given in 5.1.1.3 of BS 5979: 2007 for walls, floors and ceilings are not intended to apply to permitted openings, the requirements for which are given in 5.1.2 (entrance and exits), 5.1.3 (key transfer hatches), 5.1.4.2 (glazed areas), 5.1.5.2 (ventilation openings) and 5.1.6 (entry points for services) respectively.

Additional examples of acceptable construction are given in 5.1.1.3 as follows:

a) **A solid wall, 215 mm thick, constructed from dense concrete blocks laid flat.**

Typically, dense concrete blocks have a density in the range 1950 – 2050 kg/m³.

b) **A solid wall, 190 mm thick, constructed from dense aggregate concrete reinforced hollow block, designed in accordance with BS 5628-2.**

c) **A wall, 190 mm thick, constructed hollow concrete blocks that have been reinforced with, for example, steel bars or scaffolding tubes.**

d) **A wall, not exposed to vehicular attack, reinforced with low carbon steel sheets not less than 1.5 mm thick, of construction that would afford a fire resistance of at least 1 h in respect of integrity, insulation and, where relevant, load-bearing capacity, if tested in accordance with the tests specified in BS 476. Low carbon steel sheets should be welded together and supported by a suitably rigid substructure.**

Typically, this form of construction would be used on upper floors of a building where loading constraints prohibit use of the other examples of construction given in 5.1.1.3 of BS 5979:2007.

The last paragraph of sub-clause 5.1.1.3 of BS 5979:2007 reads as follows:

‘An ARC that became operational prior to 30 June 2008, and which relied on layered security to achieve compliance with the year 2000 edition of this standard, can continue to use layered security, provided an equivalent standard of protection is achieved compared with the physical means set out in this clause.’

Information regarding BS 5979:2000 and layered security

The text of the NOTE at the end of sub-clause 5.1.1.3 of BS 5979:2000 was as follows:

The physical protection described above has traditionally been accepted as the means for ensuring that an alarm receiving centre is resistant to attack. However, an equivalent standard of protection may be achieved by other methods, such as layered security.

NSI produced Guidelines in the form of Technical Memorandum NATM.4 (Issue 3) for use by its Inspectors when applying the NOTE at the end of sub-clause 5.1.1.3 of BS 5979:2000.

NSI has produced NSI Technical Bulletin 0007, which gives guidance on the application of the last paragraph of sub-clause 5.1.1.3 of BS 5979:2007 relating to layered security. NSI Technical Bulletin 0007 supersedes NATM.4 (Issue 3).

5.1.2 Entrance and exits

5.1.2.1 Categories I and II (previously 5.1.2.3 of BS 5979: 2000)

Sub-clause 5.1.2.1 relates to exits and reads as follows:

‘One or more exits providing adequate means of escape in an emergency should be provided utilizing an unlocking device not requiring the use of a key and operable only from within the ARC, such as those in BS EN 179:1998.’

5.1.2.2 Category I (previously 5.1.2.1 of BS 5979: 2000)

No change.

5.1.2.3 Category II (previously 5.1.2.2 of BS 5979: 2000)

BS 5979:2000 included the recommendation that “Both doors should be controlled from within the ARC by separate physical actions”. In BS 5979: 2007, this recommendation has been replaced by the following:

‘Entry to the lobby and ARC should be controlled from within the ARC by separate physical actions. Egress from the ARC should be controlled from within the ARC. Egress from the lobby may be controlled from within the ARC or the lobby. Where egress from the lobby is controlled from within the lobby a means of surveillance of any person in the vicinity outside the entrance door should be available inside the lobby.’

Where a facility to open both entrance doors from the outside is provided to deal with an emergency within the ARC, BS 5979:2000 called for access to the burglary resistant safe or vault where the keys or combination code are kept to be restricted to not more than two persons. BS 5979:2007 still calls for access to the burglary resistant safe or vault to be restricted, but only **to a list of nominated persons**.

This list of nominated persons should be kept to a minimum consistent with arrangements to ensure that at least one person is always available to facilitate emergency access to the ARC within an acceptable timeframe.

BS 5979:2007 calls for an alarm system conforming to PD 6662 to supervise the burglary resistant safe or vault and to supervise the area where the safe or vault is located.

Alarm systems installed prior to 2006 may still be compliant with BS 4737 or BS 7042, which were appropriate standards until 2005 (see 5.1.8.2 of BS 5979:2007).

5.1.3 Key transfer hatch

No change.

5.1.4 Glazed areas in the shell

No change. However, it is emphasised (see sub-clause 4.2.2.2) that the interior of the operations area or equipment room(s) must not be directly visible from outside the shell of the ARC.

