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Australian STANDARD®

STANDARDS Australia

Hard-wired consumer communication and alarm systems for use in healthcare facilities



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Hard-wired consumer communication and alarm systems for use in healthcare facilities

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(a) "should" means that something is recommended.

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A Standard always has the following parts:

(i) The Preface states who developed the Standard, what the Standard is aiming to do, and how it relates to other documents.

(ii) The Scope states what the Standard is about, what it covers and what it does not cover.

(iii) The Normative references clause lists other documents that are referenced in the Standard as part of requirements.

(iv) The Terms and definitions clause defines important terms to help with understanding the Standard.

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(1) A normative appendix sets additional requirements that need to be conformed to.

(2) An informative appendix provides additional information or guidance. They usually do not contain requirements. If an informative appendix does contain requirements, the Standard will explain when those requirements apply.

(3) A Bibliography lists documents referenced in the Standard but not as part of requirements.

Many Standards include notes. Notes provide recommendations and/or guidance only. They never contain requirements.

Preface

This Standard was prepared by the Standards Australia Committee TE-016, Personal Alarm Systems, to supersede AS 3811:1998, *Hard-wired patient alarm systems*.

The objective of this document is to specify key requirements for consumer communication and alarm systems in healthcare settings, including hospitals, residential aged care facilities, and mental health units.

This document aims to facilitate enhanced clinical and health outcomes through the integration of advanced healthcare technologies and emphasizes the key areas of safety, reliability, extensibility, longevity and sustainability.

This document demonstrates the value of continuous improvement in the quality of care, underpinned by data-driven insights. This involves using data analytics to systematically monitor, evaluate and enhance both system performance and consumer outcomes.

This document serves as an essential guide for stakeholders implementing consumer communication and alarm systems. It aims to boost health service efficacy and safety and improve clinical outcomes and operational efficiency for residents, consumers, their carers, families and staff.

The major changes in this edition are as follows:

(a) Addition of provisions for the interoperability and integration of consumer communication and alarm systems with IT systems, devices and infrastructure within the healthcare ecosystem.

(b) Specifications apply to both advanced and traditional hard-wired consumer communication and alarm systems in response to advancements in telecommunications technologies. This includes systems integrated with telephone diallers, PABX equipment and wireless networks, mirroring the industry's shift towards more flexible and interconnected solutions.

(c) Revision of performance criteria, including those for reliability, responsiveness and safety.

(d) Updates to appendices to provide detailed requirements for additional features and functionalities that are increasingly vital in modern healthcare settings. This includes specific arrangements for residential aged care facilities and mental health units, addressing the unique requirements of these environments.

The terms "normative" and "informative" are used in Standards 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.

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Contents

Page

Preface ..... **v**

Introduction ..... **x**

Section 1 Scope and general **1**
1.1 Scope 1
1.2 Normative references 1
1.3 Terms and definitions 2
1.4 New designs and innovations 7

Section 2 Outcomes **8**
2.1 Improved safety for consumers and staff 8
2.2 Increased quality of care 8
2.3 Improved health outcomes 8
2.4 Digitally connected healthcare framework 8
2.4.1 General 8
2.4.2 Digital platform capabilities for enhanced efficiency and performance in healthcare 9
2.4.3 Features and enhancements for improved consumer care and staff efficiency 9
2.5 Improved sustainability 11
2.5.1 General 11
2.5.2 Energy efficiency 11
2.5.3 Reduction in noise pollution 11
2.5.4 Material sustainability 11
2.5.5 Digital integration and waste reduction 11
2.5.6 User-centric design for long-term viability 11
2.6 Improved efficiency of workflows 11

Section 3 Planning **12**
3.1 General 12
3.2 Independence 12
3.3 Regulatory compliance 12
3.3.1 General 12
3.4 Quality management system 13
3.5 Settings and recommended equipment locations 13
3.5.1 Hospitals 13
3.5.2 Residential aged care facilities 18
3.5.3 Mental health units 19
3.6 Systems 19
3.6.1 Safety 19
3.6.2 Security 19
3.6.3 Resilience 19
3.7 Cybersecurity strategies and requirements 21
3.7.1 General 21
3.7.2 Secure system development 21
3.7.3 Identity and Access Management (IAM) 21
3.7.4 Multifactor authentication (MFA) and identity management 22
3.7.5 Secure storage and information protection 22
3.7.6 Secure configuration and vulnerability management 23
3.7.7 Logging, monitoring and maintenance 24
3.7.8 Documentation, vendor security and compliance 24
3.7.9 Cybersecurity insurance 24
3.8 Data management of consumer and staff data 25
3.8.1 General 25
3.8.2 Storage 25
3.8.3 Security 26
3.8.4 Anonymization 26
3.9 Smart infrastructure deployment and cabling minimization 27

