Postal Transport Guide

October 2018
Postal Transport Guide

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1 Purpose of the Postal Transport Guide

1.1 Introduction

This Postal Transport Guide is planned as a living document on the UPU website. It is to be easily updateable, as experience is gained or conditions change.

The guide is an information source for postal staff dealing with postal transport and transit. It deals with all modes of international postal transport: air, maritime, road and rail.

It is intended as a means by which staff can become acquainted with the various aspects of postal transport and transit.

Bearing in mind that the guide provides updated, coherent and comprehensive information on UPU transport-related matters, UPU designated operators should include the guide in the syllabus of their postal schools.

The guide is maintained by the Transport Group of the UPU Postal Operations Council (POC).

As airmail is an important mode of UPU transport, IATA is consulted on airline issues within the framework of the IATA–UPU Contact Committee.

The terms of reference of the Transport Group and the IATA–UPU Contact Committee are outlined in document POC C 1 TG 2017.1–Doc 3 and POC C 1 TG 2017.1–Doc 5e respectively, published in the UPU document database.

Questions, comments or suggestions concerning this guide may be sent to Mr Jan Bojnansky, Customs and Transport Programme Manager, at jan.bojnansky@upu.int.

1.2 A perspective on postal transport

Most people reading this guide will have travelled internationally at some point.

Consider all of the planning that you do to prepare for such a trip:

– Is the departure time convenient?
– Is the arrival time suitable?
– Are the transfers too short or too long?
– Is the transfer airport convenient?
– Most importantly, are there seats available?

Now consider that in virtually every country, customers can mail letters, packets and parcels to any other country in the world, every day. Also consider that, from a service perspective, there are typically two categories: priority and non-priority.

The staff responsible for defining the operational network for an origin Post must plan transport and transit to every country in the world, and do so such that it is logical for every day of the week and every season of the year, both for priority mail and non-priority mail.

This can be a very complex task, especially considering the changeability of conditions: daily and seasonal mail volumes, flight schedules, aircraft capacities, office of exchange (OE) working hours, etc.

And there is added complexity because the operational network plan (e.g. flights and transit arrangements) must be loaded into the dispatch system in a timely manner, so that when the origin office of exchange creates a receptacle label, the routeing information is included.

1 For the purposes of this guide, “transport” is when a designated operator uses carriers such as airlines, rail companies or a shipping company, and “transit” is when an origin designated operator uses the services of another (transit) designated operator.
The use of transit à découvert (open transit) and closed transit (both described later in this document) by an origin operator can, and does, simplify the planning necessary, but it is not uncommon for an origin Post to have dispatches to over 100 destination countries on a daily basis.

The quality of this transport and transit planning directly influences the quality of service. This complex and important task takes place in every origin Post. It is important that, within the Post, the complexities are recognized and appropriately resourced.

2 Basic postal process

2.1 UPU postal products and services

The following diagram depicts the UPU products and services:

As depicted above, postal products are classified as letter post, parcel post or EMS. Letter post covers items such as letters and postcards, which are typically not subject to systematic customs control. Letter post also includes small packets and M bags (direct bags of printed papers for the same address), both of which are subject to customs control. Parcel post, including the ECOMPRO parcel, is subject to customs control. EMS items can contain either documents or merchandise. EMS items containing merchandise are subject to customs control. Those containing documents may be subject to customs control, depending on the destination country.

2.2 Small packets/parcels

A small packet is a letter-post item weighing up to 2 kg that contains a good. The distinction between a letter-post small packet and a parcel is the mail stream in which the item is handled (letter post or parcel post) and the basic attributes of the product. The basic attributes of parcels include tracking, liability and signature on delivery. In general, to Customs, the assessment of duty and tax is the same for a packet or a parcel. However, the postal labelling of the items, the handling by the Posts, and the remuneration between Posts is different for small packets versus parcels, as indicated below:
### Table: Small packet vs. Parcel

<table>
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<th>Regulatory basis</th>
<th>Regulations to the Convention – Letter Post</th>
<th>Regulations to the Convention – Parcel Post</th>
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<tr>
<td>Customs declaration</td>
<td>CN 22 – optionally CN 23</td>
<td>CN 23 (may be part of CP 72 manifold set)</td>
</tr>
<tr>
<td>Weight</td>
<td>0–2 kg</td>
<td>0–20 kg (optionally to 30 kg)</td>
</tr>
<tr>
<td>Remuneration between Posts</td>
<td>Terminal dues</td>
<td>Inward land rates</td>
</tr>
<tr>
<td>Dispatch bill/receptacle label</td>
<td>CN 31 letter bill/CN 34, CN 35 or CN 36 receptacle labels</td>
<td>CP 87 parcel bill/CP 83, CP 84 or CP 85 receptacle labels</td>
</tr>
<tr>
<td>Barcoded item identifier</td>
<td>From 1 January 2018, a small packet containing goods needs to have a UPU Technical Standard S10 barcode identifier. This barcode is not for tracking purposes.</td>
<td>A 13-character S10-format barcoded item identifier is mandatory. This may be applied separately or included on the CN 23.</td>
</tr>
</tbody>
</table>

2.3 **Products and services related to transportation**

Some products and services are called supplementary services. Certain supplementary services are mandatory. Others are optional at the discretion of the origin, while yet others are optional requiring agreement between origin and destination.

Some products are related to transportation in that their presence must be indicated on labels or delivery bills – for example, registered items, insured items and tracked items.

3 **Item/receptacle/dispatch/dispatch series/consignment**

This section seeks to familiarize staff of designated operators with the key elements involved in transport. It includes a special focus on “consignment”, which is used only for transport.

The postal operation typically consists of the following hierarchical elements:²

*Postal item:* A letter, postcard, letter post small packet, letter post M bag, parcel, EMS item, etc. Trackable items have a unique item identifier. Standard S10 is the applicable UPU standard for item ID, used on trackable items (e.g. registered, insured or express letter post, parcels, and EMS).³

*Postal receptacle:* A unit of a dispatch. The postal receptacle is typically a bag or a tray containing postal items. It has a standard 29-character barcoded receptacle ID. Postal receptacles are a physical entity handled by carriers such as airlines. The receptacle ID is used by carriers, as well as by Posts. The applicable UPU standard for receptacle ID is S9.

*Postal dispatch:* Each postal receptacle is a component of a postal dispatch and has a standard 20-character dispatch identifier. The dispatch identifier is part of the 29-character receptacle ID. The applicable UPU standard for dispatch ID is S8.

*Postal dispatch series:* Postal dispatches are sequentially numbered within a dispatch series that is established between the origin OE and destination OE. This dispatch series is 15 characters and is also part of the receptacle ID.

*Postal consignment:* Postal receptacles are also included in consignments, for transport purposes. A consignment consists of the receptacles assigned to a specific transport, regardless of the dispatch (or dispatches) to which the receptacles belong.

² Within the UPU, the use of terminology related to items, receptacles, dispatches, dispatch series and consignments can be inconsistent. For the purpose of the Transport Guide, the terminology as described here is used.

³ UPU standards (both technical and messaging) are available for purchase (subscription or individual copy) via the UPU website at www.upu.int/en/activities/standards/about-standards.html.
The principle of postal dispatches is the basis for all operations and accounting between designated operators. In its simplest form it operates as follows:

Each dispatch from an origin OE to a destination OE, for each class of mail (and where necessary, subclass), is sequentially numbered, with the number being reset for the first dispatch of the calendar year. This is the “dispatch number”.

Each dispatch is accompanied by a paper (letter or parcel) bill describing the dispatch, in terms of the number of receptacles, weight, etc. For the first dispatch of the calendar year, the last dispatch number of the previous calendar year is also included on the (letter or parcel) bill. The (letter or parcel) bill is placed inside one of the receptacles of the dispatch, typically the last one of the dispatch.

Destination OEs file the (letter or parcel) bills in order of dispatch number for each origin OE and product. Thus, a missing dispatch can be detected immediately on receipt of the next dispatch.

As an example, if priority letter-post dispatch number 0123 of 2012 from Zurich OE to Montreal OE has been received, but dispatch number 0122 has not, then Montreal can immediately know that dispatch number 0122 may have gone astray and can create a verification note so that Zurich OE can initiate investigations.

As well, a dispatch may consist of only one receptacle (e.g. bag or tray) or may comprise several receptacles, depending on the volume of mail at the time. But individual receptacles of a dispatch do not always stay together as they progress through the supply chain. The (letter or parcel) bill also identifies the number of receptacles dispatched, so the destination can ensure not only that the postal dispatch is duly received but also that each of the receptacles that made up the dispatch is received. Of course, it is of critical importance that the destination receives the bill. Accordingly, the label of the receptacle that carries the bill is marked with a large “F” (for “forms”). This receptacle is often called the “F bag”.

3.1 Dispatch series

Postal dispatches are sequentially numbered by dispatch series. The dispatch series consists of 15 characters:

– 6-char origin OE (IMPC) code.
– 6-char destination OE (IMPC) code.
– 1-char mail category (A, B, C, or optionally D).
– 2-char mail subclass (the first character is mail class – U, C, E, or T). The second character is used to distinguish different dispatch series within the mail class.

Note: Mail category and dispatch-level mail subclass, linked together, form the 3-character “dispatch type”. An example of a dispatch series is CAYMQACHZRHBAUN, where:

– CAYMQA is MONTREAL, the operator being Canada Post (code list 108).
– CHZRHB is ZURICH 1, the operator being Swiss Post (code list 108).
– A refers to “airmail or priority mail” (code list 115).
– UN refers to “LETTERS – LC/AO” (code list 117).

Another example of a dispatch series is CAYMQACHZRHBAUL. Mail in this dispatch series consists of LETTERS – LC.

The co-existence of two dispatch series for priority letter post from MONTREAL to ZURICH 1 indicates that there is a business reason for having the two. Otherwise there would be only one.

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4 UPU standards typically reference code lists, which are on the UPU website at www.upu.int/en/activities/standards/code-lists.html.
The dispatch series is an important element carried throughout all aspects of operations and accounting, and is defined in the Regulations to the Convention in articles 17-120 and 17-223. The term exists in the International Postal System (IPS) and appears on the CN 31 letter bill and the CP 87 parcel bill created by recent versions of IPS, even though it does not yet appear on the UPU model forms.

3.2 Dispatch

Within each dispatch series, individual dispatches are created, each with a unique dispatch ID. The dispatch ID consists of 20 characters:

- 15-char dispatch series.
- 1-char dispatch year ("2" is 1992, 2002, 2012, 2022, etc.).
- 4-char dispatch number, sequentially assigned.

A dispatch can consist of one, or many, receptacles, depending on the volume of mail at the time.

3.3 Receptacle

Each receptacle of a dispatch has a receptacle ID. The receptacle ID consists of 29 characters:

- 20-char dispatch ID.
- 3-char receptacle serial number.
- 1-char highest numbered receptacle indicator.
- 1-char registered/insured indicator.
- 4-char receptacle weight.

The 29-character receptacle ID is in barcoded format (symbology code 128) on receptacle labels. It is this entity that is created by origin OEs and scanned by transit and destination designated operators and carriers such as airlines.

When the receptacle ID is scanned, the dispatch ID and the dispatch series are automatically captured. Thus, a single scan captures the origin and destination offices of exchange, the mail category, the mail class and subclass, indicators as to whether the receptacle is the highest numbered in the dispatch and whether it contains registered or insured mail, and the gross weight.
### 3.4 Relationship between receptacle ID, dispatch ID, dispatch series, dispatch type

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<thead>
<tr>
<th>Entity name and example</th>
<th>Data element name</th>
<th>UPU reference or content definition</th>
<th>Position Length Format</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receptacle Identifier</td>
<td>S9 Receptacle Identifier</td>
<td>DEFRAANLAMSAU0027</td>
<td>29 char</td>
<td>DEFFRAANLAMSAU002700000058</td>
</tr>
<tr>
<td>Dispatch-ID</td>
<td>S8 Dispatch-ID</td>
<td>DEFRAANLAMSAU00027</td>
<td>20 char</td>
<td>DEFFRAANLAMSAU0002700002</td>
</tr>
<tr>
<td>Dispatch-Series</td>
<td>Dispatch-Series</td>
<td>DEFRAANLAMSAUN</td>
<td>15 char</td>
<td>NLAMSAAUN</td>
</tr>
<tr>
<td>Dispatch-Type</td>
<td>Dispatch-Type</td>
<td>AUN</td>
<td>3 char</td>
<td></td>
</tr>
<tr>
<td>International mail processing centre (IMPC) of origin – code</td>
<td>International mail processing centre (IMPC) of origin – code</td>
<td>The origin and destination IMPCs must be in UPU code list 108</td>
<td>1–6 6 Alpha</td>
<td>DEFRAAA</td>
</tr>
<tr>
<td>IMPC of destination – code</td>
<td>IMPC of destination – code</td>
<td></td>
<td>7–12 6 Alpha</td>
<td>NLAMSA</td>
</tr>
<tr>
<td>Mail category code</td>
<td>Mail category code</td>
<td>The mail category code must be in UPU code list 115</td>
<td>13 1 Alpha</td>
<td>A</td>
</tr>
<tr>
<td>Mail sub-class code (dispatch-level)</td>
<td>Mail sub-class code (dispatch-level)</td>
<td>The mail sub-class code must be in UPU code list 117</td>
<td>14–15 2 Alpha</td>
<td>UN</td>
</tr>
<tr>
<td>Mail class code</td>
<td>Mail class code</td>
<td>(The 1st character of the mail sub-class is the mail class code – defined in code list 116.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2nd character of mail sub-class</td>
<td>2nd character of mail sub-class</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dispatch-year</td>
<td>Dispatch-year</td>
<td>Last digit of calendar year, e.g. 4 – 1994, 2004, 2014, 2024. For each dispatch-series, the dispatch-year is adjusted for the 1st dispatch of the calendar year and remains constant for each subsequent dispatch throughout the year.</td>
<td>16 1 Numeric</td>
<td>4</td>
</tr>
<tr>
<td>Dispatch-number</td>
<td>Dispatch-number</td>
<td>Numeric (0001–9999). For each dispatch-series, the dispatch-number is initialized (typically to 0001) for the 1st dispatch of the calendar year and is incremented by one for each subsequent dispatch throughout the year.</td>
<td>17–20 4 Numeric</td>
<td>0027</td>
</tr>
<tr>
<td>Receptacle serial number</td>
<td>Receptacle serial number</td>
<td>Numeric (001–999). This is the number of the receptacle within the dispatch.</td>
<td>21–23 3 Numeric</td>
<td>002</td>
</tr>
<tr>
<td>Highest numbered receptacle indicator (unless bilaterally agreed to use an alternative)</td>
<td>Highest numbered receptacle indicator (unless bilaterally agreed to use an alternative)</td>
<td>The receptacle is not the highest numbered receptacle in the dispatch</td>
<td>24 1 Numeric</td>
<td>0</td>
</tr>
<tr>
<td>0 – No</td>
<td>0 – No</td>
<td>The receptacle is the highest numbered receptacle in the dispatch</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 – Yes</td>
<td>1 – Yes</td>
<td>The receptacle contains registered and/or insured items</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registered/insured indicator (unless bilaterally agreed to use an alternative)</td>
<td>Registered/insured indicator (unless bilaterally agreed to use an alternative)</td>
<td>The receptacle does not contain registered and/or insured items</td>
<td>25 1 Numeric</td>
<td>0</td>
</tr>
<tr>
<td>0 – No</td>
<td>0 – No</td>
<td>No information is available in the barcode</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 – Yes</td>
<td>1 – Yes</td>
<td>Receptacle contains registered and/or insured items</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 –</td>
<td>9 –</td>
<td>No information is available in the barcode</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receptacle weight</td>
<td>Receptacle weight</td>
<td>Gross weight in 1/10 kilos. The decimal is not included. (If this weight exceeds 999.8 kg, then the value 9999 is included).</td>
<td>26–29 4 Numeric</td>
<td>0258</td>
</tr>
</tbody>
</table>