5.1.5 Ventilation

No change.

5.1.6 Services

No change.

5.1.7 Surveillance

5.1.7.1 Category I

No change.

5.1.7.2 Category II

In the first paragraph, the word “supervised” has been replaced by the word ‘**protected**’. NSI will continue to expect cameras and other externally located surveillance equipment to be housed within suitably rated enclosures providing protection against adverse weather conditions and other environmental hazards.

The note at the end of sub-clause 5.1.7.2 of BS 5979:2007 now reads:

‘NOTE The use of switching and split screen facilities for the ARC CCTV system is acceptable.’

5.1.8 Alarm systems

5.1.8.1 Category I

No change.

5.1.8.2 Category II

The Intruder Alarm System (IAS) for a new ARC must now meet the requirements of PD 6662 (at least Grade 3) and the means of notification (i.e. “remote signalling”) should meet the requirements of one of the notification options for a Grade 4 IAS.

There is a NOTE that states ‘**systems installed prior to 2006 may still be marked as BS 4737 or BS 7042, which were appropriate standards until 2005**’. This means that ARCs do not need to upgrade BS 4737 (or BS 7042) intruder alarm systems installed prior to 2006.

As before under BS 5979:2000 the IAS needs to incorporate detectors that respond to forcible attack upon the shell, doors, appropriate ventilation openings and key transfer hatches.

Appropriate ventilation openings are those exceeding 20,000 mm² in cross-sectional area.

The option to transmit alarm signals to the police has been removed from the Standard. The relevant paragraph reads as follows:

‘The alarm condition should be notified to another ARC meeting the requirements of Category II of this standard.’

5.1.8.3 Both Categories

There is essentially no change apart from an updating of the reference to BS 5839-1 as follows:

‘The whole of the building housing an ARC should be protected by an automatic fire detection system in accordance with Category P1/M of BS 5839-1:2002 or by an automatic sprinkler system (see NOTE 1).’

The whole of the building in which the ARC is housed needs to be protected, not just the ARC itself.

There is a note (NOTE 1), which explains that existing fire detection systems do not need to be upgraded in the case of a remote centre commissioned prior to 15 July 2003 (when BS 5839-1:1988 was withdrawn).

NOTE 1 and NOTE 2 of sub-clause 5.1.8.3 of BS 5979:2000 have been re-numbered to become NOTE 2 and NOTE 3 respectively in BS 5979:2007.

5.1.9 Communications

5.1.9.1 General

As before, under BS 5979:2000, all communication cables between the point of entry into the building and the shell need to be protected against physical and fire damage. However, the following extra guidance is given in respect of the means of protecting cables from fire:

- ‘a) **routed through areas of low fire risk; or**
- ‘b) **routed through areas protected by automatic fire detection or an automatic fire extinguishing system; or**
- ‘c) **cables of standard or enhanced fire resistance (see BS 5839-1:2002, 26)**’

An additional paragraph has been inserted into sub-clause 5.1.9.1:

‘Personal mobile electronic devices, such as telephones, music or data storage devices, pocket PCs, and photographic equipment should not be used at or adjacent to the operator’s workstation.’

5.1.9.2 Outgoing

No change except that the phrase “barred to incoming calls” has been deleted and replaced with ‘configured for outgoing calls only’.

5.1.9.3 Incoming

No change.

5.1.9.4 Recording Equipment

No change.

5.1.10 Power supplies

There are no significant changes except that the requirements (see **5.1.10.4**) for separating any generator situated within the shell of an ARC from the operations area has been changed to read '**by sound-resistant construction that would afford a fire resistance of at least 1 h in respect of integrity, insulation and, where relevant, load bearing capacity, if tested in accordance with BS 476.**'

5.1.11 Safety equipment

No change except for the inclusion of references to BS 5306-8 and BS EN 3-7:2004.

5.1.12 Staff facilities

No change except for a new note, which reads:

'NOTE Readers are reminded of the Workplace (Health and Safety and Welfare) Regulations [3].'

5.2 SATELLITES

There are no significant changes.

6 OPERATION OF AN ALARM RECEIVING CENTRE

6.1 Staff selection and training

No changes.

6.2 Access

No changes.

6.3 Operating procedures

6.3.1 All alarm and CCTV systems

Sub-clause 6.3.1 gives general recommendations that apply to the monitoring of all alarm and CCTV systems covered by the standard.

There are no significant changes except that the first two paragraphs of sub-clause 6.3.1.10 of BS 5979:2000 have been deleted and replaced with the following in BS 5979:2007:

‘The user should be informed of any transmission faults as soon as practicable. Agreement should be reached with the client as to the course of action regarding the notification of the appropriate emergency service.’

