



# SLOVENSKI STANDARD SIST-TS CEN/TS 14773:2005

01-januar-2005

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Postal services - Quality of service - Measurement of loss and substantial delay in priority and first class single piece mail using a survey of test letters

Postalische Dienstleistungen - Dienstqualität - Messung des Verlustes und der erheblichen Verzögerungen von Vorzugssendungen und Einzelsendungen erster Klasse unter Verwendung von Testbriefen

Services postaux - Qualité du service - Mesure des pertes et des retards importants pour le courrier prioritaire égrené et de 1<sup>ère</sup> classe, a partir d'une enquête utilisant des lettres témoin

Ta slovenski standard je istoveten z: **CEN/TS 14773:2004**

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TECHNICAL SPECIFICATION  
SPÉCIFICATION TECHNIQUE  
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**CEN/TS 14773**

September 2004

ICS 03.240

English version

**Postal services - Quality of service - Measurement of loss and substantial delay in priority and first class single piece mail using a survey of test letters**

Services postaux - Qualité du service - Mesurage des pertes et des retards importants pour le courrier prioritaire égrené et de 1<sup>ère</sup> classe, à partir d'une enquête utilisant des lettres d'essai

Postalische Dienstleistungen - Dienstqualität - Messung des Verlustes und der erheblichen Verzögerungen von Vorzugssendungen und Einzelsendungen erster Klasse unter Verwendung von Testbriefen

This Technical Specification (CEN/TS) was approved by CEN on 26 January 2004 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

CEN members are required to announce the existence of this CEN/TS in the same way as for an EN and to make the CEN/TS available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force (in parallel to the CEN/TS) until the final decision about the possible conversion of the CEN/TS into an EN is reached.

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

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**CEN/TS 14773:2004 (E)****Foreword**

This document (CEN/TS 14773:2004) has been prepared by Technical Committee CEN/TC 331 "Postal Services", the secretariat of which is held by NEN.

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 March 2005, and conflicting national standards shall be withdrawn at the latest by March 2005.

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

For compatibility between CEN and UPU versions of this document, the term 'document' is used. In a CEN context, this should be interpreted as being equivalent to the deliverable mentioned on the title page of this document. In a UPU context, this should be interpreted as being equivalent to 'standard'."

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## Introduction

In the Green paper on postal services in 1992 the European Commission emphasised the need to establish common rules for the development of community postal services and the improvement of quality of service. The Commission identified requirements for quality of service measurement that included the reliability of services and treatment of problems of loss, theft and damage.

CEN was asked to draw up standards related to the methodology for the measurement of loss of mail at reasonable cost for some mail types within the universal service.

There has been only limited experience in using sample surveys to measure the level of loss in postal services and it is not possible to define a standard for measurement at present. However it is possible to set out the main requirements that would probably be included in such a standard in order that the methodology may be applied and tested. Once this has been done and experience has been gained this document may be developed into a standard.

This document sets out a methodology for a more precise measure of the level of loss and substantial delay of single piece priority letters than can be obtained from the measurement of complaints. This document refers to a number of principles and minimum requirements to be applied for the measurement of the level of loss and substantial delay of national and cross-border priority and first class letter mail.

Annex E of this document describes the experience of measuring loss and contains comments relating to the implementation of the Technical Specification which have already been reported to CEN. Since the Technical Specification is to some extent experimental, CEN would particularly like to collect experience on its use from those who have implemented it. This will be valuable in determining how the Technical Specification may best be developed into a standard.

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**CEN/TS 14773:2004 (E)****1 Scope**

This document specifies methods for measuring the level of loss and substantial delay, using a survey of test letters, of domestic and cross-border priority and first class single piece letter mail, collected, processed and distributed by postal service operators.

It is impossible in practice to distinguish between items which will never arrive and items which have been delayed for a very long time. A minimum period is therefore defined after which an item that has been sent shall be treated as if it has been lost or substantially delayed for the purposes of measurement.

The resulting overall figure for loss and substantial delay is to be expressed as a percentage of the total posted priority and first class single piece mail. This indicator does not measure the postal operator's overall performance in a way which provides direct comparison of postal service operators, and does not include other service performance indicators other than those related to loss and substantial delay.

According to this document, loss and substantial delay is estimated within specified accuracy limits. When the level of loss is very small it may only be possible to estimate an upper limit for the level of loss.

This document has been developed from and is compatible with the requirements of EN 13850 for the measurement of the transit time of end-to-end services for single piece priority mail and first class mail, so that the same survey may be used to measure loss and substantial delay and on-time performance. Thus it comprises a set of requirements for the design of a measuring system involving the selection and distribution of test letters sent and received by selected panellists, according to a specification that ensures that the test letter sample design is representative of the real mail flows.

This document relates to the measurement of the so called "normal" services given to private persons / households and businesses that post mail at street letter boxes, over the counter at post offices, have pick ups at their offices or give their mail directly at postal service operators' sorting centres.

For technical reasons this document may not in all parts be suitable for the measuring of very small volumes of mail and for operators with limited coverage.

This document is not applicable for measuring the level of loss or substantial delay for large bulk mailers' services and hybrid mail which require different measurement systems and methodologies.

This document includes specifications for the quality control and auditing of the measurement system and for the reporting of loss and substantial delay of mail.