29 char 20 char 15 char 3 char
3.5 Consignment

In the UPU Regulations, the term “consignment” is used in two different contexts: one refers to an optional postal product (see article 18-005 on the consignment service) and the other relates to transport (see article 17-135). Some documents use the term “item” and “consignment” interchangeably. This guide uses the article 17-135 meaning of the term “consignment”.

As noted, receptacles of a dispatch may not all travel together. And they may not travel on the same transport that was planned when the dispatch was created. Receptacles of several different dispatches may travel on a specific transport. An operator may receive receptacles created by another operator and forward them onward, along with its own originating receptacles. (This is called “closed transit”.)

Thus, a consignment is a list of the receptacles assigned to a specific transport, regardless of the dispatch (or dispatches) to which the receptacles belong.

Whereas a dispatch is generally defined by a letter or parcel bill (forms CN 31, CN 32 and CP 87), a consignment is defined by a delivery bill (forms CN 37, CN 38 and CN 41).

The consignment is used in the transportation function, both for operational control and for accounting between the Post and the carrier.

Operationally, the consignment moves the receptacles between an origin international mail processing centre (IMPC) acting as a mail unit and a destination IMPC acting as a mail unit, typically via a carrier such as an airline.

From an accounting perspective, the consignment is the basis for payment from the designated operator initiating the consignment to the carrier (e.g. an airline).

UPU technical standard S32 defines the consignment ID, which consists of up to 12 characters:
- 2-character ISO country code;
- Up to 10-character unique identifier for the consignment, structured according to national specifications.

It is important to note the difference between “dispatch ID” and “consignment ID”. The dispatch ID is a component of the receptacle ID. Thus the dispatch to which a receptacle belongs is immediately identifiable. However, the consignment ID is not a component of the receptacle ID. Thus the consignment to which a receptacle belongs cannot be determined from the receptacle ID, or from the other information on the receptacle label. Moreover, a receptacle may be a component of more than one consignment as it is transported from origin office of exchange to destination office of exchange (e.g. in closed transit).

The CN 38 and CN 41 delivery bills are the UPU forms providing consignment information. The data element captioned “serial No.” is the equivalent of the consignment ID. Within UPU electronic data interchange (EDI) messaging standards, the consignment is covered by the PRECON, which is sent to the destination designated operator, and the CARDIT, which is sent to the carrier.

Consignments (CN 38/CN 41 delivery bills and/or CARDIT messages) are very important to airlines, as they define the shipment as mail, and therefore subject to postal customs clearance. Typically, it is the presence of UPU consignment information (paper-based or electronic) that enables the receptacles to be moved from the custody of the airline to that of the destination designated operator for postal customs clearance.

3.6 International mail processing centres

This section is to familiarize staff of designated operators with international mail processing centres. To manage transport, it is necessary to be very familiar with the principles of IMPCs. An IMPC may be either an office of exchange, a mail unit, or both.

Offices of exchange

A key principle of international mail is that designated postal operators of UPU member countries establish “offices of exchange” from which all outbound mail is dispatched and at which all inbound mail is received. International mail exchanged between countries thus actually moves between offices of exchange. Postal operators train and
equip the staff in offices of exchange to “internationalize” outbound mail based on standards and regulations, and to “domesticate” inbound mail, to the extent possible, based on its own products and processes. An operator in a large country may have only one OE or it may have several. The number of OEs is always far smaller than the number of postal facilities handling domestic mail. Work in an OE is typically quite specialized and distinct from that in an office processing domestic mail.

**Office of exchange versus mail unit**

Within the standards, an OE creates and receives dispatches. Thus it creates and receives letter or parcel bills, or the EMS equivalent, as well as receptacles. For inbound, an OE actually opens the receptacles. An OE creates and receives PREDES and RESDES messages.

A mail unit creates and receives consignments. Thus it creates and receives delivery bills such as CN 37, CN 38 and CN 41. The term “mail unit” is a standards term. It is not used in the UPU Regulations.

An IMPC is typically both an OE and a mail unit. If, however, an OE creates dispatches (and thus receptacles) and forwards them to another office for consolidation onto transport (such as flights), then the IMPC is an OE but not a mail unit.

An outbound (export) IMPC that is only a mail unit receives receptacles created by offices of exchange, records them on a delivery bill and manages the handover to the carrier (airline). An inbound (import) IMPC that is only a mail unit receives receptacles from the carrier, endorses their receipt, and forwards them to an OE to be opened, or it may forward them onward in another consignment.

An example of an IMPC that is a mail unit only is GBLGWA GATWICK AMU. This IMPC does the handover between airlines and the Post, creating and receiving consignments. It does not originate postal receptacles, so it is not an office of exchange.

**IMPC registration**

For accounting and operational purposes, it is essential that IMPCs be unambiguously identified in all communications between postal handling organizations and that all parties involved be aware of the categories and classes of mail that can be handled in any given IMPC.

To fulfil this need, the UPU has developed a mechanism for uniquely identifying IMPCs and a process for the registration and publication of their processing capabilities. Standard S34 defines the structure of the identification code used and specifies the procedures for the allocation of codes and for the registration, updating and publication of IMPC data.

The complete list of registered IMPCs is published in UPU code list 108 (Standards Code List Management System – SCMS), accessible via the Standards Section of the UPU website (www.upu.int);

All IMPCs are registered, each with a specific 6 character code. IMPCs have also evolved from being physical entities (such as buildings), to logical entities in many cases.

The IMPC registrations are defined in code list 108. The structure of the IMPC code, as defined in UPU standard S34, is as follows:

- Characters 1–5 are the UN/LOCODE of the IMPC location, of which characters 1–2 represent the ISO country code.
- Character 6 is a qualifier to enable more than one IMPC code to exist within a UN/LOCODE.

IMPC code lists are at Universal Postal Union – International Mail Processing Centres.

IMPCs are published in three text code lists: 108 (for all IMPC codes), 108a (for expired IMPC code registration entries and closed IMPCs), and reference list 108b (for valid and open IMPC codes).

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5 PREDES is the electronic equivalent of the letter/parcel bill, the receptacle labels and the list of trackable items. RESDES is the electronic confirmation of processing of the receptacle at destination. They are described in more detail later in this document.
**IMPC attributes**

IMPCs are registered with various attributes:

- IMPC name (both 12- and 35-character);
- Operator code;
- Operator name (both 12- and 35-character);
- Physical address
- Contact information
- Function: office of exchange, mail unit, or both;
- Mail flows: any combination of import, export or transit;
- Mail categories inbound: any combination of values (A, B, C, D) based on code list 115;
- Mail categories outbound: any combination of values (A, B, C, D) based on code list 115;
- Mail classes inbound: any combination of values (U, C, E, T) based on code list 116;
- Mail classes outbound: any combination of values (U, C, E, T) based on code list 116;
- Special type indicator: ETOE, military unit;
- Bilateral agreement indicator;
- Special restrictions.

A key purpose of code list 108 is the registration of the IMPC and to identify the operator.

**IMPC operator**

It is important to note that the IMPC operator or the UPU member country cannot be derived from the IMPC code itself. As an example, USLAXL is an IMPC in Los Angeles, but the IMPC is not operated by the United States Postal Service. It is an ETOE operated by Deutsche Post.

The operator of an IMPC can only be determined by referring to code list 108.

**Physical versus logical**

An IMPC is not necessarily a physical entity, such as a building. It has evolved to become more of a logical entity. Thus there can be several IMPCs not only in the same UN/LOCODE area, but even in the same building. Similarly, functions of a single IMPC can take place in more than one building.

The sixth character of the IMPC code is the qualifier and is used to manage these situations.

**Dispatch versus consignment**

A dispatch is a set of receptacles with the same dispatch ID. Thus all of the receptacles of a dispatch share the characteristics in the dispatch ID: same origin, destination, mail category, mail class and subclass, and same dispatch number within the calendar year. The dispatch may comprise one receptacle or many receptacles. UPU forms CN 31/CN 32 letter bill and CP 87 parcel bill describe the dispatch. In an automated system, the PREDES message describes the dispatch, as well as the receptacle labels.

A consignment is quite different. Individual receptacles of a dispatch may (unfortunately) not necessarily end up travelling together. Receptacles of a dispatch may be split up anywhere in the supply chain. A consignment is the list of receptacles assigned to a specific transport. Thus a consignment may contain all the receptacles of a dispatch, or only some of them. It may contain receptacles from more than one dispatch. Moreover, it may contain receptacles created by more than one operator. UPU delivery bill forms CN 37, CN 38 and CN 41 for surface, air and S.A.L. describe the consignment. In an automated system, the PRECON and CARDIT describe the consignment.
3.7 Mail category/mail class/mail subclass/dispatch year/dispatch number

This section seeks to familiarize staff of designated operators with the data elements making up the receptacle ID.

**Mail category**

The term “mail category” is a UPU standards term. It is not (yet) well defined in the UPU Regulations but relates closely to boxes in the CN 31 letter bill and the CP 87 parcel bill.

It is important to note that the term “airmail” in the Regulations does not necessarily refer to a mode of transport. Rather, it can refer to a product. This is a common source of confusion. The UPU Regulations once referred to airmail as priority mail. However, between countries in close proximity, it can be faster to use surface transport. Many countries still call their fastest international letter or parcel mail product “airmail” in dealing with their customers, even though some of it travels by surface.

In UPU standards, mail category is defined in code list 115, as follows:

- A – Airmail or priority mail
- B – S.A.L. mail/non-priority mail
- C – Surface mail/non-priority mail
- D – Priority mail sent by surface transportation (optional code)

Mail category B is S.A.L., for “surface airlifted”. S.A.L. can be implemented in a number of ways. An origin may decide that surface transport is not viable for its non-priority mail and may decide to use air transport at reduced priority for some or all destinations. This is usually based on a contract between the operator and the airline, and it is typical that an airline may have 7–14 days to provide the transportation. A minimum is needed so that S.A.L. does not erode priority mail volumes.

Another way origins can implement S.A.L. is to have a separate product that is between the traditional airmail/priority and surface/non-priority. This gives customers three levels of service rather than two.

From a destination standpoint, inbound S.A.L. mail is equivalent to inbound surface mail in terms of priority and remuneration.

Mail category C (surface mail/non-priority mail) is sent by surface, which can be by sea, rail or land, or a combination.

Mail category D can be used for priority mail sent by surface, but it is generally preferable to use category A for priority mail – whether it is transported by air or surface. Mail category D can be used if, by bilateral agreement, the remuneration between designated operators for priority mail sent by air differs from that for mail sent by surface.

**Mail class**

Mail classes are defined in code list 116, as follows:

- U – Letters (LC/AO)
- C – Parcels (CP)
- E – EMS
- T – Empty receptacles

In this context, “letters (LC/AO)” is synonymous with letter post. “LC/AO” is an abbreviation for the French “lettres et cartes postales/autres objets”. “Parcels (CP)” is synonymous with parcel post. “CP” is an abbreviation for the French “colis postaux”. “Empty receptacles” typically refers to the return of empty bags but may include the return of other equipment such as trays or containers.

**Mail subclass**

Mail subclass is a 2-character code, of which the first character is the mail class. In its simplest and most commonly
When there is a single dispatch series for a given mail category and class between two offices of exchange, the second character is “N”, which stands for “normal”.

For example, if there is only one dispatch series for priority letter post, the mail subclass code is UN, and the dispatch type is AUN. Similarly, if there is only one dispatch series for surface/non-priority parcel post, the mail subclass code is CN, and the dispatch type is CCN.

