S47-1

UNIVERSAL POSTAL UNION

Physical exchange standards

Postal receptacle labels

- UPU status: **0**
- Date of adoption at this status: **18 October 2005**
- Date of approval of this version: **18 October 2005**

Disclaimer

This document contains the latest information available at the time of publication. The Universal Postal Union offers no warrants, express or implied, regarding the accuracy, sufficiency, merchantability or fitness for any purpose of the information contained herein. Any use made thereof is entirely at the risk and for the account of the user.

Warning – Intellectual Property

The Universal Postal Union draws attention to the possibility that the implementation of this standard might involve the use of a claimed intellectual property right. Recipients of this document are invited to submit, with their comments, notification of any relevant rights of which they are aware and to provide supporting documentation.

As of the date of approval of this standard, the Universal Postal Union had not received such notice of any intellectual property which might be required to implement this standard, other than what is indicated in this publication. Nevertheless, the Universal Postal Union disowns any responsibility concerning the existence of intellectual property rights of third parties, embodied fully or partly, in this Universal Postal Union Standard.

Universal Postal Union – International Bureau
Standards Programme
3000 Berne 15
SWITZERLAND
Tel: + 41 31 350 3111
Fax: + 41 31 350 3110
E-mail: standards@upu.int

Contents

Foreword

Postal services form part of the daily life of people all over the world. The Universal Postal Union (UPU) is the specialised institution of the United Nations that regulates the universal postal service. The postal services of its 190 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 424 billion letter-post items in the domestic service and 6 billion in the international service. Some 4,4 billion parcels are sent by post annually. Keeping pace with the changing communications market, postal administrations 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 given in Part V of the "General information on UPU standards" and are published by the UPU International Bureau in accordance with Part VII of that publication.

This document supersedes UPU standards S1-3 [4] and S29-2 [5]. Because the text has been completely revised and re-structured, it is published as a new standard and there are no change marks. The main technical changes to S29-2 are:

- update of the references to the specification of forms CN 34, CN 35 and CN 36 – these are now specified in Letter Post Regulations chapter 9, article RL 184;
- addition of references to the parcel forms, CP 83, CP 84 and CP 85;
- extension of the scope, and change of the title, to cover both receptacle labels with and without bar codes;
- improved consistency with the Letter Post and Parcel Post Regulations, allowing the standard to be used as basic reference text;
- clear specification of the requirement that origin and destination information should include specification of **both** the IMPC name and the name of the operator;
- addition of support for specification of aggregate mailstream, as specified in UPU standard M34 [1] and code list 161;
- specification of recommended fonts and font sizes;
- specification of recommended zone sizes by means of tables; clear specification of the use of zone border markings;
- provision for the inclusion of data encoded in a 2d symbol;
- addition of provisions relating to the printing of receptacle labels by third parties, such as airlines and other carriers.

Introduction

UPU Letter Post Regulations, article RL 184 and associated specifications CN 34, CN 35, CN 36, CP 83, CP 84 and CP 85 determine the general form and content of labels applied to postal receptacles. These specifications make provision for the use of bar codes that serve both to identify the content of the receptacle concerned and to provide data used in its operational processing. However, they leave considerable scope for variation which, though perfectly acceptable in a manual processing environment, can lead to additional costs and processing delays for automated processing systems.

Such systems are heavily dependent on the scanning of bar coded receptacle labels. The reliability of management information depends on the consistency and quality of data capture. It is therefore essential that bar code quality standards are consistently high.

This need is reinforced by the fact that postal administrations now rely on the tracking of mail receptacles to monitor and improve their quality of service. Over 30 million international receptacles are tracked every year through the CAPE system. The reliability of quality management and tracking information depends on the consistency and quality of data capture, which is based on the scanning of bar coded receptacle labels. This requires adherence to common specifications regarding the positioning of and symbology parameters used for bar codes, as well as attention to bar code printing quality.

Though monitoring of mail movements has traditionally been restricted to the confines of the postal community, many postal administrations are seeking to increase their control over mail movements by extending their track and trace capability to non-postal partners such as carriers and customers. As volumes of mail tracked and the number of partners increase, the quality of bar codes is becoming all the more important.

During the life cycle of a mail receptacle the label may be subjected to adverse weather conditions, repeated handling and transportation which may impact on its readability, and on the readability of any bar code. All administrations therefore need to ensure that the bar codes they produce are of the highest quality so that labels can be scanned not only at origin, but more importantly, throughout the transportation pipeline.

But bar codes are not the end of the story. Receptacles are frequently handled by operational staff, who might not have ready access to supporting IT systems. Receptacle labels therefore need to contain key processing data in an easily intelligible human readable form. The data definitions for the human readable data printed on labels need to be clear to avoid problems of misinterpretation and the layout and format of labels needs to be consistent to ensure speedy recognition and handling.

The above gives rise to the need for a specification of receptacle label layout, content and quality which goes beyond that specified in article RL 184 and the associated form definitions. This standard provides such a specification. Except as explicitly indicated, it is compliant with and complements article RL 184.

This specification is structured into seven main sections:

Clause No	Description of content
5	*Information encoded on receptacle labels*: specifies the information that, depending on the content of the receptacle and the resulting choice of label type, might need to be printed or written on the receptacle label;
6	*Label areas, dimensions and construction*: defines the different types of receptacle label, specifies their size, construction and layout and indicates how a choice is made between the different possibilities and colours specified in the Letter Post and Parcel Post Regulations;
7	*Layout of the printing area*: specifies the recommended layout of information containing zones in the printed area of a label and provides permissible variations on this layout;

8 *Label content*: specifies, for each type and layout of label, which of the data attributes identified in clause 5 should, or may optionally be, printed or written on the label;

9 *Use of bar codes*: specifies the symbology and symbology parameters to be used for bar codes printed on receptacle labels;

10 *Use of two-dimensional symbols*: addresses the possible use of two-dimensional symbologies for the encoding of data on receptacle labels;

11 *Production of labels by parties other than the originator*: specifies the circumstances in which parties other than the despatch originator are authorised to modify or replace receptacle labels and describes the additional procedures to be employed in such cases.

Physical exchange standards – Postal receptacle labels

1 Scope

This standard complements RL 184 by providing a rigorous specification of the content and layout of CN 34, CN 35, CN 36, CP 83, CP 84 and CP 85 receptacle labels. It supersedes and replaces earlier UPU standard S29-2 [5], which covered only bar coded receptacle labels and should be used in preference to S29-2 for all new and updated implementations.

NOTE 1 S29-2, though superseded, remains valid and may continue to be used until further notice. However, all parties responsible for the production of receptacle labels are encouraged to migrate to the new specification contained in this standard at the earliest possible opportunity.

The standard applies to all labels of these types whether used to label a receptacle or, in the case of CP 83 and CP 84, to label a loose parcel.

The standard covers only labelling requirements related to the above mentioned list of label types. The Letter Post Regulations should be consulted for details of other labelling requirements, such as the use of article RL 130 labels for receptacles containing perishable infectious biological substances.

The standard defines two supported layouts; one in which data are printed in landscape mode (i.e. parallel to the long edge of the label) and one which uses portrait mode, in which characters are printed parallel to the short edge. Both include provision for the incorporation of a Code 128 bar code. This is required on portrait mode labels; recommended but not required on landscape mode ones. Both layouts also support the optional use of a 2d symbol in addition to the use of a Code 128 bar code.

NOTE 2 One or more 2d symbols may be used in addition to a Code 128 bar code; not instead of one. No provision is made for the use of RFID devices. The use of this technology for the identification and tracking of postal receptacles and their contents is for further study. In due course, it is anticipated that this standard will be adapted to make provision for it.

Specifications of the recommended layout for each of the above-mentioned types of label include the definition of information-containing zones and sub-zones, with specified dimensions and relative positions. To permit reasonable flexibility in overall label size, zone and sub-zone dimensions are defined relative to the dimensions of the printing area as a whole.

NOTE 3 See 6.1 and 7.1 for a detailed discussion of recommended label and zone sizes and of the applicable tolerances.

The standard also defines the data elements that are intended to be encoded on receptacle labels and links these to the layouts by specifying what information is to be printed in which sub-zone.

For information that is to be printed in human readable form, the standard defines recommended fonts and font sizes, designed to ensure easy readability by operations staff.

NOTE 4 The above does not preclude the use of handwriting on pre-printed labels where automated means of label generation are not available.

For information that is to be printed in the form of a bar code, the standard specifies the content, symbology, symbology parameters and optical characteristics required to ensure a high level of readability by both automated and hand-held bar code scanning devices.

The standard is compliant with the provisions of RL 184 except where indicated otherwise. Subject to its attaining UPU standards status 1, its adoption by all postal administrations, for all receptacle labelling purposes, is strongly recommended.

NOTE 5 The specification is presently at status 0, implying that it should be used only by participants in the test programme. Once these tests are complete and the standard achieves standards status 1, its adoption is strongly recommended, but not

required. Compliance should result in more accurate, faster, processing of mail despatches. However, it is recognised that its adoption will require a significant migration effort and postal administrations which are not (yet) in a position to implement the standard may continue to comply with the less stringent provisions of RL 184.

2 Normative references

Error! Not a valid link.

UPU Letter Post Regulations, chapter 9, article RL 184, *Labelling of mails* and article RL 185, *Use of bar codes*

UPU Standards glossary

UPU Standard S9, Postal receptacles – identification of content

UPU Standard S25, Data constructs for the communication of information on postal items, batches and receptacles

UPU Standard S28, Communication of postal information using two-dimensional symbols

UPU Standard S31, UPU issuing agency – Assignment of issuer codes

UPU Standard S35, UPU issuing agency – Assignment and use of party identifiers

UPU Standard S45, OCR and Human readable representation of data on postal items, labels and forms

UPU Standard S46, Linear bar coded representation of data on postal items, labels and forms

3 Terms and definitions

The terms used in this standard are defined in the UPU Standards glossary, in documents referred to in Normative References and in the Bibliography.

3.1 airmail items
postal items conveyed by air with priority[1]

3.2 surface airlifted items; S.A.L.
postal items conveyed by air with reduced priority

4 Symbols and abbreviations

The symbols and abbreviations used in this standard are defined in the UPU Standards glossary.

REIMS Remuneration for the Exchange of International MailS

NOTE Refers to an agreement that defines the method of payment for the handling and delivery of mail between signatories, which are primarily European postal administrations.

RL 184 UPU Letter Post Regulations, chapter 9, article RL 184

5 Information encoded on receptacle labels

Receptacle labels include both fixed data (referred to as data titles) and variable data, the presence and value of which depends on the content of the receptacle and/or on the agreement between the sender and recipient of the

1 Priority here refers to the priority of air transport, not to the priority of the mail.

despatch concerned. This clause defines all data elements that can be required; which of them are actually required, in what circumstances, is specified in clause 8.

Definitions in this clause relate either to an individual receptacle, referred to as the receptacle; to the aggregate contained within it, referred to as the aggregate, or to the despatch of which it forms a part, referred to as the despatch.

5.1 bill date
date on the letter or parcel bill (CN 31, CN 32, CP 86 or CP 87) for the despatch to which the receptacle belongs, expressed as a local date to an accuracy of 24 hours

5.2 conveyance reference
carrier's reference number or name for the last transport leg or for the specific device used for transport

EXAMPLE An airline flight number, the name of a ship, the registration number, the route name or code for road transport or the line reference for rail transport. See also transport.leg.conveyance-reference in UPU standard M35a [2]. Flight numbers should be formatted in standardised form, with three character positions for the IATA airline code [12] (left justified in case of two character identifiers) and four digits, with leading zeros as necessary) for the flight reference.

5.3 destination location
complete 35-character name of the postal processing facility to which the despatch is directed

NOTE Further information is provided in UPU standard S34 [6], which defines a mechanism for the identification of international mail processing centres, each of which has associated 12 and 35 character names and a 6 character location code. It is not permitted to abbreviate, truncate or append characters to the IMPC name in any way. See also despatch.destination-location in UPU standard M36a [3].

5.4 exempt indicator
indication of whether the receptacle contains exclusively items that are exempt from transit charges and terminal dues, expressed in the form of the text "**EXEMPT**" or as a cross or tick in a tick-box or, on receptacles containing exclusively empty receptacles, in the form of the text "**SV (Exempt)**" without a tick box

*NOTE 1 The presence, in the receptacle, of non-exempt items is indicated by the absence of text, or by an empty tick-box. See also aggregate.exempt-items-indicator in UPU standard M34a [1]. "**EXEMPT**" corresponds to aggregate.exempt-items-indicator value X. "**SV (Exempt)**" always applies to empty bags (receptacles with mail sub-class code CT, ET, TT, TZ or UT).*

NOTE 2 Tick boxes are intended for use on manually completed labels; their use on computer generated labels is not recommended.

