BPACK INTEGRATION MANUAL

This document contains:
bpost parcel sending guidelines (to Belgium and abroad)
bpost LCI integration manual
bpost barcode specifications
bpost webservices description

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Content table

A. Customer integration : general considerations

A.1 Introduction

This document describes the different aspects of the integration of bpost and its bpack products in customer systems.

By following the guidelines of this document, you will be able to find the most suitable solution to integrate bpost services, using:

- Online interfaces
- APIs
- EDI messages
- Own generatedlabels
- … Or any valid combination of the above.

As there are multiple ways to set-up the integration with bpost, we first introduce the different integration possibilities in order to make a well considered choice of which system to use.

Please read this first part of the document in order to get the most out of it, by targeting the parts that should be considered as a priority following your needs. The general overview of our integration types (see: http://bpost.freshdesk.com/support/solutions/articles/4000082901) can also be a help to determine which chapters are the most useful to read.

Are online knowledge base can be found on http://bpost.freshdesk.com/support/home

A.2 Document structure

In order to send parcels, every customer needs:

- To **capture the delivery address and products chosen** by the receiver (the addressee)
- To **generate a label** that contains this information
- **To generate the announcement data** that contains this information.

Finally, every customer should be able to follow the parcel in the distribution process, or to generate reports based on the parcels that have been sent.

Therefore, this document is composed of four different parts following this introduction:

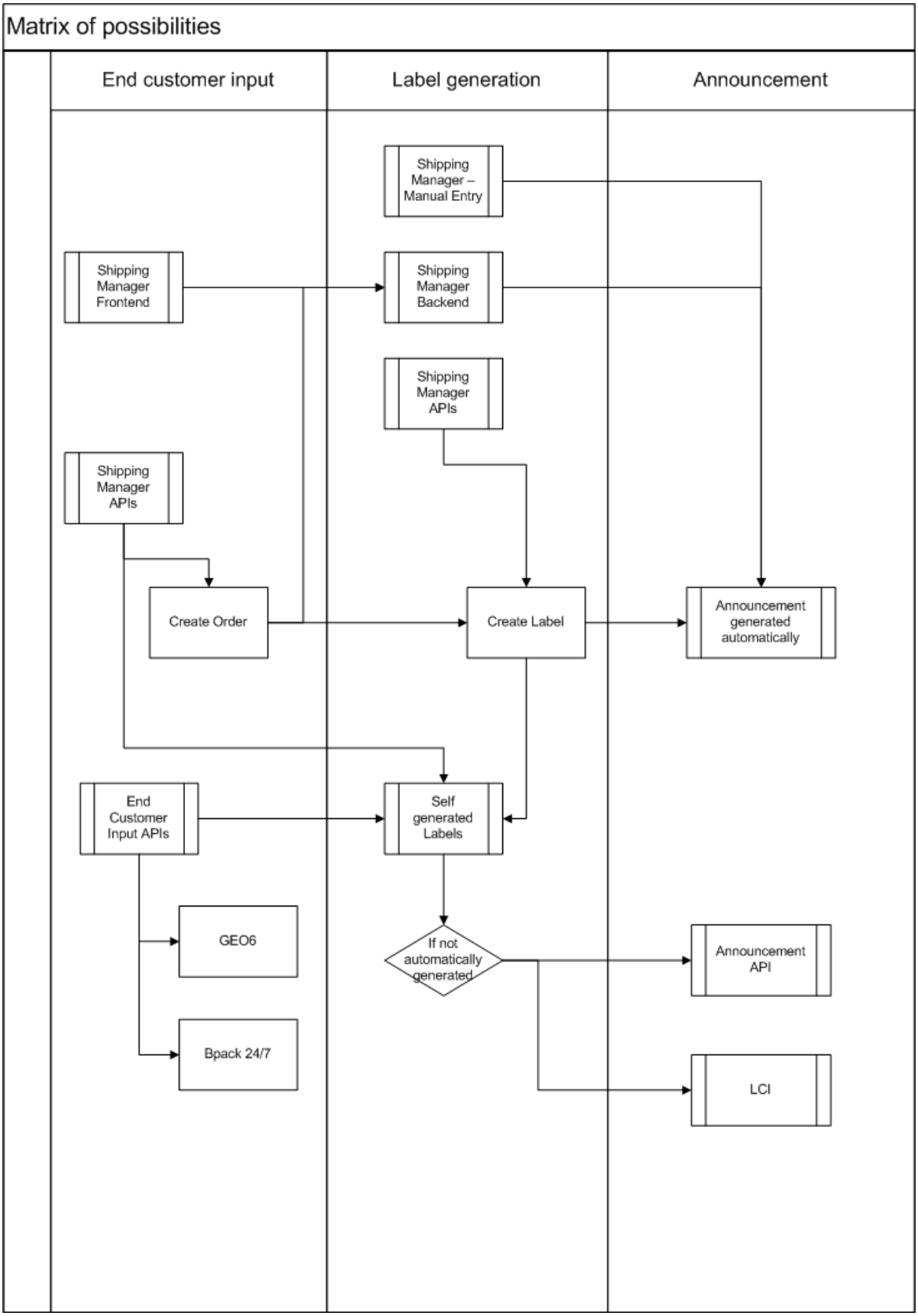
- The **Receiver Input**, summarizing the different possibilities to gather the receiver's choice of products, services, and addresses;
- The **Label,** covering the different means bpost offers to generate labels;
- The **Parcels Announcement**, specifying the ways of generating the corresponding data;
- The **Track & Trace**, showing our different tools allowing to follow the parcels.

In these different parts, we cover the tools that we offer:

- The graphical user interfaces, which consists of bpost web applications (etracker and shipping manager bpack), accessible via a login communicated upon contract generation.
- The APIs, that allows automated transactions via REST webservices and a deeper and real time connection with your systems
- EDI files that may be used for announcement or reporting purposes
- Labels standards if printing Own generated label is necessary in the logistic process.

A.3 Flow of possible combinations of tools

The flow hereafter depicts the different ways the interfaces of bpost can be combined in order to generate your sendings.



A.4 Choice of implementation tools

A.4.1 In a nutshell

Depending on different factors, we can already advise you to use specific technologies. These advices are derived from experience of previous customer integrations.

Nevertheless, these should be taken as they are: general intuitions, but not definitive rules; and therefore they must be considered with criticism. Still, these may help to guide you through this document and help to find the most suitable set up.

A.4.2 Size

The size of the contract has a strong influence on the solution that might be chosen.

In terms of implementation, three categories can be designed:

- 0 - 5.000 parcels/year:
  - Shipping Manager
  - Shipping Manager with front-end integration
  - Own generated only for specific cases
- 5.000 - 20.000 parcels/year
  - Shipping Manager with CSV upload
  - Shipping Manager with front-end integration and/or
  - Shipping Manager Deep Integration and/or
  - Own generated
- 20.000 – ... parcels/year
  - Shipping Manager with front-end integration and/or
  - Shipping Manager Deep Integration and/or
  - Own generated

A.4.3 Investment

Due to the fact that customer IT environment and skills are unknown, it is very difficult, if not impossible to estimate the price of the development.

Still, we can rank the cost of the different implementation solutions, from the cheapest to the most expensive:

1. Shipping Manager – Manual entry
2. Shipping Manager – with plugin CMS
3. Shipping Manager – Easy Integration (frontend & backend)
4. Shipping Manager – Web Services
5. Own generated

But in some cases, the “own generated” solution might be the cheapest for the customer if he’s used to work with different carriers and therefore used to do such a set-up.

A.4.4 Business Model

A.4.4.1 Sales Channel

If the majority of the volume is driven by a website with direct customer interaction, the chances are high that the shipping manager (with or without CMS plugin) will be preferred.

A.4.4.2 Type of activity

- B2B
  Historically, B2B players have a preference for an own generated integration. Nevertheless, recent examples have shown that the webservices may be considered if the IT infrastructure of the customer is more adapted towards XML API usage.

- B2C
  B2C actors should logically look into the shipping manager. Nevertheless, it can be that, due to a very high volume or specific needs, they prefer own generated.

A.4.4.3 Delivery method

If the customer wants to use all bpack deliver means, implementing the shipping manager is the most interesting solution in terms of maintenance and rapidity of implementation.

A.4.5 Operations

A.4.5.1 Logistics

Customers that have a strong logistic infrastructure in place, or specific document based (or own internal barcodes) processes should look for own generation of barcodes and EDI.

A.4.5.2 IT infrastructure

Some parameters may be in favour of the implementation of the shipping manager, such as:

- Newly installed IT system
- ERP system “cloud based”
- Strong IT skills for webservices integration
- One plug-in CMS in use:
  - Drupal
  - Magento
  - Prestashop

Other parameters play in favour of an own generation integration:
- Old IT infrastructure
- Lots of offline process/no internet access in the warehouse
- Multi carrier integration

A.5 Specific products and implementation needs

Some products need specific tools to be effectively implemented.

A.5.1 bpack@bpost

The bpack@bpost product contains the following pick-up points:

- bpost Post Offices;
- bpost Post Points;
- Parcel Points.

At least a localization tool (Shipping Manager Frontend or GEO6 locator) should be used in order to retrieve the delivery points informations and contact details of the customer which should be then transferred to bpost.

A.5.2 Bpack 24/7

At least a localization tool (Shipping Manager Frontend or GEO6 locator) should be used in order to retrieve the delivery points informations and contact details of the customer which should be then transferred to bpost.

A.5.3 bpack@bpost international

At least a localization tool (Shipping Manager Frontend or GEO6 locator) should be used in order to retrieve the delivery points informations and contact details of the customer which should be then transferred to bpost.

B. Receiver Input

B.1 In a nutshell

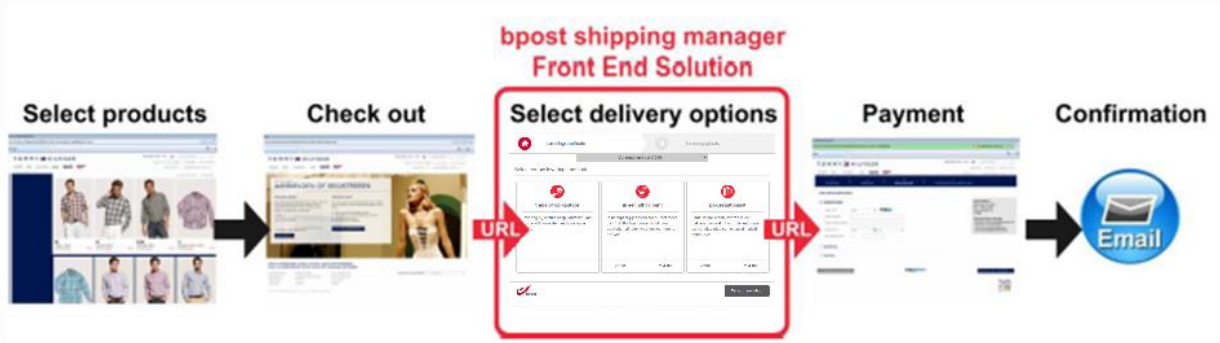
Bpost provides several ways to retrieve correct coordinates for your parcel delivery, at home, in one of our postal offices, postal points, or parcel lockers. Validation is done upon your reciever's data entries.

These are:

- Shipping Manager Frontend
- Shipping Manager API for Order Creation
- Web Services for GEO6 locator

B.2 Shipping Manager Frontend

The bpost Shipping Manager Front End is an online solution for your e-business to offer bpost delivery options to consumers.



The Front End fits seamlessly into the order process, which is shown in above figure.

The following steps show how the process works:

- First the consumer selects his desired product(s) in the web shop. Next the consumer enters his credentials and performs a check out.
- During the checkout process, when selecting the delivery method / address, the consumer is redirected via URL (parameters) to the Shipping Manager Front End. In the Front End he selects the appropriate delivery method and options. All the information is automatically sent to the bpost systems and all the information is also returned via URL redirect (parameters) to the web shop.
- The consumer then comes back to the web shop to validate and pays the order. Afterwards, the web shop can send a confirmation to bpost in order to validate the sale after payment via another URL redirection or via a REST web service.

This chapter describes how to setup the front end integration of the bpack Shipping Manager, allowing the integration of the bpack delivery methods into your checkout process.

B.2.1 CMS Plugins

Several plugins are available. These are not supported by bpost but provide an easy way to integrate our basic services. These plugins are open source and can be modified in order to enhance their functionalities (ex: use of “delivery methods overrides” – see hereafter).

More information on:
http://bpost.freshdesk.com/support/solutions/articles/4000041473

B.2.2 Using the Shipping Manager Frontend

When you have configured your account and your delivery methods, you are able to use the Front End redirect page. You need to perform the following steps to successfully call the Front End application:

1. Provide the necessary parameters
2. Calculate a checksum
3. Send the parameters and the checksum via Javascript call

B.2.2.1 Parameters

The web shop needs to send the parameters specific to your account and the order using a Javascript call. More details on the call can be found in section B.2.2.5

The following fields are mandatory and their values are filled if available. All values are case sensitive:

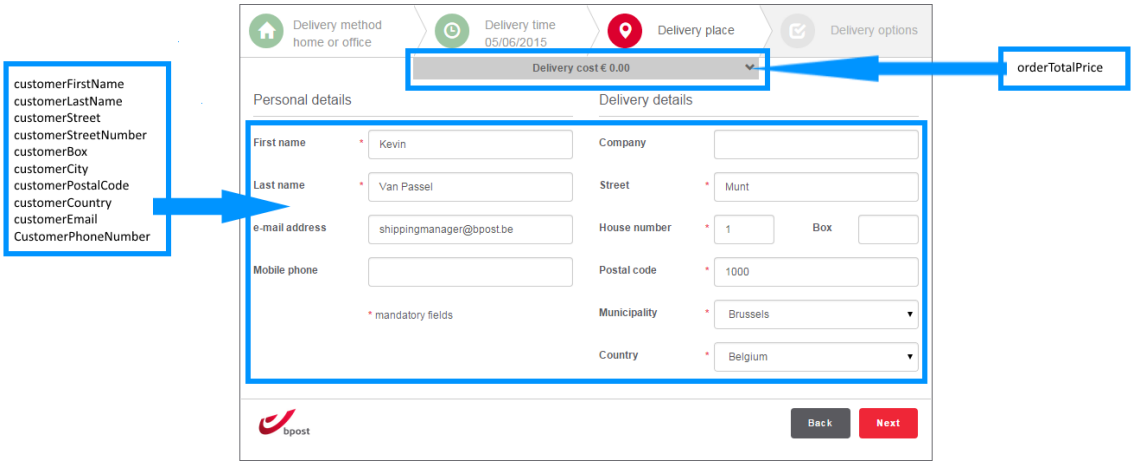
- accountId
- orderReference
- customerCountry

The table below lists all the possible hidden parameters you can send to the redirect page of the Front End. All values listed are case sensitive and the sequence is important.

Name	Required	Hashed	Allowed Values/ Constraints	Description
accountId	**Required**	Yes		Your unique customer ID of bpost P&E
lang	Optional	No	"NL" "FR" "EN" Default: language settings of your browser	Language NL = Dutch FR = French EN = English (capital letters required)
checksum	**Required**	No	SHA-256 hash	Checksum of fields. See B.2.2.2 Checksum
orderReference	**Required**	Yes	Max length = 50	Order reference: unique ID used in your web shop to assign to an order. The value of this parameter is not managed by bpost. **If the value already exists, it will cancel current order box and add a new one.**
costCenter	Optional	Yes	Max length = 50 Not unique	This information is used on your invoice and allows you to attribute different cost centers (e.g. different shops, warehouses, suppliers, …). You can use different costCenter within all your barcodes to group your barcodes under a dedicated group on the invoice. Warning: Using unique values within your barcodes would mean a single group for each barcode which is NOT authorized by bpost.
orderTotalPrice	Optional	No	Euro cents	Total price of the basket order in Euro cents (excluding shipping costs)
customerFirstName	Optional	No		First name of the customer
customerLastName	Optional	No		Last name of the customer **The first name and the last name together should not be longer than 40 characters.** **Only 40 characters are shown on the label**

customerCompany	Optional	No	Max length = 40	Name of the company of the receiver
customerStreet	Optional	No	Max length = 40	Street name of the customer
customerStreetNumber	Optional	No	Max length = 8	Street number of the customer
customerBox	Optional	No	Max length = 8	Box number of the customer
customerCity	Optional	No	Max length = 40	City of the customer
customerPostalCode	Optional	No	Integer Max length = 8	Postal code of the customer
customerCountry	**Required**	Yes	Uppercase 2 character country ISO code	Country of the customer
customerEmail	Optional	No	Max length = 50	E-mail address of the customer
customerPhoneNumber	Optional	No	Max length = 20	Mobile phone number of the customer
orderLine	Optional	No		The items that are included in the order. Order lines are shown in the back end of the Shipping Manager and facilitate the use of the tool. Multiple orderLines are available for a single order.
orderWeight	Optional	Yes	Integer	Weight of the order in grams
deliveryMethodOverrides	Optional	Yes		Overrides of delivery method for specific order.
extra	Optional	No		Additional parameters related to your web shop. Information not used by bpost and returned in the confirm/error/cancel URL.
extraSecure	**Required**	Yes		Additional parameters related to your web shop included in the hash. Same as the extra parameters, but hashed. Can be empty.
confirmUrl	Optional	No		URL to where the customer is redirected once the iFrame is closed. If empty, the default value is used
cancelUrl	Optional	No		URL to where the customer is redirected if the button “back to shopping car” is clicked. If empty, the default value is used
errorUrl	Optional	No		URL to where the customer is redirected if an error occurs. If empty, the default value is used

The following screenshot shows where the parameters are shown on the Front End pop-up:



B.2.2.2 Checksum

The checksum is a 256 bit Secure Hash Algorithm (SHA-256) in UTF-8 encoding of the following required fields: accountId + customerCountry + orderReference + passphrase.
The passphrase is the password of the shipping manager webservice and can be found in the admin panel of the shipping manager backend.

All the fields need to be passed in alphabetical order.

In case one or more of the following optional fields is used in the form, they should also be included in the checksum calculation:

- costCenter
- deliveryMethodOverrides
- extraSecure
- orderWeight

These optional fields need to be inserted into the sequence alphabetically.

Example:

➔ If the accountId is 123456, the costCenter is Online Shop, the customerCountry is BE, the orderReference is 201106161621 and the password is MyPassPhrase, you need to generate the checksum of the following string of the fields concatenated by the ampersand (&):

➔ accountId=123456&costCenter=OnlineShop&customerCountry=BE&extraSecure=&orderReference=201106161621&MyPassPhrase

➔ This string will give you the following checksum hash:
42a7610307143aa5cf955b0365fd57e9ee7ca684fc1db16c5992f4bb64afc279

For more information on how to generate SHA256, please refer to your favourite search engine.

REMARK: As shown in the above example, the passphrase is added to the end of the checksum calculation string by placing an ampersand, followed by the passphrase itself. It is not required to put "&passphrase=MyPassPhrase".

B.2.2.3 Order lines

The format of the orderLine parameter consists of the order line description and the number of items piped (|):

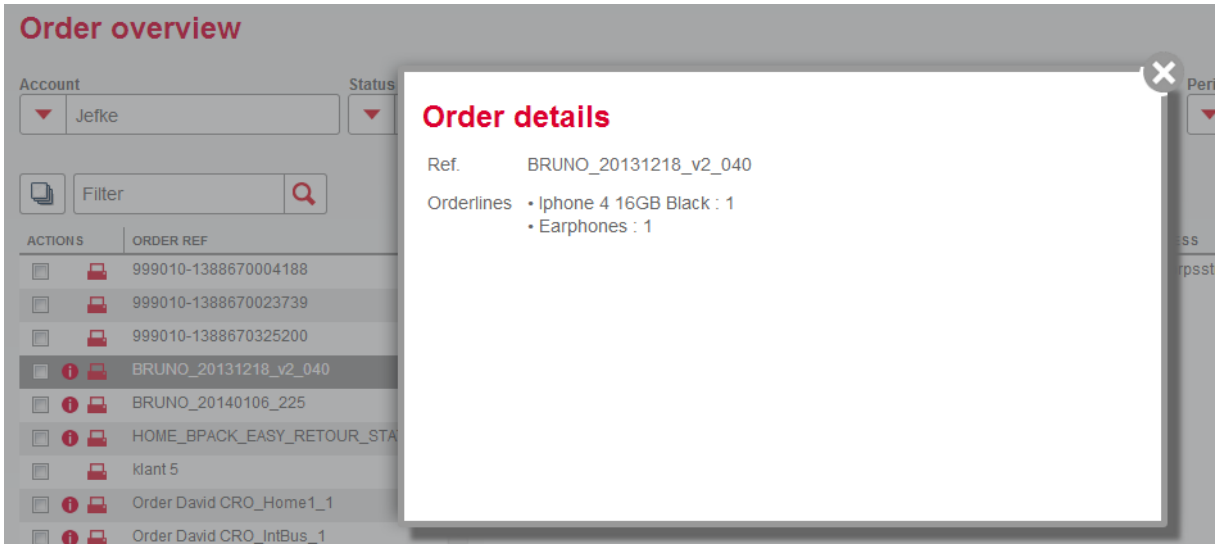
orderLineDescription|numberOfItems

- orderLineDescription is a short description. This description could be used by the person picking the order, to identify the items. If available, add the item code in front of the description, to facilitate the order management.
- numberOfItems is an integer and represents the number of items.

Example: orderLine=08815-GSM-iPhone-3GS|2

The example means that the consumer ordered 2 iPhones of type 3GS, product category GSM, with item number 08815.

The orderLine parameter can be sent multiple times. Every variable will be listed as a new order line in the Shipping Manager Back End (see next figure).



REMARK: Only use HTML safe characters as content of the orderline field

B.2.2.4 Delivery method overrides

You can use a number of fields of the type deliveryMethodOverrides containing the delivery method name, the visibility and the price in Euro cent. The following example shows the accepted format of the field and a few examples of values:

deliveryMethodOverrides (1): Accepted format: name|visibility|[priceInEuroCent]
deliveryMethodOverrides (2): Example: Regular|VISIBLE|5400
deliveryMethodOverrides (3): Example: Regular|INVISIBLE
deliveryMethodOverrides (4): Example: Regular|GREYED_OUT

The table below lists all possible delivery method names you can use as a value in the deliveryMethodOverrides fields and their corresponding labels as bpost delivery services.

Delivery Method Name	Label	Example
Regular	BPACK@HOME	Regular|VISIBLE|5400
Pugo	BPACK@bpost	Pugo|GREYED_OUT
Parcels depot	BPACK 24/7	Parcels depot|VISIBLE|4500
bpack EXPRESS	BPACK WORLD EXPRESS	bpack EXPRESS|VISIBLE|10000
bpack BUSINESS	BPACK WORLD BUSINESS	bpack BUSINESS|INVISIBLE

When passing multiple deliveryMethodOverrides in javascript, you should do so in an array, like so:
parameters.deliveryMethodOverrides = ['Parcels depot|INVISIBLE','Regular|INVISIBLE'];

Not by passing the variable 2 times like in the checksum.

ATTENTION The deliveryMethodOverrides fields must be included in the checksum hash. See the table in section *B*.2.2.1 *Parameters* and the explanation of the checksum generation below in section *B*.2.2.2 *Checksum*.
The parameters need to be sent in alphabetical order within the checksum in order to prevent a 2000 error.