However, there can be a business need for more than one dispatch series. As an example, registered items are normally included with non-registered items in the same letter-post dispatch series. But an origin may opt to have a separate dispatch series containing exclusively registered items. It would then have one dispatch series as mail subclass UN (dispatch type AUN) and another as mail subclass UR (dispatch type AUR).

EMS is a good example of multiple mail subclass codes in common use. If origins separate EMS documents from merchandise, then this is normally done at the dispatch-series level with mail subclass codes ED and EM (dispatch types AED and AEM). If documents and merchandise are commingled then the mail subclass code is EN (dispatch type AEN).

Some mail subclass codes are established to support multilateral agreements. An example is mail subclass CE, which is exclusively for EPG parcels (a multilaterally agreed parcel exchange network with remuneration conditions different from normal UPU parcels).

**Dispatch-level versus receptacle-level mail subclass codes**

In UPU standards, mail subclass codes can be at dispatch level, receptacle level, and even item level. The receptacle ID uses only the dispatch-level mail subclass code. Thus, each receptacle in a dispatch has the same dispatch ID.

For example, a dispatch of mail subclass UN may include a receptacle of subclass UM (indicating it to be an M bag). In such a case, the characters "UN" would be in the barcoded receptacle ID that is on the receptacle label (in character positions 14–15 of the 29-character identifier) and in the receptacle ID for all receptacles in messages such as PREDES. The mail subclass code "UM" would be in the PREDES message in the receptacle class, which is a different data element in the PREDES message.

Dispatch-level mail subclass codes typically have a specific set of receptacle-level subclass codes (receptacle class) that are operationally logical. As an example, it is illogical for a dispatch of subclass type UM to have a receptacle of subclass UN.

In messages such as PREDES the mail subclass representing the receptacle class should be included only if the receptacle class is not the same as the dispatch-level mail subclass and only if the combination of the dispatch-level and receptacle-level mail subclass codes is permitted, based on code list 117a on allowed combinations.

Proper use of mail subclass codes, in conjunction with the handling class, at the dispatch and receptacle level is one of the largest areas of confusion for many operators.

**Dispatch year**

The dispatch ID includes a 1-character dispatch year.

UPU standards (and regulations) do not precisely define the dispatch date, or by extension the dispatch year. Some operators may base this on the dispatch-closed date, others on the receptacle creation date, and yet others on the departure date of the first planned transport. It is thought that the best practice is to base the dispatch year on the first planned transport date. This prevents the problem of some receptacles of the dispatch being created in year N and others in year N+1. However, it means that the date of the planned first transport must be known (and in the system) when the first receptacle is created. It also means that a dispatch closed on 31 December may have a dispatch number of 0001.

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6 “Dispatch level” refers to all receptacles of a dispatch having the same value, whereas “receptacle level” refers to individual receptacles having different values.
Dispatch number

For each dispatch series, the dispatch number is initialized (typically to 0001) for the first dispatch of the calendar year. The origin may, however, start at a number other than 0001, if there is a business reason to do so. For example, in cases of multiple dispatch series for the same mail category and class (but not subclass), the origin may choose to start one dispatch series for dispatch type AUN at 0001 and another for dispatch type AUL at 1001 so that the receptacle labels for the two dispatch series are more distinguishable. Otherwise, it is possible to have two receptacle labels from different dispatches look very similar, i.e. the only difference being character 15 of the receptacle ID and thus hardly noticeable to the destination. Some operators also choose to have the first character of the dispatch number relate to a specific origin office of exchange.

When initializing the dispatch number for a dispatch series at a number other than 0001, the origin must ensure that there are enough dispatch numbers available in the calendar year so that the dispatch numbering will be a logical increasing sequence throughout the calendar year. Using the first character to help identify the dispatch series limits the number of dispatches in the year to 999.

In addition, the (letter and parcel) bill of the first dispatch of the calendar year has the dispatch number of the last dispatch of the previous calendar year. This enables the destination to ensure that all dispatches are duly received, even when the numbering is re-initialized for the calendar year.

The PREDES message, which relates to the (letter or parcel) bill, also includes this feature. Thus the first PREDES message for each dispatch series in the calendar year has, as an additional data element, the dispatch number of the last dispatch of the previous calendar year.

Ideally, automated systems should be designed such that there are no gaps in the numbering of dispatches. The current Regulations (which are based on manual numbering of dispatches) do not support having gaps in dispatch numbering. A “no mail” situation for a dispatch series on a specific transport (e.g. flight) can occur on any given date, especially for parcel post or EMS dispatches to low volume destinations. In such cases, the dispatch number should typically be automatically deferred to the next planned transport for the dispatch series.

4 The mail pipeline

4.1 Process diagram

The typical physical flow and the supporting electronic messages related to transportation are depicted in the diagram above.

The receptacle- and dispatch-level messages are quite closely related to international transport. The item event messages apply only to trackable items (e.g. registered or insured letter post, parcels, EMS) and can be indirectly related to transport, especially events EMC and EMD.

Typically, origin Posts create the EMC event and include item-level data in PREDES with a single scan.
The RESDIT, RESCON and RESDES messages are typically based on scanning the receptacle ID. As regards RESDES, this can be either on arrival at the destination office of exchange, or it can be on opening the receptacle, as depicted above.

The process is as follows:

<table>
<thead>
<tr>
<th>Operational event</th>
<th>Trackable item-level messaging</th>
<th>Dispatch- and receptacle-level messaging</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item mailed at a post office</td>
<td>EMSEVT event EMA is captured and sent to destination Post. For some products this message is optional.</td>
<td></td>
</tr>
<tr>
<td>Item arrives at outward office of exchange</td>
<td>EMSEVT event EMB is captured and sent to destination Post. For some products this message is optional.</td>
<td></td>
</tr>
<tr>
<td>Item is dispatched from outward office of exchange</td>
<td>EMSEVT event EMC is sent to destination Post.</td>
<td>PREDES message is sent to destination Post. Note that PREDES establishes the item-ID-to-receptacle-ID linkage.</td>
</tr>
<tr>
<td>Receptacle with item is added to consignment (CN 37, CN 38, CN 41 delivery bill)</td>
<td></td>
<td>PRECON message is sent to destination of consignment, (which for closed transit will be a transit Post). CARDIT message is sent to carrier (such as airline or shipping company).</td>
</tr>
<tr>
<td>Receptacle arrives at destination of consignment (may be a transit Post or the destination Post)</td>
<td></td>
<td>Destination or transit Post sends a RESCON to Post that sent the PRECON.</td>
</tr>
<tr>
<td>Receptacle processed at inward office of exchange. This may be arrival at inward office of exchange or opening of the receptacle at inward office of exchange</td>
<td></td>
<td>Destination Post sends RESDES message to origin Post.</td>
</tr>
<tr>
<td>Item arrives at transit office of exchange (e.g. transit à découvert)</td>
<td>EMSEVT event EMJ is sent to origin Post.</td>
<td></td>
</tr>
<tr>
<td>Item is dispatched from transit office of exchange (e.g. transit à découvert)</td>
<td>EMSEVT event EMK is sent to origin Post.</td>
<td></td>
</tr>
<tr>
<td>Item scanned after receptacle opened at inward office of exchange</td>
<td>EMSEVT event EMD is sent to origin Post.</td>
<td></td>
</tr>
<tr>
<td>Item presented to import Customs</td>
<td>EMSEVT event EDB is sent to origin Post.</td>
<td></td>
</tr>
<tr>
<td>Item held by Customs (typically at inward office of exchange)</td>
<td>EMSEVT event EME is sent to origin Post.</td>
<td></td>
</tr>
<tr>
<td>Item returned from import Customs</td>
<td>EMSEVT event EDC is sent to origin Post.</td>
<td></td>
</tr>
</tbody>
</table>
Item departs from inward office of exchange (having cleared Customs) | EMSEVT event EMF is sent to origin Post. |  

**Operational event** | **Trackable item-level messaging** | **Dispatch- and receptacle-level messaging**

Item arrives at delivery office | EMSEVT event EMG is sent to origin Post. For some products this message is optional. |  

Item arrives at collection point for pick-up | EMSEVT event EDH is sent to origin Post. |  

Unsuccessful delivery (e.g. addressee not present to sign for item) | EMSEVT event EMH is sent to origin Post. |  

Final delivery | EMSEVT event EMI is sent to origin Post. |  

Although not directly related to transport, the S10 item ID and EMSEVT message are the most important standards and operational and data flows in the UPU.

4.2 *S10 item ID/EMSEVT message*

Almost everybody reading this guide will have used the S10 standard, as it is the 13-character barcoded item ID on all international trackable items (e.g. registered letters, parcels, EMS items). It is a standard used by the mailing public. Many designated operators use the same standard for their domestic trackable items as well.

Standard S10 is a 13-character alphanumeric item identifier:

<table>
<thead>
<tr>
<th>Characters</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>1–2 alpha</td>
<td>Product/service indicator</td>
</tr>
<tr>
<td>3–10 numeric</td>
<td>Serial number</td>
</tr>
<tr>
<td>11 numeric</td>
<td>Check digit</td>
</tr>
<tr>
<td>12–13 alpha</td>
<td>Country code</td>
</tr>
</tbody>
</table>

The basic item-level events, as reflected in EMSEVT V3, are also depicted in the following diagram: note that the S10 item identifier is the reference for all these events.
4.3 Electronic Data Interchange (EDI) guide

The UPU, IATA and International Post Corporation (IPC), with sponsorship from several EDI solution providers, have jointly developed and published an EDI guide entitled EDI: The key to post–airline supply chain integration. The guide shows the mail pipeline and associated postal EDI messaging, as well as the equivalent airline cargo messages. This guide is currently available on the UPU website, at http://www.upu.int/en/activities/transport/upu-iata-cooperation.html. The important features of the updated guide are as follows:

- Highlights the importance of EDI for e-commerce and security;
- Provides an update on new versions of EDI standards and refers to EDI best practices;
- Places more emphasis on testimonials by EDI users;
- Includes a detailed introduction by the three organizations promoting EDI exchanges (IATA, UPU, IPC) and examines their joint collaborative initiatives;
- Offers a modern look and feel with improved readability.

5 Types of transport and transit

This section outlines the various means of transportation and transit used in the international mail exchange.

For the purpose of this document, “transportation” applies when only carriers (such as airlines) are involved; “transit” applies when a third party designated operator is involved.

Five types of transportation and transit are typically used:

i Direct transportation

ii Direct transshipment – intraline
iii Direct transhipment – interline
iv Closed transit
v Transit à découvert (open transit)

A sixth option is used by some designated operators:

*Closed mails included in the mail*

Note that when Posts and carriers exchange EDI messages the parties can agree that the transport be paperless. This means that there will be no paper CN 38/CN 41 that follows the mail from origin to destination.

5.1 *Direct transportation*

This is when a single transport leg (flight or maritime voyage) moves the mail from origin to destination. This is the simplest and typically the most service-effective option. Several designated operators are in “hub” countries where direct transport is readily available to many destinations. But the majority of designated operators are in “spoke” countries, where transhipment or transit is required for most destinations.

The UPU Regulations encourage using the most direct route possible (see article 17-132). However, even when direct routeings are available, designated operators may choose less direct routeings if the service requirements can be met and if they are more cost-effective.

Where ocean transport is involved, very few designated operators can use direct routing to many destinations.

5.2 *Direct transhipment – intraline*

This is a transfer from one flight to another where both flights are operated by the same carrier. Typically it is at an airline hub: e.g. KLM at Amsterdam, Lufthansa at Frankfurt, Cathay Pacific at Hong Kong.

Intraline transhipment has a high probability of success. It can also be quite easy to administer from an accounting standpoint, depending on the contract between the designated operator and the carrier.

Note that code sharing,7 although common among airlines for passengers, typically does not include mail arrangements. When planning intraline transhipment, it can be important to determine which airline is the actual operator of the flight in case of code sharing.

5.3 *Direct transhipment – interline*

This is a transfer from one flight to another where the flights are operated by different carriers.

Interline transhipment requires careful planning. Without extensive planning and coordination involving the origin Post and the two airlines, as well as the ground handlers, this type of operation has a low probability of success.

Another method regularly used is for the origin Post to contract with one airline for the whole route. This airline is then responsible for contracting with the other airlines involved regarding all issues. This type of operation has a good probability of success.

5.4 *Closed transit*

Closed transit is when receptacles are consigned to a transit designated operator to be forwarded onwards to the destination, along with the transit operator’s own originating receptacles.

It can be important for the origin and transit operators to consult on closed transit arrangements. This is recommended in the Regulations, as some designated operators may be better able to provide transit than others.

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7 Code sharing is when one airline physically operates a flight, but other airlines include the same flight in their own passenger schedules using their own airline code and flight number.
3 The designated operator of the country of origin may consult with the designated operator providing the closed transit service regarding the route to be followed by the closed mails which it regularly dispatches.

Closed transit can have a high probability of success. It can also be quite easy to administer from an accounting standpoint.

Closed transit is used when volumes warrant a closed dispatch, but the origin is not in a position to effectively plan the transportation all the way to the destination.

Closed transit is also very typical when ocean transport is involved.

Note that, as of 1 January 2012, there were significant changes to the Regulations with respect to transport and transit. These are reflected in articles 17-132, 17-133, 17-226 and 17-227 of the Regulations. The amendments are designed to require more planning between postal operators and airlines.

Previously, in the case of closed transit, the origin operator could include the intended onward flight to be used by the transit operator on receptacle labels and delivery bills. The amended Regulations do not permit this.

The amendments were adopted by the POC after extensive consultation with IATA.

5.5 Transit à découvert (open transit)

Transit à découvert is used when volumes do not warrant a closed dispatch.

Transit à découvert is when items (bundled letters, parcels) to a destination country are included inside receptacles (normally bags) dispatched to a third party (transit) designated operator. The transit designated operator then includes the transit à découvert mail in its own receptacles along with its own originating mail.