**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 13850:2002, *Postal services - Quality of service - Measurement of the transit time of end-to-end services for single piece priority mail and first class mail*

EN 14012, *Postal services - Quality of service - Measurement of complaints and redress procedures.*

EN ISO 9000, *Quality management systems — Fundamentals and vocabulary (ISO 9000:2000).*

ISO 3534-1:1993, *Statistics — Vocabulary and symbols — Part 1: Probability and general statistical terms.*



ISO 3534-2:1993, *Statistics — Vocabulary and symbols — Part 2: Statistical quality control*.

ISO 19011, *Guidelines for quality and/or environmental management systems auditing*

International Chamber of Commerce / ESOMAR International Code of Marketing and Social Research Practice, with attachments.<sup>1)</sup>

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<sup>1)</sup> This document can be obtained from [www.esomar.org](http://www.esomar.org) and from [www.iccwbo.org](http://www.iccwbo.org) . ESOMAR Central Secretariat ([email@esomar.nl](mailto:email@esomar.nl))

**CEN/TS 14773:2004 (E)****3 Terms and definitions**

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

**3.1****accuracy**

closeness of agreement between a test result and the accepted reference value

NOTE 1 The term accuracy, when applied to a set of test results, involves a combination of random components and a common systematic error or bias component [ISO 3534-1:1993].

NOTE 2 In this document the accuracy is given by the length of the confidence interval at the confidence level 95 % for the parameter being estimated, namely the probability of being lost or substantially delayed

**3.2****aggregation**

compounding of primary data into an aggregate for the purpose of expressing them in a summary form

**3.3****audit**

systematic and independent examination to determine whether activities and related results comply with planned arrangements and whether these arrangements are implemented effectively and are suitable to achieve objectives [EN ISO 9000]

**3.4****average (arithmetic mean)**

sum of values divided by the number of values [ISO 3534-1:1993]

**3.5****business**

bodies, other than households, that receive and send mail

**3.6****characteristic**

property which helps to identify or differentiate between items of a given population

NOTE 1 The characteristics may be either quantitative - by variables, or qualitative - by attributes [ISO 3534-1:1993]

NOTE 2 In this document the population is postal test items and the characteristics are related to type of senders, type of receivers, times and types of induction or delivery, physical aspects of test items, franking, etc.

**3.7****conformity**

fulfilment of specified requirements [EN ISO 9000]

**3.8****corrective action**

action taken to eliminate the causes of an existing non-conformity, defect or other undesirable situation in order to prevent recurrence [EN ISO 9000]

**3.9****correctly addressed letter**

letter with an address that conforms to a recognized international or national standard on the postal item concerned

NOTE The basic elements of the address are; identification information, delivery address and post code, and postal address of the addressee, and, in the case of cross-border mail, also the name of the country of destination.

### 3.10

#### **correlation**

relationship between two or several random variables within a distribution of two or more random variables

NOTE Most statistical measures of correlation measure only the degree of linear relationship. [ISO 3534-1:1993]

### 3.11

#### **correlation coefficient**

ratio of the covariance of two random variables to the product of their standard deviations [ISO 3534-1:1993]

### 3.12

#### **country**

territory of a nation with its own government

### 3.13

#### **cross-border mail**

mail distributed from one country to another country

### 3.14

#### **customer**

natural or legal person having a business relation with a postal operator

### 3.15

#### **date of delivery**

date on which a postal item is delivered to the address or the addressee

### 3.16

#### **date of deposit**

#### **J**

day on which a postal item is posted, provided posting takes place before the last collection of that day

NOTE 1 The term date of deposit is used in relation to quality of service measurement. The definition is based on the Postal Directive 97/67/EC.

NOTE 2 Last collection refers to the advertised last time for collection (not the actual time).

### 3.17

#### **delivery point**

physical location at which delivery of postal items delivered by a postal operator takes place and where they leave the operator's responsibility

### 3.18

#### **design factor**

ratio of the variance of the estimator in the given sample design by the variance of the estimator in an elementary sample design of the same size

NOTE The design factor is related to a given sample design and estimator.

**CEN/TS 14773:2004 (E)****3.19****discriminant (characteristic)**

characteristic affecting the outcome

NOTE In this document a characteristic is discriminant when transit time differs according to the different modes of the characteristic.

**3.20****distribution**

process from collecting mail at collecting points through sorting at the distribution centre to delivery of mail items to the addressee

**3.21****domestic mail**

mail items sent and received within one country

**3.22****end-to-end (transit time)**

from the point mail is placed into the collection/acceptance system under the responsibility of the collecting postal operator to the final delivery point under the responsibility of the delivering postal operators

**3.23****estimate**

value of an estimator obtained as a result of an estimation [ISO 3534-1:1993]

**3.24****estimator**

statistic used to estimate a population parameter [ISO 3534-1:1993]

NOTE In this document, a function of the observed values of test item transit times allowing the estimation of the probability of the item being lost or substantially delayed.

**3.25****expectation**

for a discrete random variable  $X$  taking the values  $x_i$ , with the probabilities  $p_i$ , the expectation if it exists, is:

$$\underline{\mu} = E(X) = \sum p_i x_i$$

the sum being extended over all the values  $x_i$  which can be taken by  $X$  [ISO 3534-1:1993]

**3.26****field of study**

total mail flow between defined postal areas

NOTE 1 Field of study could be defined for example as:

- Domestic — one operator in one country
- Domestic — one operator in one part of a country
- Domestic — a group of operators in one country
- Cross-border — one operator to one country
- Cross-border — one operator to a group of countries