B.2.2.5 Opening the Shipping Manager Frontend

The link between your web shop and the Shipping Manager Frontend has to be established on the page where you offer the consumer the possibility to choose the delivery method. Into that HTML page you need to include Javascript and call the correct function containing the parameters listed above.

B.2.2.5.1 How to integrate

1) First include the shm integration javascript file
   - Include https://shippingmanager.bpost.be/ShmFrontEnd/shm.js in page
2) To start shipping manager call SHM.open(options).

B.2.2.5.2 Options

The options consist of 2 parts. Configuration options about how the shipping manager should be shown and startup parameters consisting of data about the order/label.

Parameter name	Required?	Description
integrationType	Yes	How the shipping manager should be shown. There are 3 possible values (case sensitive) : • POPUP : Shown as modal popup window over the current page. The popup will become smaller if the user resizes the screen. Remark: If POPUP is chosen in a mobile version, it automatically will switch to the FULLSCREEN mode. • FULLSCREEN : Shown as new page (leave shop). • INLINE : Shown inside a container on the current page. Shipping manager will resize with the available size of the container.
inlineContainerId	Required if integrationType = “INLINE”	This is the id of the html element in which the shipping manager will be shown (for example <div id=”shm-inline-container” style=”width: 100%; height: 600px;”> . The shipping manager will fill all the available space that this container has to offer. In the above example shipping manager will be shown full width with 600px height.
popupWidth	No	Describes the maximum width in pixels the popup will be. (default 800). Only applicable when using “POPUP” as integrationType.
popupHeight	No	Describes the maximum height in pixels the popup will be. (default 600). Only applicable when using “POPUP” as integrationType.

closeCallback	No	Javascript function that will SHM.close() is called. This function will have a data parameter. The contents of data can be added when calling SHM.close(). This will be explained later in the section about closing the popup.
		function(data) {
		}

B.2.2.5.1 Parameters

All parameters are Strings except for orderLine and deliveryMethodOverrides. These are both String arrays. For example orderLine: [“phone|1”, “cable|2”].

For a full list of parameters please check section B.2.2.1.

B.2.2.5.2 How to close the popup

After shipping manager has done a post request to the defined confirm page, this page can call the SHM.close() method to close the popup.

This means the confirmation page also has to include the script below:
https://shippingmanager.bpost.be/ShmFrontEnd/shm.js

The SHM.close() method also takes one parameter. This parameter cannot be an object, it must be a String. If a closeCallback was defined, the value that was passed to the SHM.close() method will also be passed to the callback.

B.2.2.5.3 Responsiveness

For the shipping manager to be responsive, make sure the parent page includes the code below in the head of the page (don’t add this if the shop itself is not responsive):

```
<meta name="viewport" content="width=device-width">
```

B.2.2.5.4 Example - Open shipping manager as popup

```
<!doctypehtml><html>
<head><metaname="viewport"content="width=device-width, initial-scale=1.0, maximum-scale=1.0,
minimum-scale=1.0, user-scalable=no">
<scriptsrc="https://shippingmanager.bpost.be/ShmFrontEnd/shm.js"></script>
<script>functionloadShm(){
        SHM.open({
                integrationType: 'POPUP',
                popupWidth: 1024,
                //optionalpopupHeight: 768,
                //optionalparameters: {
                        accountId: '999010',
                        orderReference: 'test-order',
                        customerCountry: 'BE',
                        extraSecure: '',
                        checksum:
'c6a1f4a18c14dcb94fc79e44bff0a75a0db41726cddf10a8558aed41a2ea7ba1'
                }
        });
}</script>
</head><body>
<div><inputtype="button"onclick="loadShm();"value="Load in modal"></div>
</body>
</html>
```

B.2.2.5.5 Example - Open shipping manager inline

```
<!doctypehtml><html>
<head><metaname="viewport"content="width=device-width, initial-scale=1.0, maximum-scale=1.0,
minimum-scale=1.0, user-scalable=no">
<scriptsrc="https://shippingmanager.bpost.be/ShmFrontEnd/shm.js"></script>
<script>functionloadShm(){
	SHM.open({
		integrationType: 'INLINE',
		inlineContainerId: 'shm-inline-container',
		parameters: {
			accountId: '999010',
			orderReference: 'test-order',
			customerCountry: 'BE',
			extraSecure: '',
			checksum:
'c6a1f4a18c14dcb94fc79e44bff0a75a0db41726cddf10a8558aed41a2ea7ba1'
		}
	});
}</script>
</head><body>
<divstyle="margin-bottom: 20px; background-color: gray; height: 60px;">
<inputtype="button"onclick="loadShm();"value="Load inline"></div>
<divid="shm-inline-container"style="width: 100%; height: 600px;"></div>
<divstyle="margin-top: 20px; background-color: gray; height: 60px;"></div>
</ body>
</html>
```

B.2.2.5.6 Example - Open shipping manager fullscreen

```
<!doctypehtml><html>
<head><metaname="viewport"content="width=device-width, initial-scale=1.0, maximum-scale=1.0,
minimum-scale=1.0, user-scalable=no">
<scriptsrc="https://shippingmanager.bpost.be/ShmFrontEnd/shm.js"></script>
<script>functionloadShm(){
	SHM.open({
		integrationType: 'FULLSCREEN',
		parameters: {
			accountId: '999010',
			orderReference: 'test-order',
			customerCountry: 'BE',
			extraSecure: '',
			checksum:
'c6a1f4a18c14dcb94fc79e44bff0a75a0db41726cddf10a8558aed41a2ea7ba1'
		}
	});
}</script>
</head><body>
<div><inputtype="button"onclick="loadShm();"value="Load fullscreen"></div>
</body></html>
```

B.2.3 Returned parameters

The following table lists the parameters that are returned by the Shipping Manager to the web shop when the consumer clicks the **Confirm** button. The address information that will be returned in the parameters is the chosen delivery address.

Name	Allowed Values	Description
orderReference	Max length = 50	Order reference: unique ID used in your web shop to assign to an order. The value of this parameter is not managed by bpost. **If the value already exists, it will overwrite current order info.**
costCenter	Max length = 50 No unique value allowed.	This information is used on your invoice and allows you to attribute different cost centers (e.g. different shops, warehouses, suppliers, …). You can use different costCenter within all your barcodes to group your barcodes under a dedicated group on the invoice. Warning: Using unique values within your barcodes would mean a single group for each barcode which is NOT authorized by bpost.
orderTotalPrice	Euro cents	Total price of the basket order in Euro cents
customerFirstName		First name of the customer
customerLastName		Last name of the customer **The first name and the last name together should not be longer than 40 characters. Only 40 characters are shown on the label**
customerStreet	Max length = 40	Street name of the customer
customerStreetNumber	Max length = 8	Street number of the customer
customerBox	Max length = 8	Box number of the customer
customerCity	Max length = 40	City of the customer
customerPostalCode	Max length = 8	Postal code of the customer
customerCountry	Uppercase 2 character ISO country code	Country of the customer
customerEmail	Max length = 50	E-mail address of the customer
customerPhoneNumber	Max length = 20	Mobile phone number of the customer
customerPostalLocation		Name of pick-up point or parcel locker in case delivery method “BPACK@bpost” or “Bpack 24/7” is selected
customerRcCode		RC code to identify a pick-up point or parcel locker machine

orderLine		The items that are included in the order. Order lines are shown in the back end of the Shipping Manager and facilitate the use of the tool. Multiple orderLines are available for a single order.
orderWeight	Integer	Weight of the order in grams
extra		Additional parameters related to your web shop. Information not used by bpost and returned in the confirm/error/cancel URL.
extraSecure		Additional parameters related to your web shop included in the hash. Same as the extra parameters, but hashed.
deliveryMethod		Delivery method selected by the consumer
deliveryMethodPriceDefault		Default price of the selected delivery method
deliveryMethodPriceOverride		Price override of the selected delivery method
deliveryMethodPriceTotal		Total price of the selected delivery method
Selected services (if applicable for your integration)		**See appendix**

B.2.4 Confirming the order

It is recommended to confirm the order to bpost. This will change the status of the order in the back-end system, allowing you to identify which orders have been paid and which remain pending. bpost is not able to retrieve what happens between the selection of the delivery method and the actual payment of the order. If the confirmation is not provided, there is no difference between orders that were cancelled between the delivery step and the payment step, which may lead to wrong deliveries.

To confirm the order, a modify order web service should be used. Please refer to the section C.3.4 Update/Modify Order Status

B.2.5 Backup solution

bpost recommends clients to create a backup solution in order to be able to offer a delivery method to their customers in case the Shipping Manager fails to respond. If the web shop executes a request but the Shipping Manager doesn't respond, it is recommended that the web shop show a standard form with fields in which the customer can enter the delivery address.

B.2.6 Options

The management of different options you want to activate on your parcels can be done via de Admin section of your Shipping Manager.

Additional explanations can be found on this link:
http://bpost.freshdesk.com/support/solutions/articles/105545

B.2.7 Remarks

IE7 is not supported by any integrationType.

The Shipping Manager Frontend uses HTTPS for communicating with the browser of your client.
If your check-out section uses HTTP this might cause the browser of your client to generate a message that he's leaving a secure environment.
bpost advises to always use HTTPS for maximum security.

B.2.8 Error codes

When the request sent to open the redirect page is invalid, an error code will be shown. The table below lists the error codes.

Error Code	Refers to	Type	Description
1110	orderReference	Required	Order reference is required but it hasn't been supplied
1140	customerCountry	Required	Customer country code is required but it hasn't been supplied
1210	orderReference	Format error	Order reference is too long
1211	orderTotalPrice	Format error	Order total prince contains invalid integer (must be in eurocent)
1212	costCenter	Format error	Order cost center is too long
1220	orderLine	Format error	Order line has invalid format
1221	orderLine	Format error	Order line contains invalid price (must be in eurocent)
1222	orderWeight	Format error	Order weight needs to be sent in grams and should not contain decimal limiter (, or .)
1230	deliveryMethodOverrides	Format error	Delivery method overrides has invalid format
1231	deliveryMethodOverrides	Format error	Delivery method overrides has invalid visibility
1232	deliveryMethodOverrides	Format error	Delivery method overrides has invalid price (must be eurocent)
1240	customerCountry	Format error	Customer country code is invalid
1251	customerLastName	Format error	Last name is too long
1252	customerStreet	Format error	Street name is too long
1253	customerStreetNumber	Format error	Street number is too long
1254	customerBox	Format error	Box number is too long
1255	customerCity	Format error	City name is too long
1256	customerPostalCode	Format error	Postal code is too long
1257	customerPhoneNumber	Format error	Invalid phone number
1258	customerEmail	Format error	Invalid email
1310	orderReference	Data error	Order reference not found
1311	N/A	Data error	Order is not in the correct state (must be Pending)
1320	CustomerCountry	Data error	The used country code is not correctly configured in the back end
2000	N/A	Security error	**Most commonly reported error.**

			Access denied (authentication failed). This most likely due to - Wrong account parameters or - A miscalculation of the checksum or - Incorrect required parameters in the hidden input fields - usage of bpost portal login instead of Shipping Manager passphrase

B.3 Shipping Manager API – Create order

The Create Order web service creates a new shipping manager order that can be consulted in the shipping manager backend.

Once the order is created, the other shipping manager API calls (e.g. create/get label) can be executed.

To use the shipping manager create order call, the sender address should be well configured in the 'Admin' panel of your shipping manager backend.

You can only create orders for the products which are available in the 'Delivery settings' of the 'Admin' panel of your shipping manager backend.

B.3.1.1 REST

REpresentational State Transfer (REST) software architecture style is used to expose Shipping Manager resources as services to the external parties of bpost.

B.3.1.2 Protocol

Although REST is an architectural style which is not bound to a particular technology, in practice the HTTP architecture is used. Web Services offered by the Shipping Manager are then implemented by sending and/or receiving XML documents over the HTTP(s) Protocol.

Resources (business entities, such as the order) are addressed by a Uniform Resource Identifier (URI). These resources can then be manipulated with the standard HTTP operations POST, GET, PUT and DELETE. These requests will map to standard CRUD operations as illustrated in the table below:

CRUD	HTTP	Action
Create	**POST**	Create a sub-resource "under" the given URI. The resource representation is passed in the request and the address (URI) of the newly created resource is returned in the response.
Read	**GET**	Retrieve the current state of the resource at the given URI. The resource representation is returned in the response.
Update	**PUT**	Initialize or update the "state" of a resource at the given URI. The complete resource representation is passed in the HTTP request.
Delete	**DELETE**	Delete a resource at a given URI. Afterwards the URI is no longer valid.

B.3.1.3 Endpoint

To use the web services you will need to perform an HTTP operation on a URI that is constructed as follows.

URI: ServiceEndpPoint & URL suffix

ServiceEndPoint is: **https://shm-rest.bpost.cloud/services/shm**
The URL suffix may vary according to the different types of request and will be documented in each section.

B.3.1.4 Versioning

The versioning of a web service operation is achieved by sending requests and accepting responses having a specific media-type defined. The version is this manual is **version 5.**

application/vnd.bpost.<servicefamily>-<version>+<format>

Where the version identifier is a "v" followed by a whole number. We only distinguish between major versions. Minor versions have to be backwards compatible or else they are a major version by definition.

This media-type value must then be set accordingly on the **Accept:** and **Content-Type:** headers of the HTTP operation.

In annex 'F.6 XSD schemes' you can find the location where the XSD files can be found.

B.3.1.5 XML Validation

The structure of the XML request and response messages must be validated against a schema definition. The sequence of the used tags is important. The XSD file used to describe the various XML elements exchanged between the external parties and bpost can be found at the end of this document.

One XSD file contains the definition of one version of the data to be sent in requests and responses. Eventually, this XSD will import other XSDs for bpost common definitions like addresses, names … Each version of the data has its own namespace.

B.3.1.6 Security

B.3.1.6.1 Authentication

Authentication is performed by the Server hosting the Web Services. We use pre-emptive Authentication over a secure channel: **HTTPS**.

This means the server will expect the **Authorization:** header to be sent along with the request. The value of this header is the authorization type (Basic) followed by the e-tailer's external-Id concatenated with a colon and an at least 128 bits passphrase. This concatenated value must be encoded in base64 before being actually set in the **Authorization:** header.

Authorization: Basic External-Id:passphrase
Where the underlined value is encoded in Base64. The External-Id is is the e-tailer's Account ID.

For example, the Authorization Header for an e-tailer having the following attributes:
External-ID: **Etailer1** *(= your bpost account/accountId linked to your bpost contract)*
Passphrase: **QuiteLongPassPhrase** *(= the password of the shipping manager webservice and can be found in the admin panel of your shipping manager backend)*

Should generate an Authentication header and value string like:

Authorization: Basic RXRhaWxlcjE6UXVpdGVMb25nUGFzc1BocmFzZQ==

In case the call on the Web Service cannot be authenticated due to a missing or incorrect Authentication header, the caller of the Web Service will return an HTTP **401 –** Unauthorized response.

B.3.1.6.2 Authorization

Authorization is performed at the Web Service Level.

Each service end point contains the accountId to uniquely identify the resource. Prior to the accountId/passphrase validation, the web service will validate that the accountId found in the basic authentication and the accountId found in the resource are the same. This ensures a shop cannot access another shop's data.

If this is the case the Web Service will execute as described in the next sections of this document. If this is not the case the Web Service will not execute and the same response having HTTP code 401, as the example already provided above, will be sent back.

B.3.1.6.3 Status Codes

HTTP-based REST leverages the use of standard status codes:

- **4xx client error** status codes are used to map internal **Functional Exceptions**: The request can not be completed due to, for example, a conflict with the state of the resource: trying to confirm an order that has previously been cancelled, or trying to open an order referencing a product that doesn't exist in the catalog anymore. Another characteristic for these exceptions is that they can usually be solved by changing the content of the request the web service.
- **5xx server error** status codes are used to map internal **Technical Exceptions**: The request can not be completed due to an unexpected condition on the server side. For example, a failure connecting to the database or master data not being present in the database can be categorized as technical exceptions.

B.3.1.6.4 Functional Exceptions

If the Web Service call encounters a functional problem, a specific response will be sent back to the client. The response will be mapped to the most appropriate HTTP 1.1 status code in the 4xx range as defined here *http://www.w3.org/Protocols/rfc2616/rfc2616-sec10.html* and an XML content will be provided with a distinct error code and error message providing the client with a clear description of what went wrong as well as providing hints on what to change in order to solve the functional issue. A specific content-type is used to describe the version of the functional exception XML payload.

The following table summarizes the specific attributes of the functional exception response:

Attribute	Value/Description
HTTP Status	One of 400 Bad Request 403 Forbidden 404 Not Found 405 Method Not Allowed 406 Not Acceptable 409 Conflict 410 Gone 411 Length Required

	415 Unsupported Media Type 416 Requested Range Not Satisfiable 417 Expectation Failed
HTTP Header	application/vnd.bpost.shmFunctionalException-v1+XML
HTTP Body	"businessException" as described in the Common-1.0.xsd

Below an example is provided of a response returned by any Web Service encountering a functional problem.

```
HTTP/1.1 409 Conflict
Server: Apache-Coyote/1.1
Content-Type: application/vnd.bpost.shmFunctionalException-v1+XML
Content-Length: 379
Date: Tue, 26 Apr 2011 07:30:20 GMT
Connection: close

<ns2:businessException xmlns="http://schema.post.be/common/exception/v1/"
xmlns:ns2="http://schema.post.be/api/shm/v1/">
        <code>409</code>
        <message>The order is in CANCELLED state and cannot be modified anymore.</message>
</ns2:businessException>
```

B.3.1.6.5 Technical Exceptions

If the Web Service call encounters a technical problem, a specific response will be sent back to the client. The response will be mapped to the most appropriate HTTP status code in the 5xx range. If the issue happened while the code of the web service is executed, the HTTP status code will always be 500 and XML code will be provided in the content of the response with a generic error message and a unique token used to uniquely identify the problem on our side. A specific content-type is used to describe the version of the functional exception XML payload.

The following table summarizes the specific attributes of the functional exception response:

Attribute	Value/Description
HTTP Status	One of: 500 Internal Server Error 501 Not Implemented 502 Bad Gateway 503 Service Unavailable 504 Gateway Timeout 505 HTTP Version Not Supported
HTTP Header	application/vnd.bpost.shmSystemException-v1+XML
HTTP Body	"systemException" as described in the Common-1.0.xsd

Below an example is provided of the response returned by any Web Service encountering a technical problem. The 500 Internal Server Error message contains a unique ID (UUID) that is important for technical support.

```
HTTP/1.1 500 Internal Server Error
Date: Fri, 29 Apr 2011 15:37:33 GMT
Server: Apache
Content-Length: 496
Connection: close
```

```
Content-Type: application/vnd.bpost.shmSystemException-v1+xml

<?xml version="1.0" encoding="UTF-8" standalone="yes"?><systemException
xmlns="http://schema.post.be/api/shm/common/v2/"
xmlns:ns2="http://schema.post.be/common/exception/v1/"><ns2:message>An unexpected error
occurred while executing the request!
 Please try again in a few moments.
If the problem persist, please contact our support and provide the following token information f35c0f13-
538f-41ae-99aa-932bc3141109</ns2:message><ns2:timestamp>2011-04-
29+02:00</ns2:timestamp></systemException>
```

B.3.2 Operation

To use the Create Order web service, you need to perform an HTTP operation on a URI that is constructed as follows:

URI: **serviceEndPoint/{accountId}/orders/**

Where **serviceEndPoint** is **https://shm-rest.bpost.cloud/services/shm** and **{accountId}** is the same account number you use for authentication.

The only HTTP operation that is allowed on the Create Order URI is POST.

URI	POST	PUT	GET	DELETE
serviceEndPoint/{accountId}/orders/	☑	X	X	X

PUT, GET and DELETE operations on a Create Order URI are prohibited. Trying to perform these operations will always return a response with HTTP status code 405 Method Not Allowed.

Creating an order

When you want to create an order, you need to send the order information to the server using the HTTP POST operation on the URI. We will now show you how to send a valid request to create an order and what the response of the server will look like.

B.3.2.1 Client Request

Use the HTTP **POST** request method to send the order information to the server. The order information needs to be sent to the following **URL**:

Attribute	Value
HTTP Operation	POST
URL	https://shm-rest.bpost.cloud/services/shm/{accountId}/orders/

The HTTP POST request must contain a **Content-type** header field:

Attribute	Value
HTTP Header	Content-type: application/vnd.bpost.shm-order-v5+XML

In the body of the HTTP POST request you need to put the XML code describing the order.

Attribute	Description
HTTP Body	XML <order/> element

<order> element tags

Name	Allowed Values	Description
accountId		Your unique customer ID of bpost bpack
reference		Order reference: unique ID used in your web shop to assign to an order. The value of this parameter is not managed by bpost. **If the value already exists, new boxes will be added to the current order. Existing boxes will not be changed.**
costCenter	Not unique value	This information is used on your invoice and allows you to attribute different cost centers (e.g. different shops, warehouses, suppliers, …). You can use different costCenter within all your barcodes to group your barcodes under a dedicated group on the invoice. Warning: Using unique values within your barcodes would mean a single group for each barcode which is NOT authorized by bpost.
orderLine		The items that are included in the order. Order lines are shown in the back end of the Shipping Manager and facilitate the use of the tool. The subtags are explained in **<orderLine> element tags**.
box		Box tags. The subtags are explained in **<box> element tags**.

<orderLine> element tags

Name	Allowed Values	Description
text		Text describing the ordered item
nbOfItems		Number of items

<box> element tags

Name	Allowed Values	Description
sender		Sender tags. The subtags are explained in **<sender> element tags**.
nationalBox or internationalBox	nationalBox: "atHome" "atBpost" "at24-7"	"atBpost" needs to be used for deliveries at: • bpost Post Offices; • bpost Post Points;

	internationalBox: “international” “atIntlPugo”	• Parcel Points.
remark	Max length = 50	Free text. If submitted, it will be printed below the delivery address box on the shipping label.
additionalCustomerReference	Max length = 50	Free text. If not submitted, it will indicate the channel used for creating this order. Best used by integrators to indicate the origin of the order.