As outlined in the Regulations below, it is essential that the origin and transit operators consult on transit à découvert arrangements. As with closed transit, some designated operators are better than others as regards transit à découvert.

With collaboration, transit à découvert can have a high probability of success. It can also be quite easy to administer from an accounting standpoint.

"Article 17-117
Transit à découvert

1 The transmission of à découvert items to an intermediate designated operator shall be strictly limited to cases where the making up of closed mails for the country of destination is not justified. À découvert transmission shall not be used to countries of destination for which the weight of the mail exceeds three kilogrammes per mail or per day (when several dispatches are made in a day) and shall not be used for M bags.

3 The dispatching designated operator shall consult in advance the intermediate designated operators as to the suitability of using them for à découvert items to the destinations concerned. The dispatching designated operator shall notify the designated operators concerned of the date on which dispatch of mail in transit à découvert commences, providing at the same time the estimated annual volumes for each final destination. Unless otherwise agreed bilaterally by the designated operators concerned, this notification shall be renewed if, in a given statistical period (May or October) there were no à découvert items observed and, consequently, no account had to be issued by the intermediate designated operator. Items in transit à découvert shall, as far as possible, be sent to a designated operator which makes up mails for the designated operators of destination."

8 The English version of the Regulations uses the term "transit à découvert".
Designated operators may agree to effect exchanges in transit à découvert. The transmission of parcels in transit à découvert to an intermediate designated operator shall be strictly limited to cases where the make-up of closed mails for the country of destination is not justified. However, it shall be obligatory to make up closed mails if an intermediate designated operator states that the parcels in transit à découvert are such as to hinder its work.

3.1 Transit à découvert shall be possible only under the following conditions:

3.1.1 the intermediate designated operator makes up mails for the designated operator of destination;

3.1.2 the designated operator of origin and the intermediate designated operator agree to this service and to its date of commencement in advance and in writing or by e-mail.”

As indicated in article 17-117.1, transit à découvert is not to be used for M bags. One way to comply with this regulation is for designated operators to offer the M bag product only to those countries for which it has closed dispatches.

5.6 Closed mails included in the mail

This type of transit is (exceptionally) used when a designated operator is faced with forwarding a very small bag of mail that has arrived from an origin operator. Very small bags (i.e. with very few letters) tend to be more vulnerable to errors.

The designated operator has the option of including the very small bags of mail inside one of its own bags.

Some operators use this feature, others do not.

It has a high probability of success in getting the mail to the right destination.

PREDES V2.1 supports the accounting for this type of transit.

The diagrams on the following pages further explain the six types of transport/transit.
5.7 Diagrams of transport and transit

CAYMQA
Montreal

Origin office of exchange

From: Montreal
To: Kigali

direct – no transhipment nor transit

RWKGLA
Kigali, Rwanda

Dest’n office of exchange
direct transhipment – intra-line

In this example, airline B is used to transport the mail from origin to transhipment airport and also from the transhipment airport to destination airport. Only one ground handler is involved at the transhipment airport.

The airline has the necessary information to start planning the load of the flight from transhipment airport to the destination airport well before the flight arrives at the transhipment airport.

This type of operation has a high probability of success.
In this example, airline A is used to transport the mail from origin to transhipment airport and airline B from transhipment airport to destination airport. Two ground handlers are involved at the transhipment airport. Unless there are extensive contractual arrangements made involving both airline A and B, airline B cannot start load planning for its flight until it has taken custody of the mail arriving on airline A. Also, the mail being transhipped must compete for capacity on the same flights that may be used by the designated operator at the transhipment airport.

Without extensive planning and coordination involving the origin Post and the two airlines, and they then coordinating their ground handlers, this type of operation has a low probability of success.
CAYMQA
Montreal, Canada

Closed transit

In this example, the receptacles arriving from the origin enter the Mail Unit part of the IMPC at the transhipment airport, where consignments are created, but they do not enter the office of exchange part where dispatches are created. The origin's receptacle are included in the transit operator's consignment, typically by scanning the receptacle-IDs.

With proper consultation and collaboration between the origin and transit operator, this type of operation can have a high probability of success.

It has the significant advantage of not requiring the origin operator to plan and manage transport beyond the airport of transhipment—which can be quite complex.

RWKGLA
Kigali, Rwanda
transit à découvert (open transit)

In this example, the receptacles arriving from the origin enter the Office of Exchange part of the International Mail Processing Center, where dispatches are created by the transit operator. The origin’s receptacles are opened and the transit à découvert mail is included with the transit operator’s mail going to the destination.

With consultation between the origin and transit operator, this type of operation can have a high probability of success. Note that such consultation is a regulatory requirement, both for Letter Post and Parcel Post.

From an origin operator’s perspective, this type of operation is suitable for very low volume destinations, where there is insufficient volume for closed transit.
In this example, a receptacle (typically a bag) arriving from the origin is placed inside a receptacle (bag) created by the transit operator.

This type of transit is typically not planned but is used to better handle very small receptacles – such as those weighing less than a kilogram. Depending on the transit operator, such receptacles can be more secure when they are forwarded in this manner.

In effect, this is a variation of closed transit.
6 Postal transport and transit – cost and accounting principles

6.1 Treaty provisions

There are two international treaties that define the rules, regulations, forms, etc., for transportation by air:

– The Warsaw and Montreal Conventions of the International Civil Aviation Organization (ICAO) do not include mail\(^9\) in the definition of cargo; hence mail cannot be used under cargo conditions. This specifically means that mail cannot be carried under an IATA airway bill document and must instead be carried under a UPU CN 38 document.

– The UPU Convention and Regulations cover mail.

It is for this reason that all air cargo must be documented by an air waybill, whereas, from an air transport perspective, mail transported by air is documented by the UPU delivery bill (UPU form CN 38 or CN 41).

Notwithstanding the use of postal or cargo documents, whether or not an item can be mailed is a question entirely for the UPU, but the question of what can or cannot be transported by air is within the legal jurisdiction of ICAO.

6.2 Air transport

The delivery bill (e.g. CN 38) and receptacle labels (e.g. CN 35, CN 36, CP 84, CP 85) are very important – to Posts and airlines – for many reasons, including customs at airports. For the airline, the delivery bill and UPU standard receptacle labels define a shipment as being mail, rather than cargo or freight, and enable the airline processes relating to mail to be applied.

The UPU has memoranda of understanding or other arrangements with international organizations dealing with air transport (IATA for airlines and ICAO for civil aviation). There is no such MoU for maritime transport. Maritime and road transport typically involve close collaboration between the origin and destination designated operators and bilaterally agreed operational and accounting arrangements.

The origin designated operator is responsible for transporting mail to the destination or transit operator and incurs the cost of doing so. These costs are typically determined by the contract that the origin operator has negotiated with the transportation company. This applies to air transport, maritime transport and road transport. The UPU Convention and Regulations do not deal with this cost. However, for air transport, in the absence of a contract, designated operators and airlines may use the basic airmail conveyance rate (BACR), even though the BACR is intended for financial settlements between designated operators such as for accounting for closed transit and determining the rate for internal air conveyance where it is applicable.

For air transport, the origin or transit operator must arrange transport to a suitable international airport in the country of destination. There is no UPU publication that defines which international airports are deemed suitable. This can typically be determined based on the IMPC code list. If there is any ambiguity, the origin operator should consult the destination operator.

Example: Halifax (YHZ) is an international airport in Canada. However, the designated operator in Canada does not have an office of exchange in Halifax. From this it can be deduced that YHZ is not a suitable destination airport for mail, whereas Montreal (YUL), Toronto (YYZ) and Vancouver (YVR) are all suitable airports for mail.

The origin operator must arrange for the airline to hand the mail over to the destination operator at a suitable location at the airport. Many operators have airmail units with ramp-side access for this purpose. Alternatively, the arrangement may be that the airline must make the mail available at the airline facility for pickup by the destination designated operator.

If, for air transport, an origin designated operator uses direct transhipment, either intraline or interline, it is responsible for arranging payment to the airline (intraline) or airlines (interline). In the case of interline transhipment, the origin may arrange to pay both airlines directly, or it may arrange to pay one airline and have that airline pay the other. It is very important for the arrangements, both operational and accounting, to be defined in detail between the three parties. (See articles 17-133 and 17-227, including the commentary texts.)

\(^9\) The rules applicable to dangerous goods are an exception. In these cases, the ICAO conventions can also refer to mail.
6.3 Maritime transport

The same principle applies to maritime transport. The origin should consult the destination as regards suitable ports of entry. Note that ports of entry are not necessarily littoral, as there may be intermodal transport whereby containers are offloaded from vessels and transported to an inland port via rail.

For maritime transport the origin operator must pay for all charges that are incurred in making the mail available to the destination operator at the port of entry. If the destination is required to pay such charges, it then obtains reimbursement from the origin.

The destination operator incurs the cost of transporting the mail from the port of entry to the inward office of exchange. In the case of an FCL (full container load), the destination may move the entire container to the inward office of exchange and is then responsible for returning the container to the shipping company. In the case of an LCL (less than container load) the shipping company will typically make the mail available in a warehouse for pickup.

The destination operator also incurs any demurrage or storage charges if the mail is not picked up within the time period specified by the shipping company following the shipping company's notification of arrival to the destination operator.

Note that article 27-102 of the Regulations refers to maritime transport.

6.4 Rail transport


The guidelines were developed by a task force consisting of various designated operators and international rail organizations, the World Customs Organization, the European Union, and the different national customs administrations. The work was undertaken by the task force in the light of Istanbul Congress work proposal 010 relating to transport.

The guidelines will be non-mandatory in nature and could serve as a potential model for designated operators and rail companies in other parts of the world. The UPU is an intergovernmental organization that caters to the needs of its 192 member countries, irrespective of their geographical location.

The guidelines will be a living document that will be updated when needed.

6.5 Closed transit – principles of accounting

Based on the UPU Regulations, the principles of accounting for re-forwarding closed transit, both by air and by surface, are similar, with the exception of closed transit of surface parcels:

- The transit designated operator includes the receptacles on its delivery bill (CN 38 for air, CN 37 for surface and CN 41 for S.A.L.).
- In the case of transport by air, the applicable transport rate is the basic airmail conveyance rate (see article 33-101). In the case of land and sea transport, the applicable transport rate is defined in the Regulations. The Regulations also define the handling charges (see article 27-103).
- Under article 33.3.1 of the Convention, air conveyance dues are to be borne by the designated operator of origin. As stated in article 33.2, the procedure for the origin DO paying the air conveyance dues is described in the Regulations, specifically in articles 33-103, 33-104 and 33-107. It is important to note that the transit DO pays the air conveyance dues to the airlines and then invoices the origin DO for transportation and handling.
6.6 CP 88 special parcel bill

In accordance with the UPU Regulations, the principles of accounting for the closed transit of surface parcels are based on UPU form CP 88, which is sent from the origin designated operator to the destination designated operator. This applies only to surface parcels. It does not apply to air parcels.

6.7 Open transit/transit à découvert – principles of accounting

Under the Regulations, the principles of accounting are very different for letter post and parcel post.

Letter post is based on annual statistics conducted alternatively in May and October and derived from UPU form CN 65. Otherwise, if the transit designated operator so requests, the accounting is based on actual weights.

6.8 CP 81 and CP 82 tables

Transit à découvert accounting for parcel post is based on the inclusion of the cost on the CP 87. The cost applicable for each parcel dispatched as transit à découvert is included in a specific column of the CP 87 parcel bill. The rates for determining this cost are published by transit designated operators in forms CP 81 and CP 82. Note that the columns of the CP 87 are the only direct financial settlement values (i.e. in SDR) in any dispatch document. The fact that these values, in SDR, must be on the dispatch document is significant. It means that information from the transit operator's CP 81 and CP 82, which may change twice yearly, must be incorporated into the origin's system before a dispatch including parcels being forwarded as transit à découvert can be accurately (as regards accounting information) made. Information on how to complete the CP 81 and CP 82 tables are provided through the form completion instruction documents (FCDs) published on the UPU website: [http://www.upu.int/en/activities/parcels/form-completion-instructions.html](http://www.upu.int/en/activities/parcels/form-completion-instructions.html).

CP 81 and CP 82 information can be difficult to manage. The maintenance of these tables by transit operators, the distribution of the information to origin operators, and the interpretation by origin operators (including incorporating the relevant data into the origin system) can be challenging.

6.9 Former CN 68 list

The CN 68 list contained the airmail information for each country of the UPU or each dependent territory of a member country. The list has been discontinued, and any relevant information has been transferred to the Letter Post Compendium, the Transport section of the UPU website, or the Quality Control System (QCS).

The CN 68 list essentially consisted of three parts. An overview is provided below, describing the content of each part and where this information can now be found.

Part A: contained airmail information specific to each member country/designated operator, for use by other member countries/designated operators. Relevant questions from this section are now available in the Letter Post Compendium (Question 39 – Airmail).

Part B: contained information relating to internal air conveyance rates. This information is now published in the Transport section of the UPU website (Basic rate and Internal air conveyance rates).

Part C: contained lists of airmail dispatches sent to and received from each designated operator, intended to be used for transit planning purposes. The CN 68 list of dispatch series has been developed as a tool to enable origin designated operators to use QCS Mail PREDES data to see the list of dispatches sent to each designated operator – for all required categories and classes of mail.

6.10 Transit Manual


6.11 Basic airmail conveyance rate

The BACR is used when mail is re-forwarded by air between designated operators. It can be applied to cover reforwarding by air for:
– receptacles received in closed transit;
– misrouted receptacles received;
– items received as transit à découvert;
– items received as missent items.

The BACR is not intended as the transport rate between a designated operator and an airline, as such rates are typically negotiated and contractually agreed. Contract rates such as these are typically confidential.