5.5 gross weight
gross weight of the receptacle[2] and its contents, expressed in kilograms to an accuracy of 0,1 kg, with the value 999,9 indicating that the weight concerned exceeds 999,8 kg,

EXAMPLE 17,5 represents a weight of between 17,45 and 17,55 kg.

NOTE Corresponds to aggregate.gross-weight in UPU standard M34a [1]. The decimal separator is explicitly represented as a comma or point. Use of a decimal comma, as in the example above, is preferred.

5.6 item count
integer value corresponding to the number of items contained in the receptacle

NOTE In the case of empty bags contained within a bag, the outermost bag is included within the count.

5.7 label type identity
code identifying the type of label, and thus the nature of the content of the receptacle and its mode of transportation, as defined by the UPU Letter Post and Parcel Post Regulations

EXAMPLE
CN34 letter post despatched by surface transportation
CN35 letter post despatched by air
CN36 surface air lifted (S.A.L.) letter mail

---

2 In the case of a bag containing empty bags, the weight of the outermost bag should not be counted.

CP83 parcels despatched by surface transportation
CP84 parcels despatched by air
CP85 surface air lifted (S.A.L.) parcels

NOTE 1 Label type identity is based on but does not correspond exactly with mail class and category, since there are no special forms for EMS or empty receptacles. Values should be printed without a space between the CN or CP and the following digits.

NOTE 2 In practice, the only difference between the different types of label is the label type identity (5.7) and transport priority indication (5.28). Since this standard specifies a single layout that is applied in all cases, these two data elements are treated as variable data.

5.8 last bag indicator

indication of whether the receptacle is the last (highest numbered one) of the despatch and thus contains the despatch documentation: F if so; blank if not

5.9 mail format

code specifying the format of the mail contained in the receptacle, expressed as a UPU code list 120 *Format of content* value

EXAMPLE (for letter mail)
C Cards
E Bulky
G Large
J Newspapers
M Mix of large and bulky
P Small
R Exclusively registered/insured (RV)
S Mix of small and large
U Unknown
X Mix of all formats (i.e. any mix other than M or S)

NOTE See also UPU code list 120 and aggregate.format-of-contents in UPU standard M34a [1]. Mail format is not (currently) applicable to EMS or parcels. The value U is used in this case.

5.10 mail no

four digit integer value that defines the position of the despatch within the sequence of despatches exchanged, under the same despatch agreement, within a calendar year

NOTE See despatch.agreement and despatch.serial-number in UPU standard M36a [3].

5.11 mailstream

human readable indication, taken form UPU code list 161, corresponding to the mailstream segregation code of the aggregate contained in the receptacle

NOTE See UPU code list 161 and aggregate.mailstream-segregation-code in UPU standard M34a [1].

5.12 mail sub-class

mail sub-class of the mail contained in the aggregate, expressed as a UPU code list 117 code value

NOTE 1 It is stressed that this is the mail sub-class of the aggregate and not that of the despatch, which might be different. The mail sub-class of the despatch is included in S9-compliant receptacle content identifiers but is not separately represented on the label.

NOTE 2 The inclusion of mail sub-class means that there is no need for a separate M-bag[3] indicator.

EXAMPLE
UA Letters – AO
UN Letters – LC/AO
UM Letters – M bags
CN Parcels – ordinary

---

3 M-bags are receptacles containing printed papers, such as newspapers, periodicals and books, that are addressed to the same addressee at the same address, the total weight of which do not exceed 30,0 kg. Other items may be associated with the printed papers. For further details, see Letter Post – Convention article, chapter 4, article RL 124 sub 7.

ED EMS documents
TT Empty bags – mixed

5.13 mail sub-class and format
concatenation of mail sub-class (5.12) and, unless mail format (5.9) is unknown or not applicable (value U), a minus sign (-) and mail format

NOTE This is defined as a compound data construct because the combination is printed together on the label.

EXAMPLE
UA-P Letters – AO; small
UN-S Letters – LC/AO; mix of small and large
ED EMS documents – format not applicable

5.14 net weight
weight of the content of the receptacle, expressed in kilograms to an accuracy of 0,1 kg, with the value 999,9 indicating that the weight concerned exceeds 999,8 kg,

EXAMPLE 17,5 represents a weight of between 17,45 and 17,55 kg.

NOTE Corresponds to aggregate.net-weight in UPU standard M34a [1]. Equal to the gross weight less the tare weight of the receptacle. The decimal separator is explicitly represented as a comma or point. Use of a decimal comma, as in the example above, is preferred.

5.15 offload location
name, IMPC code, UN/LOCODE or IATA airport code [12] for the arrival location of the last transport leg falling under the responsibility of the originator

NOTE For air transport, the IATA code should be used. See UPU standard M35a [2] for further information on transports and transport legs. Note, however, that only IMPC codes, UN/LOCODEs, IATA airport codes and full names of locations can be used as offload location values. Support for other forms of S25 location code, such as postcodes, are for further study.

5.16 optional data
any data that the label producer prints on the label, which is additional to that required by this specification, whether or not this is in accordance with agreements with the operator of the destination IMPC

NOTE Either for internal processing reasons, or to support specific requirements of the destination IMPC, there could be a requirement for the printing, on receptacle labels, of data that is not otherwise specified in this standard. This is made possible through support for the printing of a limited quantity of optional data. As specified in 9.2 and 10.1, such data could be represented in the form of a bar code and/or two-dimensional symbol, as well or instead of being printed in human readable form.

5.17 originator
complete 12-character name of the organisation which made up the despatch

NOTE This should normally correspond to the operator responsible for the mail processing centre in which the despatch was made up. For further details, see UPU standard S34 [6]. It is not permitted to abbreviate, truncate or append characters to the originator name in any way. See also despatch.creator in UPU standard M36a [3].

5.18 origin-location
complete 12-character name of the mail processing centre in which the despatch was made up

NOTE Further information is provided in UPU standard S34 [6], which defines a mechanism for the identification of international mail processing centres, each of which has associated 12 and 35 character names and a 6 character location code. It is not permitted to abbreviate, truncate or append characters to the IMPC name in any way. See also despatch.origin-location in UPU standard M36a [3].

5.19 production data
S35 party identifier or name of the party which produced the label, optionally followed by a printer identifier, preceded by a dash (-) and/or a weigh scale identifier, preceded by a dot (.), which distinguish the printer, respectively, weigh scale, from other printers and weigh scales used by the identifier label producer

NOTE This information is optional if the label is produced by the operator of the origin-location. It is required in other cases. Printer and scale identifiers allow identification of the printer, respectively weigh scale, which can be useful in cases in which print quality is poor (e.g. the bar code is unreadable) or weight discrepancies are found. The party identification is required if

printer and/or weigh scale identification is provided. These can be assigned by, and need be unique only to, the party concerned.

5.20 product
indication of the type of mail items contained in the receptacle, being either blank, in the case of ordinary letters, or one of the values from UPU code list 175

EXAMPLE
EMS
EPG PARCELS
LETTERS[4]
POSTAL PARCELS

NOTE All items in the receptacle are required to belong to the same product group. The special content descriptor (see 5.25) allows specification of sub-product in appropriate cases.

5.21 receptacle content identifier
identifier for the aggregate contained in the receptacle to which the label applies

NOTE This will normally be an identifier constructed in accordance with UPU standard S9. However, operators may bilaterally agree to the use of other forms of aggregate identifier. See also Aggregate identification in UPU standard M34a [1].

5.22 receptacle number
serial number of the receptacle within the despatch of which it forms part

NOTE The receptacle number is one of the components of S9 receptacle content identifiers; it corresponds to despatch.component.serial-number in UPU standard M36a [3].

5.23 recipient
specification of the organisation responsible for reception and processing of the despatch at the destination location in the form of the appropriate UPU code list 108 35-character IMPC operator name if this can be printed in the space available; the 12-character IMPC operator name otherwise

NOTE This should normally correspond to the operator responsible for the mail processing centre to which the despatch is directed. For further details, see UPU standard S34 [6]. Use of UPU code list 108 names is required. The 35-character name is preferred; the 12-character name can be used if the 35-character name will not fit, at the selected font size, in the space available. It is not permitted to abbreviate, truncate or append characters to the recipient name in any way. See also despatch.recipient-organisation in UPU standard M36a [3].

5.24 seal number
identification or other characteristic that can be used in verifying that the seal or lock, used to close the container in which the aggregate is housed, has not been changed or tampered with

NOTE Used to record the lock number, combination or other identification characteristic of the seal used to close the container. The identification is not necessarily unique. For example, locks with identical keys may be used on different containers. Absence of a value indicates that the seal (if any) has no characteristic intended to distinguish it from other seals. See also aggregate.container.seal.ID in UPU standard M34a [1].

5.25 special content descriptor
indication of the special nature of the content of the receptacle, being the first applicable value[5] taken from UPU code list 176

NOTE At the time of drafting of this specification, the possible values of special content descriptor, in order of consideration, were as indicated below. However, the code list should be consulted for more up-to-date information.

Case – receptacles containing	***Special content descriptor***
exclusively ordinary bulk mail	*Bulk mail*

4 This code is provided for completeness. In case of letters, it is recommended that the product field is left blank.

5 Care should be taken in determining the first applicable case. In particular, it is stressed that, in accordance with provisions of the Letter Post Regulations, certain descriptors apply only if the receptacle concerned contains only (exclusively) items of the indicated type; others apply if the receptacle contains any such items.

Case – receptacles containing	***Special content descriptor***
"Accès Direct" items	*Accès Direct*
IBRS items	*IBRS*
exprès letters or express parcels	*Exprès*
priority mails conveyed by surface	*PRIOR*
insured parcels (whether exclusively or together with uninsured parcels)	*V*
exclusively COD parcels	*Remboursement*
exclusively newspapers[6], not being returned to sender, that were posted in bulk by publishers or their agents and dispatched by surface	*Journaux*
exclusively periodicals other than those referred to above (optional value)	*Ecrits Periodiques*
small packets	*Petits paquets*
exclusively non-priority and/or AO items	*Non-priority*
exclusively empty receptacles	*SV (Empty bags)*

5.26 special services agreement indicator

indicator of the need for special handling of the receptacle in accordance with multilateral product-based agreements, as specified in the applicable agreement

NOTE This indicator could be in the form of a special symbol or logo. It may be pre-printed or applied to the label in the form of a sticker, rather than being printed by the label printer.

EXAMPLE The following symbol is used to signify that the receptacle concerned contains parcels subject to the EPG agreement that originate from the United Kingdom (GB).

5.27 transit information

specification of a transport leg other than the last one[7], comprising:

– the name, IMPC code, UN/LOCODE or IATA airport code [12] for the arrival location;

– an asterisk (*) if the transit handling is to be performed under the responsibility of the local postal administration and the arrival location is not specified by means of an IMPC code;

optionally preceded, if this conveyance differs from conveyance reference (5.2), by the carrier's reference number, name or identification of the conveyance used for transport, followed by a comma (,) and space ( ).

NOTE 1 Only used if there is more than one transport leg (see 5.2 and 5.15 for the equivalent data for the last transport leg, or if there is only one such leg). See UPU standard M35a [2] for further information on transports and transport legs.

NOTE 2 See 5.2 for the format of flight numbers.

NOTE 3 Only IMPC codes, UN/LOCODEs, IATA airport codes and full names of locations can be used as location values. Support for other forms of S25 location code, such as postcodes, are for further study. Where transit handling falls under the responsibility of an air carrier, the IATA code should be used for the location. Where transit handling is to take place in a registered IMPC, the IMPC code should be used. In other cases in which transit handling is the responsibility of the local postal administration, the location indication should be followed by an asterisk; no asterisk should be present if the transit is performed under the responsibility of one of the carriers involved.

EXAMPLE
LH 0123, LHR Lufthansa flight 0123 to London Heathrow
LH 0123, LHR Same flight, with Royal Mail responsible for transit handling – the mail should pass through its AMU*

6 This may also be applied to news periodicals published at least once a week and posted in bulk to which the originator gives the priority treatment given to newspapers in its domestic service.

7 May occur up to four times, corresponding to the first four legs of a five-leg transport schedule.

LH 0123, GBLHRE FRA *Same flight, with IMPC GBLHRE, operated by Swiss Post, being responsible for transit handling Frankfurt (flight number as given in conveyance reference); the airline is responsible for transit handling*

5.28 transport priority indication
human readable indication of the form of transport and priority of the mail contained in the receptacle, expressed as one of the following values:

- Airmail: priority mail transported by air (mail category A transported by air);
- Priority[8]: priority mail transported by surface means (mail category A subject to surface transport, or D);
- S.A.L. surface airlifted: mail transported by air with reduced priority (mail category B);
- Surface: ordinary / non-priority mail transported by surface means (mail category C);
- - (blank): ordinary/non-priority mail transported by surface means (alternative to “Surface”).

