

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Management of alarms systems for the process industries

Gestion de systèmes d'alarme dans les industries de transformation



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INTERNATIONAL STANDARD

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Gestion de systèmes d'alarme dans les industries de transformation

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CONTENTS

FOREWORD.....	9
INTRODUCTION.....	11
1 Scope.....	12
1.1 General applicability.....	12
1.2 Exclusions and inclusions.....	13
1.2.1 Operators.....	13
1.2.2 Process sensors and final control elements.....	13
1.2.3 Safety instrumented systems.....	13
1.2.4 Event data.....	13
1.2.5 Alarm identification methods.....	14
1.2.6 Management of change.....	14
2 Normative references.....	14
3 Terms, definitions, and abbreviations.....	14
3.1 Terms and definitions.....	14
3.2 Abbreviations.....	22
4 Conformance to this standard.....	22
4.1 Conformance guidance.....	22
4.2 Existing systems.....	23
4.3 Responsibility.....	23
5 Alarm system models.....	23
5.1 Alarm systems.....	23
5.2 Alarm management lifecycle.....	23
5.2.1 Alarm management lifecycle model.....	23
5.2.2 Alarm management lifecycle stages.....	24
5.2.3 Alarm lifecycle entry points.....	27
5.2.4 Simultaneous and encompassing stages.....	27
5.2.5 Alarm management lifecycle loops.....	27
5.2.6 Alarm management lifecycle stage inputs and outputs.....	28
5.3 Alarm states.....	29
5.3.1 Alarm state transition diagram.....	29
5.3.2 Alarm states.....	30
5.3.3 Alarm state transition paths.....	31
5.4 Alarm response timeline.....	32
5.4.1 General.....	32
5.4.2 Normal (A).....	33
5.4.3 Unacknowledged (B).....	33
5.4.4 Acknowledged (C) and response.....	33
5.4.5 Return-to-normal (D).....	34
5.4.6 Consequence threshold.....	34
5.5 Feedback model of operator-process interaction.....	34
5.5.1 General.....	34
5.5.2 Detect.....	35
5.5.3 Diagnose.....	35
5.5.4 Respond.....	35
5.5.5 Performance shaping factors.....	35
6 Alarm philosophy.....	35

6.1	Purpose	35
6.2	Alarm philosophy contents.....	35
6.2.1	General	35
6.2.2	Purpose of alarm system	36
6.2.3	Definitions	37
6.2.4	References	37
6.2.5	Roles and responsibilities for alarm management	37
6.2.6	Alarm design principles	37
6.2.7	Rationalization	37
6.2.8	Alarm class definition	37
6.2.9	Highly managed alarms	38
6.2.10	HMI design principles	38
6.2.11	Prioritization method	38
6.2.12	Alarm setpoint determination	39
6.2.13	Alarm system performance monitoring	39
6.2.14	Alarm system maintenance	39
6.2.15	Testing of the alarm system	39
6.2.16	Approved enhanced and advanced alarming techniques	39
6.2.17	Alarm documentation	39
6.2.18	Implementation guidance	40
6.2.19	Management of change	40
6.2.20	Training	40
6.2.21	Alarm history preservation	40
6.2.22	Related site procedures	40
6.2.23	Specific alarm design considerations	41
6.2.24	Alarm system audit	41
6.3	Alarm philosophy development and maintenance	41
7	Alarm system requirements specification	41
7.1	Purpose	41
7.2	Recommendations	42
7.3	Development	42
7.4	Systems evaluation	42
7.5	Customization	43
7.6	Alarm system requirements testing	43
8	Identification	43
8.1	Purpose	43
8.2	Alarm identification methods	43
8.3	Identification training	43
9	Rationalization	43
9.1	Purpose	43
9.2	Rationalization documentation	44
9.2.1	Rationalization documentation requirements	44
9.2.2	Rationalization documentation recommendations	44
9.3	Alarm justification	44
9.3.1	Alarm justification process	44
9.3.2	Justification approach	44
9.3.3	Individual alarm justification	45
9.3.4	Impact on alarm system	45
9.4	Alarm setpoint determination	45