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3.9.1 General ... 27
3.9.2 Early detailed design ... 27
3.9.3 Sustainability ... 28
3.9.4 Documentation and record keeping ... 28
3.9.5 System integration and interoperability ... 28
3.10 IT infrastructure ... 29
3.10.1 Interoperability and integration ... 29
3.10.2 Robustness, scalability and availability ... 29
3.10.3 Cybersecurity ... 29
3.10.4 Design for flexibility and adaptability ... 29
3.10.5 Lifecycle management — Maintenance and decommissioning ... 29
3.10.6 Early integration of data and cabling ... 29

Section 4 Non-functional requirements and recommendations ... 30
4.1 Technology interoperability ... 30
4.1.1 General ... 30
4.1.2 Integration with existing systems ... 30
4.1.3 Design considerations for future integration ... 30
4.1.4 Data exchange and standardization ... 30
4.2 Sustainability strategy ... 31
4.2.1 General ... 31
4.2.2 Energy efficiency ... 31
4.2.3 Material sustainability ... 31
4.2.4 E-waste management ... 32
4.2.5 Total cost of ownership assessment ... 32
4.3 Infection control and prevention ... 33
4.3.1 Conformance to national guidelines ... 33
4.3.2 Focus on core principles ... 33
4.3.3 Regular review and updates ... 33
4.4 Non-functional testing ... 33
4.4.1 Power and generator tests ... 33
4.4.2 Power draw testing ... 33
4.4.3 Local staff maintenance capability ... 33
4.4.4 Remote access testing ... 33
4.5 Backward compatibility ... 34
4.5.1 Hardware and software updates ... 34
4.5.2 Network and communication interface upgrades ... 34
4.5.3 Structured cabling standards ... 34
4.6 Iterative improvement strategy ... 34

Section 5 Functional requirements ... 35
5.1 Performance ... 35
5.1.1 Alarm response — Audible and visual indicators ... 35
5.1.2 Call points ... 36
5.1.3 Buttons ... 37
5.1.4 Pendants ... 38
5.1.5 Corridor indicator lights ... 38
5.1.6 Audible indications ... 39
5.1.7 Annunciators ... 39
5.1.8 Wet areas ... 40
5.1.9 Auxiliary jacks for speciality devices ... 40
5.1.10 EMC compatibility ... 41
5.1.11 Seismic readiness ... 42
5.2 Alarm management ... 42
5.3 Location awareness — Real-time location system ... 43
5.3.1 General ... 43
5.3.2 Automatic staff presence detection ... 44
5.4 Single device strategy ... 44
5.5 IT Enterprise Architecture (EA) capability ... 44

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5.5.1 General ... 44
5.5.2 Rationalization and standardization ... 44
5.5.3 Consolidation ... 44
5.6 Informatics — Data analytics and reporting/visualization ... 44
5.6.1 General ... 44
5.6.2 Analytics ... 45
5.6.3 Reporting and visualization ... 45
5.6.4 Conformance and standards ... 45
5.7 Technology interoperability ... 45
5.7.1 General ... 45
5.7.2 Strategic and purposeful integration ... 46
5.7.3 Building management systems integration ... 46
5.7.4 Digital healthcare data systems integration ... 46
5.7.5 Consumer engagement systems ... 47
5.7.6 ICT infrastructure integration ... 47
5.7.7 ICT environment services integration ... 47
5.8 Data sharing ... 47
5.8.1 General ... 47
5.8.2 Principles ... 47
5.8.3 Standards ... 48
5.8.4 Implementation guidelines ... 48
5.9 Iterative improvement strategy ... 49

Section 6 Installation ... 50
6.1 General ... 50
6.2 Safety directives ... 50
6.2.1 General ... 50
6.2.2 System design and configuration ... 50
6.2.3 Testing and commissioning ... 50
6.2.4 Privacy and data security ... 51
6.3 Electrical equipment and electronic components ... 51
6.3.1 General ... 51
6.3.2 Backup power supply ... 51
6.3.3 Mains supply ... 51
6.3.4 Mains supply isolation/indication ... 51
6.3.5 Wiring ... 52
6.3.6 Visual indicators ... 52
6.3.7 Audible indicators ... 52
6.3.8 Notification devices ... 52
6.4 Internal wiring and wireless connectivity ... 52
6.4.1 Internal wiring ... 52
6.4.2 Wireless connectivity ... 52
6.5 IT infrastructure deployment ... 53

