S10

Identification of postal items – 13-character identifier

Data definition and encoding standards
Identification of postal items – 13-character identifier
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Foreword

Postal services form part of the daily life of people all over the world. The Universal Postal Union (UPU) is the specialised agency of the United Nations that regulates the universal postal service. The postal services of its 192 member countries form the largest physical distribution network in the world. More than 5 million postal employees working in over 660,000 post offices all over the world handle an annual total of 434 billion letter-post items in the domestic service and 5.5 billion in the international service. More than 6 billion parcels are sent by post annually. Keeping pace with the changing communications market, postal operators 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.

Standards are important prerequisites for effective postal operations and for interconnecting the global network. The UPU’s Standards Board develops and maintains a growing number of standards to improve the exchange of postal-related information between postal operators and promotes the compatibility of UPU and international postal initiatives. It works closely with postal handling organisations, 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 drafted in accordance with the rules set out in the "General information on UPU standards" and are published by the UPU International Bureau in accordance with that publication.

This document provides the specification of the UPU 13-character item identifier, as referenced in the UPU regulations and in publications of the UPU’s EMS Cooperative.

This is the twelfth version of the document. Changes to the previous version, marked by a vertical bar in the margin include the re-wording of the interpretation of service indicator code range UA–UZ at 5.6 and modification of the word “express” to “tracked” indicating the tracked letter-post service.
Introduction

A requirement for the identification of individual postal items first arose in the context of postal products that require items to be individually tracked. Such products include EMS items, parcels, and registered, recorded delivery, tracked and insured letter-post items. For these products, item identification is required to support communications about the items concerned between the sender, the receiver and the postal operator(s) involved in handling them. In many cases, item-level information might also need to be exchanged with other mail handling organisations such as carriers, delivery agents and customs authorities. Item identifiers are typically used by customers, as they are included in the customer receipt for the item posted.

The identification requirement is met by the definition and use of a 13-character postal item identifier, according to which a single authority in each UPU member country controls the allocation of unique item identifiers for use with the special categories of postal items concerned.

This document provides the specification for this basic form of individual item identification for universal use between designated operators as referred to, for example, in the following UPU publications:

− UPU Letter Post Manual (concerning the identification of items that are registered, insured, recorded delivery or tracked);
− UPU Parcel Post Manual (concerning the identification of parcels);
− publications of the UPU's EMS Cooperative (concerning the identification of EMS items).

The term “S10” is synonymous with that of the 13-character identifier referred to in above publications.

NOTE The UPU has also developed specifications for other types of item identification, including identifiers which comply with ISO/IEC 15459 [11] (commonly referred to as licence plates) and ID-tags, which are widely used in the automated processing of letters. An introduction to all forms of item identification is provided in UPU standard S55 [8].
Data definition and encoding standards – Identification of postal items – 13-character identifier

1 Scope

This document provides the specification for 13-character item identifiers for universal use, as referenced in UPU regulations and in publications of the UPU’s EMS Cooperative. The standard may also be applied to the identification of domestic items, as well as items exchanged under bilateral or multilateral agreements, where the standard can meet the business requirement.

A postal item identifier that is compliant with this standard shall be used to identify the individual postal item to which it relates by means of a representation of the identifier printed on the item or a label or form that is affixed to it. In addition to being used on items, the data content of the identifier is used on UPU forms, such as the CN 33, CN 16 and CP 87 forms, as well as comparable EMS forms. The identifier is a key element of the CN 08 inquiry form and item-level inquiry and claims processes. It may be used on the CN 07 form (Advice of receipt or AR) and may be included in electronic messages such as EMSEVT [5] [6] and PREDES [4] [7] messages.

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 cases where there is no reference to a version number, the latest edition of the referenced document (including any amendments) applies.

– UPU Standards glossary (accessible at http://www.upu.int)
– ISO 3166–1, Codes for the representation of names of countries and their subdivisions – Part 1: Country codes
– ISO/IEC 15417, Information technology – Automatic identification and data capture techniques – Bar code symbology specification – Code 128

NOTE ISO standards are available from national standards institutes or from the International Organization for Standardization (ISO):

Chemin de Blandonnet 8, 1214 Vernier, Geneva, Switzerland
Tel: +41 22 749 0111; Fax: +41 22 733 3430; www.iso.ch

3 Terms and definitions

A number of common terms used in this document are defined in the UPU Standards glossary and in documents referred to in normative references and in the bibliography. Definitions of frequently used or particularly important terms, as well as other terms introduced in this document, are given below.