However, a designated operator and an airline may agree to use the BACR in the event that their contracts do not cover specific situations.

The BACR is determined by the POC, based on airline cost statistics from ICAO, according to a specific mathematical formula (defined in article 33-101).

The POC (in 1995) also decided on the following:
– If application of the formula results in a change less than or equal to 3%, the BACR will not be changed.
– If application of the formula results in a change greater than 5% (either increase or decrease), the BACR will be adjusted to a maximum of 5%.

Thus, notwithstanding the formula, the maximum annual change in BACR is 5%.

The formula is applied by the International Bureau without any involvement of UPU members or designated operators. There is no information that needs to be provided by designated operators.

It should be noted that the amount of annual increase or decrease in BACR can have an indirect impact on designated operators and airlines. This can happen if, in their contracts, the percentage change in BACR is the trigger for a similar percentage change in their contract rate.

As regards the conveyance of empty bags, the Regulations provide for a rate of 30% of the BACR.

There is no specific BACR for S.A.L. mail. If mail is re-forwarded as S.A.L., unless there is a bilateral agreement between designated operators, the BACR is applied equally to priority mail and S.A.L. mail.

Document POC C 1 2018.1–Doc 9 (available in the UPU document database) can be used to illustrate the process of adopting a new BACR. In this case, the 2018 POC adopted a BACR of 0.539 thousandths of an SDR per kilogramme-kilometre for the year 2019.

IB circular No. 60 of 2018 illustrates the process of communicating a new BACR to UPU members. It can be seen from that circular that the previous rate was 0.567 thousandths of an SDR per kilogramme-kilometre.

The BACR is typically expressed in tonne-kilometres. Considering that a tonne is 1,000 kilogrammes, the BACR for 2019 is 0.539 SDR per tonne-kilometre.

6.12 Airmail distance

When applying the basic airmail conveyance rate to determine a cost per kilogramme (or per tonne) between an origin airport and a destination airport, it is necessary to determine the distance. The UPU publishes a list of airmail distances on its website at www.upu.int/en/activities/transport/publications.html.

Airmail distances between two points are established on the basis of the great-circle distance as determined by IATA, plus 2.5%, which is an average to cover intermediate stops. Airmail distances are rounded up to the nearest hundred when the last two figures are equal to or exceed 50.

10 UPU members and/or designated operators can review the IB's application of the formula at each POC.
6.13 Internal air conveyance

The principle of internal air conveyance (IAC) was based on the premise that the remuneration that the destination operator receives from the origin operator (letter post terminal dues, or TD; parcel post inward land rates, or ILRs) is not sufficient to cover the cost of air transport within the country of destination. It is particularly relevant to countries that have a large geographic area and must use air transport for a portion of their domestic priority letter mail posted in the same city as the inward office of exchange.

By extension, these countries use air transport for a portion of their inbound international mail.

Internal air conveyance was more prevalent in the past, when there was a fixed rate for terminal dues.

The terminal dues system has since evolved toward a target system based in part on each country’s domestic letter rate. Each year, a number of countries have moved from the TD transitional system (which is based on the single rate) to the target system (based in part on the domestic rate).

The following table shows whether the destination is eligible for IAC:

<table>
<thead>
<tr>
<th>Origin in target system</th>
<th>Origin in transitional system</th>
</tr>
</thead>
<tbody>
<tr>
<td>Destination in target system</td>
<td>No</td>
</tr>
<tr>
<td>Destination in transitional system</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Thus countries in the TD target system are eligible to receive IAC only from countries in the transitional system. For parcel post, the equivalent to terminal dues is inward land rates. The process for establishing the ILRs for each country has changed, eliminating internal air conveyance. In its place, to compensate for the cost of air transport within the country of destination, countries may have a different ILR for priority parcels versus non-priority parcels.

As a result of these changes to the remuneration systems for both letter post and parcel post, the application of IAC to compensate for air transport within the country of destination is limited to priority letter post received from countries still in the TD transitional system.

The formula that is used to determine internal air conveyance is defined in article 33-101. It is based on the principle that the origin should compensate the destination for the delta in cost of using air transport rather than surface transport. However there is one caveat – the maximum air transport rate per tonne-kilogramme (TKM) used to calculate the IAC is capped at the level of the basic airmail conveyance rate, which is set annually by the POC. Thus if a country’s actual domestic air rate per TKM is less than the BACR, the actual domestic air rate is used. If the actual domestic air rate is higher than the BACR, then the BACR is used.

The formula is thus to first determine the effective rate per TKM for which the origin should compensate the destination. This is as follows: Effective rate = (lesser of BACR or actual domestic air rate) minus the domestic surface rate.

The IAC rate is then calculated as follows: IAC = (effective rate per TKM) times (the weighted average distance)

In order to be eligible for internal air conveyance, the destination designated operator must provide the following information to the IB:

– Information to determine the weighted average distance that inbound priority letter post is transported internally by air;
– The domestic air transport rate;
– The domestic surface transport rate.

The determination of the weighted average distance is done by sampling mail for a suitable period and compiling the results as in the following table:
<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
<th>Kilogrammes</th>
<th>Distance (kilometres)</th>
<th>Kilogramme-kilometres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airport of inward office of exchange</td>
<td>(Local delivery or transported further by surface)</td>
<td>1,500</td>
<td>0 (Airmail transport distance is zero)</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Airport A within destination country</td>
<td>500</td>
<td>400</td>
<td>200,000</td>
</tr>
<tr>
<td></td>
<td>Airport B within destination country</td>
<td>700</td>
<td>600</td>
<td>420,000</td>
</tr>
<tr>
<td></td>
<td>Airport C within destination country</td>
<td>1,200</td>
<td>500</td>
<td>600,000</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>3,900</strong></td>
<td></td>
<td><strong>1,220,000</strong></td>
</tr>
</tbody>
</table>

In this case, the weighted average distance is the ratio (total kg-km)/(total kg) = 1,220,000/3,900 = 312.8 km.

The domestic air transport rate is typically a contract rate.

The domestic surface transport rate is typically determined by estimating the weight of a cubic metre of mail and determining the average cost to transport a cubic metre by surface.

Designated operators requesting IAC rates to be published are required to respond to an IB circular letter requesting the information. In the past the IAC rates were communicated via the CN 68 list of airmail services. This is no longer the case. They are now published by IB circular, as can be seen in circular No. 147 of 2017, which indicates that 32 countries are entitled to internal air conveyance in 2018. IB Circulars on IAC are also published in the Transport Section of the UPU website.

6.14 Return of empty bags

It should be noted that the Regulations permit Posts to establish a value for their bags and to charge destinations that have not returned them. Some Posts apply this provision; others do not. The provision does serve to illustrate that the supply of equipment (in this case, bags) to dispatch mail is very important.

The principles of the operations and accounting process for the return of empty bags are somewhat different than for all other classes.

The key differences are:
- The owner of the bags (i.e. the destination of the dispatch of empty bags) can specify the routeing to be used for the return of its bags.
- The airline bills the owner of the bags rather than the operator that created the consignment (i.e. the delivery bill).
- These principles can introduce practical challenges in the process of the return of empty bags. As an example, a Post needing to return empty bags may not have any business relationship with the airline that the owner of the bags selected. Also, when closed transit is used to transport the mail to the destination via a transit Post, the origin has no direct business relationship with the airline used by the transit operator.

Because of these challenges, some Posts have introduced a method to reduce the complications:
- Some Posts have developed single-use bags that do not need to be returned. However, if the destination cannot dispose of the bags in a low-cost and environmentally friendly manner, it can still return the bags at the cost of the owner of the bags.
- Some Posts have also indicated that airmail bags should be returned by surface.
- Some Posts allow and encourage destination Posts to use their bags to dispatch mail back to the owner of the bags.
- Some Posts participate in a multilateral bag-pooling arrangement, using a common bag. IPC manages this arrangement.
– In many Posts, ensuring an adequate supply of bags is an on-going challenge. Posts often ask the International Bureau to issue circulars requesting the return of their bags, especially when the peak volume period is approaching.

The following are some best practices Posts may consider:
– Origin Posts should make sure that their bags are clearly identified as belonging to them. Having only a logo and not a country name printed on the bag can make it difficult to identify the owner.
– Origin and destination Posts should make every effort to use bags in both directions.
– Origin Posts should periodically review and update their information about returning their bags. Twice yearly is recommended.
– Destination Posts returning bags should regularly ensure that the frequency of dispatch of empty bags to all countries is appropriate so that empty bags needed by the owners are not stored for a lengthy period.
– Destination Posts returning bags should ensure that their dispatches of empty bags are documented in a PREDES message. Like PREDES messages for all letter post, parcel post and EMS, PREDES for empty bags can be very useful to the destination.
– As bags are typically very lightweight, it can be cost-effective to bilaterally agree to return empty bags in a dispatch of mail. The empty bags can be dispatched as exempt from terminal dues.

For reference, the following is commentary text in the Regulations with key text bolded:

“17-144.4 Empty bags returned by air

The IATA–UPU Contact Committee approved the practical method of application given below:

i The owning DO shall have the right to choose the route and the carrier for the return of the bags. The owning DO can stipulate details such as the timing, frequency and office of return for its empty bags. In this regard, it should seek bilateral rate and operational agreements with a given carrier or carriers and inform sending DOs and carriers about these details. Financial settlements will, therefore, in principle be limited to bills raised by the participating carrier against the owning DO.

ii Empty bags should in principle be returned to one office of exchange as stipulated in article 17-144.5, and as communicated by each DO via the UPU Compendium of Information.

iii it is desirable that airlines and DOs discuss and coordinate, to the maximum possible extent, arrangements for the return of empty bags.

iv As the return of empty bags by air is now paid for by the owning DO, the airline should accept liability for any loss of the bags.

v A heading labelled “DO owning empty receptacles” has been created on the CN 47 Delivery Bill for mails of empty bags. The returning (i.e. non-owning) DO will indicate the DO owning the bags, and participating airlines will bill the owning DO on this basis.

vi Bags returned by air will always be sent in separate dispatches and accompanied by the CN 47 only. The airlines and DOs concerned should mutually agree upon any alternate procedure.

vii Carriers will bill owning DOs for the carriage of empty bags by listing the dates, serial dispatch numbers and the DO of origin of the CN 47s to which each invoice refers so that owning DOs can account for their equipment.

viii In cases where no prior bilateral agreement has been made and empty bags are handled and carried at a point of transit by a non-contracted airline as per instructions on the CN 47 issued by the sending DO, the non-contracted carrier will bill such carriage to the owning DO at the applicable carrier’s rate.

ix In cases where a transit DO is involved, the transit DO will be entitled to claim, from the owning DO, charges for handling the empty bag dispatch. The DO of transit shall prepare the CN 55 and CN 56 statements from the particulars on the CN 47 delivery bill.

Under article 33-101, the air conveyance rate payable for empty bags will, at the most, be 30% of the applicable UPU basic airmail conveyance rate. Article 17-135 applies, with appropriate changes, to CN 47 bills.
Empty bags returned by surface

For billing for land and sea transit charges for dispatches of empty receptacles, the following procedure applies:

- Return of empty receptacles by direct route between DO A and DO B (DO to which receptacles belong): transit charges should be billed by DO A to DO B, on the basis of the transit charges indicated in article 27-103 for the distance between A and B;
- Return of empty receptacles from DO A to DO C (to which the receptacles belong) through DO of transit B:
  - transit charges for conveyance from A to B should be billed by DO A to DO C, on the basis of the transit charges indicated in article 27-103 for the distance between A and B;
  - transit charges for conveyance from B to C should be billed by DO B to DO C, on the basis of the transit charges indicated in article 27-103 for the distance between B and C.”

7 UPU forms and messaging

7.1 Receptacle labels

Postal receptacle labels are probably the single most important UPU form as regards quality of service. The information content on the label is of critical importance to both Posts and carriers such as airlines.

The durability of the label, i.e. its ability to withstand the rigours of transport, is also extremely important.

Label form numbers

In the UPU Regulations, label form numbers are allocated by mail class and mode of transport, as follows:

<table>
<thead>
<tr>
<th>Label Class</th>
<th>Air</th>
<th>S.A.L.</th>
<th>Surface</th>
</tr>
</thead>
<tbody>
<tr>
<td>Letter post</td>
<td>CN 35</td>
<td>CN 36</td>
<td>CN 34</td>
</tr>
<tr>
<td>Parcel post</td>
<td>CP 84</td>
<td>CP 85</td>
<td>CP 83</td>
</tr>
<tr>
<td>EMS</td>
<td>EMS CN 35</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

Some designated operators that use the classification system based on the speed of treatment of items (article 17-101) deviate slightly from this, applying receptacle label form numbers based on priority rather than mode of transport. The difference is that priority mail forwarded by surface, such as by road between countries in close proximity, will have label form numbers CN 35 and CP 84 rather than CN 34 and CP 83.

Label colours

The use of colour is an important element of receptacle labels.

The colours in most common use are:

- Parcel post: yellow ochre;
- EMS: blue/orange striped;
- Empty bags: green;
- Ordinary letter post: white, blue, red;
- Bulk letter post: violet, red.

The distinction between the use of white versus blue on ordinary letter post labels can depend on the classification system (article 17-101 Basic services – speed of treatment versus contents) applied by the origin. The most common, and the recommended application, is to use white for priority mail (including that transported by surface) and blue for non-priority mail, including S.A.L.
Red is used on letter post labels if the receptacle contains registered or insured items and/or the letter bill. In such cases the entire label may be red, or a small red flasher may be applied. It is important that there be some red colour visible to the destination office of exchange to ensure that the registered or insured items and/or the letter bill is properly handled as the receptacle is opened.