9.5	Prioritization.....	45
9.6	Removal	45
9.7	Classification	46
9.8	Review.....	46
9.9	Use of documentation.....	46
10	Detailed design: Basic alarm design.....	46
10.1	Purpose	46
10.2	Usage of alarm states	46
10.2.1	Alarm state triggering.....	46
10.2.2	Alarm states and other logic functions	46
10.2.3	Alarm suppression and other logic functions	47
10.3	Alarm types.....	47
10.4	Alarm attributes.....	47
10.4.1	General	47
10.4.2	Alarm description	48
10.4.3	Alarm setpoints	48
10.4.4	Alarm priority	48
10.4.5	Alarm deadbands.....	48
10.4.6	Alarm on-delay and off-delay.....	48
10.5	Programmatic changes to alarm attributes.....	49
10.6	Review basic alarm design.....	49
11	Detailed design: Human-machine interface design for alarm systems.....	49
11.1	Purpose	49
11.2	HMI functions.....	49
11.2.1	General.....	49
11.2.2	HMI information requirements.....	49
11.2.3	HMI functional requirements.....	50
11.2.4	HMI display requirements.....	50
11.2.5	Alarm records requirements	50
11.2.6	Alarm records recommendations	50
11.3	Alarm states indications	50
11.3.1	General	50
11.3.2	Required alarm state indications.....	51
11.3.3	Recommended alarm state indications.....	51
11.3.4	Audible alarm state indications	52
11.4	Alarm priority indications	52
11.4.1	General	52
11.4.2	Alarm priority indication requirements.....	52
11.4.3	Colour alarm priority indications requirements	52
11.4.4	Recommended alarm priority indications.....	53
11.5	Alarm message indications	53
11.5.1	General	53
11.5.2	Recommended alarm message indications	53
11.6	Alarm displays	53
11.6.1	General	53
11.6.2	Alarm summary display	54
11.6.3	Alarm summary status.....	55
11.6.4	Alarm log displays.....	55
11.6.5	Process displays.....	56

11.6.6	Tag detail displays	56
11.6.7	Other display elements.....	56
11.7	Alarm shelving	56
11.7.1	General	56
11.7.2	Alarm shelving functional requirements.....	56
11.7.3	Alarm shelving functional recommendations.....	57
11.7.4	Shelved alarm displays	57
11.8	Out-of-service alarms	57
11.8.1	General	57
11.8.2	Out-of-service alarm functional requirements.....	58
11.8.3	Out-of-service alarm displays	58
11.9	Alarms suppressed by design	58
11.9.1	General	58
11.9.2	Designed suppression functional requirements	58
11.9.3	Design suppression functional recommendations.....	59
11.9.4	Suppressed-by-design displays	59
11.10	Alarm annunciator integration.....	59
11.10.1	General	59
11.10.2	Alarm annunciator integration recommendations.....	59
11.10.3	Alarm annunciator display integration recommendations	60
11.11	Safety alarm HMI	60
11.11.1	General	60
11.11.2	Independent safety alarm HMI.....	60
12	Detailed design: Enhanced and advanced alarm methods.....	60
12.1	Purpose	60
12.2	Basis of enhanced and advanced alarming	60
12.2.1	General	60
12.2.2	Effort, manpower requirements and complexity	60
12.3	Information linking.....	61
12.4	Logic-based alarming	61
12.4.1	General	61
12.4.2	Alarm attribute modification.....	61
12.4.3	Externally enabled systems.....	61
12.4.4	Logical alarm suppression and attribute modification	61
12.4.5	State-based alarming	61
12.5	Model-based alarming	61
12.6	Additional alarming considerations	62
12.6.1	General	62
12.6.2	Non-control room considerations	62
12.6.3	Remote alarm systems.....	62
12.6.4	Supplementary alarm systems.....	62
12.6.5	Batch process considerations.....	62
12.7	Training, testing, and auditing systems	63
12.8	Alarm attribute enforcement	63
13	Implementation.....	63
13.1	Purpose	63
13.2	Implementation planning	63
13.3	Implementation training	63
13.3.1	General	63

- 13.3.2 Implementation training 63
- 13.3.3 Implementation training requirements 64
- 13.3.4 Training documentation requirements for highly managed alarms 64
- 13.3.5 Training documentation recommendations 64
- 13.3.6 Implementation training requirements for new or modified alarm systems 64
- 13.3.7 Implementation training recommendations for new or modified alarm systems 64
- 13.4 Implementation testing and validation 64
 - 13.4.1 General 64
 - 13.4.2 Implementation testing requirements for highly managed alarms 64
 - 13.4.3 Implementation testing recommendations for new or modified alarms 65
 - 13.4.4 Implementation testing requirements for new or modified alarm systems 65
- 13.5 Implementation documentation 65
 - 13.5.1 General 65
 - 13.5.2 Documentation requirements 65
 - 13.5.3 Implementation documentation recommendations 65
- 14 Operation 66
 - 14.1 Purpose 66
 - 14.2 Alarm response procedures 66
 - 14.2.1 Alarm response procedures requirements 66
 - 14.2.2 Alarm response procedure recommendations 66
 - 14.3 Alarm shelving 66
 - 14.3.1 Alarm shelving requirements 66
 - 14.3.2 Alarm shelving for highly managed alarms 67
 - 14.3.3 Alarm shelving recommendations 67
 - 14.3.4 Alarm shelving record requirements 67
 - 14.4 Refresher training for operators 67
 - 14.4.1 Refresher training requirements for operators 67
 - 14.4.2 Refresher training documentation for highly managed alarms 67
 - 14.4.3 Refresher training content for highly managed alarms 67
 - 14.4.4 Refresher training recommendations for alarms 67
- 15 Maintenance 68
 - 15.1 Purpose 68
 - 15.2 Periodic alarm testing 68
 - 15.2.1 General 68
 - 15.2.2 Periodic alarm testing requirements 68
 - 15.2.3 Periodic alarm testing for highly managed alarms 68
 - 15.2.4 Periodic alarm test procedure requirements 68
 - 15.2.5 Periodic alarm test procedure recommendations 68
 - 15.2.6 Periodic alarm testing recommendations 69
 - 15.3 Out-of-service alarms 69
 - 15.3.1 General 69
 - 15.3.2 Out-of-service process requirements 69
 - 15.3.3 Out-of-service highly managed alarms 69
 - 15.3.4 Out-of-service process recommendations 69
 - 15.3.5 Requirements for returning alarms to service 69
 - 15.4 Equipment repair 69
 - 15.5 Equipment replacement 70