With regard to sub-clause 6.3.1.6, whilst there is no change, it is emphasised that the **ARC manager should ensure that a documented audit (of BS 5979 procedures) is undertaken at periods not exceeding six months.**

6.4 Intruder and hold-up alarm systems

Sub-clause 6.4 of BS 5979 has been updated to reflect current practices in relation to the handling of alarms received from I&HAS and to incorporate some of the recommendations taken from Annex C of BS 5979:2000.

6.4.1 Handling of alarms

6.4.1.1 General

For I&HASs designed to generate confirmed alarm conditions, reference is made to BSI Draft for Development DD 243.

6.4.1.2 Performance criteria (previously sub-clause 6.4.1.5 of BS 5979:2000)

The performance criteria for taking action on receipt of alarm signals (previously called time restrictions/alarm filtering delays) are the same as those given in 6.4.1.5 of BS 5979:2000 and an extra paragraph (taken from 7.4.3 of DD 243:2004) has been included to cater for adverse and unforeseen circumstances.

6.4.1.3 Authorization of cancellation of intruder alarms (previously sub-clause 6.4.1.2 of BS 5979:2000)

This sub-clause gives recommendations for cancelling remotely-notified intruder alarm conditions on a case-by-case basis in accordance with a defined filtering procedure using text taken from sub-clause 7.4.2 of DD 243:2004.

6.4.1.4 Authorization of cancellation of hold-up alarms

This is a new sub-clause regarding the authorization of cancellation of hold-up alarms, which reads:

‘The customer can give general or specific standing authority, by prior written agreement, that the alarm company’s ARC can supply filtering techniques to hold-up alarm signals from specific premises.’

6.4.1.5 Method of alarm filtering (previously sub-clause 6.4.1.6 of BS 5979:2000)

No change.

6.4.1.6 Informing the police (previously sub-clause 6.4.1.7 of BS 5979:2000)

This sub-clause has been expanded to include examples (which have been taken from C.2.2 of Annex C of BS 5979:2000) where there might be good reasons for making more than one call to the police.

6.4.2 Transmission fault handling (see also sub-clause 6.3.1.10 of BS 5979:2007)

The recommendations as to what the ARC should do in response to transmission faults received in the set and unset conditions is unchanged apart from adding the following extra words '**Unless otherwise agreed with the client in writing**'.

6.4.3 Monitoring of setting and unsetting

There is no change to the wording of 6.4.3, but in 6.4.3.1 and 6.4.3.2 references to informing the emergency service have been removed. The essential changes are that the police must not be contacted in relation to late setting and/or early unsetting.

6.4.3.1 Setting

The last sentence, which reads '**Unless otherwise agreed, the appropriate emergency service should not be informed unless the responses from these contacts give cause for concern**', has been deleted.

6.4.3.2 Unsetting

This sub-clause has been amended to read:

Where an alarm system is unset before the earliest time agreed for this with the client, the user/customer should be informed without delay.

Premature unsetting signals might be indicative of an alarm system management problem in which the emergency service should not be involved. Either the agreed unsetting time should be complied with by establishing improved control or it should be revised to accord with actual practice.

6.5 Fire alarm systems

A NOTE has been added to sub-clause 6.5.1, which reads:

'NOTE Automatic transmission of alarm signals between the ARC and the emergency services is permitted providing a written agreement exists between the two parties.'

The recommendations given in sub-clause 6.5.2 of BS 5979:2007 are very similar to those in sub-clause 6.5.2 of BS 5979:2000 except that the recommendation that the maximum filtering time should not normally exceed 120 seconds has been deleted in favour of a recommendation that ARC procedures must **clearly record the agreed maximum filtering period**.

6.6 Social alarm systems

The new Standard states that '**Specific operating procedures for ARCs handling signals from social alarm systems are given within Section 8 of CLC/TS 50134-7:2003.**'

6.7 CCTV system monitoring

6.7.1 Detector activated remotely monitored CCTV systems complying with BS 8418

The new Standard recommends that **RVRCs monitoring detector activated CCTV systems installed to BS 8418 should comply with those sections of BS 8418 relating to RVRCs.**

6.7.2 CCTV systems not complying with BS 8418

No significant change to the recommendations.

6.8 System availability

No change.

7 RECORDS

7.1 Client records

There is a new recommendation that '**Client records should be kept for the duration of the contracts plus 3 years.**'

Item e) in the list of items of information to be included in client records has been modified to read as follows:

'e) the types of signals to be monitored.'

The recommendation that '**Records of all monitored events should be kept for not less than 3 years after the event to which they refer**' has been retained in the Standard and is included immediately after the list of items a) to e).

