Postiteenused. Postikulude digitaalne tähis. Pealekandmine, turvalisus ja kujundus

Postal services - Digital postage marks -
Applications, security and design

EESTI STANDARDIKESKUS

EESTI STANDARDI EESSÕNA	NATIONAL FOREWORD
Käesolev Eesti standard EVS-EN 14615:2005 sisaldab Euroopa standardi EN 14615:2005 ingliskeelset teksti. Käesolev dokument on jõustatud 30.03.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 14615:2005 consists of the English text of the European standard EN 14615:2005. This document is endorsed on 30.03.2005 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

Käsitlusala:	**Scope:**
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Postal services - Digital postage marks - Applications, security and design

Services postaux - Marques d'affranchissement digitales - Applications, sécurité et design

Postalische Deinstleistungen - Digitale Freimachungsvermerke - Inhalte, Sicherheit und Gestaltung

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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 Central Secretariat has the same status as the official versions.

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

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Contents

Foreword

This document (EN 14615:2005) has been prepared by Technical Committee CEN/TC 331 “Postal Services”, the secretariat of which is held by NEN, in collaboration with the UPU.

NOTE This document has been prepared by experts coming from CEN/TC 331 and UPU, under the frame of the Memorandum of Understanding between UPU and CEN.

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of an identical text or by endorsement, at the latest by July 2005, and conflicting national standards shall be withdrawn at the latest by July 2005.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

This document (EN 14615:2005) is the CEN equivalent of UPU[1)] standard S36-4. It may be amended only after prior consultation, between CEN/TC 331 and the UPU Standards Board, in accordance with the Memorandum of Understanding between CEN and the UPU.

The UPU’s contribution to the standard was made, by the UPU Standards Board[2)] and its subgroups, in accordance with the rules given in Part V of the "General information on UPU standards".

This document is the first version of EN 14615, but corresponds to the fourth version (S36-4) of UPU standard S36, the revision history of which can be found in the Foreword of the UPU versions of the specification.

This document includes a Bibliography.

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

[1)] The Universal Postal Union (UPU) is the specialised institution of the United Nations that regulates the universal postal service. The postal services of its 189 member countries form the largest physical distribution network in the world. Some 5 million postal employees working in over 660 000 post offices all over the world handle an annual total of 425 billion letters-post items in the domestic service and almost 6,7 billion in the international service. Some 4,5 billion parcels are sent by post annually. Keeping pace with the changing communications market, posts are increasingly using new communication and information technologies to move beyond what is traditionally regarded as their core postal business. They are meeting higher customer expectations with an expanded range of products and value-added services.

[2)] The UPU's Standards Board develops and maintains a growing number of standards to improve the exchange of postal-related information between posts, and promotes the compatibility of UPU and international postal initiatives. It works closely with posts, customers, suppliers and other partners, including various international organisations. The Standards Board ensures that coherent standards are developed in areas such as electronic data interchange (EDI), mail encoding, postal forms and meters. UPU standards are published in accordance with the rules given in Part VII of the General information on UPU standards, which can be freely downloaded from the UPU world-wide web site (www.upu.int).

Introduction

The transition from letterpress to digital printing provides the opportunity for a more effective way to communicate information on postal items. Current Postmarks include information such as postage value, date of posting and equipment identification, but this information is not readily machine readable. The emergence of digital printing and image processing technologies offers the opportunity to encode critical data in the form of digital postage marks (DPMs) which are more suitable for computer data capture. However, the adoption of these technologies requires careful study, both to maximise the benefits from their introduction and because digital printing technology might bring with it the need for different security measures than those commonly used in association with letterpress printing.

The document identifies a variety of factors which need to be considered in the DPM design process. It has three main purposes. It is intended to serve as:

a) **a standard process**: for the design of applications using digital postage marks;

b) **a guide**: to help in structuring local standards for digital postage marks;

c) **a cross reference**: to point to other standards and documents related to DPM applications.

It is stressed that the factors identified are intended to be representative and do not constitute an exhaustive list.

Similarly, the document provides many examples of possible architectures and design solutions to the issues which are raised. These are non-normative. They are given for illustrative purposes only and there certainly exists a wide range of other possibilities which are not described. It is not intended to suggest that any one architecture or design or technical solution described is in any way required or in any way superior to any other, whether described herein or not.