**F label**

The label containing the CN 31 or CN 32 letter bill or the CP 87 parcel bill must have a large F, for “Feuille d'avis” or “Feuille de route” (the French name of the letter/parcel bill) near the top right corner. Note that, unlike for letter post, the parcel post receptacle containing the CP 87 is not required to have any colour red. This is because it is much easier to detect a parcel bill in a receptacle of parcels than it is to detect a letter bill in a receptacle of letters or printed papers.

**Creating receptacle labels**

Designated operators use a number of methods to create receptacle labels. The most common is to produce an adhesive label on white paper stock and then to adhere it to an appropriately coloured backing tag that also has an eyelet. The label is adhered to the backing tag and the tag then affixed to the bag via a bag seal. In the case of trays, the adhesive label may be adhered directly to the tray.

Designated operators may also have more sophisticated systems that print directly on coloured material.

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11 However, designated operators may agree, in their bilateral relations, to dispense with the use of red labels in favour of, for security reasons, any mutually agreed alternative method.
Most designated operators now have automated dispatch systems in which labels are created by computer.
**Standard S47**

UPU technical standard S47 defines the data elements for Posts with automated systems and their placement on the label. It should be noted that there is a direct linkage between the data on the receptacle label and the EDI message standard PREDES (reference M41 PREDES V2.1 or M14 PREDES V2.0).

Designated operators should make every effort to comply with the S47 standard to the fullest extent possible.

An example of a CN 35 label based on S47 is shown below. As there are a wide variety of label attributes, it is important to refer to the specification.

Some key features of S47:

- The S9 receptacle ID barcode is in the middle of the label, thereby better protecting it.
- The origin and destination IMPC operator and IMPC codes and names, from code list 108 are included.
- The dispatch type (mail category plus mail subclass) is included.
- The receptacle type, from code list 121, is included.
- The “format of contents” required for format-separated terminal dues from code list 120 is included.
- The receptacle-level mail subclass from code list 117 is included.
- The planned transport is displayed (one line per leg). For each leg, the date (day of month only), origin location, conveyance reference (e.g. flight) and destination location are included.

**Best practices regarding receptacle labels**

- Ensure that the S9 barcoded receptacle ID is included on all labels from all origin offices of exchange for all mail classes.
- Some origins create receptacle labels in one process and then scan the receptacle ID in a subsequent process, for example, to include the receptacle in a consignment. This is a built-in quality check of the barcode. Origins that do not do this should have processes in place to make sure that all labels they create are scannable. This is because it is possible for a label printer to have a technical problem and create non-scannable labels, which cause significant problems for destinations and carriers. The origin can, for example, systematically scan receptacle labels created by each label printer.

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12 UPU technical/message standards can be at one of the following six different stages in the approval process:

- Status P (work item);
- Status 0 (working draft);
- Status 1 (tested draft standard);
- Status 2 (approved UPU standard);
- Status S (superseded standard);
- Status W (withdrawn standard)
Origins should periodically review their label construction to ensure that durable and waterproof paper stock is used, that the adhesive is suitable, that the ink does not smear even if wet, that the eyelet is strong, etc. This is because the receptacle label is the only UPU form that must withstand the rigours of transport.

7.2 **Messaging standards**

The PREDES/RESDES, PRECON/RESCON and CARDIT/RESDIT data flows are depicted on the following pages:
**PREDES message**
1 per dispatch
May be one, or many, receptacles
May be none, or many, track-able items

**RESDES message**
May be several per dispatch
If receptacles processed at different times at dest’n OE

Note: A copy of the PREDES and RESDES is sent to PTC and IPC for loading into QCS and CAPE.
Note: PRECON consists of receptacles allocated to a specific designated transport. The receptacles may be from a single dispatch, or many dispatches. Receptacles of a specific dispatch may be split and thus not be on the same consignment. Receptacles may be either originating (from the same operator) or being forwarded as closed transit (from another operator). There can be more than one consignment allocated to a specific transport.

All receptacles of a consignment are of the same mail category, but may be of different mail classes. e.g. letter post, parcel post, and EMS may be on the same consignment.

Note: Depending on the operator, OEs may be separate and distinct from mail units as depicted here. Or, more commonly, both functions (OE and mail unit) may be performed in a single IMPC (International Mail Processing Center).

Note: A copy of the PRECON and RESCON is sent to PTC and IPC for loading into QCS and CAPE.

**PRECON message**
*1 per consignment*
*May be one, or many, receptacles*

**RESCON message**
*May be several per consignment*
*If receptacles arrive at different times at dest’n mail unit*
Note: Like PRECON, CARDIT consists of receptacles allocated to a specific designated transport. The receptacles may be from a single dispatch, or many dispatches. Receptacles of a specific dispatch may be split and thus not be on the same consignment. Receptacles may be either originating (from the same operator) or being forwarded as closed transit (from another operator). There can be more than one consignment allocated to a specific transport.

All receptacles of a consignment are of the same mail category, but may be of different mail classes. e.g. letter post, parcel post, and EMS may be on the same consignment.

Note: A copy of the CARDIT and RESDIT may be sent to PTC and IPC for loading into QCS and CAPE.

Note: The RESDIT events actually provided by carriers are typically contractually agreed between the designated operator and the carrier. It may vary by airport location. Airline ground handling arrangements at each location are often a determining factor.

CARDIT message
1 per consignment
May be one, or many, receptacles

RESDIT messages
May be several per consignment
Event based messages as receptacles progress along the supply chain. Refer to code list 100 - consignment event codes.
### 7.3 Overview of messaging standards

In general, it is recommended always to use the newest version of the EDI messages. The following table provides a general overview of all UPU messaging standards. Those not related to transport are highlighted by shading.

<table>
<thead>
<tr>
<th>Message standard</th>
<th>From/to</th>
<th>General description</th>
<th>Business purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>M40 EMSEVT V3</td>
<td>Exchanged between DOs handling trackable items (e.g. registered letter post, parcel post, EMS).</td>
<td>Item-level event tracking message for trackable items as they progress along the supply chain. The relevant item ID standard is S10. M40 is based on 25 defined events. A subset of these events is used for measurement that impacts financial settlements.</td>
<td>Track and trace for customers, enabling visibility of their items on DOs’ websites. Quality of service measurement, in some cases as an element of financial settlements.</td>
</tr>
<tr>
<td>M41 PREDES V2.1</td>
<td>Origin OE to destination OE. Relates to UPU forms: Letter bills CN 31 and CN 32. Parcel bill CP 87. Special lists CN 33 and CN 16. Receptacle labels CN 34, CN 35, CN 36, CP 83, CP 84, CP 85.</td>
<td>Dispatch, receptacle and item-level message. It defines the item-to-receptacle relationship, i.e. the logical location or receptacle ID, for trackable items (e.g. registered letter post, parcel post, EMS).</td>
<td>PREDES/RESDES enables: Operational control of receptacles. Analysis of the OE-to-OE component of the supply chain for quality of service. Network analyses related to volumes. It also supports financial settlement processes.</td>
</tr>
<tr>
<td>M13 RESDES V1.1</td>
<td>Destination OE to origin OE.</td>
<td>Receptacle-level message. RESDES is the response to PREDES.</td>
<td>Provides origin OE with positive confirmation, including date/time, of processing of receptacles, as well as some other receptacle-level attributes from a destination perspective.</td>
</tr>
<tr>
<td>M10 PRECON V1.1</td>
<td>Origin mail unit to destination mail unit. Relates to UPU delivery bill forms CN 37, CN 38, CN 41.</td>
<td>Consignment- and receptacle-level message. PRECON defines receptacles allocated to a specific consignment (i.e. transport from origin to destination).</td>
<td>Provides destination mail units with pre-advice of receptacles in transit to them.</td>
</tr>
<tr>
<td>M12 RESCON V1.1</td>
<td>Destination mail unit to origin mail unit.</td>
<td>Receptacle-level message. RESCON is the response to PRECON.</td>
<td>Provides origin mail unit with positive confirmation, including date/time, of arrival of receptacles, as well as other attributes.</td>
</tr>
<tr>
<td>M48 CARDIT V2.1</td>
<td>Origin mail unit to carrier. Relates to UPU delivery bill forms CN 37, CN 38, CN 41.</td>
<td>Consignment- and receptacle-level message. CARDIT defines receptacles allocated to a consignment (set of transport from origin to destination), for carrier operations and billing purposes.</td>
<td>Provides carrier with origin operator consignment and receptacle information, including intended transport (e.g. flights).</td>
</tr>
</tbody>
</table>
### Message standard

<table>
<thead>
<tr>
<th>Message standard</th>
<th>From/to</th>
<th>General description</th>
<th>Business purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>M49 RESDIT V1.1</td>
<td>Carrier to origin DO of consignment.</td>
<td>M49 RESDIT is the carrier response message to M48 CARDIT V2.1.</td>
<td>Enables the carrier to provide information regarding receptacles as they progress through the supply chain. The information provided (events and locations) is typically agreed between the origin operator and the carrier.</td>
</tr>
</tbody>
</table>

RESDIT is an event message at the receptacle level. The events are described in code list 100. Some examples:
RESDIT 74:Received: Carrier takes control/custody by reception/pickup
RESDIT 21 Delivered: Carrier surrenders control/custody to consignee or agent

| M33 ITMATT | Origin DO to destination DO. Relates to UPU forms CN 22, CN 23. | Item-level message. | Primary purpose is to provide customs-related data to the destination operator. ITMATT is intended as a source of data for M43a CUSITM. |

Note: The following message standards are in the process of being implemented by some operators and their customs organizations.

| M43a CUSITM | Destination DO to its customs organization. | Item-level message. | Provides Customs with information to enable customs control, such as determination of duty or tax. |
| M43b CUSRSP | Customs to destination DO. | Item-level message. | Provides destination DO with feedback from Customs concerning the item, including customs clearance of the item. |
| M37 EVTRPT | This is in minimal use. The need for M37 has been met by M40 EMSEVT V3. |
| M42 eVN | DO sending a verification note to another DO. Relates to UPU forms CN 43 and CP 78. | Replaces the exchange of paper verification notes. |

### Technical standards

Many technical standards are not related to the exchange of international mail. For example, some are related to placement areas on envelopes, and some are related to radio-frequency identification (RFID). The technical standards related to the exchange of international mail are the following:

<table>
<thead>
<tr>
<th>Standard</th>
<th>Name</th>
<th>Comments</th>
<th>Related message standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>S8</td>
<td>Postal dispatches</td>
<td>Referenced in modules 2 and 4. It is recommended to use the user's guide on the website rather than the standard.</td>
<td>PREDES</td>
</tr>
<tr>
<td>S9</td>
<td>Postal receptacles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S10</td>
<td>Identification of postal items – 13-character identifier</td>
<td>Referenced in module 1.</td>
<td>EMSEVT/PREDES</td>
</tr>
<tr>
<td>Standard</td>
<td>Name</td>
<td>Comments</td>
<td>Related message standards</td>
</tr>
<tr>
<td>----------</td>
<td>-----------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>S32</td>
<td>Postal consignments</td>
<td>Referenced later in this module under PRECON/RESCON.</td>
<td>PRECON/CARDIT</td>
</tr>
<tr>
<td>S34</td>
<td>Registration of international mail processing centres</td>
<td>Referenced in modules 2 and 4.</td>
<td>EMSEVT/PREDES</td>
</tr>
<tr>
<td>S47</td>
<td>Postal receptacle labels</td>
<td>This standard is currently at status 1 and version 4. It relates to the format and data contents for receptacle labels. The current version was adopted in April 2015.</td>
<td>PREDES</td>
</tr>
</tbody>
</table>

**UPU forms and their corresponding messaging and technical standards**

The relationship between UPU forms and standards is depicted in the following table:

<table>
<thead>
<tr>
<th>Level</th>
<th>UPU letter post form (and EMS equivalent)</th>
<th>UPU parcel post form</th>
<th>Combined letter post/parcel post form</th>
<th>UPU technical standard</th>
<th>UPU messaging standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Article description</td>
<td>Customs declarations:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Item-level labels:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CN 04 registered</td>
<td>CP 73 ordinary parcel</td>
<td></td>
<td></td>
<td>M40 EMSEVT</td>
</tr>
<tr>
<td></td>
<td>CN 05 recorded delivery</td>
<td>CP 74 insured parcel</td>
<td></td>
<td></td>
<td>M41 PREDES</td>
</tr>
<tr>
<td></td>
<td>CN 05bis tracked</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CN 06 insured</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Item-level forms:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CN 33 special list – registered items</td>
<td>CP 87 parcel bill</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CN 16 special list – insured items</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receptacle</td>
<td>Receptacle-level labels:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CN 34 surface</td>
<td>CP 83 surface</td>
<td></td>
<td></td>
<td>M41 PREDES</td>
</tr>
<tr>
<td></td>
<td>CN 35 air</td>
<td>CP 84 air</td>
<td></td>
<td></td>
<td>M13 RESDES</td>
</tr>
<tr>
<td></td>
<td>CN 36 S.A.L.</td>
<td>CP 85 S.A.L.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dispatch</td>
<td>Dispatch-level forms:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CN 31 letter bill</td>
<td>CP 87 parcel bill</td>
<td></td>
<td></td>
<td>M41 PREDES</td>
</tr>
<tr>
<td></td>
<td>CN 32 letter bill for bulk mail</td>
<td></td>
<td></td>
<td></td>
<td>M13 RESDES</td>
</tr>
</tbody>
</table>

13 The CP 72 is a manifold form set that includes a CN 23 customs declaration and a CP 73 parcel label.
14 The CN 23, rather than the CN 22, can optionally also be used for letter post.
15 Parcels are individually listed on the CP 87 parcel bill, which is functionally similar to the CN 33 for registered letter post.
<table>
<thead>
<tr>
<th>Level</th>
<th>UPU letter post form (and EMS equivalent)</th>
<th>UPU parcel post form</th>
<th>Combined letter post/parcel post form</th>
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<th>UPU messaging standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Article description</td>
<td>Customs declarations:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CN 22</td>
<td>CP 72&lt;sup&gt;16&lt;/sup&gt;</td>
<td>CN 23&lt;sup&gt;17&lt;/sup&gt;</td>
<td>M33 ITMATT</td>
<td></td>
</tr>
<tr>
<td>Consignment</td>
<td>Consignment-level forms:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>S32 consignment ID</td>
<td></td>
<td></td>
<td></td>
<td>M32 consignment ID</td>
</tr>
<tr>
<td></td>
<td>M10 PRECON</td>
<td></td>
<td></td>
<td></td>
<td>M12 RESCON</td>
</tr>
<tr>
<td></td>
<td>M12 RESCON</td>
<td></td>
<td></td>
<td></td>
<td>M48 CARDIT and</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>M49 RESDIT</td>
</tr>
</tbody>
</table>

8 Routeing airmail

8.1 Delivery standards

Each operator publishes its delivery standards in three publications.


