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CEN/TS 15844-2

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English Version

Postal services - ID-tagging of letter mail items - Part 2: BNB-78 Encoding Specification

Traitement automatisé des envois postaux - Chronomarquage des envois postaux - Partie 2: Spécification de codage en BNB (Bar No Bar)- 78 caractères

Postalische Dienstleistungen - ID-Kennzeichnung von Briefsendungen - Teil 2: Festlegung der BNB-78-Codierung

This Technical Specification (CEN/TS) was approved by CEN on 1 December 2008 for provisional application.

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Foreword

This document (CEN/TS 15844-2:2010) has been prepared by Technical Committee CEN/TC 331 "Postal services", the secretariat of which is held by NEN.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

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

This document (CEN/TS 15844-2), is the CEN equivalent of UPU [1] standard S18b-7. 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 document was made, by the UPU Standards Board [2] and its sub-groups, in accordance with the rules given in Part V of the "General information on UPU standards".

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, Croatia, 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 the United Kingdom.

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[1]   The Universal Postal Union (UPU) is the specialized 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 organizations. 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 may be freely downloaded from the UPU world-wide web site (www.upu.int).

Introduction

A general introduction to all parts of the specification is provided in CEN/TS 15844-1. This part deals only with the encoding of ID-tags in the form of a 78-position bar-no-bar code, BNB-78, printed on the reverse side of items, in area R1, using fluorescent ink. It is arranged under six main headings:

Clause No.   Description of content

5   *Usage limitations – requirement for a special issuer code*: explains the requirement for issuers wishing to use the BNB-78 ID-tag representation to obtain a special issuer code for this purpose;

6   *Value range limitations*: defines limitations on the values of data elements used in ID-tags which are to be represented on items in the form of a BNB-78 bar code;

7   *Encoding specification*: specifies the construction of a 78-position bar-no-bar code from ID-tag data elements;

8   *Printing of the bar code*: to allow the association of computer data with a physical item, the ID-tag is printed on the item itself. This clause defines required ink and printing parameters;

9   *Reading and interpretation of BNB-78 bar codes*: specifies the validation and error correction requirements associated with the reading of ID-tags represented using BNB-78 bar codes;

10   *Conversion to the message and binary representations*: describes the correspondence between BNB-78 representation and the binary and message interchange representations defined in CEN/TS 15844-1.

The above definition is supported by two informative annexes:

— *Error detection and correction algorithms*: provides example implementations of the error detection and correction algorithms used in encoding and reading the BNB-78 representation of the ID-tag. Other implementations are possible and, depending on the environment, might well be more efficient. The examples nevertheless serve as a possible baseline, and can be used for verifying the correctness of a different implementation.

— *S18 ID-tag 78-position BNB bar code template:* provides a template which can be used for manual decoding of the data elements in printed BNB-78 representations of an ID-tag. Such manual decoding should be used with caution since, unless the complete bar code is read and processed through the appropriate error detection/correction algorithm, there is no certainty that the value obtained has been read correctly.

1 Scope

This part of the Technical Specification defines the representation of ID-tags as a 78-position bar-no-bar code (BNB-78) printed in fluorescent ink in area R1 on the reverse side of items.

BNB-78 encoding is one of two encoding specifications supported by this Technical Specification [3] for the printing of ID-tags in area R1, the other being BNB-62, which is specified in CEN/TS 15844-3.

NOTE 1   Representation in the form of a 4-state code printed on the front of the item is covered in CEN/TS 15844-4 for flats and CEN/TS 15844-5 for small letters.

BNB-78 encoding supersedes the earlier specified BNB-62 encoding and shall be applied in all cases in which ID-tags are placed in area R1 on the reverse side of letter mail items of size up to and including C5, by issuers other than those explicitly authorised to continue use of BNB-62 encoding, namely An Post (Ireland), Canada Post and United States Postal Service.

NOTE 2   ID-tags encoded in area R1 are required by article RL 123 of the UPU Letter Post Regulations [1] to be compliant with UPU standard S18 – and by this with the related CEN/TS 15844. This supports only two encodings in area R1, namely BNB-78 as defined herein and BNB-62 as defined in CEN/TS 15844-3. The latter is authorised for continued use only by the three issuers mentioned above. Where ID-tags are used, and are applied in area R1 on the reverse side of letter mail items of size up to and including C5, the use of BNB-78 encoding is mandatory for all other issuers.

NOTE 3   BNB-78 encoding is not considered suitable for use on flats. CEN/TS 15844-4 defines a 4-state encoding which may be used for this purpose.

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.

CEN/TS 15844-1:2010, *Postal services — ID-tagging of letter mail items — Part 1: ID-tag structure, message and binary*

3 Terms and definitions

A number of common terms used in this document are defined in documents referred to in Normative References and in the Bibliography. Definition of frequently used or particularly important terms as well as other terms introduced in this document are given below.

See CEN/TS 15844-1:2010, *Postal services — ID-tagging of letter mail items — Part 1: ID-tag structure, message and binary*

4 Symbols and abbreviations

See CEN/TS 15844-1:2010, *Postal services — ID-tagging of letter mail items — Part 1: ID-tag structure, message and binary*

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[3]   References to "this Technical Specification" should be interpreted as references to CEN/TS 15844 as a whole, not only to Part 2.