NOTE Transport priority indication is derived from mail category, as defined in UPU code list 115, and means of transport.

6 Label areas, dimensions and construction

6.1 Label dimensions; tab and tab characteristics

Receptacle labels are comprised of up to six areas, laid out as illustrated in Figure 1:

1 the printing area;

2 the left border;

3 the right border;

4-5 the upper and lower borders;

6 the eyelet area.

The printing area is always required. It should have a white background.

NOTE 1 Other light colours are tolerated subject to adherence to the optical characteristics specified in UPU standards S45 in respect of human readable printing and of S46 in respect of bar coded data.

The preferred dimensions of the printing area are 90 mm by 130 mm, including a clear zone of 3 mm at top and bottom and 2 mm at either side, giving a net printable area of 84 mm by 126 mm. Variation in printing area dimensions is permitted, subject to a minimum of 68 mm by 97 mm and a maximum of 103 mm by 150 mm, provided that the overall width of the net printable area is at least 1.5 times its height.

NOTE 2 Allowing for the clear zone, this results in a net printable area of between 62 mm by 93 mm and 97 mm by 146 mm.

The left border is always required. It has the same height as the printing area and a width of between 8 mm and 20 mm, with 10 mm being recommended. It is recommended, though not required, that the word “Posts” is printed across it in black ink, in the orientation shown in Figure 1, using a font size of between 18 and 22 points. The background colour may be either the same as that of the printing area or the same as that specified in 7.3.2 for the upper and lower borders.

NOTE 3 The indication “Posts” is recommended to make clear that the receptacle contains mail and is subject to customs and other procedures applicable to post. The area in which “Posts” is printed is considered as being in the left border because it is expected that it will normally be pre-printed on the label stock or backing material. If the printer used is capable of this, it is nevertheless permissible to print the indications dynamically. In such case, the printing area extends 10 mm to the left of what is shown in Figure 1.

8 “Par avion” may be used instead or “Airmail” and “Prioritiare” instead of “Priority’, but this is not recommended.

The right border is optional. If present, it has the same height as the printing area and a width of up to 12 mm. Its colour should be the same as that of the printing area or the same as that specified in 7.3.2 for the upper and lower borders.

The upper and lower borders are required in the cases described in 7.3.2; optional otherwise, though their presence is recommended. Where present, their colour should be as specified in 7.3.2 and they should be of approximately equal height. This shall be up to 15 mm if presence of the borders is optional and between 8 mm and 15 mm, with 10 mm being recommended, where their presence is required.

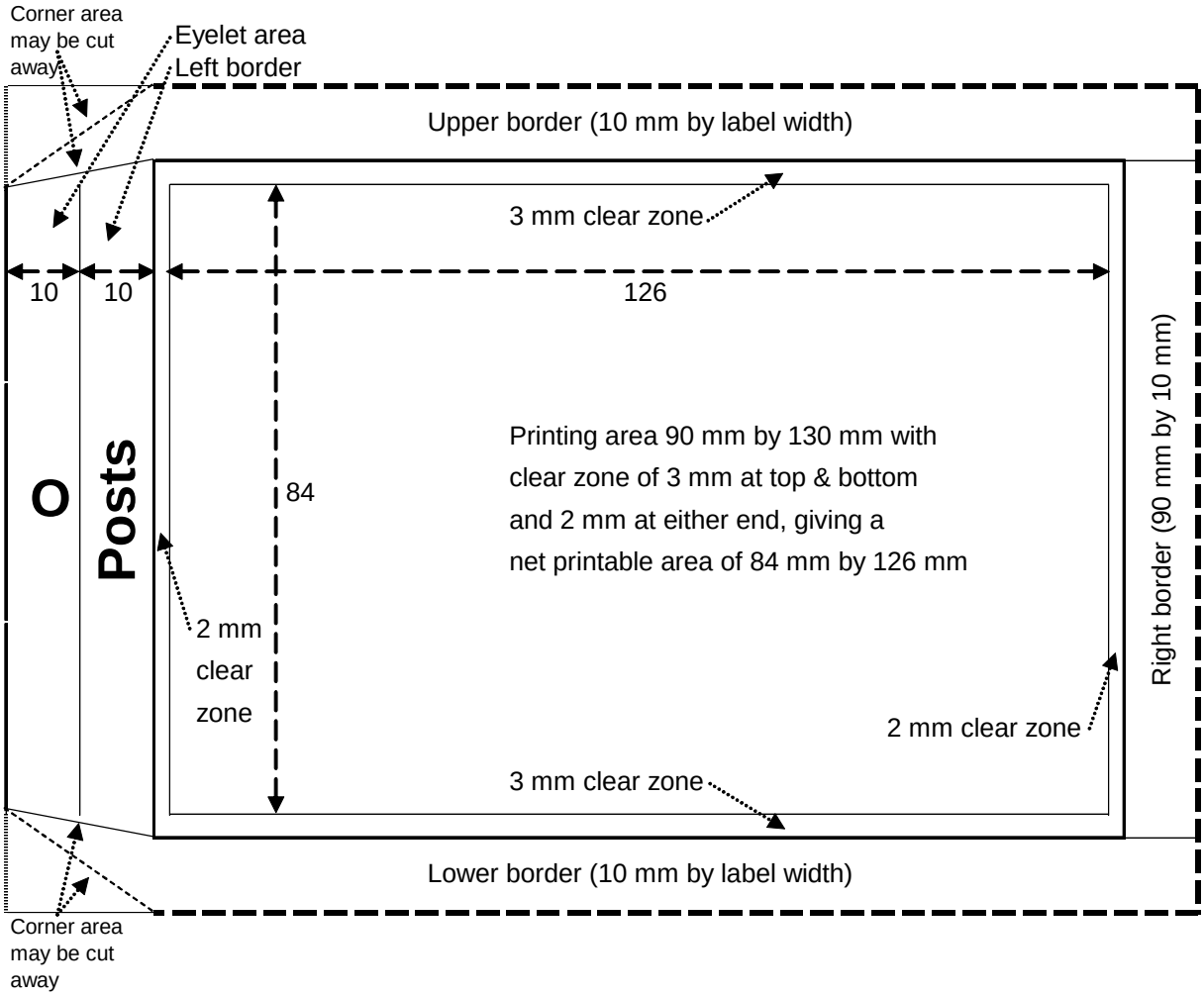


Figure 1 Label areas and recommended dimensions

The eyelet area is for use in tying the label to its receptacle. It is:

– optional on adhesive labels that are intended to be stuck onto a designated labelling area on a receptacle;

– optional for labels that are intended to be placed in a label holder on the receptacle;

– required in other cases (see 6.2).

Where present, the eyelet area should have a width of between 10 mm and 20 mm.

NOTE 4 For labels without eyelet, the above results in the minimum, recommended and maximum dimensions shown in the following table; labels with an eyelet are 10 mm to 20 mm wider.

	Label height (mm)			Label width (mm)		
Case	**Minimum**	**Preferred**	**Maximum**	**Minimum**	**Preferred**	**Maximum**
No upper, lower or right borders	*68*	*90*	*103*	*105*	*140*	*170*
Right border, no upper or lower border	*68*	*90*	*103*	*105*	*140–150*	*182*
Upper & lower border; no right border	*84*	*110*	*133*	*105*	*140*	*170*
Upper, lower and right border	*84*	*110*	*133*	*105*	*140–150*	*182*

As illustrated in Figure 1, the left corners of the label may optionally be cut away.

In certain cases (see 7.3.2) it is permissible to replace or supplement the upper and lower borders by affixing a 30 mm by 50 mm coloured tab to the label.

6.2 Label construction and material

Labels may be constructed either as an integrated whole (integrated labels), or from two parts: a backing tag and an adhesive label which is affixed to the tag (two-part labels).[9] In the latter case, the adhesive part shall correspond with the printing area or the combination of printing area and left border and should be made of white abrasion-resistant non-glossy paper.

Depending on the type of receptacle to which they apply, labels may be designed to be tied to the receptacle, to be inserted in a specially designed label holder or to be stuck to the receptacle using adhesive.

Integrated labels and the backing tags of two-part labels that are designed to be tied to a receptacle shall include the eyelet and should preferably bear the name of the origin post on the back. They should normally be made of sufficiently rigid canvas, of plastic, of strong cardboard, of parchment, or of wood, though strong paper may be used between neighbouring offices or otherwise in accordance with bilateral agreements provided that the material used is strong enough to withstand the various handling processes the receptacles undergo. If necessary, the eyelet should be reinforced, for example by means of a metal, fibre or cardboard ring, to reduce the risk of detachment. The finished label should have a tear resistance, measured in both directions (i.e. in both the normal direction of pull against the tie and in the cross direction) using the Elmendorf tear test, of not less than 3400 milliNewtons.

NOTE Studies conducted for Australia Post indicate that the Elmendorf tear test is a better indicator of label robustness than tests of the force required to detach a label from its tie by pulling it (pull tests), or of the tensile strength of the label material.

Integrated labels and the backing tags of two-part labels that are designed to be inserted into a label holder on the receptacle shall be made of thin card or heavy duty paper selected, taking account of the characteristics of the label holder, to withstand, and remain in place throughout, the various handling processes the receptacles undergo. They may omit the eyelet referred to in 6.1. They may also omit the left and/or upper and lower borders referred to in 6.1 if the functions of these are provided by a separate insert or by the label holder itself.

Integrated labels and the backing tags of two-part labels that are designed to be stuck to receptacles shall be made of abrasion-resistant paper. They may omit the eyelet referred to in 6.1.

9 It is additionally permissible (see clauses 8 and 11) to (re)print a bar coded identifier and/or to print (revised) transport details on separate stick-on labels and to affix these to the main label after the latter has been printed. This permits organisations that operationally require bar codes to affixe these to labels that do not already have one. It also allows update of transport information when this is defined or amended after production of the main label.

7 Layout of the printing area

7.1 Recommended layout

The printing area is laid out in 6 zones, A to F, all except zone D of which are further divided into sub-zones. The recommended layout is shown in Figure 2.

NOTE 1 The figure shows only the printing area, nominally 90 mm by 130 mm in size, and the effective print region of nominally 84 mm by 126 mm. Solid lines represent printed zone boundaries; dotted ones do not represent printing, but are present to illustrate where non-printed zone boundaries occur.

NOTE 2 This standard uses a single layout for CN 34, CN 35, CN 36, CP 83, CP 84 and CP 85. In particular, no distinction is made in the layout of transport information between labels used for surface transport and labels used for air transport.

Except as provided for in clause 10, compliance with this standard requires that all zones and sub-zones specified for the appropriate label type are present, whether or not they are actually used for data. In particular, zone E, which is used for bar coding, is required even if, in practice, no bar code is present.

NOTE 3 Clause 10 permits the integration of sub-zones B5 and B6, or B4, B5 and B6, to provide additional space for the encoding of two dimensional symbols in accordance with UPU standard S28.

NOTE 4 The presence of the bar coding zone is required, even when no bar code is present, for two reasons. Firstly, it reduces the number of layout variations which have to be coped with operationally. Second, and possibly more importantly, it makes it possible for a carrier, a transit post or the recipient to apply a stick-on bar code if bar coding is required for operational reasons.

NOTE 5 The bar coding zone, zone E, is placed between zones D, in which recipient / destination information is printed, and F, in which transport details are printed. This keeps the bar code away from the edge of the label, where it would be more likely to suffer damage, and makes it easier to replace transport details, by overlabelling of zone F, should this be desirable.

