

**Transport quality
system — Road rail
and inland navigation
transport — Quality
system requirements
to supplement EN 9002
for the transport of
dangerous goods, with
regard to safety**

ICS 03.120.10; 13.300

National foreword

This British Standard is the UK implementation of . It supersedes BS EN 12798:1999 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee TW/2, Transport logistics and services.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 August 2008

© BSI 2008

ISBN 978 0 580 53850 6

Amendments/corrigenda issued since publication

Date	Comments

EUROPEAN STANDARD

EN 12798

NORME EUROPÉENNE

EUROPÄISCHE NORM

May 2007

ICS 03.120.10; 13.300

Supersedes EN 12798:1999

English Version

**Transport Quality Management System - Road, Rail and Inland
navigation transport - Quality management system requirements
to supplement EN ISO 9001 for the transport of dangerous
goods with regard to safety**

Systèmes qualité Transport - Transport par route, transport
ferroviaire et transport par voie fluviale - Prescriptions
relatives au système d'assurance qualité pour compléter
l'EN ISO 9001 vis-à-vis de la sécurité pour le transport de
matières dangereuses

Qualitätsmanagementsystem für die Beförderung -
Beförderung auf der Straße, mit der Eisenbahn und auf
Binnenwasserstraßen - Forderungen des
Qualitätsmanagementsystems zur Ergänzung von EN ISO
9001 im Hinblick auf Sicherheit bei der Beförderung
gefährlicher Güter

This European Standard was approved by CEN on 15 March 2007.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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.



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
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 Quality management system	5
4.1 General requirements.....	5
4.2 Documentation requirements.....	6
4.2.1 General.....	6
4.2.2 Quality manual	6
4.2.3 Control of documents	6
4.2.4 Control of records.....	6
5 Management responsibility	7
5.1 Management commitment	7
5.2 Customer focus.....	7
5.3 Quality policy	7
5.4 Planning.....	7
5.4.1 Quality objectives	7
5.4.2 Quality management system planning.....	7
5.5 Responsibility, authority and communication.....	7
5.5.1 Responsibility and authority	7
5.5.2 Management representative	7
5.5.3 Internal communication	7
5.6 Management review.....	7
6 Resource management	8
6.1 Provision of resources	8
6.2 Human resources.....	8
6.2.1 General.....	8
6.2.2 Competence, awareness and training	8
6.3 Infrastructure.....	8
6.4 Work environment	8
7 Product realization.....	8
7.1 Planning of product realization	8
7.2 Customer-related processes	8
7.3 Design and development	8
7.4 Purchasing	9
7.4.1 Process	9
7.4.2 Purchasing information	9
7.4.3 Verification of purchased product	9
7.5 Production and service provision.....	9
7.5.1 Control of production and service provision.....	9
7.5.2 Validation of processes for production and service provision	12
7.5.3 Identification and traceability.....	12
7.5.4 Customer property.....	12
7.5.5 Preservation of product	12
7.6 Control of monitoring and measuring devices.....	12
8 Measurement, analysis and improvement	12
8.1 General.....	12
8.2 Monitoring and measurement	12

8.2.1	Customer satisfaction.....	12
8.2.2	Internal audit.....	13
8.2.3	Monitoring and measurement of processes.....	13
8.2.4	Monitoring and measurement of product.....	13
8.3	Control of nonconforming product.....	13
8.4	Analysis of data.....	13
8.5	Improvement.....	13
8.5.1	Continual improvement.....	13
8.5.2	Corrective action.....	14
8.5.3	Preventive action.....	14
	Bibliography.....	15

Foreword

This document (EN 12798:2007) has been prepared by Technical Committee CEN/TC 320 "Transport - Logistics and services", the secretariat of which is held by DS.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by November 2007, and conflicting national standards shall be withdrawn at the latest by November 2007.

This document supersedes EN 12798:1999.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: 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.

1 Scope

This European Standard specifies quality management system requirements, supplementary to those of EN ISO 9001:2000, for the management of safety in the field of the transport of dangerous goods by road, rail and inland navigation.

