

SLOVENSKI STANDARD

SIST EN 13816:2003

01-maj-2003

Transportation - Logistics and services - Public passenger transport - Service quality definition, targeting and measurement

Transport - Logistik und Dienstleistungen - Öffentlicher Personenverkehr - Definition, Festlegung von Leistungszielen und Messung der Servicequalität

Transport - Logistique et services - Transport public de voyageurs - Définition de la qualité de service, objectifs et mesures

Ta slovenski standard je istoveten z: EN 13816:2002

ICS:

01.040.03	Storitve. Organizacija podjetja, vodenje in kakovost. Uprava. Transport. Sociologija. (Slovarji)	Services. Company organization, management and quality. Administration. Transport. Sociology. (Vocabularies)
03.220.01	Transport na splošno	Transport in general

SIST EN 13816:2003

en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 13816:2003

<https://standards.iteh.ai/catalog/standards/sist/d11eed68-2525-4877-a03b-ae42d9d968af/sist-en-13816-2003>

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 13816

April 2002

ICS 01.040.03; 03.220.01

English version

**Transportation - Logistics and services - Public passenger
transport - Service quality definition, targeting and measurement**

Transport - Logistique et services - Transport public de
voyageurs - Définition de la qualité de service, objectifs et
mesures

Transport - Logistik und Dienstleistungen - Öffentlicher
Personenverkehr - Definition, Festlegung von
Leistungszielen und Messung der Servicequalität

This European Standard was approved by CEN on 30 December 2001.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

SIST EN 13816:2003

<https://standards.iteh.ai/catalog/standards/sist/d11eed68-2525-4877-a03b-ae42d9d968af/sist-en-13816-2003>



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

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

Contents

	page
Foreword.....	3
Introduction	4
1 Scope	5
2 Terms and definitions	5
3 Methodology	6
3.1 The quality loop	6
3.2 Quality criteria	8
4 Requirements for service quality.....	9
4.1 Compliance	9
4.2 Quality management	9
4.3 Service quality definition	10
4.4 Service quality measurement.....	10
5 Recommendations	10
5.1 Commitment between participating parties	10
5.2 Allocation of responsibilities	10
5.3 Other quality management tools	11
Annex A (informative) Quality criteria	12
Annex B (informative) Glossary of Terms pertinent to Public Passenger Transport	17
Annex C (informative) Guidance Notes on Performance and Satisfaction Measurement.....	23

<https://standards.iteh.ai/catalog/standards/sist/d11eed68-2525-4877-a03b-ae42d9d968af/sist-en-13816-2003>

Foreword

This document EN 13816 has been prepared by CEN/TC 320 "Transportation – 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 October 2002, and conflicting national standards shall be withdrawn at the latest by October 2002.

Certain parts have been prepared in corporation with experts from the QUATTRO project, supported by the European Union's Fourth Framework Transport RTD programme.

The annexes A, B and C are informative.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 13816:2003

<https://standards.iteh.ai/catalog/standards/sist/d11eed68-2525-4877-a03b-ae42d9d968af/sist-en-13816-2003>

EN 13816:2002 (E)

Introduction

The main purpose of the standard is to promote a quality approach to public transport operations and focus interest on customers' needs and expectations, by specifying procedures most likely to:

- draw the attention of the responsible parties to matters to be considered;
- lead to relevant and well-founded decisions particularly with regard to the allocation of responsibilities;
- enable customers, and others, to compare service quality claims from alternative suppliers, reliably;
- contribute to the implementation of a process of continuous improvement.

The requirements of the standard are such that entities, whether large or small, can benefit from its adoption and use.

Adoption of this European Standard may be appropriate for:

- 1) *Public Passenger Transport services for which a single operator carries sole responsibility for all major quality criteria, or two or more parties share responsibilities, in accordance with an agreement*

The requirements outlined in chapter 4 will permit full compliance with the standard. Compliance will assist service providers in the provision of public passenger transport that will more closely align with the expectations of the customers. To this end, provisions are made for using elements from a detailed definition of quality in public passenger transport presented as a list of quality criteria (annex A).