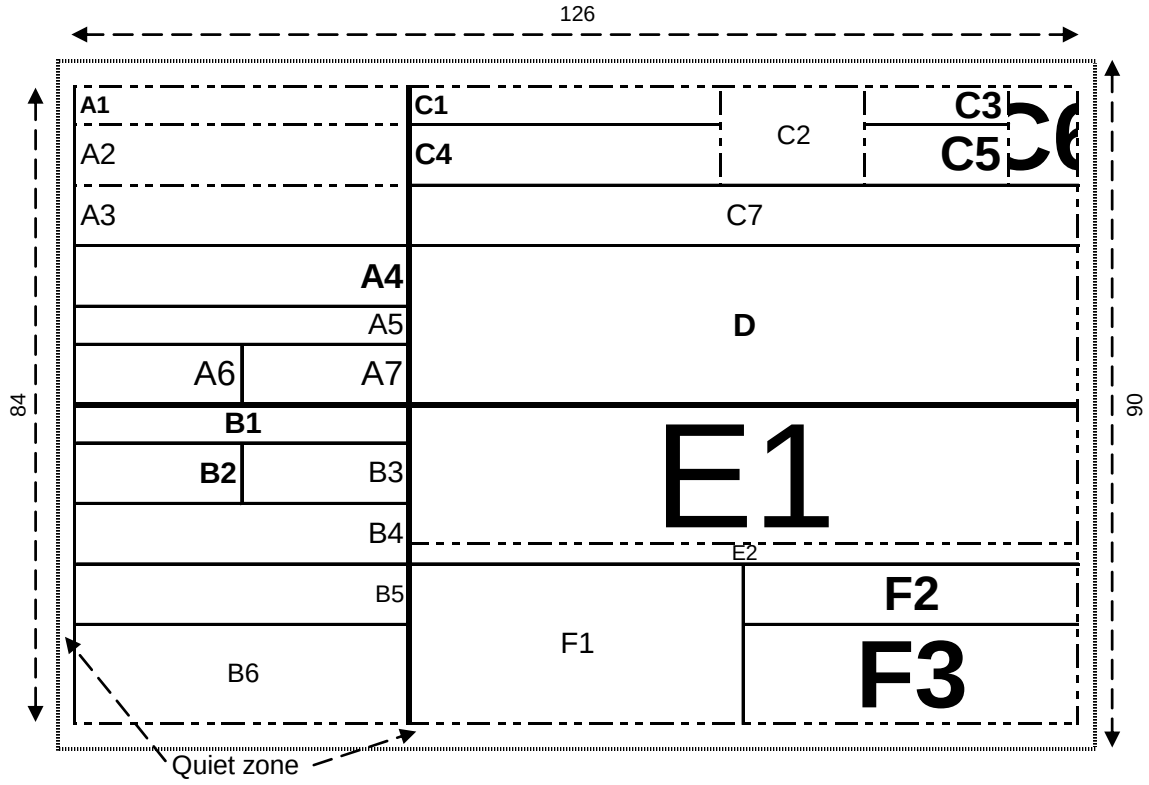


Figure 2 Recommended printing area layout

Table 1 defines the dimensions of the different zones, the use of border lines and, where applicable, the data title. The information content to be printed in each sub-zone is specified in clause 8.

Each row in the table corresponds to a zone or to a sub-zone. In each case:

– the first column indicates the zone (in bold) or sub-zone concerned;

– the second column specifies the nominal height of the zone or sub-zone. This is expressed as a multiple of the height *h* of the effective printing area of the label;

– the third column specifies the nominal width of the zone or sub-zone. For zones, this is expressed as a formula based on the height *h* and width *w* of the of the effective printing area of the label; for sub-zones, it is expressed as a multiple of the width of the zone.

EXAMPLE 1 Zone C is 0,25 h high and w - 0,5 h wide. For a label with the recommended size of printing area (90 mm by 130 mm), the effective print region is 84 mm high (h) and 126 mm wide (w). So zone C will be 0,25 x 84 = 21 mm high and 126 - 0,5 x 84 = 84 mm wide. Its sub-zone C1 will be 0,07 x 84 = 5,9 mm high and 0,45 x 84 = 37,8 mm wide. If the actual label used had an effective printing region of 62 mm by 114 mm, then zone C would be 0,25 x 62 = 15,5 mm high and 114 - 0,5 x 62 = 83 mm wide; C1 would be 4,3 mm high and 37,4 mm wide.

– the fourth column specifies the printing of borders for the zone or sub-zone. These are indicated by T for top, L for left, B for bottom and R for right. Two line thicknesses are used: 1 or 1½ points for thin lines and 2 or 3 points for thick lines. The use of thick lines is indicated by bold characters;

*EXAMPLE 2 Zone B has border specification **T** L **R**. It thus has a thick (2 or 3 point) upper and right hand border and a thin (1 or 1½ point) left border. There is no bottom border. Sub-zone B3 has border specification T L B **R**. It therefore has thin borders at the top, left and bottom; a thick border at the right.*

*NOTE 6 In displayed and printed renditions of the specification, the apparent thickness of the lines can vary. The specifications in the table (**bold** for thick lines and normal font for thin lines) should be used, not the appearance of the figures.*

NOTE 7 Dotted lines are to show the limits of zones and sub-zones (and of the printed area of the label) and do not represent printing. These lines should not be printed on actual labels.

– the fifth and sixth columns give the French and English data titles for the zone or sub-zone concerned.

The nominal dimensions resulting from application of the formulae in the table should be rounded to the nearest 0,1 mm, with the dimensions of sub-zones being adjusted to ensure that the correct zone total results. The resulting values may be varied by ± 1 mm for individual sub-zones and by ± 2 mm for zones and combinations of zones.

EXAMPLE 3 In one of the examples given above, zone C was 15,5 mm high and 83 mm wide. Sub-zones C1, C2, C3 and C4 thus have nominal widths of 37,35 mm, 18,675 mm, 18,675 mm and 8,3 mm. Rounding to 0,1 mm results in 37,4 mm, 18,7 mm, 18,7 mm and 8,3 mm. But these add to 83,1 mm rather than the required 83 mm. So the width of C1 should be adjusted to 37,3 mm. The actual sub-zones may be 37,3 ± 1,0 mm; 18,7 ± 1,0 mm; 18,7 ± 1,0 mm and 8,3 ± 1,0 mm as long as the total is 83 ± 2 mm.

Table 1 Zone definitions

Zone	Height (mm)	Width (mm)	Borders	Data title (English)	Data title (French)
A	**0,5 h**	**0,5 h**	L **B R**		
A1	0,07 h	0,5 h	L **R**		
A2	0,09 h	0,5 h	L **R**	[From]	[De]
A3	0,09 h	0,5 h	L B **R**		
A4	0,09 h	0,5 h	T L B **R**	Mail No	Dépêche
A5	0,07 h	0,5 h	T L B **R**	Date	Date
A6	0,09 h	0,25 h	T L **B** R	Receptacle	Récipient
A7	0,09 h	0,25 h	T L **B R**	Items	Pièces

Zone	Height (mm)	Width (mm)	Borders	Data title (English)	Data title (French)
B	**0,5 h**	**0,5h**	**T** L **R**		
B1	0,07 h	0,5 h	**T** L B **R**	[Exempt][10]	[Exempt]
B2	0,09 h	0,25 h	T L B R	Gross Kg	Kg brut
B3	0,09 h	0,25 h	T L B **R**	Net Kg	Kg net
B4	0,09 h	0,5 h	T L B **R**	Seal No	Scellé
B5	0,07 h	0,5 h	T L B **R**	Producer	Producteur
B6	0,16 h	0,5 h	T L B **R**	…	…
C	**0,25 h**	**x = w - 0,5 h**	**L** B		
C1	0,07 h	0,45 x	**L** B		
C2	0,16 h	0,225 x	B		
C3	0,07 h	0,225 x	B		
C4	0,09 h	0,45 x	T **L**		
C5	0,09 h	0,225 x	T		
C6	0,16 h	0,1 x	B		
C7	0,09 h	x	T **L** B	Mailstream	Flux
D	**0,25 h**	**x = w - 0,5 h**	**T L B**	[To]	[Pour]
E	**0,25 h**	**x = w - 0,5 h**	**T L** B		
E1	0,22 h	**x = w - 0,5 h**	**T L**		
E2	0,03 h	**x = w - 0,5 h**	**L** B		
F	**0,25 h**	**x = w - 0,5 h**	T **L**		
F1	0,25 h	0,5 x	T **L** R	Via	Via
F2	0,09 h	0,5 x	T L B	Conveyance[11]	Transport
F3	0,16 h	0,5 x	T L	Offload	Débarquement

English or French data titles may be used alone, or together with an equivalent text in another language, preferably that of the recipient.[12] Subject to footnote 10, data titles should be printed along the top or in multiple lines at the left of the relevant zone or sub-zone, preferably using a 6 or 7 point sans-serif font such as Helvetica or Arial. No data title should be printed in (sub-)zones for which the corresponding table entry is left blank. Square brackets [and] around an entry indicate that it is optional: users of the standard may choose whether to use the value enclosed in brackets, or to omit the data title. Dots … indicate that the data title may be freely determined by the originator.

NOTE 8 Use of a sans-serif font, such as Arial or Helvetica, for data titles is not required, but is recommended because it helps to distinguish them from real data, for which a font with serifs is recommended.

7.2 Alternative layout in portrait mode

Provided that a bar code is present, it is also admissible to layout and print the entire label in portrait mode, with the lines of printing being parallel to the short edge of the label. In this case, the layout should be as shown in Figure 3, with nominal zone dimensions and borders being as specified in Table 2. The borders between sub-zones within each zone remain as specified in Table 1.

NOTE 1 Portrait mode layout may not be used if the label does not contain a bar code.

10 Not optional if exempt status is indicated by a check box. In this case, which is not recommended for use on computer printed labels, the data title should be vertically centred and left justified in the zone, and printed in 10 or 12 point font with the check box to the right.

11 On labels used in the case of air transport, Flight (English) or Vol (French) may be used instead of Conveyance or Transport; Disembark (English) may be used instead of Offload on labels used for maritime transport.

12 Many posts currently print data titles in the language of the sender. This is not appropriate unless it happens also to be (one of) the recipient's languages. Other languages may be used subject to bilateral agreement.

Table 2 Zone definitions for portrait mode layout

Zone	Height (mm)	Width (mm)	Borders
C	**0,25 h**	**x = h**	L **B**
A	**0,5 h**	**0,5 h**	**T** L **B R**
B	**0,5 h**	**0,5h**	**T L B**
D	**0,25 h**	**x = h**	**T** L **B**
E	**0,25 h**	**x = h**	**T** L B
F	**0,25 h**	**x = h**	T L

NOTE 2 The dimension h in the table is still the smaller of the two dimensions of the effective printing area, i.e. nominally 84 mm. In this case, the width of zones C, D, E and F is limited to the value of h. The sum of the heights of the zones is 1,5 h. This means that if the aspect ratio w/h is greater than 1,5, the excess area will not be used.

For portrait mode labels, the minimum permitted dimensions of the printing area are 78 mm by 112 mm, rather than 68 mm by 97 mm as specified in 6.1.

NOTE 3 This results from the fact that, with a narrow element dimension of 0,25 mm, the bar code is 72 mm long. Adding the quiet zone results in the value of 78 mm. Similarly, the length of the printing area needs to be at least 1,5 x 72 + 4 = 112 mm.

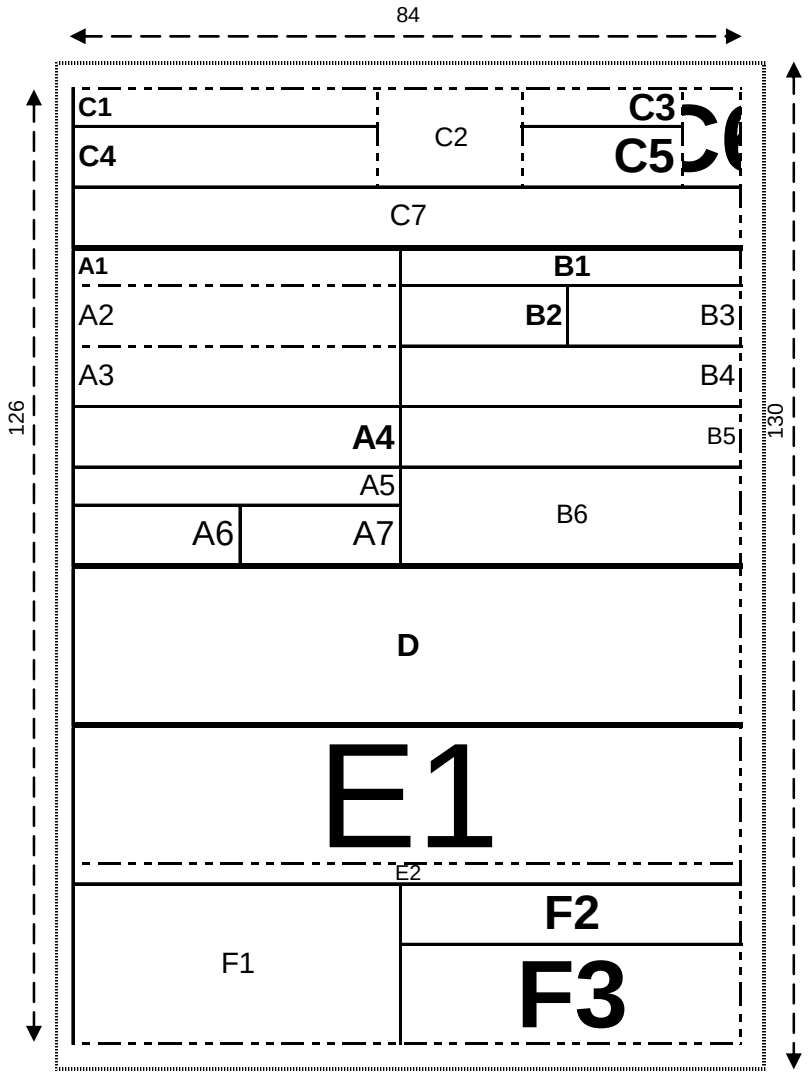


Figure 3 Portrait mode printing area layout for CN 35, CN 36, CP 84 and CP 85

7.3 Choice of label type and layout

7.3.1 Label type identity

Label type identity (5.7) shall be selected in accordance with the following table:

Table 3 Choice of label type identity

Mail class	Mail category and means of transport	Label type identity
U (letters) or E (EMS)	A, transported by air	CN35
U (letters) or E (EMS)	A, transported by surface	CN34
U (letters)[13]	B (always air transport)	CN36
U (letters)	C (always surface transport)	CN34
U (letters)	D (always surface transport)	CN34
C (parcels)	A, transported by air	CP84
C (parcels)	A, transported by surface	CP83
C (parcels)	B (always air transport)	CP85
C (parcels)	C (always surface transport)	CP83
C (parcels)	D (always surface transport)	CP83
T (empty receptacles)	B (always air transport)	CN36
T (empty receptacles)	C (always surface transport)	CN34

7.3.2 Colour coding and the use of borders

This clause defines colour coding requirements based on RL 184. Its application may be dispended with, in favour of the use of plain white labels with an optional white border and no attached 30 mm by 50 mm coloured tag unless the despatch recipient raises objections to the absence of colour coding.