3.1 S10 identifier

item identifier that is compliant with this standard

NOTE An S10 identifier appearing on an item has a human-readable component and a barcode component. An S10 identifier appearing on a form referring to the item will have a human-readable component and may additionally have a barcode component. An S10 identifier in an electronic message will contain the 13 characters of data content that comprise the identifier.

3.2 S10-format

pattern of alphanumeric characters that is required of S10 identifiers and which assists in distinguishing between these and other character strings; 13-character string consisting of AANNNNNNNNNNAA (2 alpha characters
followed by 9 numeric characters and 2 alpha characters). The human-readable component may include spaces for readability, but this is recommended rather than being required.

NOTE 1 The format is often referred to as “A2-N9-A2”, or simply “2-9-2”. Any barcode comprising 2 alpha characters, 9 numeric characters and 2 alpha characters can be considered to have an S10-format, whether or not it complies with the data content requirement of this standard.

NOTE 2 By definition, an S10 identifier has S10-format. However, not every barcode that has S10-format is an S10 identifier. This can occur if the data content of the barcode does not comply with this standard.

NOTE 3 An item can have two or more barcodes (involving various formats) applied to it. The customer posting an item and the organisations that handle the item along the supply chain may each apply barcodes for their own purposes. When the item is handled by a transit operator or by the destination operator, it is necessary to be able to easily determine which of possibly several barcodes represents the S10 identifier. The fact that S10 identifiers have a specific format makes it easier to distinguish them.

4 Symbols and abbreviations
A number of symbols and abbreviations used in this document are defined in the UPU Standards glossary.

5 Structure of the S10 identifier
5.1 Overall structure
S10 identifiers have four components, shown in the following table. The result has a fixed length of 13 characters.

<table>
<thead>
<tr>
<th>Character No</th>
<th>Data format</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 and 2</td>
<td>a2</td>
<td>Service indicator (see 5.2 and 5.6)</td>
</tr>
<tr>
<td>3 to 10</td>
<td>n8</td>
<td>Serial number (see 5.3)</td>
</tr>
<tr>
<td>11</td>
<td>n1</td>
<td>Check digit (see 5.4)</td>
</tr>
<tr>
<td>12 and 13</td>
<td>a2</td>
<td>Country code (see 5.5)</td>
</tr>
</tbody>
</table>

5.2 Service indicator
The service indicator comprises two alphabetic characters drawn from the table in 5.6. For service indicators intended for universal use between designated operators, the first character indicates the type of postal product or service and the second character is assigned by the origin operator from a range of allowed values.

As documented in 5.6 and in clause 10, a number of service indicators have been allocated for domestic/bilateral/multilateral use. These may therefore be freely used for this purpose without risk of a possible conflict with items intended for universal use. These codes can be withdrawn and/or re-allocated only after a process of consultation with designated operators via the process of International Bureau circulars.

Any combinations of two alphabetic characters that are not yet assigned for universal use, nor allocated for exclusively domestic/bilateral/multilateral use, may be assigned under the authority of the UPU’s Standards Board.1

The definitive source for service indicators is this standards publication. Service indicators are also published in code list 124 in order to support computer systems.

Refer to 5.6 for the allocated and reserved service indicator codes.

5.3 Serial number
The serial number shall be exactly eight digits in length. Where required to ensure a length of eight digits, leading zeros are used. Thus any value in the range 00000000 to 99999999 is a valid serial number.