<sender> element tags

Name	Allowed Values	Description
name	Max length = 40	
company	Max length = 40	
address		Address tags. The subtags are explained in **sender <address> element tags**.
emailAddress	Max length = 50	
phoneNumber	Max length = 20	

sender <address> element tags

Name	Allowed Values	Description
streetName	Max length = 40	
number	Max length = 8	
box	Max length = 8	
postalCode	Max length = 40	
locality	Max length = 40	
countryCode	Uppercase 2 character ISO country code	Default "BE"

B.3.2.1.1 Delivery Method @home or @work

<nationalBox><atHome> element tags

Name	Allowed Values	Description
product	bpack 24h Pro bpack 24h business bpack Bus (*) bpack Pallet bpack Easy Retour bpack XL	
options		
weight	number	Weight of the parcel in grams
height	number	Height of the parcel in mm (only mandatory for bpack XL)
length	number	Length of the parcel in mm (only mandatory for bpack XL)
width	number	Width of the parcel in mm (only mandatory for bpack XL)
openingHours (**)		
desiredDeliveryPlace (**)		
receiver		Receiver tags. The subtags are explained in **<receiver> element tags**
requestedDeliveryDate		

(*) no extra options available for this product
(**) only for use with product bpack 24h business

<options> element tags

Name	Allowed Values	Description
infoDistributed		
infoNextDay		
infoReminder		
cod		
signed		
insured		
automaticSecondPresentation		
saturdayDelivery		
fragile (*)		

(*) only for use with product bpack XL

<receiver> element tags

Name	Allowed Values	Description
name	Max length = 40	First & Last Name
company	Max length = 40	
address		Address tags. The subtags are explained in **receiver <address> element tags**.
emailAddress	Max length = 50	
phoneNumber	Max length = 20	

receiver <address> element tags

Name	Allowed Values	Description
streetName	Max length = 40	
number	Max length = 8	
box	Max length = 8	
postalCode	Max length = 40	
locality	Max length = 40	
countryCode	Uppercase 2 character ISO country code	Default "BE"

The two elements described below are only used with product **bpack 24h business**

<openingHours> element tags

To supply openings hours per working day you have one of the following possibilities:
- One range (e.g. 09:00-17:00): HH:MM-HH:MM
- Two ranges (e.g. 09:00-12:00/13:00-17:30): HH:MM-HH:MM/HH:MM-HH:MM
- Closed: -/- or -
- Unknown: empty field

HH should be in the range of 00 – 23
MM should be in the range of 00:59

Example:

```
<openingHours>
        <Monday>10:00-17:30</Monday>
        <Tuesday>10:00-12:00/13:00-17:30</Tuesday>
```

```
        <Wednesday>-/-</Wednesday>
        <Thursday>-/13:00-17:30</Thursday>
        <Friday>10:00-12:00/-</Friday>
</openingHours>
```

<desiredDeliveryPlace> element tag

Name	Allowed Values	Description
desiredDeliveryPlace	max length = 50	

<requestedDeliveryDate> element tag

Name	Allowed Values	Description
requestedDeliveryDate	Date, format = YYYY-MM-DD	

B.3.2.1.2 Delivery Method @bpost

The delivery method @bpost is used for deliveries at:

- bpost Post Offices
- bpost Post Points
- Parcel Points

<nationalBox><atBpost> element tags

Name	Allowed Values	Description
product	bpack@bpost	
options		
weight		Weight in grams
pugoId		ID of the pick-up point
pugoName		name of the pick-up point
pugoAddress		Pugo Address tags. The subtags are explained in **<pugoAddress> element tags**.
receiverName		First Name & Last Name of the final receiver
receiverCompany		
requestedDeliveryDate		

<options> element tags

Name	Allowed Values	Description
infoDistributed		
infoNextDay		
keepMeInformed		
cod		
insured		
saturdayDelivery		

<pugoAddress> element tags

Name	Allowed Values/constraints	Description
streetName	Max length = 40	streetName of the pick-up point

Number	Max length = 8	house number of the pick-up point
Box	Max length = 8	box number of the pick-up point
postalCode	Max length = 40	postalCode of the pick-up point
Locality	Max length = 40	city of the pick-up point
countryCode	Uppercase 2 characters ISO country code	countryCode of the pick-up point. default "BE".

<requestedDeliveryDate> element tag

Name	Allowed Values	Description
requestedDeliveryDate	Date, format = YYYY-MM-DD	

B.3.2.1.3 Delivery Method bpack 24/7

The delivery method bpack 24/7 is used for deliveries at a parcel locker.

<nationalBox><at24-7> element tags

Name	Allowed Values	Description
product	"bpack 24/7"	
options		The option subtags are explained in "<options> element tags".
weight		Weight in grams.
parcelsDepotId		
parcelsDepotName		
parcelsDepotAddress		24/7 parcels depot Address tags. The subtags are explained in "<parcelsDepotAddress> element tags".
unregistered		Unregistered subtags are explained in "<unregistered> element tags".
receiverName		First & last name.
receiverCompany		
requestedDeliveryDate		

<options> element tags

Name	Allowed Values	Description
infoDistributed		
infoNextDay		
cod		
insured		
saturdayDelivery		

<parcelsDepotAddress> element tags

Name	Allowed Values/constraints	Description
streetName	Max length = 40	
number	Max length = 8	
box	Max length = 8	

postalCode	Max length = 40	
locality	Max length = 40	
countryCode	Uppercase 2 character ISO country code	Default "BE".

<unregistered> element tags

Name	Allowed Values/constraints	Description
language	"NL", "FR", or "EN"	Language of the messaging towards the receiver.
mobilePhone		Mobile number of the receiver (optional).
emailAddress		mail address of the receiver
reducedMobilityZone	"Y" or "N"	Indication whether the receiver has reduced mobility (easier accessible lockers will be used).

<requestedDeliveryDate> element tag

Name	Allowed Values	Description
requestedDeliveryDate	Date, format = YYYY-MM-DD	

B.3.2.1.4 Delivery Method International

The Delivery Method International uses the delivery settings (e.g. price zone) of your shipping manager backend, so this part should be well configured in the shipping manger backend. More information can be found in our *knowledge base* OR http://bpost.freshdesk.com/support/home.
e.g. http://bpost.freshdesk.com/support/solutions/articles/4000068592--how-to-configure-country-for-international-delivery-for-the-frontend-

<internationalBox><international> element tags

Name	Allowed Values	Description
product	bpack World Business bpack World Express Pro bpack Europe Business bpack World Easy Return	
options		
receiver		Receiver tags. The subtags are explained in **<receiver> element tags**
parcelWeight		Weight in grams. In case of shipment to non-European country, this parcelWeight field must = sum of all parcel contents weight (field nettoWeight). See paragraph <parcelContents><parcelContent> element tags
customsInfo (*)		
parcelContents		Only for shipments outside Europe. Might include from 1 to 10 "parcelContent". See **<parcelContents><parcelContent> element tags**

(*) customs info tag is not used for **bpack Europe Business** as no customs declaration is needed within Europe.

<options> element tags

Name	Allowed Values	Description
insured		
automaticSecondPresentation (**)		

(**) only available for product bpack Europe Business

<receiver> element tags

Name	Allowed Values	Description
name		
company		
address		Receiver tags. The subtags are explained in receiver <address> element tags
emailAddress	Max length = 50	
phoneNumber	Max length = 20	

receiver <address> element tags

Name	Allowed Values	Description
streetName	Max length = 40	
number	Max length = 8	
box	Max length = 8	
postalCode	Max length = 40	
locality	Max length = 40	
countryCode	Uppercase 2 character ISO country code	Default "BE"

<customsInfo> element tags

Name	Allowed Values	Description
parcelValue		Integer format in cents. Example: for 10€, you must sent 1000 NO decimal ("," or ".") allowed ! In case of shipment to non-European country, parcelValue = sum of all parcelContent value (field valueOfItem). See paragraph **<parcelContents><parcelContent> element tags** Currency used is the one specified in field "currency"
contentDescription	Max length = 50	
shipmentType	SAMPLE GIFT DOCUMENTS OTHER	
parcelReturnInstructions	RTA RTS ABANDONED	Return Instructions RTS = Return by Ground RTA = Return by Air ABANDONED = destruction
privateAddress	"true" or "false"	

currency	EUR GBP USD CNY	This is the currency used for field parcelValue. In case of shipment to non-European country, this is also the currency used for all parcel contents value (field valueOfitem) in 3 letters format. See paragraph **<parcelContents><parcelContent> element tags** If your currency is not in the list of available ones, you will have to make the conversion in one of the available currency. Possible values are: EUR=Euro GBP=Pound Sterling USD=US Dollar CNY=Yuan Renminbi
amtPostagePaidByAddresse	decimal	Amount paid by the sender for the sending of this shipment. See contract pricing with bpost. Decimal format field (3.2) Minimum value : 0 Maximum value : 999.99 Currency for field amtPostagePaidByAddresse is always EUR !

<parcelContents><parcelContent> element tags

Make sure to have filled in all fields under **<customsInfo> element tags**

parcelContents tag is mandatory for shipments outside Europe.
parcelContents can contains from 1 to 10 parcelContent tag(s).

Note that the parcelContents tag enables you to be compliant with the new global international data requirement. This is a new requirement in the e-commerce industry (as from 2021) and thus applied for all your shipments outside Europe containing goods.

The new regulation requires you to send a set of information that contains details about your shipments, this is called **Electronic Advance Data** or **EAD**.

Providing these data in a correct format will enable a swift customs clearance in the destination country outside EU custom zone and avoid any delays (in worst case even sending back the parcel to sender) and/or extra charges linked to missing data.

Name	Allowed Values	Description
numberOfItemType		Number of items of each type for the specified parcel content Integer format. Value (1-999999) See example below
valueOfItem	Max length = 50	Value for the number of items and NOT per item Currency used is the one defined in field "currency".

		If your currency is not in the list of available ones, you will have to make the conversion in one of the available currencies. Integer format in cents, for example for 10€, you must sent 1000, NO decimal ("," nor ".") ! See example below
itemDescription		description of parcel content length = maximum 30 characters See example below
nettoWeight		Weight for the number of items of each type and NOT per item. Integer format, NO decimal ! In gramme (gr). Range 1-30000 See example below
hsTariffCode		HS stands for Harmonized System. It's a multipurpose international product nomenclature that describes the type of good that is shipped. Today, customs officers must use HS code to clear every commodity that enters or crosses any international borders. Integer format, maximum 9 digits, you can find the code on https://www.tariffnumber.com/ See example below
originOfGoods		2 letters country code from the orign of goods, you can find the code on https://countrycode.org/ --> See example below

Example: in order to facilitate the understanding of each field, let's suppose you intend to send a parcel outside Europe. This parcel contains clothes for which you split them in 2 parcel contents (of same type):

1. **2 jeans BRAND X MODEL Y SIZE S -180$(for 2)- weight 800gr (for 2)-Italy**

numberOfItemType	2
valueOfItem	18000
itemDescription	jeans BRAND X MODEL Y SIZE S
nettoWeight	800
hsTariffCode	62034990
originOfGoods	IT

Field "currency": USD

2. **3 shirts BRAND Z MODEL X SIZE L- 149$(for 3)- weight 621gr (for 3)-China**

numberOfItemType	3
valueOfItem	14900
itemDescription	shirts BRAND Z MODEL X SIZE L
nettoWeight	621

hsTariffCode	***6105***1000
originOfGoods	CN

Field "currency": USD

B.3.2.1.5 Delivery Method bpack@bpost international

The Delivery Method bpack@bpost international uses the delivery settings (e.g. price zone) of your shipping manager backend, so this part should be well configured in the shipping manger backend. More information can be found in our *knowledge base* *OR* http://bpost.freshdesk.com/support/home.
e.g. http://bpost.freshdesk.com/support/solutions/articles/4000068592--how-to-configure-country-for-international-delivery-for-the-frontend-

<internationalBox><atIntPugo> element tags

Name	Allowed Values	Description
product	bpack@bpost international	
options		Options tags. The subtags are explained in **<options> element tags**
receiver		Receiver tags. The subtags are explained in **<receiver> element tags**
parcelWeight		Weight in grams
customsInfo		Receiver tags. The subtags are explained in **<customsInfo> element tags**
pugoId	GEO6 webservices -> GetServicePointDetails -> "Id"	ID of the international PUGO/delivery point
pugoName	GEO6 webservices -> GetServicePointDetails -> "Name"	Name of the international PUGO/delivery point
pugoAddress		Receiver tags. The subtags are explained in **< pugoAddress > element tags**

<options> element tags

Name	Allowed Values	Description
keepMeInformed	Attribute language: NL/FR/EN	
emailAddress	Max length = 50	e-mail address to receive the 'keep me informed' messages

<receiver> element tags

Name	Allowed Values	Description
name		First & Last Name of the final receiver
company		Name of the delivery point

address		Address tags. The subtags are explained in **receiver <address> element tags**.
emailAddress	Max length = 50	e-mail address of the final receiver
phoneNumber	Max length = 20	phone number of the final receiver

receiver <address> element tags

Name	Allowed Values	Description
streetName	Max length = 40	Street name of the delivery point
number	Max length = 8	Number of the delivery point
box	Max length = 8	Box of the delivery point
postalCode	Max length = 40	Postal code of the delivery point
locality	Max length = 40	City of the delivery point
countryCode	Uppercase 2-characters ISO country code	Country code of the delivery point

<customsInfo> element tags

Name	Allowed Values	Description
parcelValue	Numeric e.g. 1025 or 201,99 or 333.65	Value of the parcel in the currency of the sender
contentDescription	Alphanum.	Free description of the parcel's content
shipmentType	"GIFT", "DOCUMENTS", "SAMPLE", "RETURNED" "GOODS", or "OTHER"	Indicates the category of the item
parcelReturnInstructions	"RTS", "RTA" or "ABANDONED"	Indication of what needs to be done with the parcel in case it could not be delivered. RTS = return to sender via road transport RTA = return to sender via air transport ABANDONED = destroyed
privateAddress	"false", "true"	false = not an address of a private person true = address of a private person

<pugoAddress> element tags

Name	Allowed Values	Description
streetName	Max length = 40	Street name of the delivery point
number	Max length = 8	Number of the delivery point
box	Max length = 8	Box of the delivery point
postalCode	Max length = 40	Postal code of the delivery point
locality	Max length = 40	City of the delivery point
countryCode	Uppercase 2 character ISO country code	Default "BE"

B.3.2.1.6 Delivery Method bpack 24/7 international

The Delivery Method bpack 24/7 international uses the delivery settings (e.g. price zone) of your shipping manager backend, so this part should be well configured in the shipping manger backend. More information can be found in our *knowledge base* OR http://bpost.freshdesk.com/support/home.
e.g. http://bpost.freshdesk.com/support/solutions/articles/4000068592--how-to-configure-country-for-international-delivery-for-the-frontend-

<internationalBox><atIntlParcelDepot > element tags

Name	Allowed Values	Description
product	bpack 24/7 international	
receiver		Receiver tags. The subtags are explained in **<receiver> element tags**
parcelWeight		Weight in grams
customsInfo		Receiver tags. The subtags are explained in **<customsInfo> element tags**
parcelsDepotId	GEO6 webservices -> GetServicePointDetails -> "Id"	ID of the international parcel locker
parcelsDepotName	GEO6 webservices -> GetServicePointDetails -> "Name"	Name of the international parcel lccker
parcelsDepotAddress		Receiver tags. The subtags are explained in **<parcelsDepotAddress> element tags**

<receiver> element tags

Name	Allowed Values	Description
name		First & Last Name of the final receiver
company		Name of the delivery point
address		Address tags. The subtags are explained in **receiver <address> element tags**.
emailAddress	Max length = 50	e-mail address of the final receiver
phoneNumber	Max length = 20	phone number of the final receiver

receiver <address> element tags

Name	Allowed Values	Description
streetName	Max length = 40	Street name of the delivery point
number	Max length = 8	Number of the delivery point
box	Max length = 8	Box of the delivery point
postalCode	Max length = 40	Postal code of the delivery point
locality	Max length = 40	City of the delivery point
countryCode	Uppercase 2 character ISO country code	Country code of the delivery point

<customsInfo> element tags

Name	Allowed Values	Description
parcelValue	Numeric e.g. 1025 or 201,99 or 333.65	Value of the parcel in the currency of the sender
contentDescription	Alphanum.	Free description of the parcel's content
shipmentType	"GIFT", "DOCUMENTS", "SAMPLE", "RETURNED" "GOODS", or "OTHER"	Indicates the category of the item
parcelReturnInstructions	"RTS", "RTA" or "ABANDONED"	Indication of what needs to be done with the parcel in case it could not be delivered. RTS = return to sender via road transport RTA = return to sender via air transport ABANDONED = destroyed
privateAddress	"false", "true"	false = not an address of a private person true = address of a private person

<parcelsDepotAddress> element tags

Name	Allowed Values	Description
streetName	Max length = 40	Street name of the delivery point
Number	Max length = 8	Number of the delivery point
Box	Max length = 8	Box of the delivery point
postalCode	Max length = 40	Postal code of the delivery point
Locality	Max length = 40	City of the delivery point
countryCode	Uppercase 2 character ISO country code	Default "BE"

B.3.2.1.7 Options

In this section we will explain the elements that may occur in the options element for all delivery methods, if available for the selected product and services.

B.3.2.1.7.1 Messaging

Three types of messages can be used:
- infoDistributed
  Message to notify you that the parcel has been delivered to the receiver.
- infoNextDay
  Message to notify the receiver that his parcel will be delivered the next business day.
- infoReminder
  This option is designed to notify the receiver that the parcel is at disposal in our post office.
- keepMeInformed (only for **bpack@bpost**)
  The message will be send when a parcel is available at the pickup point.

Name	Attributes	Description
language	EN NL FR DE	EN = English NL = Dutch FR= French DE = German
emailAddress	Max length = 50	
mobilePhone	Max length = 20	

Remark: Please note that you can only select one communication method (email or sms) per notification message. It is however possible to send SMS for one message and email for another message type.

Examples:

```
<infoDistributed language="EN">
        <mobilePhone>0495151689</ mobilePhone>
</ infoDistributed>
```

```
<infoNextDay language="NL">
        <emailAddress>someone@test.com</emailAddress>
</infoNextDay>
```

```
<infoReminder language="FR">
        <mobilePhone>0495151689</mobilePhone>
</infoReminder>
```

```
<keepMeInformed language="DE">
        <emailAddress>someone@test.com</emailAddress>
</keepMeInformed>
```

B.3.2.1.7.2 Cash on Delivery

For the Cash on Delivery option we support IBAN bank accounts. The amount is printed in eurocents.

Example:

```
<cod>
        <codAmount>1251</codAmount>
        <iban>BE19210023508812</iban>
        <bic>GEBABEBB</bic>
</cod>
```

B.3.2.1.7.3 Signature

If extra signature is needed upon delivery you must include the **<signed/>** tag in the <options> element tag.

Remark: please note that for other options that already include signature service, you should not insert this tag separately.

Services that already include signature are:
- Cash on Delivery

- Warranty (old Insurance)
- Automatic Second Presentation

B.3.2.1.7.4 Warranty (old Insurance)

Name	Attributes	Description
basicInsurance		Basic warranty (old insurance) (up to € 500)
additionalInsurance	value="2" value="3"	The range in which the warranty (old insurance) amount is situated: 2 = additional up to 2.500 EUR 3 = additional up to 5.000 EUR

Examples:

Basic Insurance:

```
<insured>
        <basicInsurance/>
</insured>
```

Adittional Insurance:

```
<insured>
        < additionalInsurance value="3"/>
</insured>
```

B.3.2.1.7.5 Automatic Second Presentation

If a second presentation is needed after first delivery attempt you must include the <automaticSecondPresentation/> tag in the <options> element tag.

B.3.2.1.7.6 Saturday Delivery

If a Saturday delivery is needed for this parcel you must include the <saturdayDelivery/>tag in the <options> element tag.

B.3.2.2 Server Response

If your request to create an order is successful, the server will respond with an HTTP **201 Created** status code.

Attribute	Value
HTTP Status	201 Created

The server will give you the location of the order you created as one of the header fields:

Attribute	Value
HTTP Header	Location: https://shm-rest.bpost.cloud/services/shm/{accountId}/orders/{reference}

The body of the response message will be empty, because there is no XML code that needs to be sent back.

Attribute	Description
HTTP Body	Response does not contain any data.

B.3.2.3 XML Examples

In this section you will find some XML examples.

B.3.2.3.1 bpack@HOME

Example: bpack@HOME with messaging and signature option (VAS 036)

```
<?xml version="1.0" encoding="UTF-8"?>
<tns:order xmlns="http://schema.post.be/shm/deepintegration/v5/national"
xmlns:common="http://schema.post.be/shm/deepintegration/v5/common"
xmlns:tns="http://schema.post.be/shm/deepintegration/v5/"
xmlns:international="http://schema.post.be/shm/deepintegration/v5/international"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://schema.post.be/shm/deepintegration/v5/">
  <tns:accountId>123456</tns:accountId>
  <tns:reference>TEST_20131202_036</tns:reference>
  <tns:costCenter>Cost Center</tns:costCenter>
  <tns:orderLine>
    <tns:text>Earphones</tns:text>
    <tns:nbOfItems>10</tns:nbOfItems>
  </tns:orderLine>
  <tns:orderLine>
    <tns:text>Ipad 5</tns:text>
    <tns:nbOfItems>20</tns:nbOfItems>
  </tns:orderLine>
  <tns:box>
    <tns:sender>
      <common:name>Business Solutions Team</common:name>
      <common:company>bpost - bpack</common:company>
      <common:address>
        <common:streetName>Muntcentrum</common:streetName>
        <common:number>1</common:number>
        <common:postalCode>1000</common:postalCode>
        <common:locality>Brussel</common:locality>
        <common:countryCode>BE</common:countryCode>
      </common:address>
      <common:emailAddress>esolutions@bpost.be</common:emailAddress>
      <common:phoneNumber>0032499123456</common:phoneNumber>
    </tns:sender>
    <tns:nationalBox>
      <atHome>
        <product>bpack 24h Pro</product>
        <options>
        <common:infoNextDay language="EN">
          <common:emailAddress>tester@test.com</common:emailAddress>
        </common:infoNextDay>
        <common:signed/>
        </options>
        <weight>2000</weight>
        <receiver>
          <common:name>Reception Desk</common:name>
```

```
            <common:company>Vandenborre</common:company>
            <common:address>
              <common:streetName>Bruul</common:streetName>
              <common:number>105</common:number>
              <common:box>A</common:box>
              <common:postalCode>2800</common:postalCode>
              <common:locality>Mechelen</common:locality>
              <common:countryCode>BE</common:countryCode>
            </common:address>
            <common:emailAddress>test@provider.be</common:emailAddress>
            <common:phoneNumber>0032499123456</common:phoneNumber>
          </receiver>
        </atHome>
      </tns:nationalBox>
      <tns:remark>bpack@home VAS 036</tns:remark>
    </tns:box>
</tns:order>
```

B.3.2.3.1 bpack@HOME – bpack XL

Example: bpack XL with option fragile (VAS 035)

```
<tns:order xmlns="http://schema.post.be/shm/deepintegration/v5/national"
xmlns:common="http://schema.post.be/shm/deepintegration/v5/common"
xmlns:tns="http://schema.post.be/shm/deepintegration/v5/"
xmlns:international="http://schema.post.be/shm/deepintegration/v5/international"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://schema.post.be/shm/deepintegration/v5/">
<tns:accountId>123456</tns:accountId>
<tns:reference>reference_XL</tns:reference>
<tns:costCenter>Cost Center</tns:costCenter>
<tns:orderLine>
        <tns:text>TV</tns:text>
        <tns:nbOfItems>100</tns:nbOfItems>
</tns:orderLine>
<tns:orderLine>
        <tns:text>TV</tns:text>
        <tns:nbOfItems>1</tns:nbOfItems>
</tns:orderLine>
<tns:box>
        <tns:sender>
                <common:name>sender_name</common:name>
                <common:company>sender_company</common:company>
                <common:address>
                        <common:streetName>sender_streetname</common:streetName>
                        <common:number>1</common:number>
                        <common:box>A</common:box>
                        <common:postalCode>1000</common:postalCode>
                        <common:locality>sender_city</common:locality>
                        <common:countryCode>BE</common:countryCode>
                </common:address>
```

```
            <common:emailAddress>sender@emailtestabc.be</common:emailAddress>
            <common:phoneNumber>0032123456789</common:phoneNumber>
        </tns:sender>
        <tns:nationalBox>
            <atHome>
                <product>bpack XL</product>
                    <options>
                        <common:fragile/>
                    </options>
                <weight>100000</weight>
                <height>100</height>
                <length>200</length>
                <width>500</width>
                <receiver>
                    <common:name>receiver_name</common:name>
                    <common:company>receiver_company</common:company>
                        <common:address>

        <common:streetName>receiver_streetname</common:streetName>
                                <common:number>1</common:number>
                                <common:postalCode>1000</common:postalCode>
                                <common:locality>receiver_city</common:locality>
                                <common:countryCode>BE</common:countryCode>
                            </common:address>

        <common:emailAddress>receiver@emailtestabc.be</common:emailAddress>
                            <common:phoneNumber>0032123456789</common:phoneNumber>
                </receiver>
            </atHome>
        </tns:nationalBox>
        <tns:remark>remark_XL</tns:remark>
</tns:box>
</tns:order>
```