<https://standards.iteh.ai/catalog/standards/sist/d11eed68-2525-4877-a03b-6e1196c0f11b/en-13816-2002>

The benefits of complying with the standard will be an improved ability to allocate the resources available to the tasks most likely to produce added customer satisfaction and revenue to the service providers.

The standard includes recommendations for the preferred form and contents of agreements regarding quality between parties sharing responsibility for a public passenger transport (PPT) system, and invitations to tender. The recommendations include a guideline for allocation of responsibilities for the relevant quality parameters.

The standard also includes recommendations for the measurement of service quality.

- 2) *Authorities in a tendering/contracting situation, requiring that the service be provided in accordance with this standard*

In a tendering situation additional benefits are derived from applying this standard:

The bidder will be certain that all quality criteria not specifically mentioned in the tender document will not be his responsibility, and respect national and European legislation, and he need not, therefore, add a contingency allowance to his bid in order to cover implicit responsibilities which may be a matter of national or local tradition.

The bidder will be able to understand what is required of him more readily, as a result of the use of standard terms used in the list of quality criteria (Annex A) and defined in the glossary (Annex B).

It is recommended that a tender document, which requires that the service be provided in accordance with this standard, also includes requirements for the level of quality.

1 Scope

This European Standard specifies the requirement to define, target and measure quality of service in public passenger transport (PPT), and provides guidance for the selection of related measurement methods.

It is intended to be used by service providers in the presentation and monitoring of their services but is also recommended for use by authorities and agencies responsible for the procurement of PPT services in the preparation of invitations to tender.

Its use promotes the translation of customer expectations and perceptions of quality into viable, measurable, and manageable quality parameters.

It is recognized that a single individual or company, or two or more parties sharing the responsibility for the provision of a PPT service in co-operation (e.g. authority and operator) may, in practice, seek to comply with the standard. In the latter situation, it is strongly recommended that the relationship between the parties be governed by a formal agreement (5.2).

It is important to note that it is the service, not the service provider, which is in compliance with the standard.

Annex A sets out the comprehensive list of quality criteria.

Annex B provides a glossary of terms.

Annex C deals with aspects of performance measurement.

The standard is intended to be applicable to PPT services, as defined in 2.1 but need not exclude other transport services (e.g. charter and taxi systems).

iTeh STANDARD PREVIEW
(standards.iteh.ai)

2 Terms and definitions

SIST EN 13816:2003

<https://standards.iteh.ai/catalog/standards/sist/d11eed68-2525-4877-a03b->

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

2.1

public passenger transport

services which have the following characteristics:

- are open to all, whether travelling singly or in groups;
- are publicly advertised;
- have fixed times or frequencies, and periods of operation;
- have fixed routes and stopping places, or defined origins and destinations, or a defined operating area;
- are provided on a continuing basis, and
- have a published fare.

It is not limited by reference to:

- mode of transport;
- vehicle and infrastructure ownership;
- journey length;
- any necessity for pre-booking, or

EN 13816:2002 (E)

- the method of payment for travel;
- legal status of the service providers

2.2

service provider

entity providing a public passenger transport service

NOTE This may not imply an entity in the legal sense. The entity providing the service may be composed of a grouping of any of individuals, companies, corporations, and authorities co-operating in the provision of the service.

2.3

service quality definition

set of quality criteria and appropriate measures for which the service provider (entity claiming compliance) is responsible

3 Methodology

3.1 The quality loop

This standard is based on the concept of the service quality loop. The general principles of the loop are set out in this chapter and illustrated in Figure 1, whereas the requirements and recommendations of the standard, based on the principle of the quality loop, are set out in clauses 4 and 5.