1 To reduce the risk of confusion between S10 identifier barcodes and barcodes which make use of ISO/IEC 15418 data identifiers [9], character combinations JA–JZ; KA–KZ; SA–SZ; TA–TZ and WA–WZ are reserved and cannot be assigned as valid service indicator values.
5.4 Check digit

A check digit is an arithmetically derived number that is used to support the detection of substitution and transposition errors which can occur during data capture. In the case of S10 identifiers, the 11th character is a check digit calculated in accordance with the following algorithm, called weighted modulus 11:

- multiply the digits in the serial number by the weighting factors 8 6 4 2 3 5 9 7 (that is, multiply the first digit by 8, the second by 6, the third by 4 and so on until the last by 7);
- calculate the sum of the weighted values;
- divide this sum by 11 (eleven) to obtain the remainder;
- subtract the remainder from 11;
- if the result falls within the range 1 to 9, use the result as the check digit;
- if the result is 10, use 0 as the check digit;
- if the result is 11, use 5 as the check digit.

**EXAMPLE Calculation for an item with serial number 47312482**

<table>
<thead>
<tr>
<th>Number</th>
<th>4</th>
<th>7</th>
<th>3</th>
<th>1</th>
<th>2</th>
<th>4</th>
<th>8</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weighting factors</td>
<td>$\times 8$</td>
<td>$\times 6$</td>
<td>$\times 4$</td>
<td>$\times 2$</td>
<td>$\times 3$</td>
<td>$\times 5$</td>
<td>$\times 9$</td>
<td>$\times 7$</td>
</tr>
<tr>
<td>Weighted values</td>
<td>32</td>
<td>42</td>
<td>12</td>
<td>2</td>
<td>6</td>
<td>20</td>
<td>72</td>
<td>14</td>
</tr>
<tr>
<td>Sum of weighted values</td>
<td>$32 + 42 + 12 + 2 + 6 + 20 + 72 + 14 = 200$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

200 divided by 11 = 18 with a remainder of 2

11 minus 2 = 9: **the check digit is therefore 9**

Complete self-checking number: 473124829

**NOTE 1** It is not permissible to extend the length of the serial number from 8 to 9 characters. Character 11 of the S10 identifier is required to be a check digit.

**NOTE 2** The check digit can be used in business processes such as claims and inquiries or customer service to check the accuracy of the numeric part of an item identifier, for example, provided by telephone or on an inquiry form. An S10 check digit validation tool is available on the UPU website at www.upu.int/en/activities/standards/support-and-downloads.html.

5.5 Country code

This shall be the two-character ISO 3166–1 code of the UPU member country under whose authority the S10 identifier was issued.²

² See clause 6 for further information on issuing authority and on issuance and management of S10 identifiers.
### 5.6 Assigned service indicators by product type

<table>
<thead>
<tr>
<th>Type of product</th>
<th>Allowable service indicator values</th>
<th>Examples (fictitious, for illustration only)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMS</td>
<td>EA–EZ: EMS; the use of EX–EZ requires bilateral agreement</td>
<td>Example 1 EE123456785KR (EMS item identifier issued by Korea (Rep))</td>
</tr>
<tr>
<td>Letter Post</td>
<td>LA–LZ: Letter post tracked; the use of LZ requires bilateral agreement</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MA–MZ: M bags</td>
<td></td>
</tr>
<tr>
<td></td>
<td>QA–QM: IBRS (International Business Reply Service)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>RA–RZ: Letter post registered; the use of RZ requires bilateral agreement</td>
<td>Example 2 RR876543216ER (registered item identifier issued by Eritrea)</td>
</tr>
<tr>
<td></td>
<td>VA–VZ: Letter post insured; the use of VZ requires bilateral agreement</td>
<td>Example 3 VA456789015KG (insured item identifier issued by Kyrgyzstan)</td>
</tr>
<tr>
<td>Parcel post</td>
<td>CA–CZ: Parcel post; the use of CZ requires bilateral agreement. It is not required to use CV for insured parcels but if the service indicator CV is used, then it is recommended that it be used only on insured parcels.</td>
<td>Example 4 CP654321092GM (parcel item identifier issued by Gambia) Example 5 CV010000155UA (insured parcel item identifier issued by Ukraine)</td>
</tr>
<tr>
<td></td>
<td>HA–HZ: ECOMPRO parcels; the use of HX–HY requires multilateral agreement; the use of HZ requires bilateral agreement</td>
<td></td>
</tr>
<tr>
<td>Codes allocated for domestic/</td>
<td>AV–AZ: domestic, bilateral, multilateral use only (see clause 10)</td>
<td></td>
</tr>
<tr>
<td>bilateral/ multilateral use only</td>
<td>BA–BZ: domestic, bilateral, multilateral use only (see clause 10)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DA–DZ: domestic, bilateral, multilateral use only (see clause 10)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GA: domestic, bilateral, multilateral use only (see clause 10)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GD: domestic, bilateral, multilateral use only (see clause 10)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NA–NZ: domestic, bilateral, multilateral use only (see clause 10)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PA–PZ: domestic, bilateral, multilateral use only (see clause 10)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ZA–ZZ: domestic, bilateral, multilateral use only (see clause 10)</td>
<td></td>
</tr>
</tbody>
</table>