B.3.2.3.2 bpack@BPOST

Example: bpack@bpost with option COD (VAS 038)

```
<?xml version="1.0" encoding="UTF-8"?>
<tns:order xmlns="http://schema.post.be/shm/deepintegration/v5/national"
xmlns:common="http://schema.post.be/shm/deepintegration/v5/common"
xmlns:tns="http://schema.post.be/shm/deepintegration/v5/"
xmlns:international="http://schema.post.be/shm/deepintegration/v5/international"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://schema.post.be/shm/deepintegration/v5/">
  <tns:accountId>123456</tns:accountId>
  <tns:reference>TEST_20131202_038</tns:reference>
  <tns:costCenter>Cost Center</tns:costCenter>
  <tns:orderLine>
    <tns:text>Earphones</tns:text>
```

```
    <tns:nbOfItems>10</tns:nbOfItems>
  </tns:orderLine>
  <tns:orderLine>
    <tns:text>Ipad 5</tns:text>
    <tns:nbOfItems>20</tns:nbOfItems>
  </tns:orderLine>
  <tns:box>
    <tns:sender>
      <common:name>Business Solutions Team</common:name>
      <common:company>bpost - bpack</common:company>
      <common:address>
        <common:streetName>Muntcentrum</common:streetName>
        <common:number>1</common:number>
        <common:postalCode>1000</common:postalCode>
        <common:locality>Brussel</common:locality>
        <common:countryCode>BE</common:countryCode>
      </common:address>
      <common:emailAddress>esolutions@bpost.be</common:emailAddress>
      <common:phoneNumber>0032499123456</common:phoneNumber>
    </tns:sender>
     <tns:nationalBox>
      <atBpost>
        <product>bpack@bpost</product>
        <options>
        <common:keepMeInformed language="EN">
             <common:mobilePhone>04895121516</common:mobilePhone>
        </common:keepMeInformed>
        <common:cod>
           <common:codAmount>1251</common:codAmount>
           <common:iban>BE19210023508812</common:iban>
           <common:bic>GEBABEBB</common:bic>
        </common:cod>
        </options>
        <weight>2000</weight>
        <pugoId>207500</pugoId>
        <pugoName>WIJNEGEM</pugoName>
        <pugoAddress>
          <common:streetName>Turnhoutsebaan</common:streetName>
          <common:number>468</common:number>
          <common:postalCode>2110</common:postalCode>
          <common:locality>Wijnegem</common:locality>
          <common:countryCode>BE</common:countryCode>
        </pugoAddress>
        <receiverName>John Doe</receiverName>
        <receiverCompany>bpost</receiverCompany>
      </atBpost>
    </tns:nationalBox>
    <tns:remark>bpack@bpost VAS 038</tns:remark>
  </tns:box>
</tns:order>
```

B.3.2.3.3 bpack 24/7

Example: bpack 24/7 with additional insurance

```
<?xml version="1.0" encoding="UTF-8"?>
<tns:order xmlns="http://schema.post.be/shm/deepintegration/v5/national"
xmlns:common="http://schema.post.be/shm/deepintegration/v5/common"
xmlns:tns="http://schema.post.be/shm/deepintegration/v5/"
xmlns:international="http://schema.post.be/shm/deepintegration/v5/international"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://schema.post.be/shm/deepintegration/v5/">
  <tns:accountId>123456</tns:accountId>
  <tns:reference>Test_label_unregistered_parcel_locker</tns:reference>
  <tns:costCenter>Cost Center</tns:costCenter>
  <tns:orderLine>
    <tns:text>Earphones</tns:text>
    <tns:nbOfItems>10</tns:nbOfItems>
  </tns:orderLine>
  <tns:orderLine>
    <tns:text>Ipad 5</tns:text>
    <tns:nbOfItems>20</tns:nbOfItems>
  </tns:orderLine>
  <tns:box>
      <tns:sender>
            <common:name>Business Solutions Team</common:name>
            <common:company>bpost - bpack</common:company>
            <common:address>
               <common:streetName>Muntcentrum</common:streetName>
               <common:number>1</common:number>
               <common:postalCode>1000</common:postalCode>
               <common:locality>Brussel</common:locality>
               <common:countryCode>BE</common:countryCode>
            </common:address>
            <common:emailAddress>esolutions@bpost.be</common:emailAddress>
            <common:phoneNumber>0032499123456</common:phoneNumber>
         </tns:sender>
    <tns:nationalBox>
      <at24-7>
        <product> bpack 24/7</product>
        <options>
          <common:insured>
            <common:additionalInsurance value="3"/>
          </common:insured>
        </options>
        <weight>2000</weight>
        <parcelsDepotId>014472</parcelsDepotId>
        <parcelsDepotName>WIJNEGEM</parcelsDepotName>
        <parcelsDepotAddress>
          <common:streetName>Turnhoutsebaan</common:streetName>
          <common:number>468</common:number>
          <common:box>A</common:box>
          <common:postalCode>2110</common:postalCode>
          <common:locality>Wijnegem</common:locality>
          <common:countryCode>BE</common:countryCode>
```

```
        </parcelsDepotAddress>
      <unregistered>
        <language>FR</language>
        <mobilePhone>0474654321</mobilePhone>
        <emailAddress>test@bpost.be</emailAddress>
        <reducedMobilityZone></reducedMobilityZone>
      </unregistered>
        <receiverName>Receiver Name</receiverName>
        <receiverCompany>Receiver Company</receiverCompany>
      </at24-7>
    </tns:nationalBox>
    <tns:remark>bpack 24/7 VAS 247</tns:remark>
  </tns:box>
</tns:order>
```

B.3.2.3.4 bpack World Business

Example: bpack World Business (CD) (with customs info within Europe)

```
<?xml version="1.0" encoding="UTF-8"?>
<tns:order xmlns="http://schema.post.be/shm/deepintegration/v5/national"
xmlns:common="http://schema.post.be/shm/deepintegration/v5/common"
xmlns:tns="http://schema.post.be/shm/deepintegration/v5/"
xmlns:international="http://schema.post.be/shm/deepintegration/v5/international"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://schema.post.be/shm/deepintegration/v5/">
  <tns:accountId>123456</tns:accountId>
  <tns:reference>TEST_20131213_INT_BUS</tns:reference>
  <tns:costCenter>Cost Center</tns:costCenter>
  <tns:orderLine>
    <tns:text>Earphones</tns:text>
    <tns:nbOfItems>10</tns:nbOfItems>
  </tns:orderLine>
  <tns:orderLine>
    <tns:text>Ipad 5</tns:text>
    <tns:nbOfItems>20</tns:nbOfItems>
  </tns:orderLine>
  <tns:box>
    <tns:sender>
      <common:name>Business Solutions Team</common:name>
      <common:company>bpost - bpack</common:company>
      <common:address>
        <common:streetName>Muntcentrum</common:streetName>
        <common:number>1</common:number>
        <common:postalCode>1000</common:postalCode>
        <common:locality>Brussel</common:locality>
        <common:countryCode>BE</common:countryCode>
      </common:address>
      <common:emailAddress>esolutions@bpost.be</common:emailAddress>
      <common:phoneNumber>0032499123456</common:phoneNumber>
    </tns:sender>
     <tns:internationalBox>
```

```
        <international:international>
          <international:product>bpack World Business</international:product>
          <international:receiver>
            <common:name>John Doe</common:name>
            <common:company>Bpost</common:company>
            <common:address>
              <common:streetName>Carnot</common:streetName>
              <common:number>1</common:number>
              <common:box>A</common:box>
              <common:postalCode>51000</common:postalCode>
              <common:locality>Paris</common:locality>
              <common:countryCode>FR</common:countryCode>
            </common:address>
            <common:emailAddress>someone@provider.be</common:emailAddress>
            <common:phoneNumber>0032499123456</common:phoneNumber>
          </international:receiver>
          <international:parcelWeight>2000</international:parcelWeight>
          <international:customsInfo>
            <international:parcelValue>700</international:parcelValue>
            <international:contentDescription>BOOK</international:contentDescription>
            <international:shipmentType>DOCUMENTS</international:shipmentType>
            <international:parcelReturnInstructions>RTS</international:parcelReturnInstructions>
            <international:privateAddress>false</international:privateAddress>
          </international:customsInfo>
        </international:international>
      </tns:internationalBox>
      <tns:remark>bpack world business</tns:remark>
    </tns:box>
</tns:order>
```

B.3.2.3.5 bpack World Business (**outside** Europe with mandatory customs data)

Example: bpack World Business (CD) (with EAD customs info)

```
<?xml version="1.0" encoding="UTF-8"?>
   <tns:order xmlns="http://schema.post.be/shm/deepintegration/v5/national"
xmlns:common="http://schema.post.be/shm/deepintegration/v5/common"
xmlns:tns="http://schema.post.be/shm/deepintegration/v5/"
xmlns:international="http://schema.post.be/shm/deepintegration/v5/international"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://schema.post.be/shm/deepintegration/v5/">
  <tns:accountId>123456</tns:accountId>
  <tns:reference>TEST_20131213_INT_BUS</tns:reference>
  <tns:costCenter>Cost Center</tns:costCenter>
  <tns:orderLine>
    <tns:text>Gloves</tns:text>
    <tns:nbOfItems>4</tns:nbOfItems>
  </tns:orderLine>
  <tns:orderLine>
    <tns:text>T-shirts</tns:text>
    <tns:nbOfItems>2</tns:nbOfItems>
```

```
  </tns:orderLine>
  <tns:box>
    <tns:sender>
      <common:name>Business Solutions Team</common:name>
      <common:company>bpost - bpack</common:company>
      <common:address>
          <common:streetName>Muntcentrum</common:streetName>
          <common:number>1</common:number>
          <common:postalCode>1000</common:postalCode>
          <common:locality>Brussel</common:locality>
          <common:countryCode>BE</common:countryCode>
      </common:address>
      <common:emailAddress>esolutions@bpost.be</common:emailAddress>
      <common:phoneNumber>0032499123456</common:phoneNumber>
    </tns:sender>
    <tns:internationalBox>
      <international:international>
        <international:product>bpack World Business</international:product>
        <international:receiver>
          <common:name>John Doe</common:name>
          <common:company>Bpost</common:company>
          <common:address>
            <common:streetName>Carnot</common:streetName>
            <common:number>1</common:number>
            <common:box>A</common:box>
            <common:postalCode>10008</common:postalCode>
            <common:locality>New York</common:locality>
            <common:countryCode>US</common:countryCode>
          </common:address>
          <common:emailAddress>someone@provider.be</common:emailAddress>
          <common:phoneNumber>0032499123456</common:phoneNumber>
        </international:receiver>
       <international:parcelWeight>1250</international:parcelWeight>
      <international:customsInfo>
        <international:parcelValue>625</international:parcelValue>
       <international:contentDescription>Ipad 6</international:contentDescription>
       <international:shipmentType>GIFT</international:shipmentType>
       <international:parcelReturnInstructions>RTS</international:parcelReturnInstructions>
<international:privateAddress>false</international:privateAddress>
<international:currency>USD</international:currency>
<international:amtPostagePaidByAddresse>12.50</international:amtPostagePaidByAddresse>
   </international:customsInfo>
   <international:parcelContents>
     <international:parcelContent>
          <international:numberOfItemType>2</international:numberOfItemType>
          <international:valueOfItem>200</international:valueOfItem>
          <international:itemDescription>t-shirt ARMANI L  WINTER 2020</international:itemDescription>
          <international:nettoWeight>400</international:nettoWeight>
          <international:hsTariffCode>61091000</international:hsTariffCode>
          <international:originOfGoods>US</international:originOfGoods>
     </international:parcelContent>
  <international:parcelContent>
```

```
    <international:numberOfItemType>4</international:numberOfItemType>
    <international:valueOfItem>425</international:valueOfItem>
    <international:itemDescription>Gloves leather ARMANI L WINTER</international:itemDescription>
    <international:nettoWeight>500</international:nettoWeight>
    <international:hsTariffCode>420329</international:hsTariffCode>
    <international:originOfGoods>IT</international:originOfGoods>
</international:parcelContent>
</international:parcelContents>
</international:international>
</tns:internationalBox>
<tns:remark>bpack world business outside europe</tns:remark>
</tns:box>
</tns:order>
```

B.3.2.3.1 Delivery Method bpack@bpost international

```
<?xml version="1.0" encoding="UTF-8"?>
<tns:order xmlns="http://schema.post.be/shm/deepintegration/v5/national"
xmlns:common="http://schema.post.be/shm/deepintegration/v5/common"
xmlns:tns="http://schema.post.be/shm/deepintegration/v5/"
xmlns:international="http://schema.post.be/shm/deepintegration/v5/international"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://schema.post.be/shm/deepintegration/v5/">
  <tns:accountId>999010</tns:accountId>
  <tns:reference>customer reference xxxx08</tns:reference>
  <tns:costCenter>Cost Center</tns:costCenter>
  <tns:orderLine>
     <tns:text>Product 1</tns:text>
     <tns:nbOfItems>1</tns:nbOfItems>
  </tns:orderLine>
  <tns:box>
     <tns:sender>
          <common:name>SENDER_NAME</common:name>
          <common:company>SENDER_COMPANY</common:company>
          <common:address>
             <common:streetName>sender_street_name</common:streetName>
             <common:number>1</common:number>
             <common:box>1</common:box><!-- When box is empty this tag has to be removed -->
             <common:postalCode>1000</common:postalCode>
             <common:locality>sender_city</common:locality>
             <common:countryCode>BE</common:countryCode>
          </common:address>
          <common:emailAddress>sender@test.be</common:emailAddress>
          <common:phoneNumber>0032123456789</common:phoneNumber>
     </tns:sender>
      <tns:internationalBox>
       <international:atIntlPugo>
          <international:product>bpack@bpost international</international:product>
          <international:options>
              <common:keepMeInformed language="NL">
                 <common:emailAddress>sender@test.be</common:emailAddress>
              </common:keepMeInformed>
           </international:options>
```

```
            <international:receiver>
               <common:name>name_of_final_receiver</common:name>
               <common:company>company_name</common:company>
               <common:address>
                  <common:streetName>street_name_of_final_receiver</common:streetName>
                  <common:number>7</common:number>
                  <common:box>b</common:box>
                  <common:postalCode>4811 ZG</common:postalCode>
                  <common:locality>city_of_final_receiver</common:locality>
                  <common:countryCode>FR</common:countryCode>
               </common:address>
               <common:emailAddress>finalreceiver@test.be</common:emailAddress>
               <common:phoneNumber>0033123456789</common:phoneNumber>
            </international:receiver>
            <international:parcelWeight>2000</international:parcelWeight>
            <international:customsInfo>
              <international:parcelValue>1000</international:parcelValue>
              <international:contentDescription>Test description</international:contentDescription>
              <international:shipmentType>GOODS</international:shipmentType>
              <international:parcelReturnInstructions>RTS</international:parcelReturnInstructions>
              <international:privateAddress>false</international:privateAddress>
            </international:customsInfo>
            <international:pugoId>163372</international:pugoId>
            <international:pugoName>name_of_delivery_point</international:pugoName>
            <international:pugoAddress>
               <common:streetName>street_of_delivery_point</common:streetName>
               <common:number>89</common:number>
               <common:box>a</common:box>
               <common:postalCode>75009</common:postalCode>
               <common:locality>city_of_delivery_point</common:locality>
               <common:countryCode>FR</common:countryCode>
            </international:pugoAddress>
         </international:atIntlPugo>
      </tns:internationalBox>
      <tns:remark>remark xyz</tns:remark>
      <tns:additionalCustomerReference>Reference that can be used for cross-
referencing</tns:additionalCustomerReference>
   </tns:box>
</tns:order>
```

B.3.2.3.1 XSD's & Examples

The XSD files are used to describe the various XML elements exchanged between the external parties and bpost. The structure of the XML request and response messages must be validated against a schema definition. The sequence of the used tags is important.

One XSD file contains the definition of one version of the data to be sent in requests and responses. Eventually, this XSD will import other XSDs for bpost common definitions like addresses, names … Each version of the data has its own namespace.

On the link below the XSD's of this API and various examples can be found.
http://bpost.freshdesk.com/support/solutions/articles/4000037653

B.4 Product related APIs

B.4.1 GEO6 webservices (pick-up point & parcel locker locator)

The GEO-6 webservice is the bpost pick-up point & parcel locker locator (national & international) to find more information about:

- bpost Post Offices;
- bpost Post Points;
- parcel lockers;
- Parcel Points;
- Click & Collect Shop.

The following three web services are available:

- GET NEAREST SERVICE POINTS;
- GET SERVICE POINT DETAILS;
- GET SERVICE POINT PAGE.
- GET ALL SERVICE POINTS

All four services are availble via http and https.

B.4.1.1 GetNearestServicePoints

The GetNearestServicePoints web service delivers the nearest bpost pick-up points to a location given as argument.

Distance estimation is currently derived from Euclidian computation. Subsequent releases may introduce routed distance, matching more closely the true situation.

B.4.1.1.1 Input parameters

The input parameters that need to be passed by the initiator to the locator as POST or GET argument of an HTTP (or HTTPS) query.

Name	Allowed Values	Remarks
Function	"search"	The web service you want to address.
Partner	AN..6 - Mandatory	Have your acountID activated by simple request.
AppId	AN..4 – Optional	Parameter used for protection/statistics.
Street	AN..40 - Optional	Street name.
Number	N..8 – Optional	Street number.
Zone	AN..40 - Mandatory	Postal code and/or City.
Country	AN..2 – Mandatory	Country code (CC) Default: BE Possible: BE / FR / NL
Language	"NL" or "FR" - Mandatory	Language.
Type (*)	N..2 – Mandatory (*Default: 3)	Requested point type: Type 1 = bpost post office; Type 2 = bpost post point & Parcel Point; Type 4 = bpack 24/7 or parcel locker; Type 16 = Parcel Point; *(Type 8 = click & collect shop.)* **!!Please read the remarks below this table and the info about the 'Limit' if**

		you want to use different pick-up points!!
Limit	N..2 – Optional (Default: 10)	The amount of results you want returned. **We advise you to use a minimum limit of 20 if you use multiple types of pick-up points on the same map (to make sure all the points within the zone are displayed).**
DD	DD-MM-YYYY – Mandatory (Default: current date)	Delivery Date - date on which you calculate the parcel will be delivered by bpost.
CheckDate	"1" - Mandatory	Verifying the foreseen delivery date in order to only return available points.
CheckList	"0" or "1" - Optional	"0" = No, "1" = Yes. Return the known holidaystart and holidayend for the points.
CheckOpen	"1" - Mandatory	Refining CheckDate - Only returning points which can be delivered in the morning of the foreseen delivery date. Particulary important in case of Saturday-delivery.
Info	"1" - optional	"1" = Yes. Return the details (e.g. opening hours) of the points.

(*) Type:

- If you want to use a combination of pickup points you can calculate the Type by following the example below.
  bpost post offices + bpost post points + Parcel Points
  = Type 1 + Type 2 + Type 16
  = 1 + 2 + 16
  = 19
  -> use Type 19
- bpost post offices + bpost post points + Parcel Points+ parcel lockers
  -> Type = 23 (=1+2+4+16)
- For bpack@bpost international use Type 2 (= Post Point)

B.4.1.1.2 Output parameters

The output parameters are passed back by the locator to the client in XML format. You receive a list of bpost points that are located near the address passed as input parameters.

This list can contain no more than 20 results. If the input parameters are invalid, or the filter they define it is too general, an appropriate error code will be returned. For each retrieved bpost pick-up points the following attributes are returned:

Name	Values	Remarks
Id		ID
Type	1, 2, 4, 8, …	TypeId of the selected point
Name		bpost pick-up point/parcel locker name
Street		Street name
Number		Street number
Zip		Postal code
City		City
Country		Country code (CC)

ClosedFrom		HolidayStart – if known and requested
ClosedTo		HolidayEnd – if known and requested
X		X
Y		Y
Longitude		Longitude
Latitude		Latitude
Distance		Distance in metres

B.4.1.1.3 Web service query details

The web service that implements the GetNearestServicePoints interface is:

http://pudo.bpost.cloud/Locator?

When the HTTP GET protocol is used it is needed to encode the parameters in the URL.

B.4.1.1.4 Example 1 – PostOffices & PostPoints (default country - BE & type = 3)

Query:

http://pudo.bpost.cloud/Locator?Function=search&Partner=xxxxxx&Language=FR&Street=araucaria&Number=&Zone=1020&Type=3&Limit=&DD=&CheckDate=1&CheckList=0&CheckOpen=1

xxxxxx = your bpost account activated to use the GEO6 webservice

XML:

```
<?xml version="1.0" encoding="UTF-8"?>
<TaxipostLocator version="1.0" type="TaxipostLocatorList">
<Copyright>
        <Txt><div class="TaxiPostCopyright">© TaxiPost, Geo6 2011</div></Txt>
</Copyright>
<Query>
        <Zone>1020</Zone>
        <Street>ARAUCARIA</Street>
        <Number></Number>
        <Language>FR</Language>
        <Type>3</Type >
        <Limit>10</Limit>
        <CheckDate>1</CheckDate>
        <DeliveryDate>09/09/2015</DeliveryDate>
        <CheckList>0</CheckList>
        <CheckOpen>1</CheckOpen>
</Query>
<Reference type="GDB">
        <Source>StreetCenter.gdb</Source>
        <Index>1/2 records</Index>
        <Name>Araucarialaan</Name>
        <ZipId>1020</ZipId>
</Reference>
```

```
<PoiList>
        <Poi>
                <Record>
                        <Id>009800</Id>
                        <Type>1</Type>
                        <Name>LAEKEN DE WAND</Name>
                        <Street>AV.DE LA BRISE</Street>
                        <Number>13</Number>
                        <Zip>1020</Zip>
                        <City>Laeken</City>
                        <X>149244</X>
                        <Y>176358</Y>
                        <Longitude>4.358</Longitude>
                        <Latitude>50.8976</Latitude>
                </Record>
                <Distance>537.29</Distance>
                < Info
ServiceRef="http://pudo.bpost.cloud/Locator?Function=info&Partner=xxxxxx&Id=9800&Type=1&Language=FR"/ >
        </Poi>
[...]
</PoiList>
</TaxipostLocator>
```

xxxxxx = your bpost account activated to use the GEO6 webservice

B.4.1.1.5 Example 2 – PostPoints in France (Country = FR & type = 2)

Query:

http://pudo.bpost.cloud/Locator?Function=search&Partner=xxxxxx&Language=FR&Zone=59800&Country=FR&Type=3&Limit=&DD=&CheckDate=1&CheckList=0&CheckOpen=1

xxxxxx = your bpost account activated to use the GEO6 webservice

XML:

```
<?xml version="1.0" encoding="UTF-8"?>
<TaxipostLocator version="1.0" type="TaxipostLocatorList">
   <Copyright>
      <Txt>&lt;div class="TaxiPostCopyright"&gt;© TaxiPost, Geo6 2016&lt;/div&gt;</Txt>
   </Copyright>
   <Query>
      <Country>FR</Country>
      <Zone>59800</Zone>
      <Street></Street>
      <Number></Number>
      <Language>FR</Language>
      <Type>2</Type>
      <Limit>10</Limit>
```

```
      <CheckDate>1</CheckDate>
      <DeliveryDate>21/12/2016</DeliveryDate>
      <CheckList>0</CheckList>
      <CheckOpen>1</CheckOpen>
   </Query>
   <Reference type="GDB">
      <Source>FR5.gdb</Source>
      <Index>1/1 records</Index>
      <Name>F-59800</Name>
      <ZipId>F-59800</ZipId>
   </Reference>
   <PoiList>
      <Poi>
         <Record>
            <Id>41530</Id>
            <Type>2</Type>
            <Name>IPHONEXPRESS</Name>
            <Street>PLACE BARTHELEMY DOREZ</Street>
            <Number>7</Number>
            <Zip>59000</Zip>
            <City>LILLE</City>
            <Country>FR</Country>
            <X/>
            <Y/>
            <Longitude>3.05008</Longitude>
            <Latitude>50.61955</Latitude>
         </Record>
         <Distance>1614.01</Distance>
         <Info
ServiceRef="http://pudo.bpost.cloud/Locator?Function=info&amp;Partner=xxxxxx&amp;Id=41530&amp;Type=2&amp;Country=FR"/>
      </Poi>
…
   </PoiList>
</TaxipostLocator>
```

xxxxxx = your bpost account activated to use the GEO6 webservice

B.4.1.2 GetServicePointDetails

The GetServicePointDetails web service delivers the details for a bpost pick-up point referred to by its identifier.