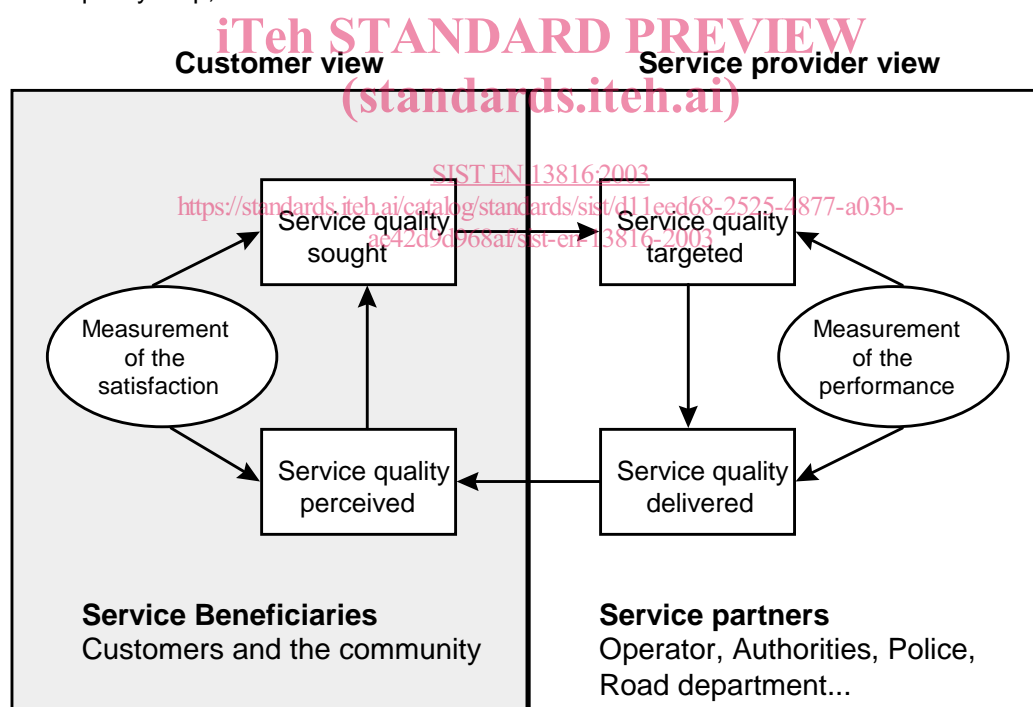


Figure 1 – Service quality loop

The relationship between the four distinct views of the quality of a public passenger transport service (see annex B for definitions) is of the utmost importance and failure to recognize the differences that can exist between them, when applied to the same service, may significantly impede the efforts of the operator to achieve parity between the service quality actually delivered and that sought by service users.

The elements and links of the quality loop are explained below.

3.1.1 Service quality sought

This is the level of quality, which explicitly or implicitly is required by the customer. The level of quality can be considered as the sum of a number of weighted quality criteria. The relative weight of these criteria can be assessed by qualitative analysis.

3.1.2 Service quality targeted

This is the level of quality, which the service provider aims to provide for the customers. It is influenced by the level of quality sought by the customers, external and internal pressures, budgetary and technical constraints and competitors' performance. When setting targets for the service to be provided, it is necessary for the following factors to be addressed:

- a brief statement of the service standard, e.g.:
 - we intend our passengers to travel on trains which are on schedule (meaning a maximum delay of 3 minutes)
 - we intend to provide a quick response to comments and complaints (meaning within 10 working days)
- a level of achievement, which is a statement or assessment of the percentage of customers benefiting from the standard service e.g.:
 - 98 % of our passengers find that their trains are on schedule
 - 95 % of our passengers find the escalator, which they want to use, in good working order
- a threshold of unacceptable performance. In each case, when the threshold is crossed, the service is considered not to have been adequately provided, immediate corrective action shall be taken, including possible alternative service, and customers may be compensated.