NOTE The Letter Post and Parcel Post Regulations specify a requirement for colour coding on receptacle labels used in interchange but allow one colour (red) to be dispensed with for security reasons. However, a number of IMPC operators dispensed with use of colour coding several years ago without objections being raised by despatch recipients and without apparent impact on quality of service. This standard therefore generalises the possibility of dispensing with the use of colour codes provided that no objections are raised by despatch recipients. Any IMPC operator making use of the dispensation should nevertheless retain the capability to selectively re-introduce colour coding on despatches addressed to recipient organisations that raise objections to the use of plain white labels. Though proposals are being put forward to generalise the dispensation in the regulations, it should be noted that the dispensation in the version of RL 184 which was current at the time of drafting of this specification applied only to suppression of the use of red, only for reasons of security and only subject to adoption of a mutually agreed alternative.

CP83, CP84 and CP85 labels should be white with a yellow ochre border and no tag. The colour coding for labels with label type identity CN34, CN35 and CN36 is indicated in Table 4. Each row of the table defines:

- the colour of the 10 mm upper and lower borders and whether these are required or optional;
- the colour of a 30 mm by 50 mm attached tab, if one is required;
- the required value for *special content descriptor* (see 5.25).

The applicable row of the table is determined by selecting, from the first column, the first condition which applies to the content of the receptacle.

13 In principle, EMS items should always have mail category A; empty receptacles should not have mail category A or D.

As indicated in the table, white borders may be omitted, yielding a smaller label. Where border and tab are indicated as having the same colour, either or both may be used.

EXAMPLE A receptacle containing exclusively ordinary bulk items together with the letter bill should have violet borders and vermilion red tab. A receptacle whose contents include any items that are not classed as ordinary bulk items (rows 1 and 2 do not apply), no direct access items (not row 3), contains priority items (not rows 4 or 5), but contains one or more registered or insured items (row 6 applies) should, subject to footnote 14, have a vermilion red border with, optionally, a vermilion red tab.

Table 4 Colour coding of CN 34, CN 35 and CN 36 labels

Row No	Receptacle content	Border colour	Tab colour	Special content descriptor
1	exclusively ordinary bulk items accompanied by the letter bill	violet	vermilion red	Bulk mail
2	exclusively ordinary bulk items (without the letter bill)	violet	violet	Bulk mail
3	direct access items	white and violet striped	white and violet striped	Accès Direct
4	exclusively non priority and/or AO items, some or all being registered or insured	vermilion red[14]	vermilion red	Non-priority
5	exclusively non priority and/or AO items, accompanied by the letter bill			Non-priority
6	includes registered and/or insured items	vermilion red	vermilion red	
b7	includes the letter bill			
8	priority items	white (optional)	no tab	
9	letters and or postcards			
10	mixed items (letters, postcards, newspapers, and periodicals and other items)			
11	Newspapers, not being returned to sender, posted in bulk by publishers or their agents and dispatched by surface only			Journaux
12	periodicals other than those referred to above	light blue	light blue	Ecrits périodiques
13	ordinary non-priority items, printed papers, literature for the blind and/or small packets			Petits paquets
14	ordinary non-priority items, printed papers, literature for the blind and/or small packets			Non-priority
15	empty receptacles being returned to origin	green	green	Empty bags
16	all other cases	white (optional)	no tab	

14 Vermilion red may be dispensed with in favour, for security reasons, of any bilaterally agreed alternative method (which may include the absence of any special indication if so agreed).

8 Label content

The information content, font size, alignment and weight for each zone and sub-zone defined in the layouts in clause 7 is specified in Table 5. This indicates, for each zone:

– the information content, with reference back to the relevant definition in clause 5;

– whether supply of the information is mandatory (indicated by M) or conditional (indicated by C). Mandatory information is always required. Conditional information should be supplied if it is relevant and available at the time of label production;

EXAMPLE Conveyance reference might not be known at the time of label production. If it is known, it should be provided; if it is not yet known, it may be omitted.

NOTE 1 In certain cases (e.g. exempt items indicator), the data value can be blanks. In such cases, it is not possible to tell, from a printed label, whether the data was supplied, but blank, or was not supplied. Absence of printing is nevertheless taken as implying that the value was blanks.

– the recommended font size, expressed as the height in mm of capital letters[15] (except for the bar code, for which the recommended bar code height is indicated);

NOTE 2 The given font size is a recommended one, not an absolute requirement. The use of a font with serifs, such as Bookman, Century or Times Roman, is recommended because many sans-serif fonts have poor distinction between letters such as capital I, lower case l and numeric 1. However, the standard does not impose the use of particular fonts and the choice of font can influence the number of characters that can be printed within the boundaries of each zone. This is particularly the case if a proportionally spaced font is used. If necessary, the font size should be adjusted in order to accommodate the information within the space available. However, the font size chosen should, subject to constraints imposed by the capabilities of the printer used, be as close as possible to the recommended one.

– the recommended alignment within the zone: L for left, C for centred, J for justified and R for right;

NOTE 3 The given alignment is a recommended one, not a requirement: the alignment of text within its (sub-)zone is not considered as critical .

– the recommended font weight: either B for **bold** or N for normal font.

NOTE 4 The given font weight is a recommended one, not a requirement. Normal font weight may be used throughout if the printer is not capable of generating bold.

Table 5 Zone content

Zone	Information content	M/C	Font size	Alignment	Font Weight
A1	product (5.20)	M[16]	2,3	L	B
A2	origin-location (5.18)	M	2,7	L	N
A3	originator (5.17)	M	2,7	L	N
A4	mail no (5.10)	M	3,2	R	B
A5	bill date (5.1)	M	2,7	R	N
A6	receptacle number (5.22)	M	3,2	R	N
A7	item count (5.6)	C[17]	3,2	R	N

15 Often referred to as the cap height. This is used, rather than the font size in points because different fonts with the same size in points can differ considerably in the real height of printing. Since printing can be in a mix of upper and lower case, the x-height, the height of a lower case x, is also of importance and should be at least 2/3 and not more than 3/4 of the cap height.

16 This can be blank in the case of letter mail, even though the field is mandatory.

Zone	Information content	M/C	Font size	Alignment	Font Weight
B1	exempt indicator (5.4)	M[18]	2,7	C	B
B2	gross weight (5.5)	M	2,7	R	B
B3	net weight (5.14)	C	2,7	R	N
B4[19]	seal number (5.24)	C	2,7	R	N
B5	production data (5.19)	C[20]	2,3	R	N
B6	optional data (5.16) – may be freely used, including for 2d-symbols – conditionality, font size and weight determined by the despatch originator, possibly in accordance with bilateral agreement with the recipient				
C1	transport priority indication (5.28)	M[21]	2,5	L	B
C2	special services agreement indicator (5.26)	C[22]	n.a.	C	n.a.
C3	label type identity (5.7)	M	3,5	R	B
C4	special content descriptor (5.25)	M[23]	2,7	L	B
C5	mail sub-class and format (5.13)	M	4,5	R	B
C6	last bag indicator (5.8)	M[24]	9,0	C	B
C7	mailstream (5.11)	C	2,7	C	N
D	destination-location[25] (5.3) and recipient (5.23)	M	5,0 / 3,0[26]	C	B
E1	receptacle content identifier (5.21), expressed as a Code 128 bar code *NOTE 5 The bar code should be supplied if the label creator has a Code 128 bar code printing capability.*	C	See clause 9		
E2	human readable representation of the content of sub-zone E1	C[27]	2,0	C	N

17 Mandatory in case of receptacles containing registered or insured items, or if special content descriptor *Bulk mail* applies.

18 Blank if the receptacle does not exclusively contain exempt items.

19 Sub-zones B5 and B6, or B4, B5 and B6, may (see 0) be integrated so as to provide more space for two-dimensional symbol printing. In this case, the data normally printed in the zone should be represented in the two-dimensional symbol printed in its place.

20 Required if the label is printed by a party other than the operator of the origin IMPC; optional otherwise.

21 Can be blank for mail category C.

22 May be required by a multilateral agreement, if the content of the receptacle is to be treated as falling under that agreement.

23 Though special content descriptor is indicated as being mandatory, it may be suppressed (i.e. not printed on the label) in cases in which it is deemed as giving rise to a security risk, subject to this being agreed on a bilateral basis or permitted by the letter or parcel post regulations.

24 Blank if the receptacle is not the last of the despatch.

25 Destination location should be printed in 22 point font; recipient in 12 point. If the destination location has a length of 18 characters or less, it should be printed on one line. If it is longer, it should be split across two lines. The split can be at any point in the text string. It is **not** permissible to abbreviate, truncate or append characters to the IMPC name in any way. Recipient should be printed on a separate line.

26 The larger size applied to the IMPC name, the smaller one to the recipient name.

27 Mandatory if the receptacle content identifier is bar coded in sub-zone E1.

Zone	Information content	M/C	Font size	Alignment	Font Weight
F1	transit information[28] (5.26)	C	2,7	C	N
F2	conveyance reference (5.2)	C	4,5[29]	C	B
F3	offload location (5.15)	M	9,0	C	B

Information should preferably be in the mix of upper and lower case characters applicable to the source data. It is permissible, but not recommended, to convert lower case characters to upper case. Care should be taken to ensure that the label content is easily legible and that sufficient ink is used to provide for good contrast.

NOTE 6 Certain data, such as mail sub-class and format, last bag indicator and IATA airport codes [12], are intrinsically represented using upper case characters; other data, such as origin location, originator and names of ships and ports, can be in a mix of upper and lower case. Where the source data is in lower case, use of this on the label is recommended as it improves readability. However, conversion to upper case is permitted, for example in the case of use of label printers that have no lower case printing capability.

The information on the label should preferably be printed or written by the postal handling organisation responsible for make up of the despatch of which the receptacle forms a part. Desirably, all information on the label should be printed or entered at the same time. It is, however, permissible to add or modify the transport information in zone F by means of a stick-on (sub-)label containing only the (revised) transport information.

Carriers, and in the case of closed transit, other intermediate organisations which handle a receptacle en route to the despatch recipient may, if the original label contains no bar code, add a bar coded identifier printed on a stick-on (sub-)label applied in zone E. They may also modify transport information as provided for above but shall not enter additional information on the original label. If this is missing or unreadable a new / replacement label may be produced as specified in clause 11. The original label, if present, should preferably not be removed, but should be clearly marked by a black or red cross, running from corner to corner of the printable area, to indicate that it should not be used.

9 Use of bar codes

9.1 Bar coding of the receptacle content identifier

It is strongly recommended, but not required, that the S9 identifier for the receptacle and its content be bar coded on the receptacle label. Alternative forms of aggregate identifier (see M34a [1]) may be used subject to (a) bilateral agreement and (b) use of an appropriate ISO/IEC 15418 [9] data or applications identifier; data identifiers are preferred.

NOTE 1 The bar coding of a unique identifier for the aggregate contained in the receptacle enables the identifier value to be captured using automated or hand held bar code readers, allowing subsequent processing to be based on information, about the receptacle and its contents, that has been supplied electronically. Identifiers conforming to UPU standard S9 are widely supported and should be used unless the aggregate creator, recipient and all transit posts and postal handling organisations that might need to capture the identifier value have agreed otherwise.

Except as provided below, the identifier shall be encoded, using Code 128 symbology, in accordance with the specifications in UPU standard S46. S9 compliant identifiers shall be encoded either:

– without data identifier, or

– in licence plate compliant form (i.e. with prefix J9A), using data identifier 2J.

---

28 The transport of a receptacle (as part of a consignment) can involve multiple transport legs. Up to 5 transport legs are allowed in M35, implying that there could be up to 4 instances of transit information. Complete routing information should be given if this is known. If multiple instances are specified, they should be given in time sequence order. Each instance should be on a separate line.