For parcel post, in an annex to the Parcel Post Compendium Online at: Universal Postal Union – Parcel post compendium.

For EMS, in the EMS Operational Guide, available to registered users at: www.emsog.post

Each of these publications defines the delivery standard from arrival at each inward office of exchange, to delivery to postcode zones in the destination country. The delivery standards are typically based on domestic standards, with the inward office of exchange serving as a proxy for the (domestic) office of posting.

The publications also define the latest time that inbound mail must arrive, either at the airport (air transport) or at the port or the office of exchange (surface transport), in order to receive the same level of service as domestic originating mail posted the same day. This time is called the “latest arrival time”, or LAT.

8.2 Some best practices

The challenge of routeing mail can vary significantly depending on the country. Some countries are “hub” countries, with daily direct flights to many destinations. Others are “spoke” countries with direct flights to only a few destinations; these countries must rely on transhipment or transit to provide service to many destinations.

For some countries, only a very small number of destinations can be served directly – sometimes only one or two destinations.

Consultation with airlines

Similarly, the volume of mail can vary extensively, depending on the country. In some cases it is critically important to plan aircraft capacity with the airline. In other cases, capacity planning is not as critical. However, in all cases, the origin Post should first check with the airlines involved to assure proper and acceptable schedules are used and to assure, to reasonable certainty, that adequate capacity will in fact exist on the planned flights to accommodate the mail – throughout the scheduled period.

<sup>16</sup> The CP 72 is a manifold form set that includes a CN 23 customs declaration and a CP 73 parcel label.

<sup>17</sup> The CN 23, rather than the CN 22, can optionally also be used for letter post.

<sup>18</sup> Time spent in customs is typically not included.
**Latest arrival time**

Every effort should be made to have mail arrive before the LAT, although unreliable connections should be avoided. The LAT is only to be used by the origin Post for planning purposes.

**Critical tag time (CTT)**

The origin Post must make every effort to have the mail handed over to the destination Post before CTT, even when the mail has arrived after the LAT.

**Direct flights**

Direct flights should be used whenever possible. Depending on various factors, it may be better to hold the mail until the following day for a direct flight.

**Consistency**

When transhipment or transit is required, every effort should be made to have a consistent routeing plan throughout the schedule period (e.g. the winter/summer airline schedules).

**Consultation between origin and transit operators**

It is important for origin Posts to fully consult with, and maintain close dialogue with, actual and potential transit Posts.

When direct transhipment is being considered, it is important to ensure that the airline (or airlines) agrees that the connection is operationally viable. This especially applies to interline transhipment, but also to intraline transhipment, in particular where code-shared flights may appear in passenger schedules. It is also important to know what airline actually operates the flight and whether the ground handling arrangements are in place.

In some cases direct transhipment may look feasible based on passenger flight schedules but is unworkable for mail. After appropriate consultation, it may be that closed transit is a more reliable alternative than direct transhipment.

**Monitoring of dispatch-closed times compared with planned transport departure times**

Offices of exchange sometimes close dispatches too much in advance of planned transport departure, so that mail that could have been dispatched “today” must wait for the next dispatch, possibly “tomorrow”. A systemic practice of closing dispatches too early may not be readily evident.

Similarly, it can happen that offices of exchange close dispatches too late for the planned transport. (However, this is typically noticed each time it occurs.)

Periodic monitoring of dispatch-closed times can improve end-to-end service.

Note that the PREDES message includes both the dispatch-closed time and the planned transport depart time. PREDES information can be used for this monitoring.

**Proactivity by destination Post**

Normally it is the origin Post that should monitor the quality of its planned transport. However, the destination can also do this. Both Posts can be impacted by service failures. Whenever the destination Post notices that the planned transport arrangements used by the origin Post systematically fail, the destination Post should inform the origin Post. Note that the PREDES message includes the planned transport, and the RESDES shows the date/time each receptacle is processed at the inward office of exchange.

**Labelling receptacles forwarded as closed transit**

When dispatching mail to a transit Post as closed transit, the origin Post must not include any onward routeing on the receptacle label or the delivery bill, as indicated in article 17.132.3. Inclusion of onward routeing information can cause confusion by giving the appearance that direct transhipment is planned. It is typically unrealistic for an origin Post to specify the routeing to be used by a transit Post because mail in closed transit is, in principle, forwarded by
the same transportation used by the designated operator of the country of transit for the transport of its own mails (reference 17.132.4).

*Barcoded receptacle ID*

The quality of the receptacle label is critical. One of the most important factors for success – for carriers, transit Posts and destination Posts – is the barcoded receptacle ID. Origin Posts should make every effort to ensure that all receptacle labels have a barcoded receptacle ID, from all origin offices of exchange, for all mail categories (priority, S.A.L., non-priority) and for all mail classes (letter post, parcel post, EMS and empty receptacles).

### 8.3 Service agreements

The IATA–UPU Contact Committee has developed a framework for a service agreement between an airline and a postal operator. Posts can use this model agreement when negotiating and drawing up contracts. It is available on the UPU website at: www.upu.int/en/activities/transport/publications.html.

Note that this framework is continually being improved. The 2018.1 POC approved the latest framework service agreement (POC C 1 2018.1–Doc 5b.Annex 1).

*Guidelines for using the Framework for a Service Agreement between an airline and a designated operator*

The guidelines aim to provide supplementary information on the provisions of the framework agreement in order to help designated operators better understand and use the provisions. The link to the guidelines can be accessed at http://www.upu.int/en/activities/transport/publications.html.

### 9 Use of EDI to monitor the transportation operation

Prior to EDI messaging the only method to monitor the OE-to-OE component of the supply chain was for the origin to include a CN 44 trial note in the dispatch. The destination would indicate the date/time of arrival and return the form to the origin. The origin would then analyze the returned CN 44 forms. This was a cumbersome process, and often the CN 44 trial notes were not returned in a timely manner.

One of the purposes of the S9 barcoded receptacle ID and message sets such as PREDES/RESDES, PRECON/RESCON and CARDIT/RESDIT is to enable origin and destination Posts to more easily and thoroughly monitor the OE-to-OE component of the supply chain.

At a minimum, this monitoring can identify dispatch series that are performing well, versus those that are not performing well, so that resources can be focused on the latter.

Often the probable cause of failures can be deduced by applying analytical reasoning and business knowledge to the EDI information. This probable cause then just needs to be confirmed, e.g. through e-mail to a carrier or partner Post. Then, of course, the problem needs to be fixed.

By having a central database whereby origin and destination operators can access the same information and work collaboratively to improve the quality of the OE-to-OE component of the supply chain, significant improvement in the end-to-end quality of service is possible at low administrative cost.

The following should be noted:

- The EDI messaging data that can be used for transportation is at the receptacle level – not just the dispatch level (as is the case with the CN 44). Every receptacle can be tracked. This is particularly important because receptacles of a dispatch do not always travel together.
- The potential for end-to-end service improvement is not just for trackable items. It is for all products, including ordinary non-registered letter post – the largest volume product.
- Rather than being based on a small sample of items, EDI messaging can cover 100% of the mail.
- Three message sets can be used to monitor the quality of the OE-to-OE component of the supply chain. These are PREDES/RESDES, PRECON/RESCON and CARDIT/RESDIT.

Of the three, PREDES/RESDES is the most advanced in terms of coverage and potential for immediate use for quality improvement. Many Posts are already sending PREDES/RESDES. Some of these are making extensive
use of a central database to improve quality of service. Many other Posts, although they are sending PREDES/RESDES, do not make use of its service improvement potential.

The CARDIT/RESBIT message set can provide additional information for the origin operator. This is especially the case if the airline sends RESBIT messages from the destination, indicating that the receptacle has been handed over to the destination Post.

At this time, the PRECON/RESCON message set is less widely used than the PREDES/RESDES. A primary use of PRECON/RESCON is to advise the transit operator of receptacles en route as closed transit.

In order to make business use of the data that already resides in central databases, operators need the ability to view and extract the data – in useful, user-friendly, formats. Some operators already have this capability, but most do not.

The POC Transport Group’s work plan includes further improving the visibility of mail while in transport through increased synergies with carriers and use of EDI messaging, e.g.:

- by maximizing the benefit of PREDES/RESDES messaging; and
- by developing reporting tools in the UPU’s Quality Control System (QCS) based on PREDES/RESDES so that all designated operators have access to a basic set of reporting tools.

In conjunction with the work that is being undertaken by the POC Transport Group, it is recommended that operators send PREDES/RESDES messages for all dispatch series and make maximum use of the reporting tools available from central database managers.

It is also recommended that operators establish CARDIT/RESBIT exchanges and reporting with their airlines, to the maximum extent possible.

**Mail registration device**

There are an increasing number of IT tools available to monitor leg 2 processes. One of them is the mail registration device (MRD). The MRD provides a complete view of handover processes between Posts and airlines at both origin and destination, enabling seamless visibility from outbound Post to inbound Post.

The MRD allows a quick and simple registration of mail handovers between Posts and airlines at postal facilities situated in airports. The device is installed by designated operators at the point where handlers from the airlines deliver postal containers to the postal staff and/or where postal staff handover mail consignments to airlines, which usually takes place at the entrance of the airmail units at the airport. The MRD consists of a touchscreen terminal, a scanner, a label printer and technical infrastructure to manage the data produced.

The main benefit of MRD use is increased visibility over one of the operational grey areas within airmail transportation (accurate information on mail status), progressively eliminating the visibility gap in the airmail transportation pipeline. Two separate and independent processes can be registered through an MRD: the delivery of mail consignments at destination (proof of delivery – POD MRD) and the handover of mail consignments at origin (proof of custody – POC MRD).

MRD data is collected and consolidated by IPC, and the Transport Group will analyze the possibility of wider use of this system in many designated operators’ networks.
10 Security issues

Safeguarding the postal supply chain is critical. Nearly every Post has experienced a significant increase in the volume of goods associated with e-commerce. In a commercial product fulfilment model, there is no value for the mailing business if a Post cannot protect commercial products and deliver them to paying customers. In simple terms, if a Post cannot reliably and safely deliver e-commerce products, mailers will understandably seek alternative delivery providers.

Security measures must protect the postal supply chain from criminal threats, mistreatment, loss, and unnecessary delay. Another significant threat is dangerous goods. Each Post must have procedures in place for controlling the introduction of dangerous goods into postal networks. Most Posts currently devote significant resources to preventing the mailing of prohibited lithium batteries, flammable and toxic substances, and improvised explosive devices. In addition to safeguards to protect postal personnel and the public, a priority should be placed on dangerous goods that could be a threat to aviation.

The UPU also provides guidance (POC C 1 PSG 2018.1–Doc 6.Annex 1: Model Postal Security and Investigation Unit) for Posts interested in supporting a dedicated unit within their operation to focus on matters of security and dangerous goods.

The UPU provides a number of publications, documents, and references to assist Posts in implementing an effective security programme. UPU security standards S58 and S59 are now mandatory for all Posts.

Consignment security declaration

The consignment security declaration (CSD) uses a standard format to provide evidence of the security status of a consignment, including information on who secured what consignment, how and when. If a designated operator has been granted Regulated Agent (RA) status, it can screen mail items and use a paper CSD. Designated operators that do not have RA status will need to put in place contractual arrangements with airlines or other eligible entities for security screening and the issuance of the CSD.

Electronic Consignment Security Declaration Guidelines (eCSD)

Instead of using a paper form, the CSD information could be included in M48 CARDIT 2.1 messages in the form of an e-CSD. Detailed information about the eCSD is available in document POC C 1 2018.2–Doc 5e. The eCSD is the electronic representation of the CSD. It is based on the CN 70, i.e. the paper representation of the CSD, which is aligned with IATA specifications.

Alarm resolution

The POC Transport Group carried out a study relating to occurrences during conveyance that raise suspicions at transit locations in which an item cannot advance until the matter is resolved. The term “alarm” is considered a catch-all phrase, and an alarm situation may occur during the handling of dangerous goods or prohibited inadmissible or wrongly admitted items. Airlines were also consulted on the alarm resolution study within the framework of the IATA–UPU Contact Committee. The Transport Group recommended some changes to existing regulations with specific instructions for alarm resolution remediation at transit locations. The 2016.1 POC approved the following two articles to the Regulations to the Convention: 19-102 and 19-201.

Electronic advance data

The UPU postal model for electronic advance data (EAD) depicted below was developed in close consultation with all parties involved, including ICAO, the WCO, IATA, the European Commission and airlines.
Data flows 7 and 8 relate to the role of the designated operator of origin and the contracted air carrier. Conceptual processes can be summarized as follows, although a pilot should be conducted before commercial implementation.

