# DIN EN 15399:2019-03 (E)

## Gas infrastructure - Safety Management System for Gas Networks with maximum operating pressure up to and including 16 bar

## Contents

Page


European foreword ....4

Introduction ....5

1 Scope ....6

2 Normative references ....6

3 Terms and definitions ....7

4 Context of the organization ....9
4.1 Understanding the organization and its context ....9
4.2 Understanding the needs and expectations of interested parties ....9
4.3 Safety Management System (SMS) ....9
4.3.1 General ....9
4.3.2 Determining the scope of the SMS ....9

5 Leadership ....10
5.1 Leadership and commitment ....10
5.2 Policy ....10
5.3 Organizational roles, responsibilities and authorities ....11

6 Planning of the SMS ....11
6.1 Actions to address risks and opportunities ....11
6.1.1 Safety risk management ....11
6.1.2 Legal and other requirements ....12
6.2 SMS objectives and planning to achieve them ....12

7 Support of the SMS ....13
7.1 Resources ....13
7.2 Competence ....13
7.3 Awareness ....14
7.4 Communication ....14
7.5 Documented information of the SMS ....15
7.5.1 General ....15
7.5.2 Creating and updating ....15
7.5.3 Control of documented information ....15

8 Operation of the SMS ....16
8.1 Operational planning and control of the SMS ....16
8.1.1 General ....16
8.1.2 Design of the gas distribution infrastructure ....16
8.1.3 Construction, commissioning and decommissioning of the gas distribution infrastructure ....17
8.1.4 Operation of the gas distribution infrastructure ....18
8.1.5 Maintenance of the gas distribution infrastructure ....19
8.1.6 Gas infrastructure permanently out of service ....20
8.1.7 Emergency plans ....20
8.1.8 Outsourcing and purchasing ....21
8.1.9 Innovation and improvement ....22
8.2 Performance evaluation Monitoring, measurement, analysis and evaluation ....22

8.2.1 Performance evaluation framework ..... 22
8.2.2 Evaluation of compliance ..... 23
8.3 Internal Audit ..... 23
8.3.1 Purpose of internal audits ..... 23
8.3.2 Program and implementation of internal audits ..... 23
8.4 Management Review ..... 24
8.5 Documentation ..... 24

9 Improvement of the SMS ..... 24
9.1 Non-conformity and corrective action ..... 24
9.2 Gas network operatorContinual improvement ..... 25

Annex A (informative) Plan-Do-Check-Act (PDCA) methodology ..... 26

Bibliography ..... 27