B.4.1.2.1 Input parameters

The input parameters need to be passed by the initiator to the locator as POST or GET argument of an HTTP query.

Name	Allowed Values/ Constraints	Remarks
Function	"info"	The web service you want to address.
Partner	AN..6 – Mandatory	Parameter used for identification/statistics

AppId	AN..4 – Optional	Parameter used for protection/statistics
Id	AN..6 – Mandatory	Requested point identifier
Language	"NL" or "FR" – Mandatory	Language
Country	AN..2 – Mandatory	Country code (CC) Default: BE Possible: BE / FR / NL
Type	N..2 – Mandatory	Requested point type: Type 1 = bpost Post Office; Type 2 = bpost Post Point; Type 4 = bpack 24/7 or parcel locker; Type 16 = Parcel Point; *(Type 8 = Click & Collect Shop.)*

B.4.1.2.2 Output parameters

The output parameters are passed back by the locator to the client in XML format.

Name	Values	Remarks
ID		ID
Type	1, 2, 4, 8, …	TypeID
OFFICE		Office name
STREET		Street name
NR		Street number
ZIP		Postal code
CITY		City
X		X
Y		Y
Longitude		Longitude
Latitude		Latitude
Services		Available services
Hours		Opening hours (AM & PM)
ClosedFrom		HolidayStart
ClosedTo		HolidayEnd
NOTE		Note
Page		Details page of the point

B.4.1.2.3 Web service query details

The web service that implements the GetServicepointDetails interface is:

http://pudo.bpost.cloud/Locator?

When the HTTP GET protocol is used it is needed to encode the parameters in the URL.

B.4.1.2.1 Example 1 – Service Point details of a Belgian PostOffice (default country - BE & Type = 1)

Query:

http://pudo.bpost.cloud/Locator?Function=info&Partner=xxxxxx&AppId=A001&Language=FR&Id=009800&Type=1

xxxxxx = your bpost account activated to use the GEO6 webservice

XML:

```
<TaxipostLocator version="1.0" type="TaxipostLocatorInfo">
<Copyright>
 <Txt>
        <div class="TaxiPostCopyright">© TaxiPost, Geo6 2015</div>
 </Txt>
</Copyright>
<Query>
        <Id>009800</Id>
        <Type>1</Type>
        <Language>FR</Language>
</Query>
<Poi>
        <Record>
        <ID>9800</ID>
        <Type>1</Type>
        <OFFICE>LAEKEN DE WAND</OFFICE>
        <STREET>Avenue de la Brise</STREET>
        <NR>13-15</NR>
        <ZIP>1020</ZIP>
        <CITY>Laeken</CITY>
        <X>149244</X>
        <Y>176358</Y>
        <Longitude>4.35801</Longitude>
        <Latitude>50.89757</Latitude>
                <Services>
                <Service category="2" flag="10">Terminal Bancontact/MisterCash</Service>
                </Services>
        <Hours>
        <Monday>
                <AMOpen>9:30</AMOpen>
                <AMClose>12:30</AMClose>
                <PMOpen>13:30</PMOpen>
                <PMClose>17:00</PMClose>
        </Monday>
        <Tuesday>
                <AMOpen>9:30</AMOpen>
                <AMClose>12:30</AMClose>
                <PMOpen>13:30</PMOpen>
                <PMClose>18:00</PMClose>
        </Tuesday>
        <Wednesday>
                <AMOpen>9:30</AMOpen>
                <AMClose>12:30</AMClose>
                <PMOpen>13:30</PMOpen>
                <PMClose>17:00</PMClose>
        </Wednesday>
        <Thursday>
                <AMOpen>9:30</AMOpen>
                <AMClose>12:30</AMClose>
```

```
            <PMOpen>13:30</PMOpen>
            <PMClose>18:00</PMClose>
        </Thursday>
        <Friday>
            <AMOpen>9:30</AMOpen>
            <AMClose>12:30</AMClose>
            <PMOpen>13:30</PMOpen>
            <PMClose>17:00</PMClose>
        </Friday>
        <Saturday>
            <AMOpen>9:30</AMOpen>
            <AMClose>13:00</AMClose>
            <PMOpen/>
            <PMClose/>
        </Saturday>
        <Sunday>
            <AMOpen/>
            <AMClose/>
            <PMOpen/>
            <PMClose/>
        </Sunday>
        </Hours>
        <ClosedFrom/>
        <ClosedTo/>
        <NOTE/>
</Record>
<Page
ServiceRef="http://pudo.bpost.cloud/Locator?Function=page&Partner=999998&Id=009800&Type=1&L
anguage=FR"/>
</Poi>
</TaxipostLocator>
```

B.4.1.2.2 Example 2 – Service Point details of a French Post Point (Country - FR & Type = 2)

Query:

http://pudo.bpost.cloud/Locator?Function=info&Partner=xxxxxx&AppId=A001&Language=FR&Id=062049&Country=FR&Type=2

xxxxxx = your bpost account activated to use the GEO6 webservice

XML:

```
<?xml version="1.0" encoding="UTF-8"?>
<TaxipostLocator version="1.0" type="TaxipostLocatorInfo">
   <Copyright>
      <Txt>&lt;div class="TaxiPostCopyright"&gt;© TaxiPost, Geo6 2016&lt;/div&gt;</Txt>
   </Copyright>
   <Query>
      <Country>FR</Country>
      <Id>062049</Id>
      <Type>2</Type>
```

```
    <Language>FR</Language>
  </Query>
  <Poi>
    <Record>
      <ID>62049</ID>
      <Type>2</Type>
      <OFFICE>L'UNIVERS DU MOBILE</OFFICE>
      <STREET>RUE DES PROUVAIRES</STREET>
      <NR>1</NR>
      <ZIP>75001</ZIP>
      <CITY>PARIS</CITY>
      <Country>FR</Country>
      <X/>
      <Y/>
      <Longitude>2.344</Longitude>
      <Latitude>48.86134</Latitude>
      <Services/>
      <Hours>
        <Monday>
          <AMOpen>10:30</AMOpen>
          <AMClose>14:00</AMClose>
          <PMOpen>15:00</PMOpen>
          <PMClose>20:00</PMClose>
        </Monday>
        <Tuesday>
          <AMOpen>10:30</AMOpen>
          <AMClose>14:00</AMClose>
          <PMOpen>15:00</PMOpen>
          <PMClose>20:00</PMClose>
        </Tuesday>
        <Wednesday>
          <AMOpen>10:30</AMOpen>
          <AMClose>14:00</AMClose>
          <PMOpen>15:00</PMOpen>
          <PMClose>20:00</PMClose>
        </Wednesday>
        <Thursday>
          <AMOpen>10:30</AMOpen>
          <AMClose>14:00</AMClose>
          <PMOpen>15:00</PMOpen>
          <PMClose>20:00</PMClose>
        </Thursday>
        <Friday>
          <AMOpen>10:30</AMOpen>
          <AMClose>13:00</AMClose>
          <PMOpen>15:00</PMOpen>
          <PMClose>20:00</PMClose>
        </Friday>
        <Saturday>
          <AMOpen>10:30</AMOpen>
          <AMClose>14:00</AMClose>
          <PMOpen>15:00</PMOpen>
          <PMClose>20:00</PMClose>
        </Saturday>
```

```
            <Sunday>
               <AMOpen>12:00</AMOpen>
               <AMClose></AMClose>
               <PMOpen></PMOpen>
               <PMClose>19:00</PMClose>
            </Sunday>
         </Hours>
         <ClosedFrom></ClosedFrom>
         <ClosedTo></ClosedTo>
         <NOTE></NOTE>
      </Record>
      <Page
ServiceRef="http://pudo.bpost.cloud/Locator?Function=page&amp;amp;Partner=999998&amp;amp;Id=062049&
amp;amp;Type=2&amp;amp;Country=FR"/>
   </Poi>
</TaxipostLocator>
```

B.4.1.3 GetServicePointPage

The GetServicePointPage web service delivers the details for a bpost pick-up point or parcel locker referred to by its ID, presented in an HTML page.

B.4.1.3.1 Input parameters

The input parameters need to be passed by the initiator to the locator as POST or GET argument of an HTTP query.

Name	Allowed Values/Constraints	Remarks
Function	"page"	The web service you want to address.
Partner	AN..6 - Mandatory	Static parameter used for protection/statistics
AppId	AN..4 – Optional	Static parameter used for protection/statistics
Id	AN..6 - Mandatory	Requested point identifier
Language	"NL" or "FR" - Mandatory	Language
Type	N..2 - Mandatory	Requested point type: Type 1 = bpost Post Office; Type 2 = bpost Post Point; Type 4 = bpack 24/7 or parcel locker; Type 16 = Parcel Point; *(Type 8 = Click & Collect Shop.)*

B.4.1.3.2 Output parameters

The output parameters are passed back by the locator to client in HTML format.

Name	Values	Remarks
ID		ID
Type	1, 2, 4, 8, …	Byte Code
OFFICE		Office
STREET		Street name

NR		Street number
ZIP		Postal code
CITY		City
X		X
Y		Y
Latitude		Latitude
Longitude		Longitude
Services		Services
Hours		Hours
ClosedFrom		Closed from
ClosedTo		Closed to
NOTE		Note

B.4.1.3.3 Web service query details

The web service that implements the GetServicepointPage interface is:

http://pudo.bpost.cloud/Locator?

When the HTTP GET protocol is used it is needed to encode the parameters in the URL.

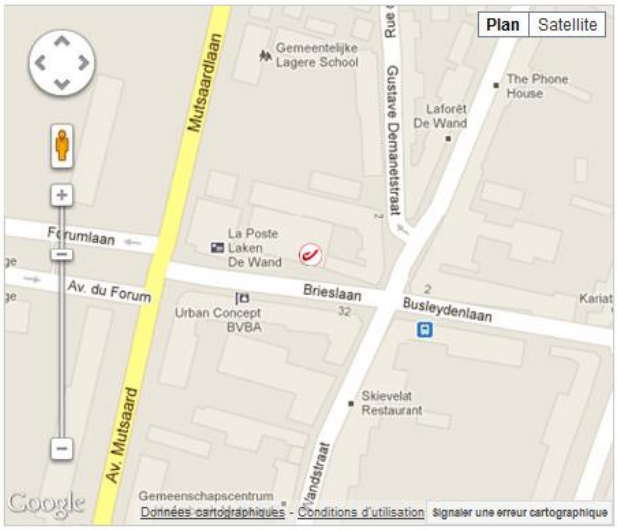
B.4.1.3.4 Example

Query:

http://pudo.bpost.cloud/Locator?Function=page&Partner=xxxxxx&AppId=A001&Id=009800&Language=NL&Type=1

xxxxxx = your bpost account activated to use the GEO6 webservice

HTML:



LAEKEN DE WAND

Bureau de poste
Avenue de la Brise 13-15
1020 Laeken
022/012345

Heures d'ouvertures :

Lun :	9:00 - 13:00	14:00 - 17:00
Mar :	10:00 - 13:00	14:00 - 17:00
Mer :	9:00 - 13:00	14:00 - 17:00
Jeu :	9:00 - 13:00	14:00 - 17:00
Ven :	9:00 - 13:00	14:00 - 17:00
Sam :	9:00 - 12:30	-
Dim :	-	-

Produits et services postaux :
Terminal Bancontact/MisterCash

B.4.1.4 Get All Service Points

The Get All ServicePoints web service delivers all pick-up points to a zipcode(optional) and type(optional) given as argument.
This webservices can also return in a oneshot all pickup points of any type (in case field 'type' is not filled in) of a specific country (mandatory, in this case the zipcode must be kept empty).

B.4.1.4.1 Input parameters

The input parameters need to be passed by the initiator to the locator as POST or GET argument of an HTTP query.

Name	Allowed Values/Constraints	Remarks
Function	"getallservicepoints"	The web service you want to address.
Account	AN..6 - Mandatory	Static parameter used for protection/statistics
Language	"NL" or "FR" - Mandatory	Language
Country	AN..2 – Mandatory	Country code (CC) Default: BE Possible: BE/BG/CA/CE/DE/DK/ES/EE/FI/FR/GB/GR/HR/HU/LT/LV/NL/NO/PL/RO/RU/SE/SI/SK/UK
Type	N..2 - Optional	Requested point type: Type 1 = bpost Post Office; Type 2 = bpost Post Point; Type 4 = bpack 24/7 or parcel locker; Type 16 = Parcel Point; *(Type 8 = Click & Collect Shop.)* If no 'Type' is filled in, the webservice will return pickup points of any types.
zip	Zipcode - Optional	Zipcode for which you want to retrieve the pickup points of the specified 'type'. By leaving this field empty, the webservice will return all national pickup points (according to 'type' choosed) of the specific 'country'

B.4.1.4.2 Output parameters

The output parameters are passed back by the locator to the client in XML format. You receive a list of points that are matching with the input parameters.

For each retrieved pick-up points the following attributes are returned:

Name	Values	Remarks
Id		ID
Type	1, 2, 4, 8, …	TypeId of the selected point
Name		bpost pick-up point/parcel locker name
Street		Street name
Number		Street number
Zip		Postal code
City		City
ClosedFrom		HolidayStart – if known and requested
ClosedTo		HolidayEnd – if known and requested
Longitude		Longitude
Latitude		Latitude

AMOpen		From Monday to Sunday Opening hours in the morning
AMClose		From Monday to Sunday Closing hours in morning
PMOpen		From Monday to Sunday Opening hours in afternoon
PMClose		From Monday to Sunday Closing hours in afternoon

B.4.1.4.3 Web service query details

The web service that implements the GetNearestServicePoints interface is:
http://pudo.bpost.cloud/Locator?Function=getallservicepoints
When the HTTP GET protocol is used it is needed to encode the parameters in the URL

B.4.1.4.4 Example 1 – Get all points in Belgium

http://pudo.bpost.cloud/Locator?Function=getallservicepoints&Account=XXXXXX&Language=FR&Country=BE&Type=&Zip=

B.4.1.4.5 Example 2 – Get all parcel lockers in Netherlands

http://pudo.bpost.cloud/Locator?Function=getallservicepoints&Account=XXXXXX&Language=FR&Country=NL&Type=4&Zip=

B.4.1.4.6 Example 3 – Get all parcel lockers in France on zipCode 75000

http://pudo.bpost.cloud/Locator?Function=getallservicepoints&Account=XXXXXX&Language=FR&Country=FR&Type=4&Zip=75000

C. Label

C.1 In a nutshell

The parcel labels and their corresponding barcode information are the logistical backbone of bpost parcels network, and therefore a specific attention should be given to the generation of the labels.

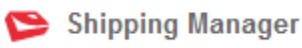
Bpost provides several ways to create parcels labels. Some of these options create automatically an EDI. These are:

- Use of Shipping Manager online tool (EDI is generated automatically)
- Use of APIs (EDI is generated automatically)
- Use of own generated labels

Depending on the IT infrastructure, the logistic environment and the business model, this choice has to be carefully analysed to ensure a smooth implementation. Our integration experts may help you with this choice, if you feel the need.

C.2 Shipping Manager

The Shipping Manager tool can be accessed through the portal, via the login received at account creation.
Portal URL: https://www.bpost.be/portal/goLogin



The Shipping Manager online tool allows both manual entry and integration via the front-end iframe.

C.2.1 Shipping manager – Manual Entry

Using this application, it is possible to generate:

- Domestic and outbound labels
- Collect requests

The different ways to generate labels are:

- One label at the time via user interface (address fields, option choice);
- Several labels at the time via one shot functionality (addresses need to be saved in the application);
- Several labels at the time via CSV upload.

For more information, please refer to the user manual.

FR: http://www.bpost.be/shippingmanager/pdf/userguide_fr.pdf
NL: http://www.bpost.be/shippingmanager/pdf/userguide_nl.pdf
EN: http://www.bpost.be/shippingmanager/pdf/userguide_en.pdf
DE: http://www.bpost.be/shippingmanager/pdf/userguide_de.pdf

C.2.2 Shipping manager – Easy Integration

For orders that have been created via the front-end iframe integration or create order web service, it is possible to generate labels using this interface. The EDI is then automatically generated.

For more information, please refer to the user manual.

FR: http://www.bpost.be/shippingmanager/pdf/userguide_fr.pdf
NL: http://www.bpost.be/shippingmanager/pdf/userguide_nl.pdf
EN: http://www.bpost.be/shippingmanager/pdf/userguide_en.pdf

We also have a YouTube channel:
http://www.youtube.com/playlist?list=PLcRld1SkgfkFa3OOLwS0umjcoZMdIe5TM

C.3 Shipping Manager API

C.3.1 In a nutshell

The Shipping Manager API allows a series of different actions and operations needed to create and modify orders (full description in section B.3), generate the according shipping labels, modify an order status or retrieve all information to a related order.

In this part, the different request types are described technically. Apart from order creation we have following request types:

- Create Label
  - Create Label for Order
  - Create Label for Box
  - Create Label in Bulk for Order
- Update/Modify Order Status
- Retrieve Order Information

The Create Label image allows image output in both PDF and PNG. The formats used are A4 or A6. Depending the output (e.g. world easy retour label of our local partner in combination with a prove of deposit document of our local partner or an outbound label in combination with the CN23 document) the A4 format should be used.

If the given format and size does not fit your specific needs, the Create Label webservice can be used as well to get a barcode for an order. That same barcode can then be used on own generated labels, without any announcement needed.

C.3.2 API Implementation

C.3.2.1 REST

REpresentational State Transfer (REST) software architecture style is used to expose Shipping Manager resources as services to the external parties of bpost.

C.3.2.2 Protocol

Although REST is an architectural style which is not bound to a particular technology, in practice the HTTP architecture is used. Web Services offered by the Shipping Manager are then implemented by sending and/or receiving XML documents over the HTTP(s) Protocol.

Resources (business entities, such as the order) are addressed by a Uniform Resource Identifier (URI). These resources can then be manipulated with the standard HTTP operations POST, GET, PUT and DELETE. These requests will map to standard CRUD operations as illustrated in the table below:

CRUD	HTTP	Action
Create	**POST**	Create a sub-resource "under" the given URI. The resource representation is passed in the request and the address (URI) of the newly created resource is returned in the response.
Read	**GET**	Retrieve the current state of the resource at the given URI. The resource representation is returned in the response.
Update	**PUT**	Initialize or update the "state" of a resource at the given URI. The complete resource representation is passed in the HTTP request.
Delete	**DELETE**	Delete a resource at a given URI. Afterwards the URI is no longer valid.

C.3.2.3 Endpoint

To use the web services you will need to perform an HTTP operation on a URI that is constructed as follows.

URI: ServiceEndpPoint & URL suffix

ServiceEndPoint is: **https://shm-rest.bpost.cloud/services/shm**
The URL suffix may vary according to the different types of request and will be documented in each section.

C.3.2.4 Versioning

The versioning of a web service operation is achieved by sending requests and accepting responses having a specific media-type defined. The version is this manual is **version 3.3**.

application/vnd.bpost.<servicefamily>-<version>+<format>

Where the version identifier is a "v" followed by a whole number. We only distinguish between major versions. Minor versions have to be backwards compatible or else they are a major version by definition.

This media-type value must then be set accordingly on the **Accept:** and **Content-Type:** headers of the HTTP operation.

In annex 'F.6 XSD schemes' you can find the location where the XSD files can be found.

C.3.2.5 XML Validation

The structure of the XML request and response messages must be validated against a schema definition. The XSD file used to describe the various XML elements exchanged between the external parties and bpost can be found at the end of this document.

One XSD file contains the definition of one version of the data to be sent in requests and responses. Eventually, this XSD will import other XSDs for bpost common definitions like addresses, names … Each version of the data has its own namespace.

C.3.2.6 Security

C.3.2.6.1 Authentication

Authentication is performed by the Server hosting the Web Services. We use pre-emptive Authentication over a secure channel: **HTTPS**.

This means the server will expect the **Authorization:** header to be sent along with the request. The value of this header is the authorization type (Basic) followed by the e-tailer's external-Id concatenated with a colon and an at least 128 bits passphrase (the passphrase is the password of the shipping manager webservice and can be found in the admin panel of the shipping manager backend). This concatenated value must be encoded in base64 before being actually set in the **Authorization:** header.

Authorization: Basic External-Id:passphrase
Where the underlined value is encoded in Base64. The External-Id is the e-tailer's Account ID.

For example, the Authorization Header for an e-tailer having the following attributes:
External-ID: **Etailer1**
Passphrase: **QuiteLongPassPhrase**
Should generate an Authentication header and value string like:

Authorization: Basic RXRhaWxlcjE6UXVpdGVMb25nUGFzc1BocmFzZQ==

In case the call on the Web Service cannot be authenticated due to a missing or incorrect Authentication header, the caller of the Web Service will return an HTTP **401 –** Unauthorized response.

C.3.2.6.2 Authorization

Authorization is performed at the Web Service Level.

Each service end point contains the accountId to uniquely identify the resource. Prior to the accountId/passphrase validation, the web service will validate that the accountId found in the basic authentication and the accountId found in the resource are the same. This ensures a shop cannot access another shop's data.

If this is the case the Web Service will execute as described in the next sections of this document. If this is not the case the Web Service will not execute and the same response having HTTP code 401, as the example already provided above, will be sent back.