Application of this document covers, and is limited to, the range of transport related services that a company claims to provide in compliance with this European Standard.

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

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

transport

deliberate change of location of dangerous goods by road, rail and inland navigation extending from receipt to delivery and including temporary breaks in between

3.2

dangerous goods

substances and articles defined and listed in regulations as applicable to their transport

3.3

company

organisation, or part thereof, involving carrying out the transport of dangerous goods

3.4

periodic inspection

series of planned inspections carried out at specified intervals

NOTE 1 The term "product" used in EN ISO 9001:2000 corresponds with the application of this European Standard to any transport related service.

NOTE 2 The term "supplier" used in EN ISO 9001:2000 corresponds with the application of this European Standard to any company, as defined above.

4 Quality management system

4.1 General requirements

EN ISO 9001:2000, 4.1 and the following additional requirements apply.

Each specific quality management system requirement, unless otherwise indicated in this European Standard, shall apply to both quality and safety.

The quality management system of the company shall address the relevant safety requirements of the regulations for the transport of dangerous goods.

4.2 Documentation requirements

4.2.1 General

EN ISO 9001:2000, 4.2.1 and the following additional requirements apply.

A company profile shall be available with the following key elements:

- General data:
 - a) Name and address of head office;
 - b) Legal company status;
 - c) Line of business.
- Data concerning the transport of dangerous goods:
 - d) Name and address of any other depots and offices;
 - e) Number of employees;
 - f) Composition of the fleet;
 - g) Types of dangerous goods generally carried (according to danger classes).

The company shall have a clear organizational chart.

The company shall make available proof of insurance coverage or other indemnity arrangements.

NOTE Attention is drawn to existing regulations concerning indemnity and relevant to the transport of dangerous goods.

4.2.2 Quality manual

EN ISO 9001:2000, 4.2.2 applies.

4.2.3 Control of documents

EN ISO 9001:2000, 4.2.3 applies.

NOTE The documents of external origin mentioned in 4.2.3 of EN ISO 9001:2000 should include all applicable standards, regulations, codes of practice, service manuals, and general documentation related to safety practices in the transport of dangerous goods.

4.2.4 Control of records

EN ISO 9001:2000, 4.2.4 applies.

5 Management responsibility

5.1 Management commitment

EN ISO 9001:2000, 5.1 applies.

5.2 Customer focus

EN ISO 9001:2000, 5.2 applies.

5.3 Quality policy

EN ISO 9001:2000, 5.3 and the following additional requirement apply.

The company shall document its policy for quality and safety and these documents shall be signed by the manager in charge.

5.4 Planning

5.4.1 Quality objectives

EN ISO 9001:2000, 5.4.1 applies.

5.4.2 Quality management system planning

EN ISO 9001:2000, 5.4.2 applies.

5.5 Responsibility, authority and communication

5.5.1 Responsibility and authority

EN ISO 9001:2000, 5.5.1 and the following additional requirement apply.

The personnel mentioned in EN ISO 9001:2000, 5.5.1, including temporary personnel, shall be given a functional description of their position in the company and of all the safety obligations incumbent upon them.

5.5.2 Management representative

EN ISO 9001:2000, 5.5.2 and the following additional requirement apply.

The responsibility for the safety management system shall be specifically allocated to a named individual.

NOTE A single management representative may be responsible for both quality and safety aspects of the quality management system or the responsibility for each aspect may be assigned to separate individuals.

5.5.3 Internal communication

EN ISO 9001:2000, 5.5.3 and the following additional requirement apply.

Safety shall be a continuing topic of internal communication at all levels within the company. The resulting actions taken shall be in writing and subject to an implementation plan.

5.6 Management review

EN ISO 9001:2000, 5.6 applies.

6 Resource management

6.1 Provision of resources

EN ISO 9001:2000, 6.1 applies.

6.2 Human resources

6.2.1 General

EN ISO 9001:2000, 6.2.1 applies.

6.2.2 Competence, awareness and training

EN ISO 9001:2000, 6.2.2 and the following additional requirements apply.

These requirements shall also cover provisions for refresher training on safety aspects of changing regulations, product knowledge and technology.