3 The use of code range UA–UZ is for letter-post items containing goods requiring an S10 identifier and without customer-oriented tracking. The identifier is used for visibility in the supply chain, for example in an ITMATT message for electronic advance data.

4 Thus: a) insured parcels might have a service indicator other than CV; and b) service indicator CV does not necessarily imply that the parcel is an insured one.

5 In principle, the use of code range AV–AZ is to identify RFID-tracked items.
5.7 Rules for assigning a service indicator to a mail item

Rules for assigning service indicators are governed by the UPU Regulations.

EXAMPLE In the case of letter post, with many ranges defined, the following applies when assigning a service indicator to a letter post item:

- if a letter is insured, then its service indicator is in the range VA–VZ, regardless of the other characteristics of the item;
- if not, if it is registered, its service indicator is in the range RA–RZ, regardless of the other characteristics of the item;
- if not, then:
  - if it is tracked, its service indicator is in the range LA–LZ, or
  - if it is an M bag, its service indicator is in the range MA–MZ, or
  - if it is an IBRS, its service indicator is in the range QA–QM.

If it is not any of the above and if it contains goods and requires an S10 identifier its service indicator is in the range UA–UZ.

6 Issuing and management of S10 identifiers

S10 identifiers ending with a given ISO 3166–1 country code shall be issued only under the authority of a single organization assigned by the UPU member of the country concerned.6 7

The organization8 assigned by the UPU member country shall manage the issue and use of S10 identifiers, among all the operators under the authority of that UPU member country, in such a way as to ensure that no S10 identifier is reused within a period of 12 calendar months. A period of 24 calendar months, or longer, is recommended.

NOTE The UPU International Bureau produces, as a service, labels with S10 identifiers for use by designated operators. Further information is available from the UPU International Bureau.

Operators that have extraterritorial offices of exchange (ETOEs) or military offices of exchange may issue S10 identifiers for use in the countries where their ETOEs or military offices of exchange are located. In these cases, the operator is a designated operator, but not a designated operator of the country in which the ETOE or military office of exchange is located. The country code used is that of the UPU member country of which they are a designated operator. This implies that the country code at the end of an S10 identifier cannot be used as a reliable indicator of the geographic origin of an item.

EXAMPLE Swiss Post operates ETOEs in several countries. It uses S10 identifiers with country code CH for items despatched from its ETOEs.

Operators may authorise individual customers to control the issue of their own S10 identifiers by allocating them a specific service indicator value and/or serial number range, provided that this is done in a way which ensures that no S10 identifier is reused within a period of 12 calendar months.

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6 In cases where there is more than one operator in a country designated by an ISO 3166–1 country code, the country code cannot, on its own, be used to identify the operator.

7 Some UPU member countries may have more than one region or territory, each identified by a different ISO 3166–1 code. In these cases, there can be different designated operators issuing and managing S10 identifiers – one for each region or territory as defined by the ISO 3166–1 code.

8 The organization assigned by the UPU member country may be a designated operator of the UPU member country.
7 Use of S10 identifiers

7.1 Use of S10 identifiers on items

The S10 identifier assigned to an item shall be physically represented on the item in the form of a barcode which complies with the provisions of clause 8 and an associated human readable representation that complies with clause 9. The physical representation may be on pre-printed label stock, with a label then applied to each item, and/or incorporated into UPU labels and forms (including the CN 04, CN 05, CN 07, CN 23, CP 72, CP 73 and CP 74 forms), and/or generated by a customer using the shipping system of an operator.