C.3.2.6.3 Status Codes

HTTP-based REST leverages the use of standard status codes:

- **4xx client error** status codes are used to map internal **Functional Exceptions**: The request can not be completed due to, for example, a conflict with the state of the resource: trying to confirm an order that has previously been cancelled, or trying to open an order referencing a product that doesn't exist in the catalog anymore. Another characteristic for these exceptions is that they can usually be solved by changing the content of the request the web service.
- **5xx server error** status codes are used to map internal **Technical Exceptions**: The request can not be completed due to an unexpected condition on the server side. For example, a failure connecting to the database or master data not being present in the database can be categorized as technical exceptions.

C.3.2.6.4 Functional Exceptions

If the Web Service call encounters a functional problem, a specific response will be sent back to the client. The response will be mapped to the most appropriate HTTP 1.1 status code in the 4xx range as defined here *http://www.w3.org/Protocols/rfc2616/rfc2616-sec10.html* and an XML content will be provided with a distinct error code and error message providing the client with a clear description of what went wrong as well as providing hints on what to change in order to solve the functional issue. A specific content-type is used to describe the version of the functional exception XML payload.

The following table summarizes the specific attributes of the functional exception response:

Attribute	Value/Description
HTTP Status	One of 400 Bad Request 403 Forbidden 404 Not Found 405 Method Not Allowed 406 Not Acceptable 409 Conflict 410 Gone 411 Length Required 415 Unsupported Media Type 416 Requested Range Not Satisfiable 417 Expectation Failed
HTTP Header	application/vnd.bpost.shmFunctionalException-v1+XML
HTTP Body	"businessException" as described in the Common-1.0.xsd

Below an example is provided of a response returned by any Web Service encountering a functional problem.

```
HTTP/1.1 409 Conflict
Server: Apache-Coyote/1.1
Content-Type: application/vnd.bpost.shmFunctionalException-v1+XML
Content-Length: 379
Date: Tue, 26 Apr 2011 07:30:20 GMT
Connection: close

<ns2:businessException xmlns="http://schema.post.be/common/exception/v1/"
xmlns:ns2="http://schema.post.be/api/shm/v1/">
        <code>409</code>
        <message>The order is in CANCELLED state and cannot be modified anymore.</message>
</ns2:businessException>
```

C.3.2.6.5 Technical Exceptions

If the Web Service call encounters a technical problem, a specific response will be sent back to the client. The response will be mapped to the most appropriate HTTP status code in the 5xx range. If the issue happened while the code of the web service is executed, the HTTP status code will always be 500 and XML code will be provided in the content of the response with a generic error message and a unique token used to uniquely identify the problem on our side. A specific content-type is used to describe the version of the functional exception XML payload.

The following table summarizes the specific attributes of the functional exception response:

Attribute	Value/Description
HTTP Status	One of: 500 Internal Server Error 501 Not Implemented 502 Bad Gateway 503 Service Unavailable 504 Gateway Timeout 505 HTTP Version Not Supported
HTTP Header	application/vnd.bpost.shmSystemException-v1+XML
HTTP Body	"systemException" as described in the Common-1.0.xsd

Below an example is provided of the response returned by any Web Service encountering a technical problem. The 500 Internal Server Error message contains a unique ID (UUID) that is important for technical support.

```
HTTP/1.1 500 Internal Server Error
Date: Fri, 29 Apr 2011 15:37:33 GMT
Server: Apache
Content-Length: 496
Connection: close
Content-Type: application/vnd.bpost.shmSystemException-v1+xml

<?xml version="1.0" encoding="UTF-8" standalone="yes"?><systemException
xmlns="http://schema.post.be/api/shm/common/v2/"
xmlns:ns2="http://schema.post.be/common/exception/v1/"><ns2:message>An unexpected error
occurred while executing the request!
 Please try again in a few moments.
If the problem persist, please contact our support and provide the following token information f35c0f13-
538f-41ae-99aa-932bc3141109</ns2:message><ns2:timestamp>2011-04-
29+02:00</ns2:timestamp></systemException>
```

C.3.3 Create Label

Depending on the request type this web service will return a parcel tracking id and/or the requested image in base64.

Format of the images returned in the XML response is A4 or A6, the output image is in PDF/PNG or ZPL(only A6 in this case is allowed)

There are three type of requests:

- Create Label for Order
- Create Labels in Bulk
- Create Label for Box

Note that the ZPL is only available in A6 format and via the request "Create Label for Order" **WITH** order reference in server response. ZPL labels only apply to 203 dpi printers.

C.3.3.1 Create Label for Order

C.3.3.1.1 Create Label for Order **WITHOUT** order reference in server response

The service will return labels for **all** unprinted boxes for that order. Boxes that were unprinted will get the status PRINTED, the boxes that had already been printed will remain the same. The label can be retrieved in different formats (A4/A6 - 1 format per call), which should be explicitly defined in the Accept header.

C.3.3.1.1.1 Client Request

Use the HTTP **GET** request method to send the information to the server. The order information needs to be sent to the following **URL**:

Attribute	Value
HTTP Operation	**GET**
URL suffix	/{accountId}/orders/{reference}/labels/{labelFormat} - Account id is the identifier used for the authentication - reference: order reference used to create the order - desired format (A4 or A6) - withReturnLabels: if retour labels should be returned (optional parameter)

Apart from the Basic Autorization, the HTTP GET request must contain an **Accept & Content-Type** header field.

To retrieve label in **PDF format**, use:

Attribute	Value
Content-Type	application/vnd.bpost.shm-labelRequest-v5+XML
Accept	application/vnd.bpost.shm-label-pdf-v3+XML

To retrieve label in **PNG format**, use:

Attribute	Value
Content-Type	application/vnd.bpost.shm-labelRequest-v5+XML
Accept	application/vnd.bpost.shm-label-image-v3+XML

C.3.3.1.1.2 Server Response

If the order reference is unknown, the service will return HTTP status 404.
If the order reference is known, the server will return a HTTP 200 OK status.

The XML response <labels> element will contain:

Name	Allowed Values	Description
barcode		
mimeType	image/png image/pdf	
Bytes		Base64 encoded text string

Example:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<labels xmlns="http://schema.post.be/shm/deepintegration/v5/"
xmlns:ns2="http://schema.post.be/shm/deepintegration/v5/common"
xmlns:ns3="http://schema.post.be/shm/deepintegration/v5/national"
xmlns:ns4="http://schema.post.be/shm/deepintegration/v5/international">
<label>
<barcode>32321234565990035766203O</barcode>
<mimeType>image/png</mimeType>
<bytes>iVBORw0KGgoAAAANDVs…ABBHAAAAANgY/wdBpW2kg+xuSQAAAABJRU5ErkJggg==</bytes>
</label>
</labels>
```

With **withReturnLabels** parameter, one box will get two barcodes accordingly. The barcode ending in “050” is to be used for the return parcel.

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<labels xmlns="http://schema.post.be/shm/deepintegration/v5/"
xmlns:ns2="http://schema.post.be/shm/deepintegration/v5/common"
xmlns:ns3="http://schema.post.be/shm/deepintegration/v5/national"
xmlns:ns4="http://schema.post.be/shm/deepintegration/v5/international">
<label>
<barcode>32321234565990035766303O</barcode>
<barcode>3232123456599003576640SO</barcode>
<mimeType>image/png</mimeType>
<bytes>iVBORw0KGgoAAAANSUhEUgAAA2gAAA...ErkJggg==</bytes>
</label>
</labels>
```

C.3.3.1.2 Create Label for Order **WITH** order reference in server response

The service will return labels for **all** unprinted boxes for that order. Boxes that were unprinted will get the status PRINTED, the boxes that had already been printed will remain the same. The label can be retrieved in different formats (A4/A6 - 1 format per call), which should be explicitly defined in the Accept header. The server response will contain the order reference.

C.3.3.1.2.1 Client Request

Use the HTTP **GET** request method to send the information to the server. The order information needs to be sent to the following **URL**:

Attribute	Value
HTTP Operation	**GET**
URL suffix	/{accountId}/orders/{reference}/labels/{labelFormat} - Account id is the identifier used for the authentication - reference: order reference used to create the order - desired format (A4 or A6) - withReturnLabels: if retour labels should be returned (optional parameter)

Apart from the Basic Autorization, the HTTP GET request must contain an **Accept & Content-Type** header field.

To retrieve label in **PDF format**, use:

Attribute	Value
Content-Type	application/vnd.bpost.shm-labelRequest-v5+XML
Accept	application/vnd.bpost.shm-label-pdf-v3.4+XML

To retrieve label in **PNG format**, use:

Attribute	Value
Content-Type	application/vnd.bpost.shm-labelRequest-v5+XML
Accept	application/vnd.bpost.shm-label-image-v3.4+XML

To retrieve label in **ZPL format (only A6 is possible with 203 dpi printers)**, use:

Attribute	Value
Content-Type	application/vnd.bpost.shm-labelRequest-v5+XML
Accept	application/vnd.bpost.shm-label-zpl-v5+XML

C.3.3.1.2.2 Server Response

If the order reference is unknown, the service will return HTTP status 404.
If the order reference is known, the server will return a HTTP 200 OK status.

The XML response <labels> element will contain:

Name	Allowed Values	Description
barcode		
reference		Field "reference" used in the "creating order" request, see B.3.2.1
mimeType	image/png application/pdf text/zpl	
bytes		Base64 encoded text string (for PNG or PDF)
zplCode		Code ZPL of the label For testing purpose, you can copy/paste this tag value in a ZPL viewer

Example pdf:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes" ?>
<labels>
   <label>
      <barcodeWithReference>
         <barcode>323299901059912037679030</barcode>
         <reference>test_reference_1</reference>
      </barcodeWithReference>
     <mimeType>application/pdf</mimeType>
     <bytes>{base64 string}</bytes>
   </label>
</labels>
```

Example png:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes" ?>
<labels>
   <label>
      <barcodeWithReference>
         <barcode>323299999959912037679030</barcode>
         <reference>test_reference_1</reference>
      </barcodeWithReference>
     <mimeType>image/png</mimeType>
     <bytes>{base64 string}</bytes>
   </label>
</labels>
```

Example zpl:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<labels xmlns="http://schema.post.be/shm/deepintegration/v5/"
xmlns:ns2="http://schema.post.be/shm/deepintegration/v5/common"
xmlns:ns3="http://schema.post.be/shm/deepintegration/v5/national"
xmlns:ns4="http://schema.post.be/shm/deepintegration/v5/internation
al">
     <label>
          <barcodeWithReference>
               <barcode>32329999995999826568127</barcode>
               <reference>test-ZPL1001</reference>
          </barcodeWithReference>
```

```
            <mimeType>text/zpl</mimeType>
            <zplCode>{zplCode}</zplCode>
      </label>
</labels>
```

With **withReturnLabels (available for all the 3 formats; png,pdf,zpl)** parameter, one box will get two barcodes accordingly. The barcode ending in "050" is to be used for the return parcel.

Example for PDF format:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes" ?>
<labels>
      <label>
            <barcodeWithReference>
                  <barcode>32329990105991201529 2030</barcode>
                  <reference>test_barcode_with_reference</reference>
            </barcodeWithReference>
            <barcodeWithReference>
                  <barcode>32329990105991201529 3050</barcode>
                  <reference>test_barcode_with_reference</reference>
            </barcodeWithReference>
            <mimeType>application/pdf</mimeType>
            <bytes>{base 64 string}</bytes>
      </label>
</labels>
```

C.3.3.2 Create Label in bulk for Order

C.3.3.2.1 Create label in bulk for order **WITHOUT** order reference in server response

The service will return labels for **all** unprinted boxes for all specified orders. Boxes that were unprinted will get the status PRINTED, the boxes that had already been printed will remain the same. The label can be retrieved in different formats (A4/A6 - 1 format per call), which should be explicitly defined in the Accept header.

C.3.3.2.1.1 Client Request

Use the HTTP **GET** request method to send the information to the server. The order information needs to be sent to the following **URL**:

Attribute	Value
HTTP Operation	**GET**
URL suffix	/{accountId}/labels/{labelFormat} - Account id is the identifier used for the authentication - desired format (A4 or A6) - withReturnLabels: if retour labels should be returned (optional parameter)

Apart from the Basic Autorization, the HTTP GET request must contain an **Accept & Content-Type** header field just like the "*Create Label for Order **WITHOUT** order reference in server response*" request.

In the body of the HTTP POST request you need to put the XML code describing the order.

Attribute	Description
HTTP Body	XML <batchLabels/> element

<batchLabels> element tags

Name	Allowed Values	Description
order		Order reference: unique ID used in your web shop assigned to an order.

Example:

```
<?xml version="1.0"?>
<batchLabels xmlns="http://schema.post.be/shm/deepintegration/v3/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xsi:schemaLocation="http://schema.post.be/shm/deepintegration/v3/">
  <!--Element order is optional, maxOccurs=unbounded-->
   <order>MY_ORDER_REFERENCE_1</order>
   <order>MY_ORDER_REFERENCE_3</order>
   <order>MY_ORDER_REFERENCE_2</order>
</batchLabels>
```

C.3.3.2.1.2 Server Response

If the order reference is known, the server will return a HTTP 200 OK status.
The XML response <labels> element will contain exactly the same elements as the response from the "*Create Label for Order **WITHOUT** order reference in server response*" request.

If the order reference is unknown, the service will return HTTP status 404.
The XML response <unknownItems> element will contain:

Name	Allowed Values	Description
order		Order reference: unique ID used in your web shop assigned to an order.

Example:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<labels xmlns="http://schema.post.be/shm/deepintegration/v3/"
xmlns:ns2="http://schema.post.be/shm/deepintegration/v3/common"
xmlns:ns3="http://schema.post.be/shm/deepintegration/v3/national"
xmlns:ns4="http://schema.post.be/shm/deepintegration/v3/international">
        <label>
                <barcode>32320369085990013227003O</barcode>
                <mimeType>image/png</mimeType>
                <bytes>{base 64 string}</bytes>
        </label>
        <label>
                <barcode>32320369085990013227105O</barcode>
```

```
            <mimeType>image/png</mimeType>
            <bytes>{base 64 string}</bytes>
        </label>
</labels>
```

C.3.3.2.2 Createlabel in bulk for order **WITH** order reference in server response

The service will return labels for **all** unprinted boxes for all specified orders. Boxes that were unprinted will get the status PRINTED, the boxes that had already been printed will remain the same. The label can be retrieved in different formats (A4/A6 - 1 format per call), which should be explicitly defined in the Accept header. The server response will contain the order reference.

C.3.3.2.2.1 Client Request

Use the HTTP **GET** request method to send the information to the server. The order information needs to be sent to the following **URL**:

Attribute	Value
HTTP Operation	**GET**
URL suffix	/{accountId}/labels/{labelFormat} - Account id is the identifier used for the authentication - desired format (A4 or A6) - withReturnLabels: if retour labels should be returned (optional parameter)

Apart from the Basic Autorization, the HTTP GET request must contain an **Accept & Content-Type** header field just like the "*Create Label for Order **WITH** order reference in server response*" request.

In the body of the HTTP POST request you need to put the XML code describing the order.

Attribute	Description
HTTP Body	XML <batchLabels/> element

<batchLabels> element tags

Name	Allowed Values	Description
order		Order reference: unique ID used in your web shop assigned to an order.

Example:

```
<?xml version="1.0"?>
<batchLabels xmlns="http://schema.post.be/shm/deepintegration/v3/"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xsi:schemaLocation="http://schema.post.be/shm/deepintegration/v3/">
  <!--Element order is optional, maxOccurs=unbounded-->
   <order>MY_ORDER_REFERENCE_1</order>
   <order>MY_ORDER_REFERENCE_3</order>
   <order>MY_ORDER_REFERENCE_2</order>
</batchLabels>
```

C.3.3.2.2.2 Server Response

If the order reference is known, the server will return a HTTP 200 OK status.
The XML response <labels> element will contain exactly the same elements as the response from the "*Create Label for Order **WITH** order reference in server response*" request.

If the order reference is unknown, the service will return HTTP status 404.
The XML response <unknownItems> element will contain:

Name	Allowed Values	Description
order		Order reference: unique ID used in your web shop assigned to an order.

Example:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes" ?>
<labels>
   <label>
      <barcodeWithReference>
         <barcode>3232999010599120383260 30</barcode>
         <reference>MY_ORDER_REFERENCE_1</reference>
      </barcodeWithReference>
      <barcodeWithReference>
         <barcode>3232999010599120383280 30</barcode>
         <reference>MY_ORDER_REFERENCE_3</reference>
      </barcodeWithReference>
      <barcodeWithReference>
         <barcode>3232999010599120383270 30</barcode>
         <reference> MY_ORDER_REFERENCE_2</reference>
      </barcodeWithReference>
      <mimeType>application/pdf</mimeType>
      <bytes>{base64 string}</bytes>
   </label>
</labels>
```

C.3.3.3 Create Label for Box

C.3.3.3.1 Create label for Box **WITHOUT** order reference in server response

The service will return the label for **the specific** box. The label can be retrieved in different formats (A4/A6 - 1 format per call), which should be explicitly defined in the Accept header.
This request can only be performed on boxes which have already the status PRINTED.
It should only be used when the original label needs to be generated again. **As always, each box should have a unique label.**

C.3.3.3.1.1 Client Request

Use the HTTP **GET** request method to send the information to the server. The order information needs to be sent to the following **URL**:

Attribute	Value
HTTP Operation	**GET**
URL suffix	/{accountId}/boxes/{barcode}/labels/{labelFormat} - Account id is the identifier used for the authentication - barcode: the barcode linked to this specific box - desired format (A4 or A6)

Apart from the Basic Autorization, the HTTP GET request must contain an **Accept & Content-Type** header field just like the "*Create Label for Order **WITHOUT** order reference in server response*" request.

C.3.3.3.1.2 Server Response

If the barcode is unknown, the service will return HTTP status 404.
If the barcode is known, the server will return a HTTP 200 OK status.

The XML response is identical to that from the "*Create Label for Order **WITHOUT** order reference in server response*" request.

C.3.3.3.2 Create label for Box **WITH** order reference in server response

The service will return the label for **the specific** box. The label can be retrieved in different formats (A4/A6 - 1 format per call), which should be explicitly defined in the Accept header.
This request can only be performed on boxes which have already the status PRINTED.
It should only be used when the original label needs to be generated again. **As always, each box should have a unique label.** The server response will contain the order reference.

C.3.3.3.2.1 Client Request

Use the HTTP **GET** request method to send the information to the server. The order information needs to be sent to the following **URL**:

Attribute	Value
HTTP Operation	**GET**
URL suffix	/{accountId}/boxes/{barcode}/labels/{labelFormat} - Account id is the identifier used for the authentication - barcode: the barcode linked to this specific box - desired format (A4 or A6)

Apart from the Basic Autorization, the HTTP GET request must contain an **Accept & Content-Type** header field just like the "*Create Label for Order **WITH** order reference in server response*" request.

C.3.3.3.2.2 Server Response

If the barcode is unknown, the service will return HTTP status 404.
If the barcode is known, the server will return a HTTP 200 OK status.

The XML response is identical to that from the "*Create Label for Order **WITH** order reference in server response*" request.

C.3.4 Update/Modify Order Status

If the order reference is not found, the service will return a HTTP 404 Not Found status.
If the order reference is found, the service will update the state of all unprinted boxes. The printed boxes will remain the same.

C.3.4.1 Client Request

Use the HTTP **POST** request method to send the order information to the server. The order information needs to be sent to the following **URL**:

Attribute	Value
HTTP Operation	**POST**
URL suffix	**/{accountId}/orders/{reference}** - Account id is the identifier used for the authentication - reference is the reference of the order to update

Apart from the Basic Autorization, the HTTP POST request must contain a **Content-type** header field:

Attribute	Value
HTTP Header	Content-type: application/vnd.bpost.shm-orderUpdate-v3+XML

Example:

```
<?xml version="1.0"?>
<orderUpdate xmlns="http://schema.post.be/shm/deepintegration/v3/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://schema.post.be/shm/deepintegration/v3/ ">
   <status>OPEN</status>
</orderUpdate>
```

Statusses available:

- OPEN
- CANCELLED
- ON-HOLD

C.3.4.2 Server Response

If your order status is successfully updated, the server will respond with an HTTP **200 OK** status code.

Attribute	Value
HTTP Status	200 OK

The body of the response message will be empty, because there is no XML code that needs to be sent back.

C.3.5 Retrieve Order Information

The Retrieve Order web service retrieves an order by its reference. Therefore, an order has to be created on forehand using the shipping manager frontend or webservices.

If there are multiple boxes within the order that matches the provided reference, all the boxes regardless of their status will be returned. Barcodes that are attached to the requested reference will be returned if any.

C.3.5.1 Operation

To use the Retrieve Order web request, you need to perform an HTTP operation on a URI that is constructed as follows:

URI: **serviceEndPoint/{accountId}/orders/{reference}**

Where
serviceEndPoint is https://shm-rest.bpost.cloud/services/shm and **{accountId}** is the same account number you use for authentication.

The only HTTP operation that is allowed on the Fetch Order URI is GET.

URI	POST	PUT	GET	DELETE
serviceEndPoint/{accountId}/orders/{reference}	X	X	☑	X

POST, PUT and DELETE operations on a Fetch Order URI are prohibited. Trying to perform these operations will always return a response with HTTP status code 405 Method Not Allowed.

C.3.5.2 Retrieving an order

When you want to retrieve an order, you need to send a request to the server to receive order information using the HTTP GET operation on the URI. We will now show you how to send a valid request to fetch an order and what the response of the server will look like.

C.3.5.3 Client Request

Use the HTTP **GET** request method to send the order information to the server. The order information needs to be sent to the following **URL**:

Attribute	Value
HTTP Operation	**GET**
URL suffix	**/{accountId}/orders/{reference}** - Account id is the identifier used for the authentication - reference: reference of the order to search for

Apart from the Basic Autorization, the HTTP POST request must contain an **Accept** header field:

Attribute	Value
HTTP Header	Accept: application/vnd.bpost.shm-order-v3.3+XML

The body of the GET request will be empty, because there is no XML code that needs to be sent to the server.

Attribute	Description
HTTP Body	empty

Example:
The following example shows a valid request to fetch an order:

```
GET /shm/123456/orders/201106241506
Accept: application/vnd.bpost.shm-order-v3.3+XML
```

C.3.5.4 Server Response

The service will return order data with all boxes.
The XML response will contain exactly the same tags as the ones used for for the create order request.

The following list of statuses can be returned (one status per box).
Internal Shipping Manager statuses (before handing over the parcel to bpost):

- PENDING
- OPEN
- CANCELLED
- ON-HOLD
- PRINTED

Operational statuses (after handing over the parcel to bpost):

- ANNOUNCED
- IN_TRANSIT
- AWAITING_PICKUP
- DELIVERED
- BACK_TO_SENDER

The service will return HTTP status 404 for an unknown order reference.

C.3.6 Get Product configuration

This service will return all information about the configuration of this shop.

C.3.6.1 Client Request

Use the HTTP **GET** request method to send the order information to the server. The order information needs to be sent to the following **URL**:

Attribute	Value
HTTP Operation	**GET**
URL suffix	**/{accountId}/ productconfig** - Account id is the identifier used for the authentication

Apart from the Basic Autorization, the HTTP POST request must contain an **Accept** header field:

Attribute	Value
HTTP Header	Accept: application/vnd.bpost.shm-productConfiguration-v3.1+XML

C.3.6.2 Server Response

If the accountID is unknown, the service will return HTTP status 404.
If the accountID is known, the server will return a HTTP 200 OK status.