Section 7 Commissioning and training ... 54
7.1 General ... 54
7.2 Installation records ... 54
7.3 Handover records ... 54
7.4 Documentation availability ... 54
7.5 End-user training ... 54
7.5.1 Educational team composition and expertise ... 54
7.5.2 Educational resources ... 55
7.5.3 Training methodology and content ... 55

Section 8 Maintenance ... 56
8.1 General ... 56
8.2 Maintenance ... 56
8.2.1 Continual maintenance ... 56
8.2.2 Routine maintenance ... 56
8.2.3 Emergency maintenance ... 57

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8.2.4 Remote support ... 58
8.2.5 Records ... 58
8.2.6 Reports ... 58
8.2.7 Software maintenance ... 59
8.3 System monitoring ... 59
8.3.1 General ... 59
8.3.2 Consumer room equipment ... 59
8.3.3 Application subsystems ... 59
8.3.4 Monitoring consoles ... 59
8.3.5 Monitoring status ... 60
8.4 System logging and reporting ... 60
8.5 Spare parts ... 60
8.6 Continuous technology support and end-user training ... 61
8.6.1 Continuous technology support ... 61
8.6.2 End user training ... 61
8.7 Management of devices ... 61
8.8 IT infrastructure lifecycle management ... 61
8.8.1 General ... 61
8.8.2 Sustainability ... 62
8.8.3 Risk management ... 62

Appendix A (informative) **Evidence and rationale ... 63**

Appendix B (normative) **Variations for residential aged care facilities ... 65**

Appendix C (informative) **Recommended consumer communication and alarm system equipment locations in residential aged care facilities ... 73**

Appendix D (normative) **Variations for mental health units ... 75**

Appendix E (informative) **Recommended consumer communication and alarm system equipment locations in mental health units ... 78**

Bibliography ... 80

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Introduction

Consumer communication and alarm systems play a crucial role in healthcare settings, including acute care hospitals, residential aged care, and mental health facilities. They are indispensable for enabling consumers, carers, families and staff in these settings to request assistance when necessary. This functionality allows healthcare providers to respond promptly, effectively and efficiently.

The Standards Australia Committee TE-016, Personal Alarm Systems, has undertaken a complete rewrite from the ground up of AS 3811:1998, which has been withdrawn. This edition of the Standard offers comprehensive guidance on consumer communication and alarm system requirements, encompassing clinical and health outcomes and integrating the latest advancements in healthcare technology, while establishing criteria for such systems in hospitals, residential aged care facilities and mental health units, with an emphasis on safety, reliability, extensibility, longevity and sustainability. It specifies requirements that core life safety functions be hard-wired, as per Clause 1.3.15, to allow for the highest level of dependability. This document also emphasizes ongoing enhancement of care quality through data-driven improvements.

This revision extends and refines the minimum performance requirements for consumer communication and alarm systems, surpassing the initial focus on conventional hard-wired configurations. Recognizing the dynamic development of healthcare technology, this edition encompasses a more extensive range of systems, including both the core wired and ancillary wireless solutions.

This document serves as a critical resource for all stakeholders involved in the implementation and use of consumer communication and alarm systems. These systems are essential for the delivery of high-quality care by healthcare providers. This document aids in the advancement of consumer communication and alarm systems, supporting the delivery of consumer-centred care, enhancing healthcare delivery mechanisms and improving clinical outcomes.

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Hard-wired consumer communication and alarm systems for use in healthcare facilities

Section 1 Scope and general

1.1 Scope

This document specifies key requirements for consumer communication and alarm systems in healthcare settings, including hospitals, residential aged care facilities and mental health units.

This document applies to consumer communication and alarm systems as well as digitally connected consumer communication and alarm systems deployed in high dependency care facilities as defined in Clause 1.3. It also applies to consumer communication and alarm systems deployed to specialist facilities including acute care, residential aged care, residential disability care, low dependency care, young care facilities, and mental health units.

This document specifies requirements for the development and implementation of consumer communication and alarm systems in healthcare facilities, with an emphasis on the following:

(a) Consumer and staff safety with privacy considerations.

(b) System longevity.

(c) Digitally connected healthcare systems. Specifications are provided for —

  (i) exchangeability and accessibility of health information;

  (ii) interoperability of clinical data;

  (iii) development and updating of digital services;

  (iv) access to telehealth services; and

  (v) staff training.

(d) Workflow efficiency improvements.

(e) Clinical outcomes.

(f) Sustainability strategy.

(g) Single device strategy.

(h) Quiet environment strategy.

(i) IT Enterprise Architecture (EA) capability.

(j) Cybersecurity strategy.

(k) Technology interoperability.

1.2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document:

AS 1170.4, *Structural design actions, Part 4: Earthquake actions in Australia*

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