NOTE Originating operators may allow customers to apply S10 identifiers to items either by supplying the customers with forms or labels with the S10 identifier pre-printed or by enabling the customers to access the operator’s systems to create forms or labels printed with the S10 identifier.

Where the physical representation is printed on a postal form such as a CN 23 that is placed inside an envelope affixed to the item, the barcode, form and envelope shall be designed to permit the barcode to be scanned and the human readable representation to be read without removing the form from the envelope.

Only one S10 identifier shall be assigned to an item. The physical representation of the S10 identifier may be applied in several copies, with the item bearing more than one representation of the same identifier as a result.

To enable barcode scanning, the S10 identifier should be applied to a flat surface on the item, and not folded around its edge. Where there is no flat surface, there should be minimal curvature along the length of the barcode.

7.2 Use of additional barcodes on items

Operators should discourage customers from using S10-format barcodes for the encoding, on international items, of information other than the valid S10 identifier. When a customer does apply an S10-format barcode, other than the valid S10-identifier, the origin operator should remove or obliterate the customer’s S10-format barcode, other than the valid S10-identifier, prior to the item’s despatch to another operator.

NOTE 1 Customers might have a business requirement to affix barcodes that are separate and distinct from the S10 identifier provided by the originating operator, for their own internal purposes. This is permitted, but barcodes containing information other than the S10 identifier should not make use of S10-format.

Originating, transit or destination operators may apply additional barcodes that do not use an S10-format, provided that the additional barcodes do not obscure any part of the sender’s address or return address, or any part of the S10 item identifier applied under the authority of the originating operator (see example at A.3).

A transit or destination operator may apply an item identifier that is compliant with this standard and identical in data content to the one applied by the originating operator. In this case, it is not necessary to obliterate or remove the identifier concerned if the item is forwarded to another operator or returned to the originating operator (see example at A.7).

NOTE 2 This practice may be used to precisely identify the domestic product or processing stream, add additional information or eliminate the need for delivery employees to recognize labels from many countries of origin.

Any S10-format barcode, applied to an item by a transit or destination operator that differs in data content from the original S10 identifier shall be obliterated or removed before the item is forwarded to another operator or returned to the originating operator.
8 Barcode representation of S10 identifiers

For the bar coding of S10 identifiers, use shall be made of either Code 128 symbology, defined in ISO/IEC 15417, or Code 39 symbology, defined in ISO/IEC 16388. Of the two, barcode symbology Code 128 is strongly recommended, as it is more compact, has better read error detection capability, and uses less ink.

Operators are required to be able to scan S10 identifier barcodes irrespective of whether these use Code 128 or Code 39 symbology.

The following symbology parameters shall be used:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Code 128</th>
<th>Code 39</th>
</tr>
</thead>
<tbody>
<tr>
<td>Character set</td>
<td>A–Z, 0–9</td>
<td>Mandatory (required by symbology)</td>
</tr>
<tr>
<td>Number of characters</td>
<td>13 (excluding start, stop, symbology check value)</td>
<td>Mandatory</td>
</tr>
<tr>
<td>Symbology defined symbol check character</td>
<td>Mandatory</td>
<td>Mandatory</td>
</tr>
<tr>
<td>Check digit</td>
<td>See 5.4</td>
<td></td>
</tr>
<tr>
<td>Narrow element (X) dimension</td>
<td>0,25 mm – 0,51 mm</td>
<td>0,25 to 0,43 mm</td>
</tr>
<tr>
<td>Wide/narrow (N) ratio</td>
<td>Not applicable</td>
<td>2,5:1 to 3,0:1; 3,0:1 preferred</td>
</tr>
<tr>
<td>Intercharacter gap</td>
<td>Not applicable</td>
<td>1X – 5,3X if X&lt;0,287 mm; 1X – 1,52 mm if 0,286&lt;X&lt;0,507 mm, 1X – 3X if X&gt;0,506 mm</td>
</tr>
<tr>
<td>Minimum bar height</td>
<td>15 % of the width of the entire symbol with a minimum of 9,0 mm and a recommended minimum of 12,5 mm.</td>
<td></td>
</tr>
<tr>
<td>Minimum quiet zone at ends</td>
<td>Minimum 10 times the X-dimension at each end of the barcode.</td>
<td></td>
</tr>
<tr>
<td>Minimum quiet zone at ends</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum quiet zone at ends</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of FNC4</td>
<td>Not permitted</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

To ensure adequate read rates, it is recommended that the print quality of symbols, assessed in accordance with ISO/IEC 15416[10], be at least 2,6/A/630 and 2,6/A/660, where A is the aperture determined in accordance with ISO/IEC 15416 Table 1.