In flow 7, the designated operator sends a CARDIT message to the carrier, including:
- EAD indicator
- Postal Air Waybill (PAWB) number (if required, and if range provided in advance)
- where relevant, security status and physical screening information (eCSD)

The designated operator hands over the postal consignment to the carrier or its agent.

In flow 8, the air carrier:
- checks material flow against CARDIT
- checks presence of EAD indicator
- assigns a PAWB number to receptacles (if required)
- files manifest information (which receptacle is loaded on which flight) as requested by Customs, including PAWB number and receptacle IDs if required
- either transfers list of receptacle IDs (and eCSD) from mail management system to cargo management system or files EAD from mail management system.
11 Annex – Key UPU regulations

The UPU Convention contains many references to transport issues, as do the Regulations. The Convention articles and detailed regulations are found in the Convention Manual (CM), available on the UPU website at  http://www.upu.int/en/the-upu/acts-of-the-union-and-other-decisions/manuals-in-three-volumes.html

The table below contains the regulations thought to be the most significant, as well as comments regarding their operational interpretation. An ellipsis (“…”) refers to text from the article or regulation that has been omitted to shorten the text in the table. Readers can refer to the complete text in the Convention Manual. Note that there is some repetition of text between this annex and the other sections of the Postal Transport Guide.

This table is periodically updated by the POC Transport Group. It is reviewed after every POC session to incorporate any changes made by the POC.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Reference</th>
<th>Text</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freedom of transit</td>
<td>Convention Article 4</td>
<td>Freedom of transit</td>
<td>Freedom of transit is a fundamental principle of the UPU.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 The principle of the freedom of transit is set forth in article 1 of the Constitution. It shall carry with it the obligation for each member country to ensure that its designated operators forward, always by the quickest routes and the most secure means which they use for their own items, closed mails and à découvert letter-post items which are passed to them by another designated operator. This principle shall also apply to missent items and misrouted mails.</td>
<td>However, it is important, and in some cases mandatory, for there to be consultation between the origin operator and the transit operator. This consultation is essential to ensure effective and efficient operations.</td>
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<td>3 Freedom of transit for parcels shall be guaranteed throughout the territory of the Union.</td>
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<td>Transit à découvert</td>
<td>CM Article 17-117</td>
<td>3 The dispatching designated operator shall consult in advance the intermediate designated operators as to the suitability of using them for à découvert items to the destinations concerned. The dispatching designated operator shall notify the designated operators concerned of the date on which dispatch of mail in transit à découvert commences, providing at the same time the estimated annual volumes for each final destination. Unless otherwise agreed bilaterally by the designated operators concerned, this notification shall be renewed if, in a given statistical period (May or October) there were no à découvert items observed and, consequently, no account had to be issued by the intermediate designated operator. Items in transit à découvert shall, as far as possible, be sent to a designated operator which makes up mails for the designated operators of destination.</td>
<td>This regulation clarifies that consultation is mandatory for letter post transit à découvert. Note that articles 17-132 and 17-226 (referenced later in this table) encourage consultation for closed transit.</td>
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<td>Postal security</td>
<td>Convention Article 8</td>
<td>1 Member countries and their designated operators shall observe the security requirements defined in the UPU security standards and shall adopt and implement a proactive security strategy at all levels of postal operations to maintain and enhance the confidence of the general public in the postal services provided by designated operators, in the interests of all officials involved. This strategy shall include the objectives defined in the Regulations, as well as the principle of complying with requirements for providing electronic advance data on postal items identified in implementing provisions (including the type of, and criteria for, postal items) adopted by the Council of Administration and Postal Operations Council, in accordance with UPU technical messaging standards. The strategy shall also include the exchange of information on maintaining the safe and secure transport and transit of mails between member countries and their designated operators.</td>
<td>This specifies Posts’ responsibility to screen mail to support aviation security. It also refers to a strategy to provide electronic pre-advice of information from customs declarations. The underlined text was adopted by the 2012 Congress, and entered into effect on 1 January 2014. The UPU security standards referenced in this article are UPU technical standards S58 (General security measures) and S59 (Office of exchange and international airmail security), available from the UPU Standards Programme. They are also available on the postal security section of the UPU website at <a href="http://www.upu.int/en/activities/postal-security/security-standards.html">www.upu.int/en/activities/postal-security/security-standards.html</a>.</td>
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<td>Closed transit</td>
<td>CM Article 17-132</td>
<td>Article 17-132 Routeing of mails</td>
<td>By including closed transit mail, this regulation ensures that the transit operator uses the same transport for receptacle being re-forwarded as for its own originating mail. It also encourages direct routings.</td>
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<td>1 Closed mails including closed transit mails shall be forwarded by the most direct route possible.</td>
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<td>2 When a mail consists of several receptacles, these shall as far as possible remain together and be forwarded by the same transportation.</td>
<td>This regulation encourages steps to be taken to keep receptacles in a dispatch on the same means of transport, but also recognizes the reality that this is not always possible.</td>
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<td>3 The designated operator of the country of origin may consult with the designated operator providing the closed transit service regarding the route to be followed by the closed mails which it regularly dispatches. The designated operator of the country of origin shall not enter information about the routeing to be followed by the designated operator providing the closed transit on the CN 37, CN 38 or CN 41 bills, nor on the CN 34, CN 35 or CN 36 labels. The route information appearing on the CN 37, CN 38 or CN 41 bills, and on the CN 34, CN 35 or CN 36 labels shall be limited to the route intended to transport the mails from the designated operator of origin to the designated operator providing the closed transit.</td>
<td>This regulation encourages consultation between origin and transit operators for closed transit. Such consultation should be considered as being extremely important. It also clarifies that origins must not include onward routing information (i.e. from the transit location to the destination) on labels and delivery bills.</td>
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<td>4 Mail in closed transit shall, in principle, be forwarded by the same transportation used by the designated operator of the country of transit for the transport of its own mails. If, on a regular basis, there is insufficient time between arrival of the mail in closed transit and transport departure, or the volumes regularly exceed the capacity of a flight, the designated operator of the country of origin shall be so informed.</td>
<td>This regulation aims to ensure that transit operators use the same transport for receptacles being reforwarded as for their own originating mail. It also requires transit operators to consult with origin operators in the event of systemic or recurring problems.</td>
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<td>5 In the event of a change in a route for the exchange of closed mails established between two designated operators via one or more designated operators providing closed transit, the designated operator of origin of the mail shall inform those designated operators providing closed transit of the change of route.</td>
<td>This regulation requires the origin operator to inform the transit operator of changes.</td>
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Direct transhipment

1. Direct transhipment between flights operated by different airlines, the designated operator of the country of origin must make prior arrangements involving both airlines. The designated operator of the country of origin may request one airline to make the arrangements with the other airline but must have confirmation that such arrangements, including ground handling and accounting, are in place. The use of the additional CN 42 label should also be determined.

This regulation illustrates that intra-line direct transhipment is preferable to inter-line direct transhipment.

2. In case of direct transhipment, the designated operator of origin shall enter information about the transhipment airport on the delivery bill (CN 38, CN 41, CN 47) or electronic equivalent, and on the receptacle label (CN 35, CN 36).

This regulation refers to the need for an arrangement to be specified between the origin operator and the airline such that in the case of a failed connection, the mail is not handed over to the designated operator at the transhipment airport.

3. If mails documented for direct transhipment fail to connect with the scheduled flight at the transhipment airport, the designated operator of the country of origin shall ensure that the airline shall follow the arrangements in its agreement with the airline for direct transhipment referred to under 1 or shall contact the origin designated operator for instructions. Such arrangements for direct transhipment must include provision for later flights operated by the same airlines.

This regulation recalls that closed transit is an option and refers to the applicable regulation.

4. Mails transhipped directly at the transit airport either between flights operated by the same airline, or between flights operated by the different airlines shall not be subject to transit charges between the designated operator at the transhipment airport and the origin DO.

This regulation recalls that closed transit is an option and refers to the applicable regulation.

5. In the cases referred to under 1 and where the designated operators of origin and of destination and the airline concerned agree in advance, the airline making the transhipment may prepare, if necessary, a special delivery bill to replace the original CN 38 or CN 41 bill. The parties concerned shall mutually agree on the relevant procedures and form in conformity with article 17-136.

This regulation enables airlines to prepare the necessary UPU form, subject to agreement between affected designated operators.

6. Where arrangements for direct transhipment are not possible, the designated operator of the country of origin may plan closed transit, in accordance with article 17-132.
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| Direct trans-shipment  
(cont.) | 7 | When surface mails from a designated operator are forwarded as closed transit by air by another designated operator, the conditions of such closed transit shall be covered by a special agreement between the designated operators concerned. | |
| Commentary 17-133.1 | Closed transit (see art. 17-132) is when the transit is performed via a DO and is subject to transit charges. It differs from direct transhipment, which is when transit is performed by carriers such as airlines, without involving the DO at the transhipment point. Depending on the arrangements, it may be practical to limit the use of the CN 42 label to inter-line direct transhipment and to require the airline to remove the label at the transfer airport. | |
| Commentary 17-227.1 | Practical application formula for the direct transhipment of airmails by the airlines:  
A. Direct transhipment of airmails between flights of the same airline performing successive stages of the journey (direct intra-line transhipment)  
i A DO desiring direct transhipment of its mails, at an airport in another DO's country, between flights of the same airline performing successive stages of the journey shall reach agreement with the local representative of that airline on the transhipment procedure.  
B. Direct transhipment of airmails between flights of two different airlines (direct inter-line transhipment)  
i A DO desiring direct transhipment of its airmails between two different airlines at an airport in another DO's country shall provide the representative of the first airline with all relevant information.  
ii If the first airline agrees to convey the mails over the first part of the route and considers that there is sufficient time for the transhipment at the transit airport, it shall contact the representative of the second airline concerned. It shall also contact any other involved parties, such as private ground handlers, and determine if there will be any additional costs involved which must be notified to and agreed by the origin DO. | This commentary text further explains direct transhipment. |
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<td>iii  Before agreeing to convey the mails over the second part of the route, the second airline shall make sure that, under normal conditions, there is nothing foreseeable to prevent them from being reforwarded by the second airline (available capacity, commercial rights, etc.).</td>
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<td>iv  Having obtained the agreement of the second airline, the first airline shall inform the dispatching DO.</td>
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<td>v   The dispatching DO shall reach agreement with the first airline on the number of copies of the CN 38 delivery bill to be supplied to it if the number required for the transhipment exceeds that provided for by the Regulations, and also on the provision of an additional copy of the CN 45 envelope.</td>
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<td>vi  Following an alteration in the airline timetables, the dispatching DO shall review, in consultation with the first airline, the arrangements made for the transhipment.</td>
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<td>17-133.2 Unplanned closed transit is not a solution for failure of direct transhipment. It can be very disruptive to the DO at the transhipment airport.</td>
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<td>Postal security</td>
<td>CM Article 08-001</td>
<td>The postal security strategy implemented by member countries and designated operators shall aim to:</td>
<td>S58 and S59 will become mandatory for designated operators with effect from 1 January 2020.</td>
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<td>1.1  raise quality of service as a whole;</td>
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<td>1.2  increase employee awareness of the importance of security;</td>
<td>S 59 is of crucial importance concerning airmail security.</td>
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<td>1.3  create or reinforce security units;</td>
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<td>1.4  share operational, security and investigative information on a timely basis;</td>
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<td>1.5  propose to legislatures, wherever necessary, specific laws, regulations and measures to improve the quality and security of worldwide postal services;</td>
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<td>1.6  provide guidelines, training methods and assistance to postal officials to enable them to deal with emergency situations that could endanger life or property or could hamper the mail transport chain, in order to maintain the continuity of operations.</td>
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| Implementing provisions for providing electronic advance data | CM Article 08-002 | 1 Items containing goods may be subject to specific import customs and security-based requirements for providing electronic advance data as referred to in article 8.1 of the Convention. Letters, postcards, printed papers (other than books) or letter-post items containing correspondence or items for the blind, which are not subject to customs duties, shall be exempted from these requirements.  
2 Each item for which electronic advance data is provided shall be accompanied by the appropriate UPU customs declaration form.  
3 The electronic advance data required to meet such requirements shall, in all cases, replicate data documented on the appropriate UPU customs declaration form.  
4 Each item for which electronic advance data is provided shall bear a unique item identifier, in both human-readable and barcode format, conforming to UPU Technical Standard S10. All exchanges of electronic advance data provided for customs and security reasons shall be compliant with UPU Technical Standard M33 and shall correspond to the content of the UPU customs declaration form.  
5 Electronic advance data shall be used in a manner consistent with the relevant provisions of the Acts of the Union regarding the processing of personal data. Without prejudice to the foregoing, the exchange of such data may be additionally governed by bilateral or multilateral agreements or protocols regarding the protection of personal data and other technical aspects relating to data exchanges.  
6 Certain items may be subject to extra security measures as per the relevant procedures adopted by the UPU in consultation with other relevant stakeholders. Such measures may include, inter alia, the tracing and/or prevention of further conveyance of individual items. |

The proposal is designed to address the increased security requirements of the international aviation sector, more specifically by acknowledging the concept of EAD (also referred to in other documents as AEI, or advance electronic information) on certain types of postal items. The aviation security interest implies that, in all cases, the electronic data needs to be provided within a time frame prior to loading of the aircraft. This article is intended to specify which categories of letter-post items member countries may subject to the requirement of EAD, and under what conditions.
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<td>Implementing provisions for providing electronic advance data (cont.)</td>
<td>7</td>
<td>In order to safeguard the smooth flow of the items referred to herein, member countries and designated operators implementing the provisions of this article shall do so in a manner that is consistent with the capacity of the global postal network and the available infrastructure for implementation thereof, and also take into account whether the requirements for providing electronic advance data can be met by all concerned parties in the international postal transport chain.</td>
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