29 A smaller font size may be used on CN 34 and CP 83. This might be necessary to accommodate the printing of conveyance references and offload locations which are not coded. In this case, it is also permissible to use multiple lines.

NOTE 2 S46 recommends a Code 128 X-dimension in the range 0,25 mm to 0,33 mm, with values down to 0,20 mm being tolerated but not recommended. The size of the label limits the X-dimension, since the bar code is required to fit, with required clear zone, in label zone E. The length of a Code 128 bar code is a function of the narrow element dimension and the number, type and sequence of characters encoded in it. In the case of S9 identifiers, which contain 15 alphabetic characters followed by 14 numeric digits, the overall bar code length is 288 times the narrow element dimension if the symbol is encoded optimally. In addition, the symbology requires a clear zone of 10 times the narrow element dimension at either end of the bar code. The space required is thus:

X (mm)	*0,20*	*0,21*	*0,22*	*0,23*	*0,24*	*0,25*	*0,26*	*0,27*	*0,28*	*0,29*	*0,30*	*0,31*	*0,32*	*0,33*
Bar code (mm)	*57,6*	*60,5*	*63,4*	*66,2*	*69,1*	*72,0*	*74,9*	*77,8*	*80,6*	*83,5*	*84,4*	*89,3*	*92,2*	*95,0*
Total (mm)	*61,6*	*64,7*	*67,8*	*70,8*	*73,9*	*77,0*	*80,1*	*83,2*	*86,2*	*89,3*	*92,4*	*95,5*	*98,6*	*101,6*
Min height (mm)	*12,5*	*12,5*	*12,5*	*12,5*	*12,5*	*12,5*	*12,5*	*12,5*	*12,5*	*12,5*	*13,0*	*13,4*	*13,8*	*14,3*

EXAMPLE If the label printing area is 90 mm by 130 mm as recommended, zone E is 84 mm wide and the maximum X-dimension is 0,273 mm. This can be increased to 0,279 mm if the clear zone at the right end of the bar code is allowed to extend into the clear zone defined around the edges of the printing area. On labels printed in portrait mode, where the clear zone at both ends of the bar code can overlap with the clear zone defined around the printing area, a maximum X-dimension of 0,292 mm can be accommodated. Of course, the limitations will differ if the actual printing area deviates from the recommended size, as allowed for in 6.1.

NOTE 3 S46 specifies a minimum bar code height of 12,5 mm. Bar codes less than 12,5 mm in height are not permitted, even on the smallest labels, in which the height of zone E1 can be as little as 13,6 mm. The maximum bar code height is limited by the dimensions of the zone in which it is printed.

If the direction of label feeding is parallel to the bars of the bar code, it is recommended that a 2 mm thick black line be printed along the top of the bars in place of the normal quiet zone.

NOTE 4 Though modern printers are generally fitted with self checking devices that disable the printer should a head failure occur, there is a risk that head failure might affect bar width if the print head is aligned across the bar code (i.e. if the bars emerge from the printer vertically). Such failures can be visually detected if a thick enough line is printed across the top of the bar code, since a print head malfunction or of print failure due to debris in the print head would result in a visible break in this line. Of course, the line should be printed at the same time as the bar code itself: otherwise the diagnostic effect would be lost. No such line is needed if the label transport direction is such that bars emerge from the printer one at a time since, in this case, a print head malfunction would be visible as a break running through the bar code itself.

As required by S46, the bar coded identifier shall be accompanied by a human readable interpretation of the bar coded data printed in accordance with UPU standard S45. This should be printed parallel to and beneath the bar code, separated from it by a clear space of between 1 mm and 2 mm. It is recommended, but not required, that the human readable interpretation be followed by a two-character error detection code calculated and printed in accordance with UPU standard S40 [7].

NOTE 5 This allows manual data entry to be used as a last resort in case the bar code is unreadable. The use of an S40 error detection code supports the detection of (most) keying and character interpretation errors.

9.2 Other bar codes

It is permissible to use sub-zone B6 for the printing of a bar code, containing data other than the receptacle content identifier. Any such bar code should make use of Code 128 symbology and should be printed in accordance with the specifications in UPU standard S46.

10 Use of two-dimensional symbols

10.1 General

Sub-zone B6 may be used for the encoding of data in the form of a two-dimensional symbol which complies with UPU standard S28. Two-dimensional symbols printed on receptacle labels should make use of Data Matrix symbology with ISO/IEC 15434 [10] format 06.

NOTE 1 Sub-zone B6 can accommodate a Data Matrix symbol of size 16 by 48 elements (8 mm by 24 mm) or up to three symbols of size 24 by 24 elements (12 mm by 12 mm). Format 06 is used because this is supported by Data Matrix macro 06, minimising the ISO/IEC 15434 overhead. Using C40 encoding, a 16 by 48 element symbol would support up to 67 characters of encoded data; two 24 by 24 symbols would support up to 132 characters. PDF417 is less space efficient in this context

because, at the minimum recommended X-dimension of 0,38 mm, the space available allows for only two data codewords per symbol row. Accordingly, use of PDF417 on receptacle labels is not supported.

Use of two-dimensional symbols in no way reduces the desirability of encoding the receptacle content identifier in the form of a Code 128 bar code, as specified in 9.1.

NOTE 2 All parties involved in handling a receptacle are likely to need to capture the receptacle content identifier for tracking purposes. However, it could be many years before all have the capability to read two-dimensional symbols. Until this is the case, the identifier should be encoded as a Code 128 bar code, even if it is also encoded in a two-dimensional symbol.

10.2 Alternative layout for extended use of 2-d symbols

Label producers wishing to encode data using larger two-dimensional symbols may deviate from the layouts defined in 7.1 and 7.2 by combining sub-zones B5 and B6, or B4, B5 and B6 into a single sub-zone with (nominal) dimensions 19,3 mm by 42,0 mm, or 26,9 mm by 42,0 mm, that may be used for such encoding.

NOTE Integrating sub-zones B5 and B6 allows encoding of two 32 by 32 element Data Matrix symbols, supporting 174 characters of data; integrating B4, B5 and B6 allows encoding of two 40 by 40 element symbols (with space for 228 characters), three 16 by 48 symbols (201 characters) or a 48 by 48 symbol (255 characters).

In this case, the integrated sub-zone has no internal borders and no data title. The information which would normally be printed in human readable form in sub-zone B5 and, if it is used for the 2-d symbol, B4 (see clause 8) should be encoded within the two-dimensional symbol(s).

10.3 Use of data identifiers

Two-dimensional symbols printed on receptacle labels shall use ISO/IEC 15434 [10] format 06, which requires data to be introduced by ISO/IEC 15418 [9] data identifiers. Where the symbol is used to encode data satisfying the definitions in clause 5, encoding should be as specified in the following table.

NOTE 1 Though UPU standard S28 also supports the use of ISO/IEC 15434 formats 02 (EDIFACT interchanges) and 04 (EDIFACT segments), these formats are not supported for use on receptacle labels.

Information content	**Recommended encoding**
bill date (5.1)	Encode in accordance with the S25 specification of Date/time
conveyance reference (5.2)	Not supported. The 2d encoding of conveyance reference, which can become outdated in case re-routing or rescheduling becomes necessary, is not recommended.
destination-location (5.3)	Not supported[30].
exempt indicator (5.4)	<<to be defined>>
gross weight (5.5)	Not supported.
item count (5.6)	Encode as a numeric value preceded by data identifier Q
label type identity (5.7)	Not supported
last bag indicator (5.8)	Not supported.
mail format (5.9)	Not supported[31]
mail no (5.10)	Not supported.

[30] Origin-location, destination-location, mail category, mail number, receptacle number, aggregate.mailstream-segregation-code and gross weight are components of S9 receptacle content identifiers and will normally be included within a Code 128 bar coded representation of this. The S9 identifier may also be included in the 2d symbol for convenience. 2d encoding of the individual components is not supported by this version of the standard, but could be added in a future version.

[31] 'Last bag' and mail format can normally be represented by use of an appropriate aggregate mailstream segregation code value; its separate encoding is not supported by this version of the standard, but could be added in a future version.

Information content	Recommended encoding
mail sub-class (5.12)	Supported only as part of a compound construct
mail sub-class and format (5.13)	Not supported as such – see the individual components: mail sub-class and mail format.
mailstream (5.11)	Not supported.
net weight (5.14)	Encode as a numeric value in hectograms (units of 0,1 Kg), preceded by data identifier 2Q
offload location (5.15)	Encode, in accordance with the specifications in S25, as a Location code alone, or with Location category 29. *NOTE 2 For a normal IATA airport code [12] or UN/LOCODE, this corresponds to the use of data identifier 17U followed by the IATA or UN/LOCODE or of data identifier 18U followed by the value 29, followed by the IATA or UN/LOCODE. Full text location names cannot be encoded in this way. They should be replaced by the corresponding IATA or UN/LOCODE if one exists. Another form of S25-compliant location code (e.g. a postcode or a privately allocated code) can be used if necessary.* *NOTE 3 Location category 29 (transit location) is used, rather than 24 (destination) because the category destination is reserved for possible future explicit representation of the destination location. In the event of future support for the encoding, in a 2d symbol, of other location or transit information, it could be necessary to allocate an explicit location category for the offload location, and/or to impose rules about the order in which location data are encoded.*
optional data (5.16)	Encode with a data identifier, other than one specified or implied elsewhere in this table, selected in function of the nature of the data to be encoded.
originator (5.17)	Not supported[32]
origin-location (5.18)	Not supported.
product (5.20)	Not supported. Product can normally be inferred from mail sub-class and its separate encoding Is not supported by this version of the standard.
production data (5.19)	Encode with data identifier 6V.
receptacle content identifier (5.21)	If present[33], this shall be the first data construct in the leftmost 2d symbol. Data identifier 2J shall be used in combination with an ISO/IEC 15459 (licence plate) [11] compliant form of identifier. *NOTE 4 S9 identifiers can be rendered licence plate compliant by prefixing them with J9A.* *NOTE 5 In the case of identifiers constructed in accordance with 11.3.2, the data identifier is already included. It is not necessary to prefix a second 2J.*

32 Since the identity of the originator and recipient can be derived by look up from the origin and destination IMPC location codes, which are normally included within the receptacle content identifier, their encoding as explicit data constructs has little added value and is not supported by this version of the standard. Support, based on the use of S25 Party role and Party identifier, could be added in a future version.

33 The receptacle content identifier may be encoded in the 2d symbol, but if the recommendation to encode it as a Code 128 bar code is followed, the benefit of this is likely to be limited to the convenience of avoiding the need to scan the bar code.

Information content	Recommended encoding
receptacle number (5.22)	Not supported.
recipient (5.23)	Not supported.
seal number (5.24)	Encode with data identifier 13S
special content descriptor (5.25)	<<to be defined>>
special services agreement indicator (5.26)	If supported, as specified in the relevant special services agreement.
transit information (5.26)	Not supported. The 2d encoding of transit information, which can become outdated in case re-routing or rescheduling becomes necessary, is not recommended.
transport priority indication (5.28)	Not supported; can be inferred from mail category, which can be encoded as part of an S9 receptacle content identifier.

11 Production of labels by parties other than the originator

11.1 Introduction

In normal circumstances, receptacle labels are produced by the originator of the despatch which contains them, or by an agent acting under the responsibility of the originator.

NOTE Some posts contract third parties to label receptacles on their behalf. As long as such parties act in accordance with the instructions and under the responsibility of the despatch originator, the labels produced are regarded, for the purposes of this standard, as having been produced by the originator. This clause does not apply to them.

Circumstances can arise, however, in which it is necessary or desirable for a receptacle label to be modified or produced, and attached to a receptacle, by a third party, such as a carrier or a post involved in closed transit. In such case, the provisions of this clause shall be applied. Four cases are covered:

– Reproduction or replacement of a label when all data required for reconstruction of an S9-compliant identifier are known;

– Supply of missing labels, or reproduction or replacement of a label in other cases;

– Modification of an existing label by addition or replacement of a bar coded identifier;

– Modification of an existing label by replacement or update of transport data.

EXAMPLE To support handling, carriers might need to replace damaged or missing labels, and/or to add a bar code to labels that do not carry one.

11.2 Label production when all data required for identification are known

11.2.1 Applicability

Sub-clause 11.2 may be applied if the label to be reproduced or replaced contains a readable S9-compliant bar coded identifier and/or its human readable print out, or if all of the following label data are available:

NOTE Use of the term 'may' implies that application of the clause is permitted, but not required: sub-clause 11.3 may be applied instead.

– origin-location (5.18);

– destination-location (5.3);

– transport priority indication (5.28);

– mail sub-class and format (5.13);

– mail no (5.10);

– receptacle number (5.22).