The XML response <labels> element will contain:

Name	Allowed Values	Description
productConfiguration		
deliveryMethod	home or office pick-up point Parcel locker	National / International National / International National
product	bpack 24h Pro bpack 24h business bpack Easy Retour bpack World Express Pro bpack World Business bpack Europe Business bpack@bpost international	National National National International International International International + pick-up point
price		Different pricing zones per product
option		Different selected options per product

C.4 Own generated labels

C.4.1 General considerations

The parcel labels and their corresponding barcode information are the logistical backbone of bpost Parcels.

This specification document defines the barcode and the label layout standards that must be respected in order to use bpost services for deliveries.

The customer commits to follow the instructions in this document. The customer is the sole responsible party for technical or IT-related adaptations and developments necessary to print the barcodes.

The technical department of bpost can be reached for support during the development and validation of the labels on the following address: esolutions@bpost.be

Own generated labels have to follow a very precise process for validation.

C.4.2 Barcode Requirements

C.4.2.1 General rules

The primary barcode used by bpost is a Code 128C barcode designed in accordance with the latest ANSI and CEN standards for transportation industry barcodes. The following rules must be followed during preparation of the mail items:

- A unique identification number must be assigned to each item.
- The identification number must comprise 24 numeric positions for domestic sendings, S10 standard for outbound parcels.
- Each identification number can be used only once.
- The identification number must be reproduced on the mail item as a Code 128C human readable barcode.
- In the interests of safety, the identification number must be reproduced in Arabic numerals on the item underneath de barcode. The values of the control digit, the start and stop code must not be printed.
- In case of Cash on Delivery (CoD), the amount of the cash on delivery mail items must be printed in the form of a separate barcode because the CoD parcels need to be controlled for payment. The CoD barcode is also a code 128C barcode
- The customer must follow the structure described hereunder.
- If other barcodes are present on the parcels, it is recommended not to use Code 128, EAN 128, Code 39 or 2/5 interleaved for these barcodes. If there is no other possibility, the barcodes should be put vertically on the label to clearly distinguish it from the bpost barcode. Moreover, the logical structure of the barcodes (type, length & fixed start digits) should be communicated to the technical team who will investigate the possibility to block these barcodes in the network, if it is not an existing bpost product.

C.4.2.2 Physical properties

The specified physical properties of the bpost barcode have been developed to ensure accurate readability with all barcode scanning systems currently in use at bpost. The physical properties of the barcode depend on the type of barcode, being a standard parcel barcode, domestic or outbound or a CoD barcode.

C.4.2.2.1 General properties

The **X-DIMENSION** is the width of the narrowest element in the barcode – bar or space – and can be used to calculate the barcode's actual width. The X-dimension must be based on the printer resolution to ensure good readability. This is caused by the fact that a printer can only print complete dots.

An X-dimension of 0.381 mm (0.015 inches) is recommended for 600 and 1200 dpi printers. In this case, the thinnest bar will be 9 or 18 dots wide.

An X-dimension of 0.381 mm produces an identification barcode of 63.627 mm in length. Minor differences are possible and sometimes unavoidable.
Note that ZPL format labels is only applicable for 203 dpi printers.

C.4.2.2.2 Height

The overall **HEIGHT** of the barcodes is established to ensure that barcodes are accurately read on all of bpost's scanning systems. The barcode height must be **exactly 14 mm**.

C.4.2.2.3 Parcel barcode

The **WIDTH** of the barcode is a result of the X-dimension and the wide to narrow ratio. The width of the identification number barcode must be within the following values:

	Width (mm)
Minimum	60
Maximum	85

The overall **HEIGHT** of the barcodes is established to ensure that barcodes are accurately read on all of bpost's scanning systems. The barcode height must be exactly 14 mm.

The barcode widths based on the X-dimension are listed in annexe F.2.3.

C.4.2.2.4 Cash on delivery barcode

The ideal width of the barcode representing the amount of the CoD item is 42.672 mm at 600 and 1200 dpi.

The **WIDTH** of the barcode representing the amount must be chosen between the following values:

	Width (mm)
Minimum	28
Maximum	60

The **HEIGHT** of the barcode must be comprised between 9 and 11 mm.

C.4.2.2.5 Outbound - S10 Barcode

For a S10 barcode, the X-dimension should measure between 0.25 and 0.51 mm. However, a minimum of 0.33 mm is recommended.

For optimal scanning results, we advise to use the largest possible X-dimension within the allowed range that is consistent with the label design.

The barcode width depends heavily on the used X-dimension. The barcode widths based on the X-dimension are listed in annexe F.2.3.

C.4.2.2.6 Quiet zones

The customer must leave a blank area (margin) measuring **at least 6.5 mm** right and left of the barcode. These quiet zones ensure that the barcode reader is able to easily find the start and end of the barcode. The quiet zones must not contain any text or other markings.

C.4.2.2.7 Barcode quality

C.4.2.2.7.1 Choice of printer

To ensure clear results and constant quality, the barcodes must be printed at high contrast and at a good resolution. Moreover, the bars need to have clear edges. Various printers meet the quality standard. The best results are listed below in descending order:

- VERY HIGH DENSITY (15 cpi)
  Intermec drum printers or photocomposition

- HIGH DENSITY (9.4 cpi)
  Thermal transfer printers

- AVERAGE HIGH DENSITY (7-8 cpi)
  Thermal printers
  Laser printers

- AVERAGE DENSITY (5-7 cpi)
  Needle printer
  Some inkjet printers (HP DESKJET)

- LOW DENSITY (less than 5cpi)
  Inkjet printers
  Professional inkjet printers
  The barcodes must be resistant to external influences (manipulation, sun, rain)

Due to its low quality, matrix printing must be avoided.
Note that with ZPL format labels, only printers with 203 dpi are applicable.

When printing barcodes, it is recommended to perform the following checks on a regular basis:

- Ink and toner quality
- Print quality – marks, damage, dirt, …
- Service – regular cleaning and timely replacement of the print heads, checking quality of the ink ribbon, …

If the printed barcodes are not protected by a window or transparent foil, the ink used by the customer must be resistant to external influences such as rain, sunlight or normal manipulation.

C.4.2.2.7.2 Paper quality

For the same quality reasons and to ensure a good barcode printing quality, the following specifications have to be met:

- The paper colour should provide a high contrast with black ink. White is the preferred colour.
- The surface has to be moisture resistant and abrasion proof.
- The paper should not be affected by light or temperature.
- The glue should be permanently adhering and should not affect the homogeneity of the label, which has to remain perfectly plain.

C.4.2.2.7.3 Standardised quality

The American National Standards Institute (ANSI) has developed a method for assessing barcode quality. It is based much more on readability than on precision of dimensions and ink quality.

This method was adopted by the European Committee for Standardisation (CEN) and given world standard (ISO) status in 2000. It uses seven main parameters, each of which is evaluated separately. The final result is determined by the lowest of the seven scores, which run from A to F (ANSI) or from 4 to 0 (CEN), where A or 4 is perfect and F or 0 is extremely poor.

The official ISO 15416 standard provides more information on this method.

The customer must produce a **minimum barcode quality B** (ANSI) **or 3** (CEN), in accordance with the ISO 15416 specification.

More information on the official ISO 15416 standards can be found on the official ISO website: http://www.iso.org.

C.4.2.2.7.4 Impact of barcode quality on shipping process

bpost relies on the latest technology in barcodes to take in, sort, distribute and track parcels. Parcels are sorted at automated hubs at high speeds. Therefore, it is very important that a barcode meets bpost's specifications so that all scanners can clearly and swiftly read the barcode.

Under certain circumstances, if a barcode cannot be read (due to damage, misplacement, incorrect data content…), the parcel will be relabelled. Logically, this procedure takes up more handling time and the standard service cannot be guaranteed anymore (D+1 and Track & Trace services will be lost).

C.4.2.2.7.5 Benefits of quality barcodes

Good quality barcodes:

- Ensure agreed service
- Provide Track & Trace information
- Ensure complete and accurate data capture
- Minimize handling time of parcels
- Ensure accurate invoicing

C.4.2.2.8 Font

The characters printed in the address fields (name, street, house number, box, postal code, city or other indicators) must be printed in an OCR-compatible font. The size of this font must be between 11pt and 17pt. 12pt is recommended as optimal font size. The font must not be printed in italics or bold and it must not be underlined. Moreover, the text should be print in black. The use of red ink is forbidden.

Examples of OCR-compatible fonts are: Arial, Helvetica and Verdana. Serif fonts such as Times New Roman are strongly discouraged.
The text in the box must be aligned to the left and the distance between the text and the left side of the box should be at least 5 mm. The address must be printed. It may not be handwritten.

Moreover, other specifications concerning the address have to be met:

- Attached characters are forbidden.
- Dashes are not authorized.
- First characters have to be written in capitals.
- City name has to be written in capitals.
- No characters should be placed before the postal code (in other words: B-1000, B1000 or BE1000 and all derivations are not recognized postal codes).

C.4.3 Domestic labels

C.4.3.1 Barcode type

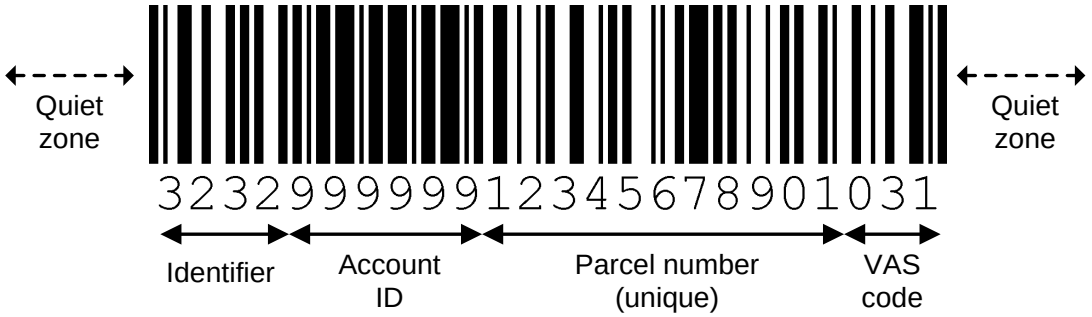
bpost uses Code 128C as barcode type for its domestic parcels. Code 128 is a variable length, alphanumerical code with high packing density. Three different sub types can be distinguished, each with its own interpretation and advantages.

Character set	Description
Code 128A	This character set encodes ASCII characters 00 to 95 (0-9, A-Z and control codes) and special characters.
Code 128B	This character set encodes ASCII characters 32 to 127 (0-9, A-Z, a-z) and special characters.
Code 128C	This character set encodes 00-99 (double density encoding of numeric only data) and FNC1.

C.4.3.2 Structure and contents

C.4.3.2.1 Parcel barcode

The customer must strictly follow the barcode structure described below and may only use the numeral ranges allocated to it in the agreement. The barcode structure comprises 24 numerical positions as specified as follows:



Description	Position	Value	Explanation
Start code			Specific initial character for Code 128C
Identifier	1 to 4	3232	bpost identifying tag
Account ID	5 to 10	******	Customer identifier assigned to the customer by bpost
Parcel number	11 to 21	**********	Eleven-digit parcel number that freely can be chosen as long it is unique and as long it doesn't start with 599.
VAS code	22 to 24	***	Description of the product with selected options
Control digit		Modulo 103 value	Control value calculated with a modulo 103 type algorithm. *This value cannot be visible in the printed human readable area nor should it be part of the scannable value.*
End Code			Specific end value for Code 128C

C.4.3.2.2 Cash on Delivery barcode

Customers shipping CoD items must print two barcodes:

- The unique identification number described in chapter C.4.3.2.1, using the CoD mail item's VAS code (see annexe F.2.4).
- The amount of the CoD mail item, using a barcode with the following structure:

Description	Position	Value	Explanation
Start code			Specific initial character for Code 128C
Link between the barcodes	1 to 4	****	Last four digits of the unique number in the bpost identification number (positions 18 to 21).
Amount in Euros	5 to 8	****	Value in Euros
Amount in cents	9 to 10	**	Value in Eurocents
Postal code	11 to 14	****	Receiver's postal code
Control digit		Modulo 103 value	Control value calculated with a modulo 103 type algorithm. *This value cannot be not visible in the printed HR area.*
End Code			Specific end value for Code 128C

C.4.3.2.3 Control digit

Each barcode printed in the Code 128 format requires a control digit. This control digit is printed after the readable part and before the stop code, which indicates the end of the barcode. The digit is calculated on the basis of the modulo 103 calculation rule as prescribed by the Code 128 standard. Although most of the barcode software programs calculate this automatically, the calculation method is described in full in annexe 0.

A Code 128 barcode assigns an ASCII value to every character. The ASCII values are used to calculate the control digit. For a complete list of values refer to the table in annexe F.2.1.

C.4.3.2.4 Account ID

The customer's account ID (positions 5 to 10 of the identification number) must be referred to in the customer's agreement. bpost assigns this number to the agreement. If the customer has not received an account ID yet, he should contact the account manager.

C.4.3.2.5 VAS code

The VAS (Value Added Service) code combines a product with its options (VAS). The customer must insert the appropriate VAS code in the barcode based on the product and options chosen. A VAS code always consists of 3 digits. The table of VAS codes can be found in annexe F.2.4.

It is also possible to insert the product's VAS code in the barcode and to submit the options via LCI (Large Customer Interface). In this case, the options requested have to remain consistent.

C.4.3.2.6 Human-readable

The identification number must be printed under the barcode in Arabic numerals in the area between the barcode and the address box. Under certain circumstances, our operators will manually enter the data encoded in the barcode in case of scanner malfunctioning or label damage.

To ensure that the human readable part can be easily interpreted, we ask that the height of this text is comprised between 3 and 4,5 mm.

Neither the start code, nor the stop code or the control digit should be taken up in the readable area.

C.4.3.3 Label Requirements

C.4.3.3.1 Label layout

C.4.3.3.1.1 General parcel

The label for domestic parcels is split into three zones.

- **VAS (Value Added Service) zone**
  - This zone is foreseen for the visual indications of the Value Added Services and the products.

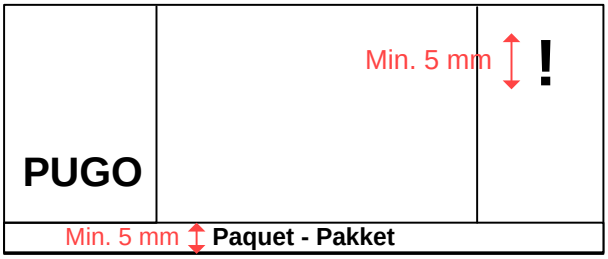
- **Shipper zone**
  - This is where the customer's address goes. The address must be located in Belgium.

- **Address zone**
  - The bottom part of the label contains the barcode, preceded by the identification character 'P' and the destination address in a black box centred with respect to the barcode with the presorting code on the right.

C.4.3.3.1.1.1 VAS zone

The VAS zone is divided into three sections:

- The visual indicator for 'bpack@bpost' [PUGO], for bpack pacels locker [247] or for Saturday delivery [SAT] goes on the left.
- An exclamation mark goes on the right if the VAS is used as an option. It is always on top.
- The middle section is only used in case of CoD. Consequently, it must be left blank in case of a standard parcel.



The following Value Added Services must be visually indicated on the label. Their use determines which action is needed in the bpost network. The customer is responsible for the correctness of the indicator. If the correct VAS indicator is missing or displayed incorrectly, bpost cannot guarantee the agreed services.

VAS name	Visual indicator	VAS zone
Signature	!	Right
Basic/Additional Warranty (old Insurance)	!	Right
Automatic 2nd presentation	!	Right

Remark: The contractual conditions of some the options listed above may vary.
Please contact your sales representative for detailed information about their availability.

The minimum height of these visual indicators is 5 mm. The exclamation mark must be printed in bold.

C.4.3.3.1.1.2 Product indicator

The names of the product should be printed on the label. The words below must be printed underneath the VAS zone.

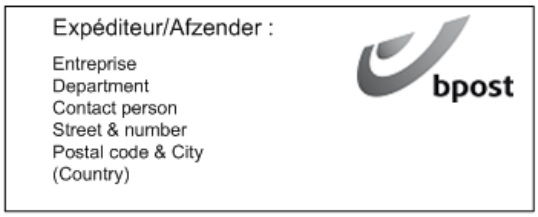
- "Paquet – Pakket"
- "Envoi contre Remboursement – Verrekenzending"

These words, which enable an operator to quickly distinguish the product visually, must be printed on the label so that bpost is able to process the item properly and smoothly.

The customer must use a bold font that is no less than 5 mm and no more than 9 mm high.

C.4.3.3.1.1.3 Shipper Zone

The shipper zone contains the sender's address. Since these specifications deal with domestic parcels, the **shipper's address must be located in Belgium**.



C.4.3.3.1.1.4 Address zone

The bottom part of the label contains the barcode, preceded by the identification character 'P', the destination address and a link to the bpost website.

The **BARCODE** must be centred with respect to the address box. The distance between the barcode and the address box must be exactly 5 mm across the length of the barcode. The readable part is inserted in the 5 mm of space between the barcode and the address box.

In addition to the barcode representing the identification number, the customer must also print the **IDENTIFICATION CHARACTER "P"** to indicate that the barcode represents a bpost parcel. The identification character should be printed before the barcode at a distance of no less than 6.5 mm and no more than 10 mm in a bold font that is no less than 8 mm and no more than 14 mm high.

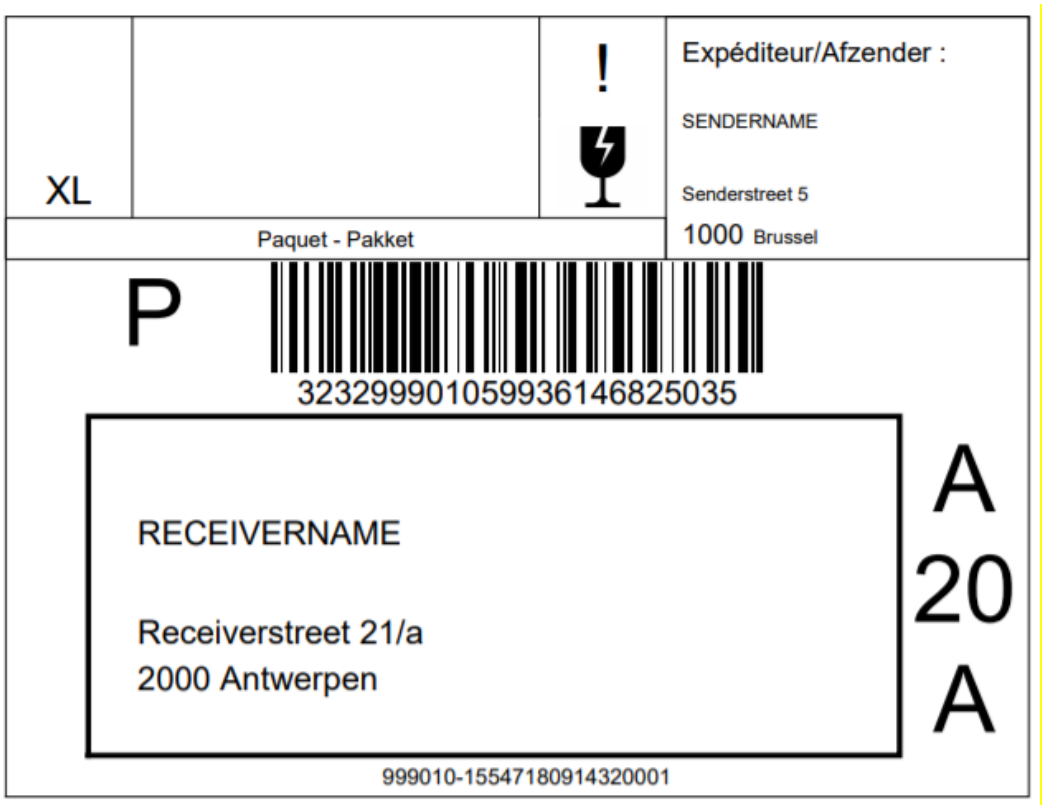
The customer must print a black line around the **RECIPIENT'S ADDRESS** to ensure the address can be scanned automatically. This line must be at least 1 mm thick. The box may be up to 50 mm high and 110 mm wide.

Only the following addresslines can be used:

Line 1: receiver individual identification (form of address, given name, surname)
Line 2: receiver organization identification (function, department, organization name)
Line 3: receiver dispatching information (building, wing, stairwell, floor, door)
Line 4: other delivery information (PO Box, “bpack 24/7”)
Line 5: delivery point location (street type and name, street number, box number if applicable)
Line 6: postcode and town
Line 7: name in full of destination country if cross-border mail.

C.4.3.3.1.2 Bpack XL

The Bpack XL parcel label will have the extra eye-catcher **XL**, printed in the left upper corner of the VAS zone.
If the parcel will have the option ‘fragile’, the picture of the **glass & !**, printend in the right upper corner of the VAS zone is also needed.



C.4.3.3.1.3 Cash on Delivery (CoD)

The customer should use the following indicators on CoD mail items as well as the indicators for parcels (see chapter C.4.3.2.1):

1. In the address box on the first line
   - The amount specified as follows: ****,** € or ****,** EUR.
   - The bank account number to be credited (current bank account at a Belgian bank): ***-*******-**.

The amount must always be placed to the left of the account number.

2. In the VAS zone
   - The CoD barcode containing the amount.
   - Above the CoD barcode: an equilateral triangle (with sides measuring 2 cm) containing the characters CoD.
   - An exclamation mark in the right section of the VAS zone.

C.4.3.3.1.4 bpack@bpost

For bpack@bpost (delivery at bpost Post Offices, bpost Post Points, Parcel Points), the label must be adapted in the following way:

- The name of the final recipient who will collect the parcel at the bpack@bpost point must be printed in the address box. The recipient name must be printed on the first line, before a line only mentioning “VIA AFHAALPUNT/POINT D’ENLEVEMENT”, followed by the name and the address of the bpack@bpost point. The latter information can be retrieved from our official GEO6 webservice.

- The ‘PUGO’ visual sign (in bold) must be printed in the top left of the VAS zone. In case of space issues, the characters PUGO may also be printed as follows:

PU
GO

C.4.3.3.1.5 bpack@bpost & CoD

A bpack@bpost CoD parcel must bear the bpack@bpost and the CoD details:

- The recipient's name, the bpack@bpost point name and the bpack@bpost point address must be indicated in the address box, with the mention "VIA AFHAALPUNT/POINT D'ENLEVEMENT" between the recipients name and the point address.
- The bank account number and the amount should be printed at the top of the address box.
- The 'bpack@bpost' visual sign needs to be mentioned in the top left of the VAS zone.
- The CoD barcode and the CoD triangle should be present in the middle of the VAS-zone.
- Product designation: "Envoi contre remboursement – Verrekenzending"

bpost bpack@bpost and bpack@bpost CoD can only be used in combination with LCI. To ensure correct treatment of the parcels, the accompanying LCI file(s) must be sent to bpost's LCI interface before the parcels are physically injected in the bpost network. In case of non-compliance, bpost cannot guarantee accurate operational execution of the parcels.

