

AS 1670.3:2024



# Fire detection, warning, control and intercom systems — System design, installation and commissioning

## Part 3: Fire alarm monitoring



AS 1670.3:2024

This Australian Standard ® was prepared by FP-002, Fire Detection, Warning, Control and Intercom Systems. It was approved on behalf of Standards Australia's Standards Development and Accreditation Committee on 18 June 2024.

This Standard was published on 28 June 2024.

The following are represented on Committee FP-002:

- Association of Accredited Certification Bodies
- Association of Australasian Acoustical Consultants
- Australasian Fire and Emergency Service Authorities Council
- Australian Building Codes Board
- Australian Chamber of Commerce and Industry
- Australian Industry Group
- Australian Institute of Building Surveyors
- CSIRO
- Deafness Forum of Australia
- Engineers Australia
- Engineers Australia/ Society of Fire Safety
- Fire Protection Association Australia
- Hydraulic Consultants Association Australasia
- National Electrical and Communications Association
- National Fire Industry Association
- Property Council of Australia

This Standard was issued in draft form for comment as DR AS 1670.3:2023.

### **Keeping Standards up-to-date**

Ensure you have the latest versions of our publications and keep up-to-date about Amendments, Rulings, Withdrawals, and new projects by visiting:

[www.standards.org.au](http://www.standards.org.au)

# **Fire detection, warning, control and intercom systems — System design, installation and commissioning**

## **Part 3: Fire alarm monitoring**

Originated as AS 1670.3—1997.  
Previous edition 2018.  
Fourth edition 2024.

© Standards Australia Limited 2024

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher, unless otherwise permitted under the Copyright Act 1968 (Cth).

## Preface

This Standard was prepared by the Standards Australia Committee FP-002, Fire Detection, Warning, Control and Intercom Systems, to supersede AS 1670.3:2018, *Fire detection, warning, control and intercom systems — System design, installation and commissioning, Part 3: Fire alarm monitoring*.

This Standard will be referenced in the National Construction Code (NCC).

The objective of this Standard is to achieve the reliable monitoring of fire detection and alarm systems (FDAS) installed in buildings by a remotely located monitoring service and to transfer required signals to a fire dispatch centre.

Changes to this edition include the following:

- (a) Introduces the Standardised Data Interface for the transmission of real time fire event data to the responding fire appliances.
- (b) Introduces the concept of designated detection zone group. This enables specific areas within the FDAS to be independently monitored.
- (c) Introduces the concept of multiple FDAS integrated within the building or site. This enables specific areas within the building or structures forming the building to be provided with an independent FDAS and for each FDAS to be independently monitored.
- (d) Provides new definitions for clarity.
- (e) Provides details of permitted transmission path formats.

The terms “normative” and “informative” have been used in this Standard to define the application of the appendices to which they apply. A “normative” appendix is an integral part of a Standard, whereas an “informative” appendix is only for information and guidance.

This edition also permits the use of two editions of relevant Standards relating to components. See [Table 1.8](#) for the list of relevant editions of the Standards which apply throughout this document.

# Contents

<b>Preface</b> .....	<b>ii</b>
<b>Section 1 Scope and general</b> .....	<b>1</b>
1.1 Scope.....	1
1.2 Application.....	1
1.3 Normative references.....	1
1.4 Terms and definitions.....	2
1.5 Abbreviated terms.....	4
1.6 Tolerance measurements.....	4
1.7 System design.....	4
1.7.1 General.....	4
1.7.2 Baseline data — Monitored site.....	4
1.7.3 Baseline data — Network and monitoring centre.....	5
1.7.4 Alterations to existing systems.....	5
1.8 Application of normative references.....	5
<b>Section 2 Design criteria</b> .....	<b>7</b>
2.1 Connection between the FDAS and ASE.....	7
2.1.1 General.....	7
2.1.2 Path formats.....	7
2.1.3 Transmission path supervision.....	9
2.1.4 Signals.....	9
2.1.5 Transmission path protection.....	9
2.2 Connection between the ASE and monitoring centre.....	10
2.2.1 General.....	10
2.2.2 Network reliability.....	10
2.2.3 Monitoring centre protocol.....	10
2.2.4 Clocks.....	10
2.3 Maximum transfer time.....	10
2.4 Monitoring centre.....	10
2.4.1 General.....	10
2.4.2 Indicating and logging equipment.....	10
2.4.3 Voice recording equipment.....	11
2.4.4 Telecommunication.....	11
2.4.5 Clocks.....	11
2.4.6 Ancillary equipment.....	11
2.4.7 Standby lighting.....	11
2.4.8 Records.....	11
2.4.9 Critical failure response.....	11
2.5 Monitoring centre power source.....	12
2.6 Connection between monitoring centre and fire dispatch centre.....	12
2.7 Commissioning.....	12
<b>Section 3 Monitored site installation</b> .....	<b>13</b>
3.1 General.....	13
3.2 Alarm signalling equipment (ASE).....	13
3.3 Covering door.....	13
3.4 Power supply equipment (PSE).....	13
3.4.1 General.....	13
3.4.2 Main power source.....	14
3.4.3 Standby power source.....	14
3.4.4 Battery capacity calculation.....	14
3.4.5 Battery charging current.....	15
3.4.6 Batteries and cabinet.....	15
3.5 Combined FDCIE and ASE.....	15
3.6 Cabling systems.....	15
3.6.1 General.....	15

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

- 
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
  - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-