These requirements shall also cover recruitment and selection of personnel involved in the transport of dangerous goods, based on criteria such as experience, capability, education, proficiency and technical ability.

The company shall have in place a policy regarding appropriate medical surveillance of personnel.

These requirements shall also apply for temporary personnel.

NOTE Regulations may exist with respect to requirements for medical surveillance and the recording and confidentiality of records maintained.

6.3 Infrastructure

EN ISO 9001:2000, 6.3 applies.

6.4 Work environment

EN ISO 9001:2000, 6.4 applies.

7 Product realization

7.1 Planning of product realization

EN ISO 9001:2000, 7.1 applies.

7.2 Customer-related processes

EN ISO 9001:2000, 7.2 applies.

7.3 Design and development

EN ISO 9001:2000, 7.3 applies.

7.4 Purchasing

7.4.1 Process

EN ISO 9001:2000, 7.4.1 and the following additional requirements apply.

The company shall require that subcontractors comply with an equivalent level of safety. This requirement shall be incorporated in the service contract.

Adherence to the safety requirements by subcontractors shall be verified on a regular basis and the results shall be recorded in writing. Exceptionally this requirement may be satisfied by a subcontractor submitting only a declaration concerning the safety requirements (see 4.2.4).

When tank-cleaning is subcontracted, it shall only be carried out by specialised undertakings.

7.4.2 Purchasing information

EN ISO 9001:2000, 7.4.2 and the following additional requirements apply.

Where tank-cleaning services are subcontracted, the purchasing/specification documents shall contain the requirement that cleaning certificates be provided by the service provider. The service procurer shall retain such certificates with other relevant safety documentation.

When the product or service bought corresponds with a requirement of this European Standard, pertinent safety specifications shall be incorporated in the purchasing document.

7.4.3 Verification of purchased product

EN ISO 9001:2000, 7.4.3 applies.

NOTE Receiving inspection and testing procedures should at cover at the least, containers, means of transport, equipment and maintenance/repair items. These may be new, reconditioned or second-hand, and may be bought or hired.

7.5 Production and service provision

7.5.1 Control of production and service provision

7.5.1.1 General

EN ISO 9001:2000, 7.5.1 and the following additional requirements apply.

Where the absence of operating instructions/procedures could adversely affect safety, the company shall establish and maintain written instructions for the personnel concerned.

Where operating activities include an interface with another organization (e.g. loading and unloading locations), the company shall liaise with that organization to ensure that all activities are covered by the agreed operating instructions/procedures and that particular responsibilities are identified and agreed.

7.5.1.2 Management and use of personal protective equipment

Where applicable, the company shall ensure that, at least:

- personal protective equipment is properly managed, and, especially, that it is kept in prescribed places, known to the personnel;
- personnel physically involved in the transport of dangerous goods have and use personal protective equipment according to the regulations and special instructions;

- personnel are trained in the use of the protective equipment.

7.5.1.3 Maintenance

The company shall ensure the periodic maintenance of the means of transport and equipment for which the company is responsible. Details of the maintenance carried out shall be recorded (see 4.2.4).

This also includes equipment used for loading and unloading of packaged goods, bulk, tanks, tank containers and containers.

Where appropriate, maintenance shall be carried out in accordance with the manufacturer's instructions.

NOTE The means of transport also includes containers when offered as an integral part of transport.

7.5.1.4 Loading and unloading activities - Securing of load

Where applicable, the company shall ensure that the means of transport are properly loaded and unloaded, including appropriate means of securing the load, and especially that:

- for the transport of packaged goods, containers including tank containers and bulk transport, sufficient and appropriate means are provided and used to secure the load to prevent undue movement;
- appropriate equipment is provided and used for loading/unloading the means of transport;
- appropriate equipment is provided and used and appropriate measures taken to clean/remove any spillages from the means of transport;
- only hoses which have been certified to comply with particular requirements relating to compatibility with the dangerous goods and the actual pressure and temperature, are used;
- for tanks at least the following pre-loading and discharging checks are carried out:
 - presence of safety equipment;
 - identification of the product;
 - tank cleanliness;
 - product compatibility;
 - tank capacity;
 - correct hose connection and valve operation;
 - correct operation of any transfer equipment;
 - equipotential electrostatic bonding/earthing;
 - measures against overpressure, underpressure, overfilling, and overloading;
 - safe condition of tank and site.