11.2.2 Construction of the bar coded identifier

If the label to be reproduced or replaced contains a readable S9-compliant bar coded identifier, or its human readable equivalent, an S9-compliant identifier shall be constructed from this by concatenating:

– the first 23 characters of the existing identifier;

– the special[34] aggregate mailstream segregation code value 95;

– the last 4 characters of the existing identifier.

Where the human readable equivalent of the original bar code is used in the above procedure, the extracted data should preferably be checked, either by verification of the associated S40 [7] error detection code, if present, or by verifying it against the data elements listed in 11.2.1.

If the old label had no bar code, or if the bar code and its human readable data cannot be reliably read, an S9-compliant identifier shall be constructed by concatenating the following components[35]:

– the IMPC code corresponding to the origin-location (5.18), obtained by look-up in UPU code list 108;

– the IMPC code corresponding to the destination-location (5.3), obtained by look-up in UPU code list 108;

– mail category, derived from transport priority indication (5.28) by look-up in the following table:

transport priority indication	mail category
Airmail	A
Par avion	A
S.A.L. …	B
Surface	C
Priority	D
- (blank)	C

– mail sub-class, being the first two characters of mail sub-class and format (5.13);

NOTE 1 This is the mail sub-class of the aggregate, rather than that of the despatch, so the identifier which results might differ from the one which would have been assigned by the despatch originator. It is theoretically possible that this difference could lead to duplication of the identifier. However, this would occur only if identifiers were constructed

34 This is used to signify that the resulting identifier and label are reproductions, the content of which might be less reliable than the content of an original label produced by the aggregate creator or its agent. The resulting identifier value will not be identical with the original, but, since aggregate mailstream segregation code does not contribute to S9 identifier uniqueness, will nevertheless be unique. For the purposes of look-up of electronically supplied data, only the first 23 characters of the identifier value should be used.

35 Except for the aggregate mailstream segregation code, Individual components can be replaced by corresponding data extracted from the human readable representation of the original bar code (if any), provided that the data can be reliably read. For example, if the first 12 characters of the human readable representation of the original bar code are available, but not the rest, these can be used in place of look-up of the origin and destination IMPC codes, with the other data then being looked up in accordance with the component-based specification.

for two aggregates with the same aggregate sub-class, drawn from two despatches with different despatch sub-class, whose original identifiers differed only in the mail sub-class component of the identifier. This probability of this occurring in practice is judged to be negligible.

- despatch year, being the last digit of the year in the bill date (5.1) or, if this is not supplied, the last digit of the current year;[36]
- mail no (5.10), expressed as a four digit value with leading zeros as necessary;
- receptacle number (5.22), expressed as a three digit value with leading zeros as necessary;
- the special aggregate mailstream segregation code value 95;
- receptacle weight in hectograms, expressed as a 4 digit value with leading zeros as necessary, being either derived form the gross weight (5.5) on the label if this is readable, or by measurement if not.

NOTE 2 Measurement might result in a value which differs from that measured by the despatch originator, so the identifier which results might differ from the one which would have been assigned by the despatch originator. However, since receptacle weight does not contribute to identifier uniqueness, the difference should not result in non-uniqueness of the assigned value. For the purposes of look-up of electronically supplied data, only the first 23 characters of the identifier value should be used.

11.2.3 Production data

Production data (5.19) shall not be taken from the original label, but shall be set to (one of) the S35 party identifiers of the party which produces the label, optionally followed by a dash (-) and that party's identifier for the printer used and/or a dot (.) and that party's identifier for the weigh scale used (if any) to measure the receptacle weight. Any party identifier, printer identifier and/or weigh scale identifier found on the original label shall not be used.

11.2.4 Production of the new label; invalidation of the old one(s)

The label should, as far as possible, be produced in accordance with clauses 5 to 10 above and shall contain:

- the bar coded and human readable representations of the identifier constructed in accordance with 11.2.2;
- production data as specified in 11.2.3;
- conveyance reference (5.2), offload location (5.15) and transit information (5.27) being the most up-to-date and accurate information available to the label producer, with any readable values taken from the original label being used in the absence of more up-to-date data;
- mailstream (5.11) being the value "REPLACEMENT LABEL";
- other label data, as specified in clauses 5 and 8, to the extent that the label producer is reasonably certain of their accuracy, either because it was possible to extract them from the original label or to reproduce them from other information available to the label producer.

NOTE Other data should as far as possible be derived from the original label, either by direct extraction or by look-up of codes from the identifier. For example, IMPC names and operator names can be derived from IMPC codes by look-up in UPU code list 108. Gross weight should preferably be taken from the original label. If this did not provide the weight, of if the weight could not be read, gross weight may either be measured by the label producer or left blank.

If possible, the new label should be stapled to the original one (and any earlier replacements) in such a way as to obscure the face of these from casual glance, without making it impossible for their content to be consulted. If this

---

36 Use of the current year could be inappropriate early in January, when the real bill date might have been in December of the previous year, and/or (though this is less likely) close to the end of December, when the real bill date might be in January of the next year. Discretion is allowed in such cases, particularly if the mail number is low at the end of December, or high early in January. Identifier duplication could occur if the wrong assumption is taken, but this has low probability.

is not possible, the original (and any earlier replacements) should be marked as invalid by means of a cross running from top left to bottom right corner and bottom left to top right corner. This cross should be clear enough to make it obvious that the old label(s) are not intended to be used, but should preferably not prevent reading of the original content.

The new label should not be affixed to or printed on the back of the original one.

11.3 Label production when not all identification data are known

11.3.1 Applicability

This sub-clause shall be applied in the case of label production when one or more of the identifier components listed in 11.2 is not known or is uncertain. It may also be applied, instead of sub-clause 11.2, when all required data are available.

NOTE If all data required for identifier construction are known, application of 11.2 is preferred, but not mandatory: this sub-clause may be applied instead. Inter-alia, it is anticipated that this sub-clause will be applied by parties which do not have ready access to the UPU code lists which can be required for application of sub-clause 11.2.

11.3.2 Construction of an identifier

An ISO/IEC 15459 (licence plate) [11] compliant identifier for the receptacle and its contents shall be constructed by concatenating:

- UPU code list 157-defined prefix value J9C;
- the IATA airport code [12] for the location of origin or, if this is not known, the ISO 3166-1 [8] two-alpha code for the country of origin, followed by the digit '9' or, if neither are known, the fixed value 'X99';

  NOTE 1 The purpose of including origin location is to support customs and security requirements. The identified location or country should therefore be the location from which the receptacle was shipped, not (unless this happens to be the same) that in which the label is being produced.

- the full destination IMPC code, if available (see 11.2.2) or, failing that, the first of the following which is known[37]:
  - the UN/LOCODE of the location of destination followed by the digit '9' (e.g. DEHAM9);
  - the UN/LOCODE, or 'X9' followed by the IATA airport code [12] of the offload location followed by the digit '9' (e.g. X9FRA9);
- the label producer's three digit IATA airline code [12] or, if the producer is not an airline or has no such code, (one of) its UPU S31 issuer code(s);[38]

  NOTE 2 Only numeric IATA airline codes are supported. The distinction between the use of IATA and UPU S31 codes can be determined from the 7th character (not counting the data identifier!) of the identifier value: if the 7th character is numeric, it is the first character of an IATA code; if it is alphabetic, it is the first character of a UPU S31 issuer code. The length can also be used as a determinant: identifiers starting with J9C which (without the data identifier) contain 30 characters are airline issued; those with 27 characters are not.

- a fixed length numeric value, assigned by the label producer, which differs from any other value assigned during the same day by the label producer concerned and which has length:
  - eleven digits if the identifier includes (see above) a numeric IATA airline code;

---

37 If neither location of the following locations is known, the receptacle cannot be transported and there is no point in attempting to produce a label. The receptacle should be handed over to a local postal administration so that it can be opened and processed under open transit rules.

38 Organisations other than airlines, which need to produce labels, will need to obtain a UPU S31 issuer code.

NOTE 3 The assignment of these digits is at the discretion of the airline. Eleven digits is allowed for so as to permit airlines that wish to do so to make use of airway bill numbers (airline code plus 8 digits), with three digits being available to permit the numbering of multiple receptacles (up to 1000) being carried to the same destination on the same day, within a single (master) airway bill. Use of airway bill numbers is not required, however, as long as the numbering system used ensures uniqueness of the assigned identifier.

– eight digits if the identifier includes a UPU S31 issuer code

NOTE 4 The Code 128 bar coding of an S31 issuer code, which commences with an alphabetic character, requires more space that the bar coding of a numeric IATA code. Fewer digits are allowed for in this case to ensure that the resulting bar code cannot be longer than a normal S9 receptacle bar code.

NOTE 5 The assignment of these digits is at the discretion of the label producer. If labels are produced in multiple locations, or on different printers, it is recommended that the value comprise some form of location/printer identification, followed by a sequence number.

– the last digit of the year followed by the Julian date (e.g. 5123 for the 123rd day of 2005)

NOTE 6 It can happen that old labels are left on receptacles when they are re-used. The date is included primarily to support detection of this, and selection of the most recent value if multiple labels are present. It also contributes to uniqueness.

NOTE 7 The above results in a value which can be bar coded, with an appropriate data identifier (J), in place of the usual S9 bar code.

11.3.3 Production data

See 11.2.3.

11.3.4 Production of the label; invalidation of the old one(s)

The label should be produced in accordance with 11.2.4, except that:

– the bar coded and human readable representations of the identifier shall consist of the licence plate, constructed in accordance with 11.3.2, prefixed with data identifier value J;

NOTE The above results in a value which can be bar coded in place of the usual S9 bar code. It contains either 31 characters, of which the last 18 are numeric (airline case) or 28 characters of which the last twelve are numeric (non-airline case). Either form will occupy the same space as a normal S9-compliant bar code. The value is distinguishable from a normal receptacle label bar code by virtue of the fact that it commences with JJ9C, which cannot occur as the first four characters of a normal S9 bar coded identifier.

– other label fields for which the label producer lacks reliable information should be left blank.

11.4 Addition or replacement of a bar coded receptacle content identifier on an existing label

Any party called upon to handle a receptacle may add a bar coded receptacle content identifier to the existing receptacle label, if it does not already have one, provided that the label is in good condition and contains readable representations of the data components listed in 11.2.1.

Similarly, any party called upon to handle a receptacle may replace the existing bar code on a label whose original bar code cannot be read, or can only be read with difficulty, provided that the label itself is in good condition and contains readable representations of the data listed in 11.2.1 and/or of the content of the original bar code.

In both cases, the bar coded value shall be determined in accordance with 11.2.2.

NOTE 1 This results in the original aggregate mailstream segregation code being replaced by the value 95, indicating that the bar code was generated by a party other than the aggregate creator. This case can be distinguished from that in which the whole label is replaced by reference to the value of production data (5.19): if only the bar code has been added or replaced, this will either be blank, or will start with an S35 party identifier of the aggregate creator; if the whole label has been replaced, it will start with an S35 party identifier of the label producer.

The resulting identifier value should be bar coded, in accordance with 9.1, on a label with white background which is then affixed, to the original label, in zone E. The stick-on label should preferably have a size which corresponds,

to within ± 2 mm, with the size of zone E on the original label. A smaller label size may be used, however, subject to minimum dimensions of 15 mm by 62 mm. The label should also be large enough to completely cover any original bar code.

NOTE 2 9.1 requires the printing of a human readable representation of the bar code content, preferably protected by means of an S40 [7] error detection code.

NOTE 3 If no label of appropriate size is available, the receptacle label should be reproduced, as detailed in 11.2, rather than being modified as allowed for in this sub-clause.

11.5 Addition or replacement of transport details

Any party called upon to handle a receptacle may add or replace the transport details, given in zone F of the label, by more up-to-date information. Replacement data should be bar coded on a label with white background which is then affixed, to the original label, in zone F. The stick-on label should preferably have a size which corresponds, to within ± 2 mm, with the size of zone F on the original label.