<https://standards.iteh.ai/catalog/standards/sist/d11eed68-2525-4877-a03b-ae42d9d968af/sist-en-13816-2003>

3.1.3 Service quality delivered

This is the level of quality achieved on a day-to-day basis. Delivered quality is measured from the customer viewpoint. It is not simply a technical evaluation showing that a process has been accomplished (thus, punctuality is about what is experienced by the customers throughout the journey, not just the amount of delay, for instance: in a train system scheduled to run at 10 minute intervals, if the first train is 10 min late, measurement will show that all trains run 10 minutes late. However, only the passengers on the first train will experience the delay, while passengers on following trains will experience normal journey times. NB: In practice, this may not always prove to be the case, especially where junctions are involved).

Delivered quality can be measured by using statistical and observation matrices (direct performance measures, see annex C).

3.1.4 Service quality perceived

This is the level of quality perceived by the customer. Customer perception of the quality delivered depends on their personal experience of the service or associated services, on the information they receive about the service - from the provider or from other sources - or the personal environment.

3.1.5 Service quality differences may be noted as follows:

The difference between "quality sought" and "quality targeted" expresses the degree to which the service providers are able to direct their efforts towards the areas which are important to the customers.

The difference between "quality targeted" and "quality delivered" is a measure of the efficiency of service providers in achieving their targets.

EN 13816:2002 (E)

Perceived quality sometimes bears little resemblance to delivered quality. Perceived quality can be measured through surveys (soft measures). The gap between delivered quality and perceived quality is a function of the customer's knowledge about the service delivered and of personal or reported experiences with the service and/or personal background and environment.

The difference between "quality sought" and "quality perceived" may be taken as the degree of customer satisfaction.

3.1.6 Application of the principles of the quality loop to any quality management scheme involves:

- defining or assessing explicit and implicit expectations of the customer;
- specifying a viable and deliverable service, taking these expectations into account, (for instance specifying a reference service, a level of achievement and a threshold of unacceptable performance), and, when appropriate, letting customers know about it;
- producing a service that complies with the specifications (including measurement of performance and corrective action);
- communicating the results to the customers, where appropriate;
- measuring customer satisfaction;
- analyzing the results and taking appropriate corrective action.

iTeh STANDARD PREVIEW (standards.iteh.ai)

3.2 Quality criteria

The overall quality of public passenger transport contains a large number of criteria. The criteria represent the customer view of the service provided, and in this standard they have been divided into 8 categories.

<https://standards.iteh.ai/catalog/standards/sist/d11eed68-2525-4877-a03b-4012990a1d3c/en-13816-2002>

Category 1 and 2 describe the PPT offer in more general terms, category 3, 4, 5, 6, and 7 provide a more detailed description of the quality of the service, and category 8 describes the environmental impact on the community as a whole:

- | | |
|--------------------------|---|
| 1) availability: | extent of the service offered in terms of geography, time, frequency and transport mode |
| 2) accessibility: | access to the PPT system including interface with other transport modes |
| 3) information: | systematic provision of knowledge about a PPT system to assist the planning and execution of journeys |
| 4) time: | aspects of time relevant to the planning and execution of journeys |
| 5) customer care: | service elements introduced to effect the closest practicable match between the standard service and the requirements of any individual customer |
| 6) comfort: | service elements introduced for the purpose of making PPT journeys relaxing and leasurable |
| 7) security: | sense of personal protection experienced by customers, derived from the actual measures implemented and from activity designed to ensure that customers are aware of those measures |
| 8) environmental impact: | effect on the environment resulting from the provision of a PPT service |

4 Requirements for service quality

4.1 Compliance

The service provider shall ensure that the requirements of 4.2, 4.3 and 4.4 are met.

4.2 Quality management

Quality management shall be adopted by service partners (authorities, operators and/or others), which ensures that the following steps are taken to an appropriate degree, and at an appropriate frequency, considering the scale and complexity of the PPT operation.