Where barcodes are printed using digital printing technologies, parameter values should be chosen such that each bar and space has a width which corresponds to an integral multiple of the printer resolution. This should be at least 8 dots per mm (approx. 200 dots per inch), but a resolution of 12 dots per mm (approx. 300 dots per inch) or more is recommended. Where Code 39 is used, the N-ratio should be chosen such that the product of this and the number of dots in X is an integer.

**EXAMPLE** An N-ratio of 3:0:1 may always be used; a ratio of 2:5:1 should only be used if the number of dots in X is even.

**NOTE** This maximises print quality. Poor print quality and high read error rates can result if the barcode resolution is not properly matched to the resolution of the printer used to print it.

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9 Users of the standard with measurement equipment that complies with older American National Standard ANS X3.182 [12] may continue to measure print quality in accordance with that standard. In such case, the recommendation is for symbol print quality to be at least grade B.
9 Human-readable representation of S10 identifiers

A human-readable representation of the S10 identifier shall be printed in close proximity to (1 mm–5 mm above or below) and parallel to the barcoded representation. Additional copies of the human readable representation may be printed without associated barcode, provided that each has identical content and the content is identical to that of the barcode.

The human-readable representation consists of 13 characters. Spaces may be inserted to enhance readability. The recommended combination of data and spaces is AA NNN NNN NNN AA. Only upper case alphabetic and numeric characters may be used.

NOTE 1 The spaces are not part of the identifier and are not included in the barcoded representation of the S10 identifier, or in the data content of the S10 identifier used in electronic messages.

NOTE 2 If a barcode is damaged in transit, the data might not be scan-able by the transit or destination operator and might need to be manually entered, using the human-readable representation. It is important that either:

a spaces are not entered when manually entering the S10 identifier; or

b the data capture system prevents spaces from being entered, or automatically removes them.

A single sans-serif font and character size should be used. The specific font and size should be chosen in function of the frequency of reading/capture of the text concerned, the desired ease of readability, the available space, etc. Individual characters shall be between 2 mm and 5 mm high, and have a maximum width of 4 mm.

NOTE 3 This typically corresponds to a range of 8 to 14 point. The printout needs to be large enough to be easily readable, but needs to take account of aesthetics. Character size also needs to relate to the resolution of image capture devices used in OCR and video-coding applications; the values specified are appropriate to scanners with a resolution of 8 dots per mm (200 dpi) or greater.

10 Domestic, bilateral, or multilateral use of S10 identifiers

In addition to their universal use in accordance with the provisions of the UPU, S10 identifiers may be used for the identification of domestic items and for items subject to bilateral and/or multilateral agreements. The identifiers of such items may use the service indicators assigned for universal use with an interpretation that differs from that defined in 5.6, provided that the interpretation to be applied is defined in the appropriate domestic specification or bilateral/multilateral agreement.

Domestic items and items subject to bilateral and/or multilateral agreements may also use S10 identifiers with a service indicator specified in the table in 5.6 as being for domestic/bilateral/multilateral use. These service indicators will not be assigned for universal use, without consultation as noted in 5.2, and can therefore be freely used for domestic or bilateral/multilateral operations without risk of a possible conflict with those in universal use.

Items with service indicators defined by bilateral or multilateral agreement should be despatched only to operators participating in the agreement.10

Designated operators that wish to add a new service indicator to the list of those currently allocated for exclusively domestic or bilateral/multilateral use can submit a request to the International Bureau, for consideration by the UPU Standards Board.