The implementation of certain of the techniques described in the informative sections of this specification might involve the use of intellectual property that is the subject of patent rights. It is the responsibility of users of the standard to conduct any necessary patent searches and to ensure that any pertinent patents are in the public domain; are licensed[3] or are avoided. Neither CEN nor the UPU can accept any responsibility in case of infringement, on the part of users of this document, of any third party intellectual property rights. Nevertheless, document users and owners of such rights are encouraged to advise the Secretariat of the UPU Standards Board and/or of CEN/TC 331 of any explicit claim that any technique or solution described herein is protected by patent in any CEN or UPU member country. Any such claims will, without prejudice, be documented in the next update of this standard, or otherwise at the discretion of the Standards Board, respectively CEN/TC 331. Annex K of this document lists the intellectual property rights brought to the attention of CEN/TC 331 and the UPU Standards Board prior to approval of the publication of this version of the standard.

NOTE The mention of intellectual property rights, in Annex K, is on a 'without prejudice' basis. That is, such mention indicates only that some party has expressed the view that use of the standard might, in some circumstances, infringe the mentioned intellectual property rights. It should not be taken as in any way confirming the validity of such view and users should conduct their own patent searches to determine whether the mentioned IPR is in fact applicable to their specific case.

[3] Mail service contractors are advised to ensure that reliance on patented approaches does not inadvertently lead to the creation of an effective monopoly. This could occur, even if usage of the approaches concerned is licensed by the mail service contractor, unless the terms of the licensing agreement commit the patent holder to making licences available, on appropriate terms, to the mail service contractors customers and suppliers, including competitors of the patent holder.

1 Scope

This document specifies a recommended procedure for the development of specifications for applications of digital postage marks (DPMs) – i.e. applications linked to the use of digital printing and image data capture technologies in the postal industry, most particularly for the evidencing of postage accounting and/or payment. It is not intended to prescribe or to recommend any particular architecture or design for such applications, only to specify the process through which such an architecture or design should be developed.

NOTE 1 For this reason, the standard includes both normative and informative content. Clauses 1 to 5 and Annex A are normative, whilst the remaining annexes are informative. Non-normative (informative) clauses are indicated as such in the heading.

The process described is based on a cyclic model, involving business planning; systems analysis; security analysis and detailed DPM design.

The defined process is a recommended one only and DPM applications designers are not obligated to follow it. However, its use is intended to ensure both that all relevant aspects are taken into account in the design process and that the resulting specifications have a degree of commonality of structure which make them comparable with similar specifications produced by other parties. It is hoped that this will make them more easily intelligible, and less open to ambiguity, for implementers.

It is assumed that users of the standard are familiar with normal processes involved in the design of computer-based applications and the standard therefore limits itself to aspects which are specific to DPM applications design. In particular, the document covers only requirements and considerations relating to applications that use digital postage marks, on individual postal items, as a means of communicating data (messages). The clause on design covers only the design of the digital postage marks themselves. It does not cover other aspects of design, including the possible use of other messages, transported by other means (e.g. statements of mailing), to provide for the communication of additional data, even though these might be just as important.

The standard assumes, but does not require, that it is desired to implement digital postage marks which conform to UPU standards S27, S28 and S25 (see Bibliography) and provides a guide to the use of these standards. However, many of the guidelines, recommendations and checklists would apply equally to the design of DPM applications using digital postage marks based on symbologies other than those supported by S28, or requiring data which cannot be accommodated within S25-defined data constructs.

NOTE 2 Though S28 [7] applies only to representation using two-dimensional symbologies and restricts its scope to two of these: Data Matrix and PDF417, its extension to other symbologies, including linear barcodes and OCR representation of data, is open to consideration. Users who find that their requirements cannot be met within the defined constraints are therefore encouraged to contact the Secretariat of the UPU Standards Board, with a view to exploring possible extension of the standard.

NOTE 3 Though S25 [5] defines an initial set of data constructs, it is intended to extend this set on an as-needed basis. Users who find that their requirements cannot be met by existing data definitions are therefore encouraged to contact the Secretariat of the UPU Standards Board, with a view to extension of the standard.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, or references to a version number, only the edition cited applies. For undated references and where there is no reference to a version number, the latest edition of the referenced document (including any amendments) applies.

UPU Standards glossary[4)]

NOTE Though this standard was developed on the assumption that users would wish to base their digital postage mark implementations on UPU standards S28 [7] and S25 [5], this is not actually a requirement. These two standards, along with many other standards which are relevant and should desirably be taken into account in the digital postage mark definition process, are therefore listed in the (informative) Bibliography at the end of the standard.

[4)] UPU Standards are obtainable from the UPU International Bureau, whose contact details are given in the Bibliography; the UPU Standards glossary is freely accessible on URL http://www.upu.int