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BS 8418:2021

Incorporating corrigendum No. 1



BSI Standards Publication

**Design, installation, commissioning
and maintenance of detection-activated
video surveillance systems (VSS) —
Code of practice**

bsi.

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Foreword

Publishing information

This British Standard is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 31 July 2021. It was prepared by Subcommittee GW/1/10, *Closed circuit television (CCTV)*, under the authority of Technical Committee GW/1, *Electronic security systems*. A list of organizations represented on these committees can be obtained on request to the committee manager.

Supersession

This British Standard supersedes BS 8418:2015+A1:2017, which will be withdrawn on 31 July 2022.

Information about this document

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

- a) the simplification of the technical requirements of the standard with the introduction of a tiered approach as follows:
 - Type A (base recommendations);
 - Type A+ (enhanced recommendations for higher risk sites); and
- b) the removal of the RVRC (ARC) recommendations as these have been moved to another standard (BS 9518).

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Users may substitute any of the recommendations in this British Standard with practices of equivalent or better outcome. Any user claiming compliance with this British Standard is expected to be able to justify any course of action that deviates from its recommendations.

Presentational conventions

The provisions of this standard are presented in roman (i.e. upright) type. Its recommendations are expressed in sentences in which the principal auxiliary verb is "should".

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

The word "should" is used to express recommendations of this standard. The word "may" is used in the text to express permissibility, e.g. as an alternative to the primary recommendation of the clause. The word "can" is used to express possibility, e.g. a consequence of an action or an event.

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and additional information that are important but do not form part of the recommendations. Commentaries give background information.

Where words have alternative spellings, the preferred spelling of the Shorter Oxford English Dictionary is used (e.g. "organization" rather than "organisation").

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Introduction

A detection-activated video surveillance system (VSS), also known as CCTV (closed circuit television), is intended to obtain a response to a confirmed incident from the police (or other responding authority).

The recommendations of this British Standard are intended to assist in ensuring that the integrity and effectiveness of an installed VSS are not compromised. The resilience and quality of the VSS needs to always be maintained and in all environments in which the system is required to work.

When an alarm occurs, images are transmitted to, and displayed at, a remote video response centre (RVRC) to enable the cause to be determined. An emergency response is only requested by the RVRC if there is positive evidence in these images of unauthorized access to the secure area and of actual or perceived criminal activity.

NOTE Requirements for the handling of alarms, technical services and structure of the RVRC are contained in BS EN 50518, BS 9518, BS 8591 and BS 5979. An RVRC might be referred to as an ARC or a monitoring centre in other standards. For the purposes of this British Standard, the term RVRC is used throughout.

This British Standard recognizes two key types of system (Type A and Type A+) with different recommendations dependent on the levels of risk. Below is a summary table of the key differences to assist with the user’s understanding.

Table 1 — Key features: Type A vs Type A+

Feature	Type A	Type A+
Risk analysis/threat assessment, operational requirement (OR), system design proposal (SDP)	✓	✓
Audio challenge facility ^{A)}	✓	✓
Camera video loss signal to RVRC	✓	✓
Alternative power source – movement detectors	✓	✓
Tamper detection – interconnections (to detection devices) and movement detection enclosure, e.g. PIRs	✓	✓
Tamper detection – pluggable connectors and removal from mounting of detectors	X	✓
Fault indications (see 5.6 and Table 2)	X	✓
Control equipment located in an area with restricted access	X	✓
Uninterruptible power source (UPS) – Control equipment (see 5.10.1)	X	✓
Reporting time (Identification of transmission path failure)	≤24 hr	≤10 min

^{A)} Audio challenge is mandatory for both Type A and Type A+ systems if police response is required.

NOTE X indicates that not all of the recommendations of the associated feature are included. See applicable clauses.

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1 Scope

This British Standard gives recommendations for the design, installation, commissioning, maintenance and operation of detection-activated VSS, whether permanent or temporary/portable. It is intended for use by VSS companies, including the installation and maintenance engineers working for the VSS company.

This standard applies irrespective of the length of time the VSS are installed and/or whether the equipment can be re-used on another site.

This standard provides recommendations for two types of system, Type A and Type A+, which might differ in design based on the results of a threat assessment and risk analysis, which takes into account the threat and consequences of an incident occurring. A Type A system sets the minimum recommendations applicable to all systems within this scope. A Type A+ system design would include all Type A recommendations, with additional security features to detect or prevent the system being compromised.

2 Normative references

The following document is referred to in the text in such a way that some or all of its content constitutes provisions of this document.¹⁾ For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BS EN 62676-4:2015, *Video surveillance systems for use in security applications – Part 4: Application guidelines*

3 Terms, definitions and abbreviated terms

3.1 Terms and definitions

For the purposes of this British Standard, the following terms and definitions apply.

3.1.1 activation

operation of a VSS triggered by an alarm resulting in the transmission of images to an RVRC

3.1.2 alternative power source

power source capable of powering components of the VSS for a predetermined time when a prime power source is unavailable

3.1.3 as-fitted document

document in which details of the VSS actually installed are recorded

3.1.4 control equipment

equipment for receiving, processing and initiating the onward transmission of data

3.1.5 customer

person or organization utilizing the services of a VSS company

¹⁾ Documents that are referred to solely in an informative manner are listed in the Bibliography.