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# Social alarm systems — IP signalling protocols

Part 2: Specification for NOW IP

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## Summary of pages

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# Foreword

## Publishing information

This part of BS 8521 is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 30 April 2020. It was prepared by Subcommittee GW/1/12, *Social alarms*, under the authority of Technical Committee GW/1, *Electronic security systems and products*. A list of organizations represented on these committees can be obtained on request to their secretaries.

## Relationship with other publications

This British Standard forms the second part of BS 8521. The existing BS 8521 is expected to become BS 8521-1 at its next revision.

This standard is intended to provide requirements for specialized group living environments. For other social alarm applications, PD CLC TS 50134-9:2018 should be considered.

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## Presentational conventions

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

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

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

## Contractual and legal considerations

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

**Compliance with a British Standard cannot confer immunity from legal obligations.**

## Introduction

Communications providers continue to converge voice traffic on to their packet-based IP (internet protocol) infrastructures, supported by the removal of a regulatory obligation to support in-call, tone-based signalling. This will further compromise the reliability of tone-based protocols. It is expected that this will reduce the performance of tone-based alarm transmissions below the requirements for a social alarm system established in BS EN 50134-5.

This standard defines an IP communications protocol for social alarm systems, optimized for specialized grouped living environments. This standard addresses a need for an openly defined standard for information and control exchange between social alarm equipment and alarm response centres (ARC) over a public or private IP network.

PD CLC/TS 50134-9 specifies a protocol for point-to-point transmission of alarms, faults, control signals and communications monitoring, optimized for a combined (standalone) Local Unit and Controller and an Alarm Receiving Centre using the IP.

The system performance characteristics for alarm transmission are specified in BS EN 50134-5.

The performance characteristics of the Local Unit and Controller should conform to the requirements of the BS EN 50134 series.

## 1 Scope

This British Standard specifies requirements for the transfer of information and control signals between social alarm equipment used in specialized grouped living environments and alarm receiving centres (ARCs).

It provides for the establishment of a common signalling protocol over a public or private IP network to ensure that social alarm systems from different manufacturers exchange essential information and controls in a compatible manner.

This British Standard specifies a protocol for point-to-point transmission of alarms, faults, control signals and communications monitoring using the Internet Protocol (IP) to enable communication of the following:

- a) alarm information;
- b) speech path and system control commands;
- c) selection of local units in grouped equipment;
- d) request for information on outstanding calls;
- e) speech control functions;
- f) equipment control functions;
- g) programming;
  - 1) parameter programming;
    - parameter remote enquiry; and
- h) streaming media, e.g. voice.

*NOTE 1* The alarm protocol is intended for use over any network that supports the transmission of IP data with sufficient quality of service to support VoIP.

*NOTE 2* The alarm protocol is defined as an XML scheme including the alarm types, codes and necessary additional information.