7.2 Logs

No change.

7.3 Performance analysis

No change. However, it is emphasised here that performance figures need to be calculated on a monthly basis as a minimum.

7.4 Voice communications

The text of 7.4 of BS 5979:2000 has been retained. However, the following has been added ‘**Voice communications that are the subject of enquiry raised with the ARC should be retained until the conclusion of the enquiry.**’

7.5 Data communications

The time period for all data communications to and from the ARC to be kept has been increased from 3 months to 12 months.

7.6 Audits

No change.

7.7 Security

No change.

7.8 Disposal

No change apart from attention being drawn to the Data Protection Act.

8 CONTINGENCY PLAN

8.1 General

The list of items to include in the contingency plan has been extended to include:

- ‘d) contact details of contractors and service providers able to undertake reinstatement whilst the service is maintained;
- ‘e) the means by which services will be continued or restored;
- ‘f) a review period of not less than six months, performed by the management.’

Item d) above (of BS 5979:2007) replaces what was given in sub-clause 8.3 of BS 5979:2000.

8.2 Hazard examples

No change.

8.3 Reinstatement of monitoring services (previously 8.4 of BS 5979:2000)

No changes have been made compared to sub-clause 8.4 of BS 5979:2000.

Sub-clause 8.3 of BS 5979:2007 (previously sub-clause 8.4 of BS 5979:2000), as it applies to ARCs, is in two parts, which are contained in the first and third paragraphs of 8.3. (The second paragraph of 8.3 deals with satellites).

8.3 First Paragraph:

This paragraph deals with plans to REINSTATE monitoring following an envisaged incident and applies to all ARCs. BSI Committee Ref: GW/1/11 has advised that a company operating a single remote centre should establish a dialogue with another remote centre in order to achieve transfer of monitoring to an alternative site complying substantially with BS 5979 within a maximum of 28 days.

Having regard to the need to ensure secure monitoring, and the BSI Committee's advice, NSI recommends that organisations having a single remote centre should establish a dialogue with another organisation operating a remote centre in order to comply with the first paragraph of 8.3 of BS 5979:2007.

NOTE: If arrangements exist to sustain monitoring without interruption, in accordance with the third paragraph of 8.3 (see below), and if these arrangements cover the monitoring of all the alarms that fall within the scope of the application for approval, then normally this will adequately cover the first paragraph of 8.3 and there will be no need for further plans to reinstate monitoring.

8.3 Third Paragraph:

This paragraph deals with arrangements to SUSTAIN monitoring without interruption and applies only:

- (i) *where high integrity monitoring (suitable for handling BS 7042 intruder alarms) is to be provided, or*
- (ii) *where arrangements to sustain monitoring without interruption are provided as an alternative to providing lightning protection in accordance with 4.2.1 of BS 5979:2007 (see NOTE to 4.2.1).*

8.4 Staff procedures associated with contingency plan

The wording of the first paragraph has been altered to state:

'It should be the responsibility of the ARC manager to ensure that staff are instructed in [rather than "are fully aware of"] the procedures associated with the contingency plan.'

An extra phrase, which reads '**the contingency plan should be reviewed and if necessary amended, taking into account the results of the rehearsal**' has been added to the last paragraph.

ARCs should revise and update contingency plans where weaknesses are discovered during rehearsals or through real incidents having an adverse effect on monitoring services. The reasons for the revisions should be recorded.

ANNEX A (informative) Notes for guidance of inspectorates

No change.

ANNEX B (informative) Security and technical implications of remote access to remote centre data systems

B.1 General

A new sub-clause (i.e. B.1) has been added as follows:

‘ARC operators are reminded of other standards relating to the security of information management systems, for example BS ISO/IEC 17799:2005/BS 7799-1:2005.’

B.2 Levels of access (previously B.1)

No change.

B.3 Access to the system (previously B.2)

No change.

B.4 Authorization for facilities (previously B.3)

No change.

B.5 Placing a system on test (previously B.4)

No change.

B.6 Password management

B.6 has been added and includes the following statement:

‘Means should be provided to audit, validate and/or delete unused, withdrawn or otherwise unauthorized usernames and passwords.’

ANNEX C (normative) Form of agreement for authorizing alarm receiving centre to exercise discretion regarding the filtering out of alarm information (previously Annex D)

Annex C of BS 5979:2007 was previously Annex D of BS 5979:2000.

NOTE 2 in D.1 of BS 5979:2000 has been made into a full recommendation within Annex C of BS 5979:2007.

Some other minor editorial changes have been made.

BIBLIOGRAPHY

Some new standards have been added to the bibliography.
Standards listed in the bibliography are not normative.