Annex A
(informative)

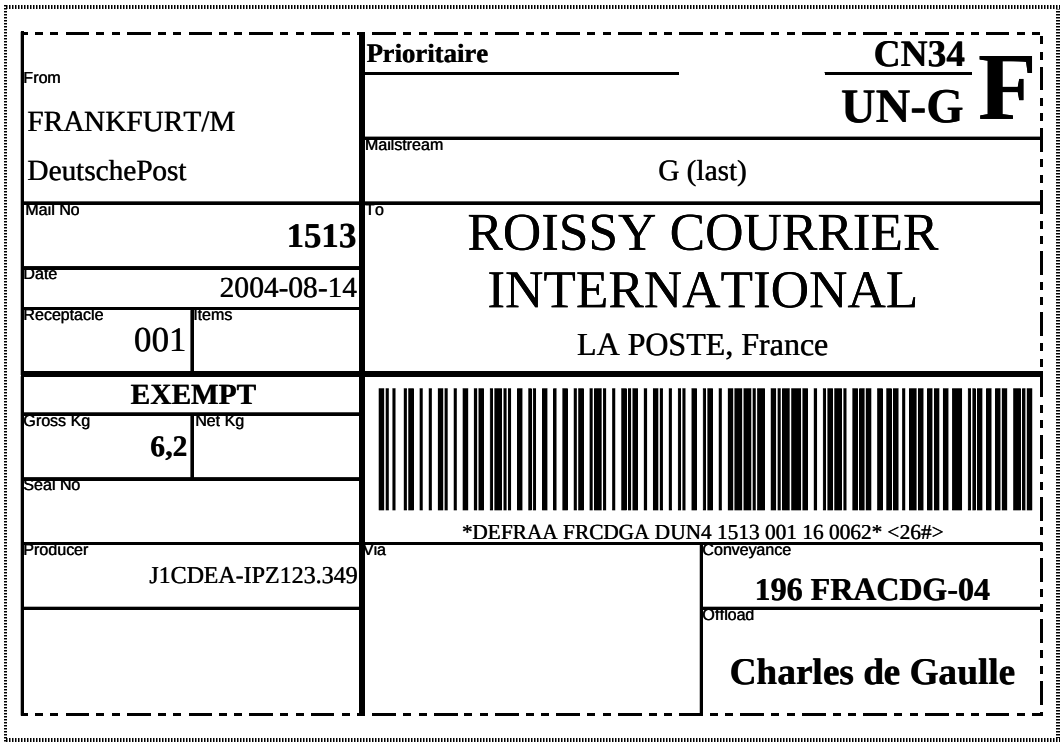
Examples of receptacle labels

A.1 Introduction

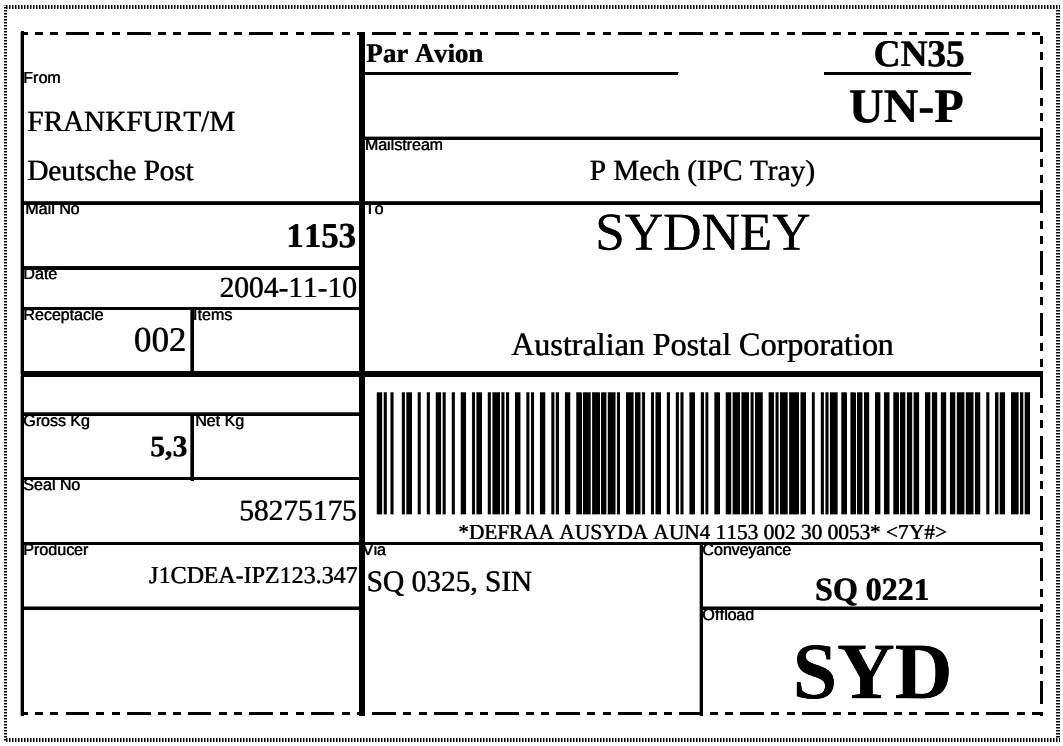
The following examples illustrate the content of receptacle labels printed in accordance with the standard. Only the printing area (90 mm by 130 mm) is shown and, since the examples are contrived to illustrate some of the different possibilities offered by the specification, the data might not be fully realistic.

All of the examples show the presence of a bar code. Though strongly recommended, this is not required in the examples printed in landscape mode. It is required in the example which is printed in portrait mode.

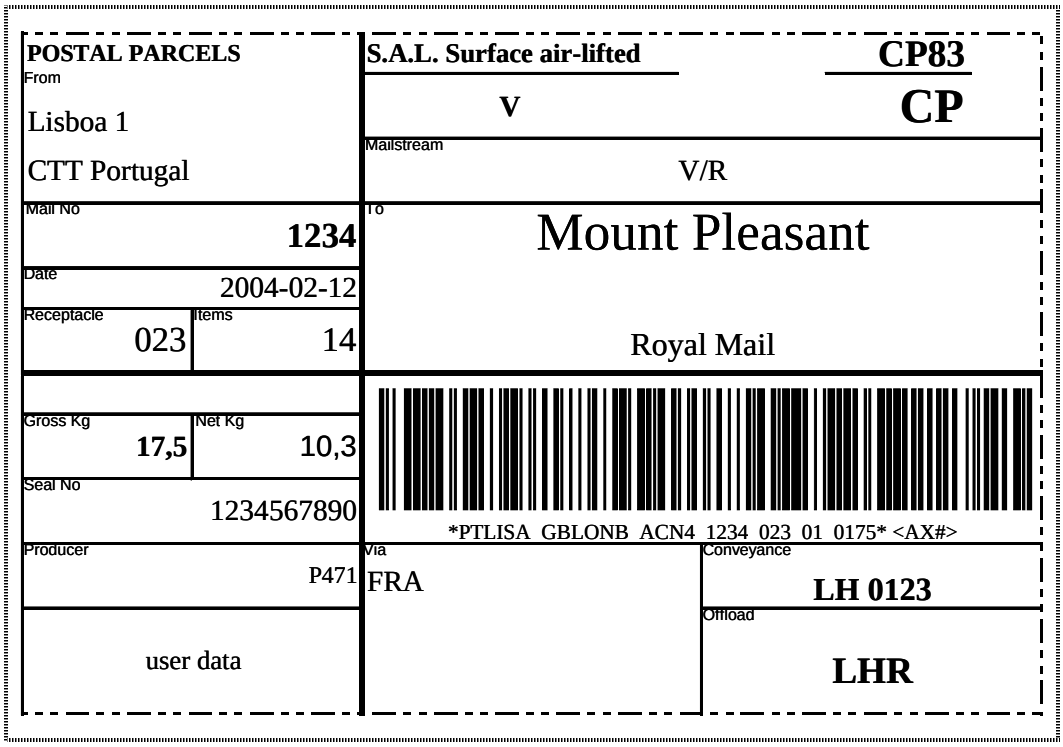
A.2 CN 34 example



A.3 CN 35 example

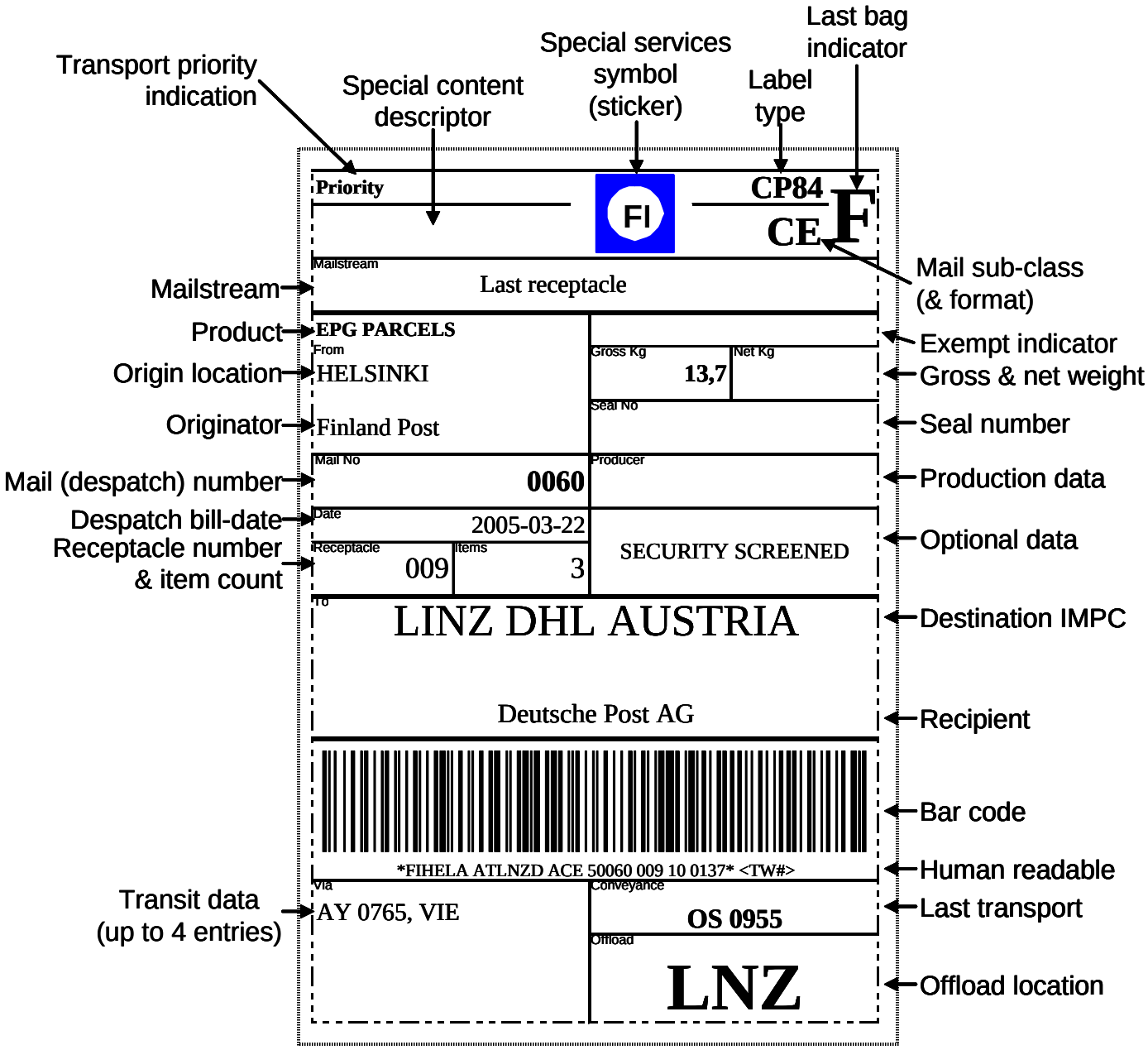


A.4 CP 83 example



A.5 CP 84 example printed in portrait mode

This, final, example shows the portrait mode layout of the receptacle label. It is annotated to indicate which variable data is printed in which position on the label.



Bibliography

This bibliography provides full reference and sourcing information for all standards and other reference sources which are quoted in the above text. For references which mention specific version numbers or dates, subsequent amendments to, or revisions of, any of these publications might not be relevant. However, users of this document are encouraged to investigate the existence and applicability of more recent editions. For references without 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 The UPU standards listed below are available on subscription from the UPU International Bureau:

Weltpoststrasse 4, Case postale, 3000 Berne 15, Switzerland;
Tel: +41 31 350 3111; Fax: +41 31 350 3110; http://www.upu.int

[1] M34, Mail aggregate attributes and the communication of aggregate information

[2] M35, Communication of mail transport information between postal handling organisations

[3] M36, Despatch attributes and the communication of despatch information

[4] S1, Bar code symbology for postal receptacles

[5] S29, Bar-coded receptacle labels

[6] S34, Registration of international mail processing centres

[7] S40, Human and OCR data capture – Error Detection – Algorithm for the generation and checking of an error detection code

ISO standards

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

1, rue de Varembé, Case postale 56, 1211 Genève 20, Switzerland;
Tel: +41 22 749 0111; Fax: +41 22 733 3430; www.iso.ch

[8] ISO 3166-1, Codes for the representation of names of countries and their subdivisions – Part 1: Country codes

[9] ISO/IEC 15418, Automatic identification and data capture techniques – International specification – Data application identifiers

[10] ISO/IEC 15434, Information technology – Transfer syntax for high capacity ADC media

[11] ISO/IEC 15459: Information technology — Unique identification of transport units

Other documents

[12] IATA Airline Coding Directory

NOTE 3: Published by IATA (www.iata.org), this contains both IATA airline designators and IATA location ID codes. These are separately available, in digital form, on either a one-off or subscription basis.