7.5.1.5 Transport operations

7.5.1.5.1 General

These requirements shall ensure that the applicable regulations are correctly followed and in addition, include the following modal specific items as a minimum.

7.5.1.5.2 Road

- validity of the drivers' training;
- presence on board of the required transport document(s);
- presence on board of the required personal protective equipment;
- correct placarding and labelling of the vehicle;
- following appropriate routes;
- selection of parking locations.

7.5.1.5.3 Rail

- marshalling and stabling wagons carrying dangerous goods;
- availability of proper consignment details and correct placarding and labelling for wagons;
- availability of the necessary information concerning the dangerous goods carried in each wagon in the driver's cab or to other persons involved,. This information may also be based on electronic data transmission.

7.5.1.5.4 Inland Navigation

- navigation in poor visibility;
- mooring;
- ensuring that the maximum permissible draught is not exceeded.

7.5.1.6 Cleaning of cargo spaces

Where applicable, the company shall determine and control:

- requirements for proper cleaning, ventilation and control the cleanliness of cargo spaces;
- cleaning activities, appropriate for dangerous goods which can be treated;
- handling and removing wastes;
- requirements for cleaning certificates.

7.5.1.7 Entry into cargo spaces

Where applicable, the company shall ensure that tanks and cargo spaces are safe to enter.

This shall be carried out in accordance with an entry permit issued and signed by an authorized person.

NOTE Verification should be carried out by top management or by a person appointed by them.

7.5.1.8 Other aspects of safety system management

The company or any outside agency appointed by the company for this purpose shall be contactable whenever transport is performed.

There shall be adequate emergency and first aid response system at the company's site for assistance to be given effectively at all times.

Additional requirements concerning road transport.

Where appropriate, a gate control system for security purposes shall be in place for the site facilities.

The company shall ensure that loaded vehicles are safely and securely parked.

Additional requirement concerning inland navigation.

An adequate emergency and first aid response system shall also be available for personnel on board barges.

7.5.2 Validation of processes for production and service provision

EN ISO 9001:2000, 7.5.2 applies.

7.5.3 Identification and traceability

EN ISO 9001:2000, 7.5.3 and the additional following requirement apply.

The company shall have a system for monitoring the location and load details of all means of transport and loading units carrying dangerous goods.

7.5.4 Customer property

EN ISO 9001:2000, 7.5.4 applies.

7.5.5 Preservation of product

EN ISO 9001:2000, 7.5.5 applies.

7.6 Control of monitoring and measuring devices

EN ISO 9001:2000, 7.6 applies

8 Measurement, analysis and improvement

8.1 General

EN ISO 9001:2000, 8.1 applies.

8.2 Monitoring and measurement

8.2.1 Customer satisfaction

EN ISO 9001:2000, 8.2.1 applies.

8.2.2 Internal audit

EN ISO 9001:2000, 8.2.2 applies.

8.2.3 Monitoring and measurement of processes

EN ISO 9001:2000, 8.2.3 applies.

8.2.4 Monitoring and measurement of product

EN ISO 9001:2000, 8.2.4 and the following additional requirements apply.

Periodic inspections shall take place to ensure that the tank and fittings are appropriate for their intended use.

Where applicable, periodic inspections shall be made to verify the presence and serviceability of load securing, loading and unloading equipment.

Periodic inspections shall be made to verify the presence and serviceability of personal protective equipment and first aid equipment.

Periodic inspections shall be carried out regarding compliance with any special instructions.

The results of these periodic inspections shall be recorded (see 4.2.4).

Additional requirement concerning inland navigation.

The hoses and their permanent connections (couplings) shall be checked and tested periodically.

NOTE 1 This test should be carried out at least annually, at the test pressure prescribed in EN 12115.

