

ICS 91.140.40

English Version

**Gas Supply Systems - Guidelines for Management systems for
Gas Distribution Network**

Systèmes d'alimentation en gaz - Lignes directrices pour
les systèmes de management des réseaux de distribution
de gaz

Gasversorgungssysteme - Leitlinien für
Managementsysteme für Gasverteilungsnetze

This Technical Specification (CEN/TS) was approved by CEN on 4 December 2006 for provisional application.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

Contents

Page

Foreword.....	4
Introduction	5
1 Scope	6
2 Normative references	6
3 Management system	6
4 Management policy, objectives and targets	7
5 Management planning.....	7
6 Legal and other requirements	7
7 Implementation of a Management System.....	7
8 Training, awareness and competence.....	8
9 Communication.....	10
10 Document control	10
11 Hazard identification	10
11.1 Environmental and safety aspects.....	10
11.2 Gathering and analysis of incidents	11
11.3 Environmental impact analysis	11
11.4 Top Management Reviews	12
12 Planning and design.....	12
12.1 Design/planning principles	12
12.2 Design overview.....	12
12.3 Design review.....	13
13 Purchasing	13
13.1 Purchasing policy	13
13.2 Purchasing implementation and operation.....	14
13.3 Purchasing control and corrective action – process review	15
14 Construction.....	15
14.1 General.....	15
14.2 Construction principles	15
14.3 Construction review	15
14.4 Construction supervision	15
14.5 Technical aspects	16
15 Commissioning, decommissioning, recommissioning and abandonment.....	16
15.1 Testing: General.....	16
15.2 Commissioning, decommissioning, recommissioning	16
15.3 Abandonment.....	16
16 Operation and maintenance	16
16.1 General.....	16
16.2 Preventive and corrective maintenance – planning and scheduling	17
16.3 Preventive and corrective maintenance – Implementation and functioning	17
16.4 Third party work.....	18
17 Emergency management	18
17.1 Emergency preparedness and response	18
17.2 Element of process review	18

17.3	Implementation and functioning.....	19
18	Performance measurement.....	19
19	Non-conformance, corrective and preventive actions.....	19
19.1	General.....	19
19.2	Inspection and corrective actions.....	19
20	Records.....	20
21	Audits.....	21
22	Management system review.....	21
	Bibliography.....	22

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Foreword

This document (CEN/TS 15399:2007) has been prepared by Technical Committee CEN/TC 234 "Gas Supply Systems", the secretariat of which is held by DIN.

There is a complete suite of functional standards prepared by CEN/TC 234 "Gas supply" to cover all parts of the gas infrastructure system from the input of gas to the distribution network starting at the boundary of the delivery station on the premises of the Gas Distribution System Operator (GDSO), up to the point of delivery of the customers, whether domestic, commercial or industrial.

In preparing this Technical Specification, a basic understanding of Management Systems and gas distribution networks by the user has been assumed.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this Technical Specification: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Introduction

This Technical Specification deals with the design, construction, commissioning, operation, maintenance and abandonment of a distribution network, all in order to provide an efficient gas distribution network for the safe and secure distribution of gas.

It is written in accordance with European Directive 2003/55/EC of 26 June 2003, concerning common rules for the internal market in natural gas.

The provisions refer to a general organisational scheme in which:

- safety,
- security,
- reliability, and
- efficiency,

of gas distribution activity are highlighted.

This Technical Specification could be an appropriate tool supporting a GDSO in the implementation of a management system, for example in conjunction with the ISO certification procedure, which needs to be translated into specialized processes; it could also be used in case of assessment or certification by a third party.

The use of this Technical Specification is first targeted at all technical operations and processes performed by a GDSO including those activities carried out by outsourced contractors.

This Technical Specification also deals with the matter of the required competences for technical people involved in gas distribution activities. In this context, competences should not be confused with "qualification".

The structure of this Technical Specification is based on the documents EN ISO 9001, *Quality management system – Requirements (ISO 9001:2000)* and EN ISO 14001, *Environmental management systems – Requirements with guidance for use (ISO 14001:2004)* and the technical contents are mainly taken from EN 12007 (all parts), Gas supply systems-Pipelines for maximum operating pressure up to and including 16 bar.

In addition and regarding environmental requirements, the Sector Forum Gas Infrastructure guide should be taken into account.

Further important reference has been the document written by Study Group SG4.2 of IGU/WOC4 entitled "Frame of reference regarding Pipeline Integrity Management System", and parts of the internal Procedures written by distribution Companies.

1 Scope

The field of application of this Technical Specification is the new and existing gas grid starting at the boundary of the delivery station on the premises of the GDSO up to the point of delivery of the customers that can be at a means of isolation (e.g. at the outlet of a LPG storage vessel or at the meter outlet connection) typically nominated by the GDSO and may be defined in national regulations or standards.

For existing installations this Technical Specification does not apply to design, construction, testing and commissioning.

The main objectives of this Technical Specification can be summarized by the following:

- Provide guidance about the minimum necessary requirements to be included in a management system related to safety, security, reliability and efficiency of technical activities (design, construction, testing and commissioning/decommissioning, operation and maintenance).
- Demonstrate that the competencies required in the activities mentioned above concretely find their expression in practice on the plants/installations of the gas distribution networks (e.g. for operations in distribution: odourisation, emergency service, cathodic protection, leak survey, maintenance activities on pressure reduction plants, mains and service lines).

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 12007-1:2000, *Gas supply systems - Pipelines for maximum operating pressure up to and including 16 bar - Part 1: General functional recommendations*

EN 12007-4, *Gas supply systems - Pipelines for maximum operating pressure up to and including 16 bar - Part 4: Specific functional recommendations for renovation*

EN 12186, *Gas supply systems - Gas pressure regulating stations for transmission and distribution. - Functional requirements*

EN 12327, *Gas supply systems - Pressure testing, commissioning and decommissioning procedures - Functional requirements*

EN ISO 9001, *Quality management systems – Requirements (ISO 9001:2000)*

EN ISO 14001, *Environmental management systems - Requirements with guidance for use (ISO 14001:2004)*

3 Management system

This Technical Specification is intended for use by a GDSO who has a basic appreciation of quality, environmental, health and safety (H + S) management and distribution network maintenance and integrity.

The Management System introduced in this Technical Specification refers to gas distribution networks as defined in the scope and introduction.

It is at the GDSO discretion to include other objects and structures in their own management system.

This Technical Specification is a general framework that applies to all activities of a GDSO including safety aspects of distribution networks management (i.e. public safety, pipeline monitoring, etc.).