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10 This is particularly important for bilateral/multilateral agreements under which service indicators assigned for universal use have an interpretation which differs from that defined in 5.6, such as an agreement under which service indicators EA–EZ are considered equivalent to indicators CA–CZ. Operational and/or accounting problems can arise if items falling under such an agreement are inadvertently despatched to an unintended destination that does not participate in the agreement.
Annex A
(informative)

Examples

NOTE Example A.1 is intended to illustrate barcode and human readable components. Examples A.2 to A.8 are intended to illustrate business uses of S10 identifiers. For these, the barcodes in this publication were copied from actual items and some resolution was lost in the copy process. Thus, these barcodes may not scan properly from this publication.

A.1 S10 identifiers 12,5 mm high with check digit
Code 128 symbology
Code 128 (narrow element X-dimension 0,33 mm)

![Barcode Example]

Code 39 symbology (accepted, but not recommended)
Code 39 (narrow element X-dimension 0,33 mm)

![Barcode Example]

A.2 S10 item identifiers for registered letter-post items incorporated into the CN 04 form

![Barcode Example]
A.3 S10 item identifier with a non S10-format identifier applied at destination

In this case, the destination operator has applied a non S10-format item identifier (98.00.802077.23271453) for internal purposes and has established a cross-reference with the original S10 identifier. If this item had been returned to sender, it would not have been necessary to remove or obliterate the item identifier applied at destination, since it does not use an S10-format.

Non S10-format identifier applied at destination

S10 identifier applied at origin. In this case, the originating operator used an alternative to the recommended spacing of AA NNN NNN NNN AA. It is still S10-compliant.

A.4 S10 identifier incorporated into CN 04 and CN 22 forms

In this case, the originating operator also applied a second barcode. Since this second barcode does not use the S10-format, its application complies with the S10 standard.
A.5 S10 identifiers as listed on an EMS CN 33 form

<table>
<thead>
<tr>
<th>Serial</th>
<th>Item Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>EE004436418CA</td>
</tr>
<tr>
<td>02</td>
<td>EE066465396CA</td>
</tr>
<tr>
<td>03</td>
<td>EE002250653CA</td>
</tr>
<tr>
<td>04</td>
<td>EE071328614CA</td>
</tr>
<tr>
<td>05</td>
<td>EE006635245CA</td>
</tr>
</tbody>
</table>

A.6 S10 identifiers as listed on a CP 87 form

<table>
<thead>
<tr>
<th>Detailed Entry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serial No.</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>7</td>
</tr>
<tr>
<td>8</td>
</tr>
</tbody>
</table>

A.7 S10 identifiers applied by destination, with identical data content as original

S10 identifiers applied by the destination operator (Canada Post) on an inbound tracked item from Great Britain (LY 375 239 424 GB), an EMS item from the United States (EC 654 466 857 US), a registered item from the Philippines (RZ 030 057 185 PH) and a parcel from China (CP 170 251 153 CN). As the data content of the S10 identifiers applied by Canada is identical to that of the original S10 identifiers, Canada does not need to remove or obliterate these identifiers if returning the items to the sender.
A.8 S10 identifier incorporated into the UPU CP 72 manifold set (comprising receipt, customs declaration, despatch note)
Bibliography

This bibliography provides full reference and sourcing information for all standards and other reference sources quoted in the above text. For references that mention specific version numbers or dates, subsequent amendments to, or revisions of, any of these publications may not be relevant. However, users of this document are encouraged to investigate the existence and applicability of more recent editions. For references without a date or version number, the latest edition of the document referred to applies. It is stressed that only referenced documents are listed here.

UPU standards

NOTE 1  UPU documents are available from the UPU International Bureau:

P.O. Box 312, 3000 BERNE 15, SWITZERLAND;
Tel: +41 31 350 3111; Fax: +41 31 350 3110; www.upu.int

[3] EMS manual (available from the International Bureau’s EMS Unit)
[8] S55: Identification of postal items – Identifier structures and encoding principles

ISO standards

NOTE 2  ISO standards are available from national standards institutes or from the International Organization for Standardization (ISO):

Chemin de Blandonnet 8, 1214 Vernier, Geneva SWITZERLAND
Tel: +41 22 749 0111; Fax: +41 22 733 3430; www.iso.ch


ANSI standards

NOTE 3  ANSI standards can be obtained from the American National Standards Institute:

11 West 42nd Street, New York, New York 10036, U.S.A.;
Tel: +1 212 642 4900; Fax: +1 212 398 0023; http://web.ansi.org