Each item from the list below shall be considered, whether in outline or in detail and recorded in such a way that it can be reviewed.

- 1) The explicit and implicit expectations of the customer regarding the quality of the PPT service are identified.
- 2) Legal, political, financial, technical and other constraints are taken into account.
- 3) Existing quality levels and areas for potential improvement are identified.
- 4) Targets are set with due consideration of items 1, 2, 3 above and 5 below. This involves translation of data from these items into measurable quality criteria, and:
 - selection of criteria from the list of quality criteria (see annex A), considering the number of passengers affected
 - specification of the performance level to be targeted for each of above mentioned criteria, considering the number of passengers affected. This involves (see 3.1.2):
 - statement of service standard
 - level of achievement, expressed, where appropriate, as a ratio of passengers affected
 - threshold of unacceptability
 - redress, (if contracted), in case of failure to meet threshold
- 5) Performance is measured. This involves:
 - selection of measurement methods (see 5.3 and annex C)
 - decision about frequency of measurement
 - decision about methods for computation of results, and appropriate validation
 - documentation of results
- 6) Corrective action is taken - i.e. improvement of performance or revision of targets. This involves:
 - corrective action in the case performance targets are not met
 - corrective action in the case of unacceptable performance
 - appropriate communication
- 7) The customer perception of quality delivered is assessed in order to establish a basis for item 8 below.

EN 13816:2002 (E)

8) Appropriate action plans are prepared and implemented to reduce differences between:

- delivered and perceived quality
- sought and perceived quality

4.3 Service quality definition

In defining/presenting the quality of the service(s) offered, the service provider shall select criteria from the list provided in annex A to prepare a service quality definition for the particular PPT system. Of that list, all level 1 criteria shall be included unless not relevant to the service provided. Where level 1 criteria are thus excluded, a written explanation shall be included in the service quality definition. In addition, the service provider should select additional criteria from level 2 and 3 in accordance with his needs and preferences for the particular service being defined.

Criteria from annex A may be clustered into one criterion, subdivided and/or renamed. In all cases reference to annex A decimal numbers shall be supplied. Additional criteria may be introduced, and shall be provided with a decimal number to prove their group affiliation.

4.4 Service quality measurement

In measuring the quality of service performance for each criterion, appropriate methods shall be used. In annex C some relevant methods are described, and some examples of their use are given.

Alternative methods may be used, provided these produce equivalent results. Where an alternative method is used, a summary of its parameters shall be provided with any statement/claim of performance.

5 Recommendations

[SIST EN 13816:2003](https://standards.iteh.ai/catalog/standards/sist/d11eed68-2525-4877-a03b-ae42d9d968af/sist-en-13816-2003)

<https://standards.iteh.ai/catalog/standards/sist/d11eed68-2525-4877-a03b-ae42d9d968af/sist-en-13816-2003>

5.1 Commitment between participating parties

It is strongly recommended, where two or more parties share the responsibility for the provision of a PPT service in cooperation (e.g. authority and operator), that formal agreement be entered into to ensure that allocation of responsibilities and determination of the quality management tools to be applied, is adequately addressed.

5.2 Allocation of responsibilities

In a situation where the provision of an effective PPT service depends upon the participation and co-operation of two or more bodies or partners, it is essential that adequate attention be paid to ensuring that all partners are able to identify, and understand fully, the quality criteria for which they are responsible. It is also essential that each is aware of the responsibilities of the other participants. A process to allocate such responsibilities is a significant objective of these recommendations and should include

- a joint quality management system, or
- separate quality management systems should be adopted.

In both cases it is strongly recommended that an agreement between the parties be set up, containing the following elements, and allocating responsibility for each:

- 1) Common objectives for the partners in the PPT system
- 2) Customer expectations
 - 2.1) Selection of research methods
 - 2.2) Research