15.6	Refresher training for maintenance	70
15.6.1	General requirements.....	70
15.6.2	Refresher training requirements for highly managed alarms	70
15.6.3	Refresher training recommendations for alarms	70
16	Monitoring and assessment	70
16.1	Purpose	70
16.2	Requirements.....	70
16.3	Monitoring, assessment, audit, and benchmark.....	70
16.4	Alarm system monitoring	71
16.5	Alarm system performance metrics	71
16.5.1	General	71
16.5.2	Average alarm rate per operator console	71
16.5.3	Peak alarm rate per operator console	72
16.5.4	Alarm floods.....	72
16.5.5	Frequently occurring alarms	73
16.5.6	Chattering and fleeting alarms.....	73
16.5.7	Stale alarms.....	73
16.5.8	Annunciated alarm priority distribution.....	73
16.5.9	Alarm priority distribution	74
16.6	Unauthorized alarm suppression.....	74
16.7	Alarm attribute monitoring	74
16.8	Reporting of alarm system analyses	74
16.9	Alarm performance metric summary.....	74
17	Management of change.....	75
17.1	Purpose	75
17.2	Changes subject to management of change.....	75
17.3	Change documentation requirements.....	76
17.4	Change documentation recommendations.....	76
17.5	Alarm removal recommendations.....	76
17.6	Alarm attribute modification recommendations	76
18	Audit.....	77
18.1	Purpose.....	77
18.2	Benchmark.....	77
18.2.1	General	77
18.2.2	Initial audit or benchmark requirements	77
18.3	Audit interviews.....	77
18.4	Audit recommendations	77
18.5	Action plans	78
	Bibliography	79
	Figure 1 – Alarm system dataflow.....	13
	Figure 2 – Alarm management lifecycle	24
	Figure 3 – Alarm state transition diagram	29
	Figure 4 – Alarm response timeline	33
	Figure 5 – Feedback model of operator-process interaction	35
	Table 1 – Alarm management lifecycle stage inputs and outputs	28

Table 2 – Alarm states	31
Table 3 – Required and recommended alarm philosophy content	36
Table 4 – Recommended alarm state indications	52
Table 5 – Average alarm rates	72
Table 6 – Annunciated alarm priority distribution	73
Table 7 – Recommended alarm performance metrics summary	75

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

MANAGEMENT OF ALARMS SYSTEMS FOR THE PROCESS INDUSTRIES

FOREWORD

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Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

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- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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INTRODUCTION

Purpose

This International Standard addresses the development, design, installation, and management of alarm systems in the process industries. Alarm management includes multiple work processes throughout the alarm system lifecycle. This standard defines the terminology and models to develop an alarm system, and it defines the work processes recommended to effectively maintain the alarm system throughout the lifecycle.

This standard was adapted from ANSI/ISA-18.2-2009, *Management of Alarm Systems for the Process Industries*, an International Society of Automation (ISA) standard, and with due consideration of other guidance documents that have been developed throughout industry. Ineffective alarm systems have often been cited as contributing factors in the investigation reports following major process incidents. This standard is intended to provide a methodology that will result in the improved safety of the process industries.

This standard is not the first effort to define terminology and practices for effective alarm systems. In 1999 the Engineering Equipment and Materials Users' Association (EEMUA) issued Publication 191, *Alarm Systems: A Guide to Design, Management and Procurement*. In 2003 the User Association of Process Control Technology in Chemical and Pharmaceutical Industries (NAMUR) issued worksheet NA 102, *Alarm Management*.

During the development of this standard every effort was made to keep terminology and practices consistent with the previous work of these respected organizations and committees.

This document provides requirements for alarm management and alarm systems. It is intended for those individuals and organizations that

- a) manufacture or implement embedded alarm systems,
- b) manufacture or implement third-party alarm system software,
- c) design or install alarm systems,
- d) operate and/or maintain alarm systems, and
- e) audit or assess alarm system performance.

Organization

This standard is organized in two parts. The first part is introductory in nature, (Clauses 1 to 5). The main body of the standard follows (Clauses 6 to 18).