NOTE 2 National/international safety regulations may exist with respect to periodic inspections and care should be taken to ensure that they are taken into account when periodic inspections are planned and carried out.

8.3 Control of nonconforming product

EN ISO 9001:2000, 8.3 and the following additional requirements apply.

Where applicable, the company shall establish and maintain documented emergency procedures/instructions describing how to act in the case of accidents, incidents or contamination.

All offences and incidents shall be recorded.

Additional requirement concerning inland navigation.

For personnel on board barges there shall be resources available to immediately call on the assistance of the emergency services.

8.4 Analysis of data

EN ISO 9001:2000, 8.4 applies.

8.5 Improvement

8.5.1 Continual improvement

EN ISO 9001:2000, 8.5.1 applies.

8.5.2 Corrective action

EN ISO 9001:2000, 8.5.2 applies and shall be extended to procedures on:

- reporting accidents and incidents;
- ensuring that defects reported concerning the means of transport and equipment are remedied as soon as necessary;
- ensuring that defects discovered during inspections on tanks and fittings are remedied before the tank/fitting is used again;
- ensuring that offences and/or incidents are recorded and reviewed with the persons concerned at all levels.

8.5.3 Preventive action

EN ISO 9001:2000, 8.5.3 applies.

Bibliography

- [1] EN 12115, Rubber and thermoplastics hoses and hose assemblies for liquid or gaseous chemicals – Specification
- [2] EN ISO 9000:2005, Quality management systems - Fundamentals and vocabulary (ISO 9000:2005)

BSI - British Standards Institution

BSI is the independent national body responsible for preparing British Standards. It presents the UK view on standards in Europe and at the international level. It is incorporated by Royal Charter.

Revisions

British Standards are updated by amendment or revision. Users of British Standards should make sure that they possess the latest amendments or editions.

It is the constant aim of BSI to improve the quality of our products and services. We would be grateful if anyone finding an inaccuracy or ambiguity while using this British Standard would inform the Secretary of the technical committee responsible, the identity of which can be found on the inside front cover. Tel: +44 (0)20 8996 9000. Fax: +44 (0)20 8996 7400.

BSI offers members an individual updating service called PLUS which ensures that subscribers automatically receive the latest editions of standards.

Buying standards

Orders for all BSI, international and foreign standards publications should be addressed to Customer Services. Tel: +44 (0)20 8996 9001. Fax: +44 (0)20 8996 7001 Email: orders@bsigroup.com You may also buy directly using a debit/credit card from the BSI Shop on the Website <http://www.bsigroup.com/shop>

In response to orders for international standards, it is BSI policy to supply the BSI implementation of those that have been published as British Standards, unless otherwise requested.

Information on standards

BSI provides a wide range of information on national, European and international standards through its Library and its Technical Help to Exporters Service. Various BSI electronic information services are also available which give details on all its products and services. Contact Information Centre. Tel: +44 (0)20 8996 7111 Fax: +44 (0)20 8996 7048 Email: info@bsigroup.com

Subscribing members of BSI are kept up to date with standards developments and receive substantial discounts on the purchase price of standards. For details of these and other benefits contact Membership Administration. Tel: +44 (0)20 8996 7002 Fax: +44 (0)20 8996 7001 Email: membership@bsigroup.com

Information regarding online access to British Standards via British Standards Online can be found at <http://www.bsigroup.com/BSOL>

Further information about BSI is available on the BSI website at <http://www.bsigroup.com>.

Copyright

Copyright subsists in all BSI publications. BSI also holds the copyright, in the UK, of the publications of the international standardization bodies. Except as permitted under the Copyright, Designs and Patents Act 1988 no extract may be reproduced, stored in a retrieval system or transmitted in any form or by any means – electronic, photocopying, recording or otherwise – without prior written permission from BSI.

This does not preclude the free use, in the course of implementing the standard, of necessary details such as symbols, and size, type or grade designations. If these details are to be used for any other purpose than implementation then the prior written permission of BSI must be obtained.

Details and advice can be obtained from the Copyright and Licensing Manager. Tel: +44 (0)20 8996 7070 Email: copyright@bsigroup.com