C.4.3.3.1.6 Bpack parcel locker (24/7)

C.4.3.3.1.6.1 Description

bpost has extended its delivery methods with bpack parcel locker
This consists of new parcel automate machines for which labels have to contain the specific bpack parcel locker information. For more information on this delivery method, please contact your account manager.

C.4.3.3.1.6.2 Mandatory information on the labels

As the success of delivery is based upon having complete information on the receiver, it is of the utmost importance to clearly print the necessary information on the correct position.

The necessary information consist of:

- Receiver Surname and First Name
- bpack parcel locker name
- bpack parcel locker zip code
- bpack parcel locker city name
- extra eye-cathcher [**247**], printed in the upper left corner of the VAS zone

C.4.3.3.1.6.3 Address fields layout bpack parcel locker

C.4.3.3.1.7 Saturday Delivery

Parcels that need Saturday Delivery will need to be announced with the Saturday option. The shipping label will also have an extra eye-catcher **SAT**, printed in the left upper corner of the VAS zone:

The pre-sorting code is mandatory for operational sorting. See C.4.3.3.1.8.2 Pre-sorting code, for more information on this subject.

C.4.3.3.1.8 Label Free zones

It is strictly forbidden to add other information in one of the three zones indicated in section 0. If other indications are needed, the best place to display them is under the address box.

As explained in the barcode requirements in section C.4.2.1, the use of other barcodes should be avoided. If there is no other possibility, the rules indicated in that section should be followed.

C.4.3.3.1.8.1 Logo

A bpost logo should be placed in the upper right or left corner of the label next to the VAS or Shipper zone. A quiet zone of 1/8 of the largest side of the logo should be present.
Examples of the logo in Black & White can be found in the annexe. A logo in colour is available on demand. The printing quality of this logo is also subjected to validation.

C.4.3.3.1.8.2 Pre-sorting code

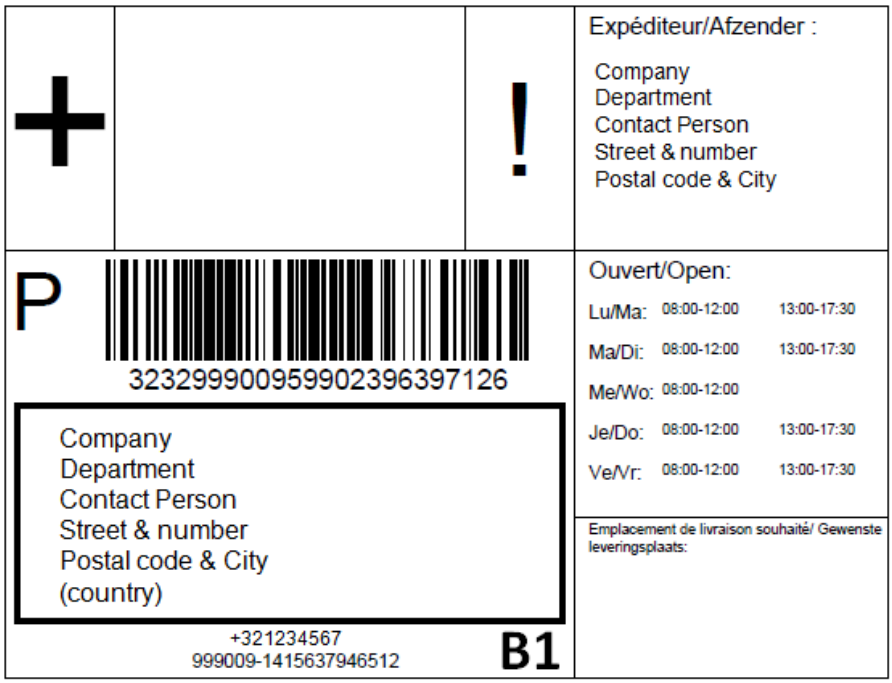
In order to facilitate the logistical process a pre-sorting code is needed on te parcel's label.
The pre-sorting code depends on the receiver's postal code and can be found in the table below.

Postal code		Pre-sorting code
From	To	
2000	2499	A20A
2500	2999	A25A
3500	3999	A35A
8000	8499	A80G
8500	8999	A85G
9000	9499	A90G
9500	9999	A95G
1000	1299	B10B
1300	1499	C13C
1500	1699	B15B
1700	1999	B17B
3000	3499	A30B
5000	5999	C50C
6000	6599	C60C
7000	7499	C70C
7500	7999	C75C
4000	4499	C40L
4500	4999	C45L
6600	6999	C66L

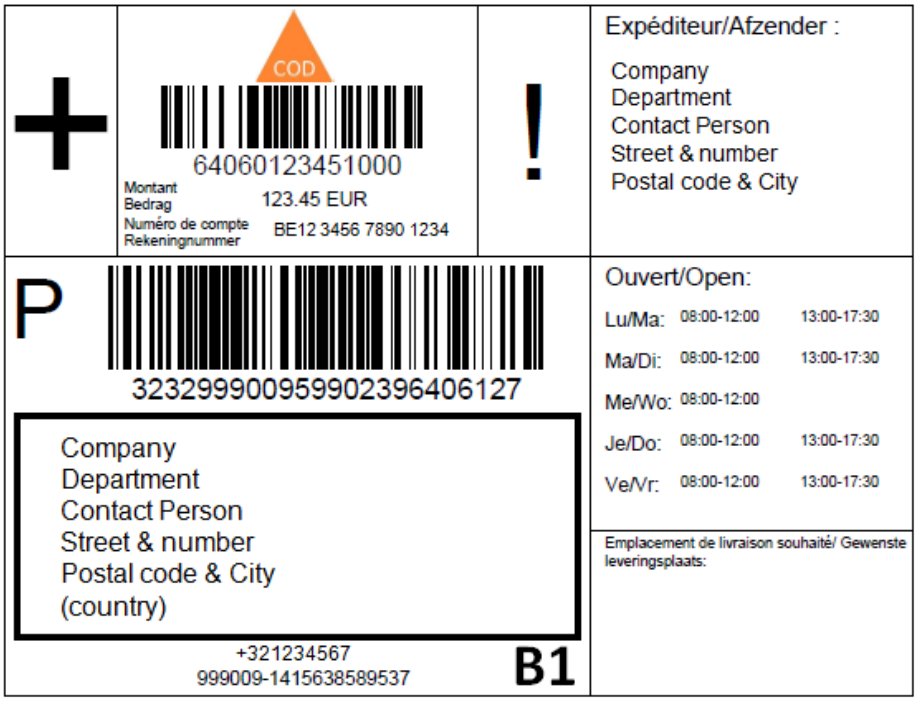
This pre-sorting code should be placed at the right side of the receiver's address box.The 2 pictures below can be used as example.

C.4.4 Domestic B2B label

C.4.4.1 Regular bpack 24h Business label (VAS 126)



C.4.4.2 bpack 24h Business label with option COD (VAS 127)



C.4.5 Outbound labels

C.4.5.1 Outbound label bpack world business & bpack world business express pro

C.4.5.1.1 Barcode type

bpost uses Code 128 as barcode type for its international parcels. Code 128 is a variable length, alphanumerical code with high packing density. Three different sub-types can be distinguished, each with its own interpretation and advantages.

Character set	Description
Code 128A	This character set encodes ASCII characters 00 to 95 (0-9, A-Z and control codes) and special characters.
Code 128B	This character set encodes ASCII characters 32 to 127 (0-9, A-Z, a-z) and special characters.
Code 128C	This character set encodes 00-99 (double density encoding of numeric only data) and FNC1.

C.4.5.1.2 Structure and contents

C.4.5.1.2.1 Parcel barcode

The customer must strictly follow the barcode structure described below and may only use the numeral ranges allocated to it in the agreement. The barcode structure comprises 13 alphanumerical positions as specified as follows:

Description	Position	Value	Explanation
Start code			Specific initial character for Code 128
Service indicator	1 to 2	EE or CD	Identifies the used service or product
Serial number	3 to 10	********	Eight-digit unique parcel number.
Check digit	11	Modulo 11 value	Control value calculated with a modulo 11 type algorithm.
Country code	12 to 13	BE	Country of origin
End Code			Specific end value for Code 128

Positions 3 to 10 of the identification number are variable. These digits may be chosen freely, as long as the barcode remains unique.

C.4.5.1.2.2 Service indicator

The service indicator comprises 2 alphabetic characters. For service indicators intended for universal use between designated operators, the first character indicates the type of postal product or service and the second character is assigned by the origin operator from a range of allowed values.

In case of bpost only 2 service indicators can be used:

Service indicator	Type of product
CD	bpack world business
EE	bpack world express pro

C.4.5.1.2.3 Serial number

The customer is only allowed to use serial numbers in the range that will be attributed to him by bpost.
Contact bpost to receive the range attributed to you.

The serial number shall be exactly eight numeric digits in length. Where required to ensure a length of 8 digits, leading zeros are used. Thus, any value in the range 00000000 to 99999999 is a valid serial number.

C.4.5.1.2.4 Check digit

A check digit is an arithmetically derived number that is used to support the detection of substitution or transposition errors which might occur during data capture. Each barcode printed in the S10 format requires a control digit. This check digit is printed after the readable part and before the stop code, which indicates the end of the barcode. In the case of S10 identifiers, the 11th character is either a check digit. The digit is calculated based on the modulo 11 calculation rule as prescribed by the S10 standard. The calculation method is described in full in annexe 0.

A Code 128 barcode assigns an ASCII value to every character. The ASCII values are used to calculate the control digit. For a complete list of values refer to the table in annexe F.2.1.

C.4.5.1.2.5 Country code

This shall be the 2-character ISO3166-1 code of the UPU member country under whose authority the S10 identifier was issued. For international shipments leaving Belgium, the country code is fixed to “BE”.

C.4.5.1.2.6 Human-readable

The identification number must be printed under the barcode in Arabic numerals. Under certain circumstances, our operators will manually enter the data encoded in the barcode in case of scanner malfunctioning or label damage.

To ensure that the human readable part can be easily interpreted, we ask that the height of this text is comprised between 3 and 4.5 mm. Spaces may be inserted to enhance readability. The recommended combination of data and spaces is AA NNN NNN NNN AA. Only upper case alphabetic and numeric characters are allowed.

Neither the start code nor the stop code should be taken up in the readable area.

C.4.5.1.3 Label Requirements

C.4.5.1.3.1 Label layout

C.4.5.1.3.1.1 General layout

The label for international parcels is split into three zones.

- **Shipper zone**
    - This is where the sender's address, the account ID and instructions in case of non-delivery go. The sender address must be located in Belgium.
- **Product zone**
    - This is where the used service or product is indicated.
- **Recipient zone**
    - The bottom part of the label contains the destination address, the CN23 notification, the barcode (preceded by the identification character 'P'), the service logo and the Terms and Conditions.
    - CC = country code of the addressee

C.4.5.1.3.1.1.1 Shipper zone

The shipper zone is divided into three sections:

- In the left part, the customer's account ID should be mentioned.
- The middle part contains the sender's instructions in case a parcel cannot be delivered abroad.
- The right part contains the sender's identification: name, address and telephone number.

Account ID	**Sender's instruction in case of non delivery**	**Sender address**
[Account ID]	[Instruction for non delivery]	[Sender name] [Contact person] [Street & number] [Postal code & City] [Country] [Phone number]

C.4.5.1.3.1.1.2 Product zone

The name of the product should be printed on the label in uppercase characters. The product is linked with the service indicator and should be indicated accordingly.

Service indicator	Type of product	Logo
CD	bpack world business	
EE	bpack world express pro	

C.4.5.1.3.1.1.3 Recipient zone

The bottom part of the label contains the destination address, the CN23 notification, the barcode (preceded by the identification character 'P'), the service logo and the Terms and Conditions.

The **BARCODE** must be aligned to the right of the label, taking into account the prescribed quiet zones. The total length of barcode + the quiet zones + the character P should measure no more than 80 mm.

In addition to the barcode representing the identification number, the customer must also print the **IDENTIFICATION CHARACTER "P"** to indicate that the barcode represents a bpost parcel. The identification character should be printed before the barcode at a distance of no less than 6.5 mm and no more than 10 mm in a bold font that is no less than 8 mm and no more than 14 mm high.

The customer must print a **SERVICE LOGO** depending on the chosen product. The logo should be aligned to the right and should be printed at a reasonable distance from the barcode. It should not hinder the scanning of the barcode.
At the bottom left of the barcode box, the Terms and conditions are printed: "Carriage of this consignment is subject to the Terms and Conditions as specified in the Contract".

The entire barcode box should have a height of maximum 55 mm.

Destination address

Min. 5 mm [Recipient name]
[Contact person]
[Street & number]
[Postal code & City]
[Country]
[Phone number]

PLEASE ALWAYS ADD CN23 DOCUMENTS FOR ALL SHIPMENTS OUTSIDE THE EU

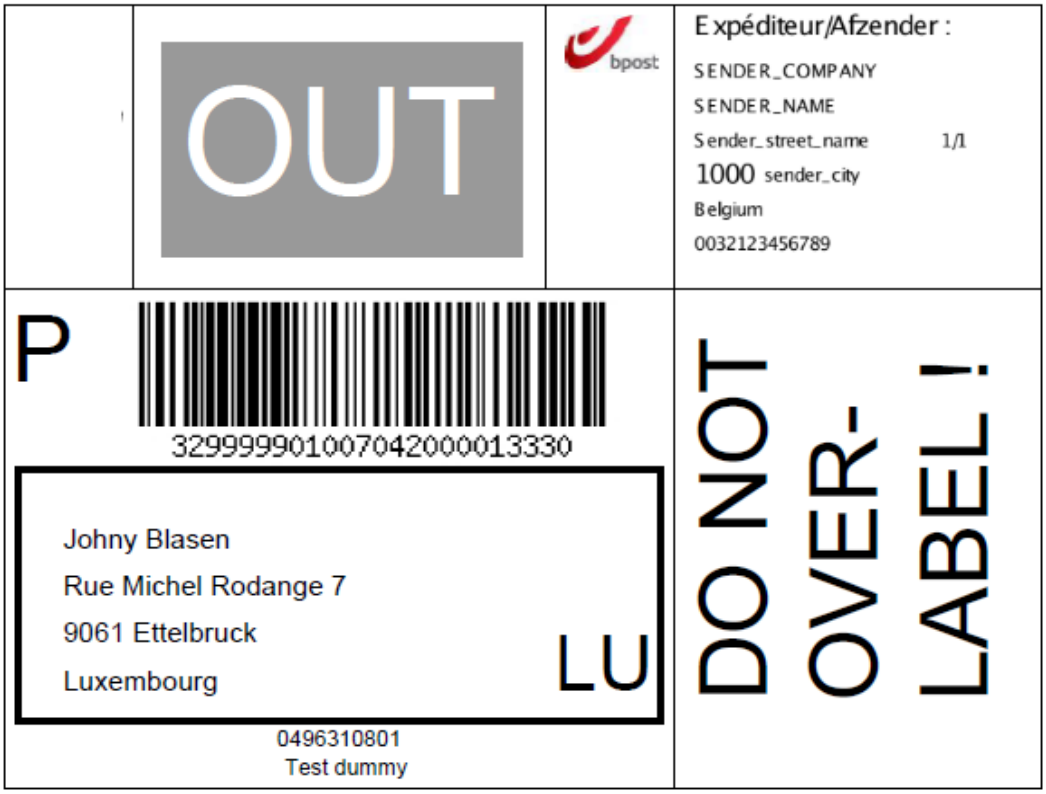
Below the destination address, the following warning message should be printed so that the necessary documents are not forgotten: “PLEASE ALWAYS ADD CN23 DOCUMENTS FOR ALL SHIPMENTS OUTSIDE THE EU”.

Only the following addresslines can be used:

Line 1: receiver individual identification (form of address, given name, surname)
Line 2: reciever organization identification (function, department, organization name)
Line 3: receiver dispatching information (building, wing, stairwell, floor, door)
Line 4: other delivery information (PO Box, “bpack 24/7”)
Line 5: delivery point location (street type and name, street number, box number if applicable)
Line 6: postcode and town
Line 7: name in full of destination country if cross-border mail.

C.4.5.1 Label layout for Outbound label bpack World Business for **Luxemburg**

For Luxemburg destination, in order to take the advantage of faster delivery handling, we ask you to use 3299…330 labels as illustrated bellow:

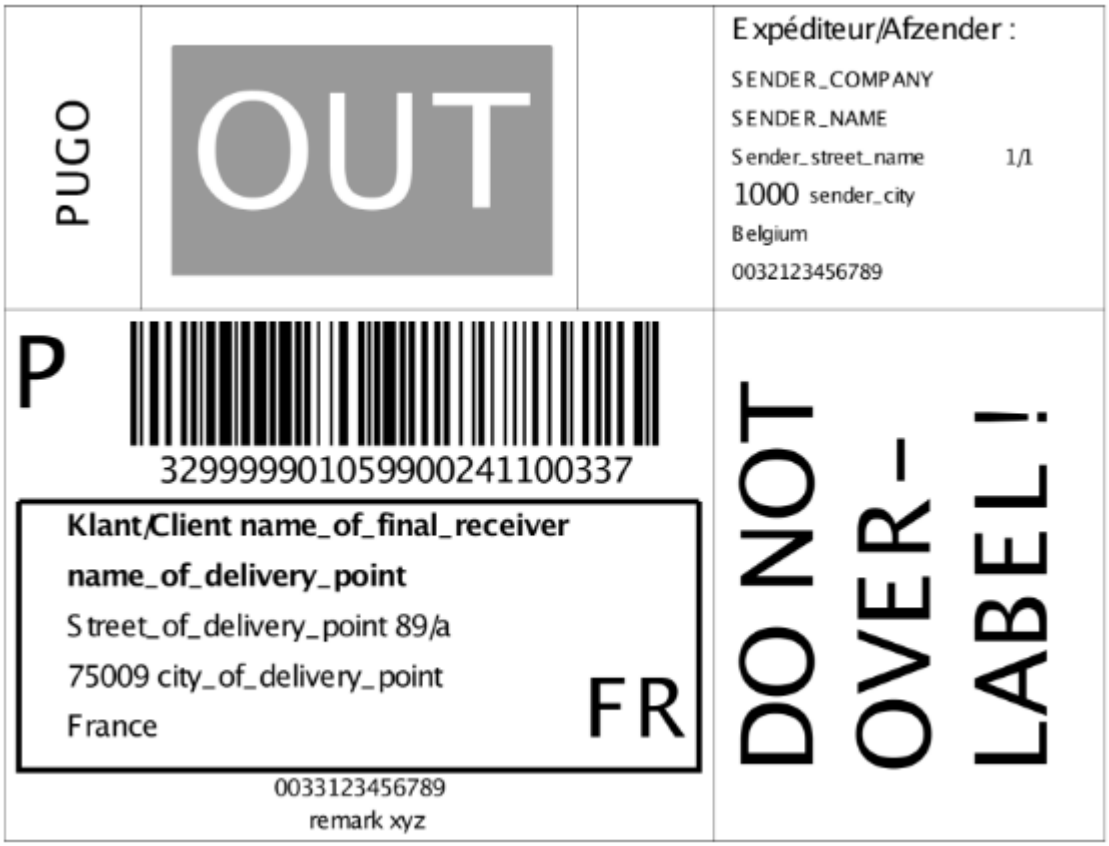


For LU label, the same general guidelines of the domestic labels must be followed.

The difference compared with domestic label:

Description	Position	Value	Explanation
Identifier	1 to 4 on barcode	3299 instead of “3232”	bpost identifying tag
VAS	22 to 24 on barcode	330 instead of “030”	Home delivery
Code Country	Right-lower corner of the addressee zone	LU	Code country is mandatory
Country	Addressee zone		Country is mandatory
Mention	VAS zone	OUT	Give an indication of outbound label
Mention	Right-lower quarter	DO NOT OVER-LABEL!	Mention for operation
No presorting code			Presorting code not applicable for outbound labels

C.4.5.2 Label layout for Outbound label bpack@bpost international

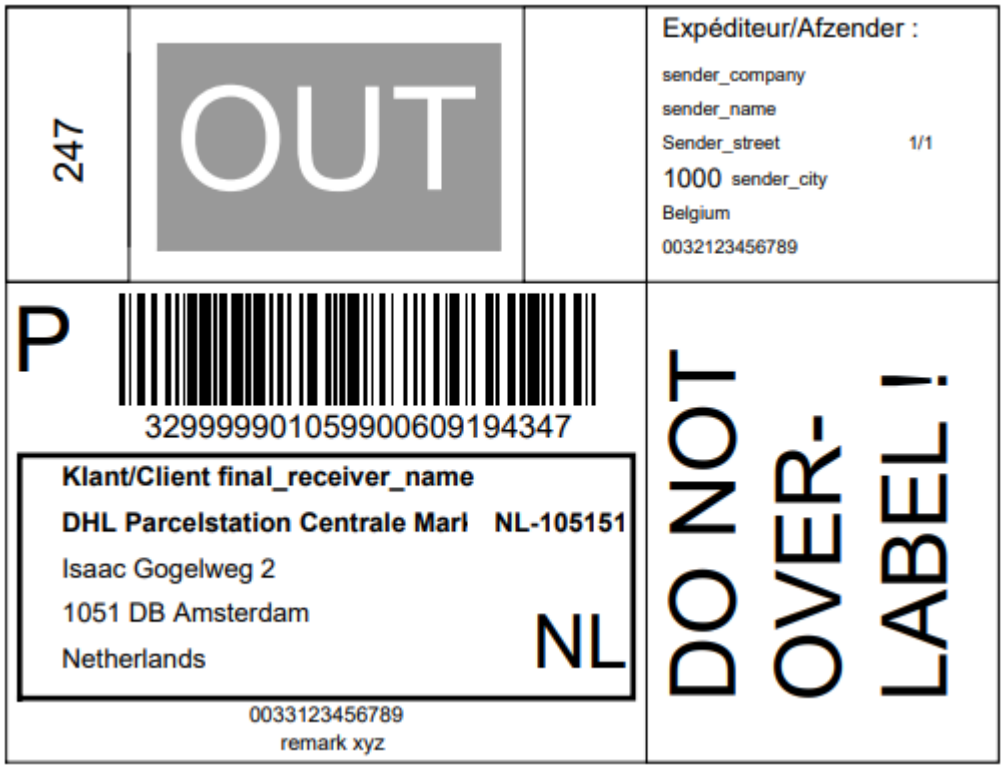


For the bpack@bpost international label, the general guidelines of the domestic labels must be followed.

The difference on barcode level:

Description	Position	Value	Explanation
Identifier	1 to 4	3299	bpost identifying tag

C.4.5.3 Label layout for Outbound label bpack 24/7 international



For the label bpack 24/7 international label, the general guidelines of the domestic labels must be followed.

The difference on barcode level:

Description	Position	Value	Explanation
Identifier	1 to 4	3299	bpost identifying tag

C.4.5.4 Customs documentation for shipments outside the EU

C.4.5.4.1 General information

It's the responsibility of the sender to verify which customs documents are required for a shipment. These need to be **completed, signed and pasted on the parcel** by the sender.
For all international shipments, following customs documents need to be added to the shipment:

Destination	Requirements
Fiscal EU (*)	No customs documentation required
Outside Fiscal EU (*)	• Completely fill out the CN23 document (see below) • Always add 2 copies of the (pro forma) invoice

	• Shipments with a value over 1000EUR also need an additional “Enig Administratief Document”

* The complete list of Fiscal EU countries can be found in appendix

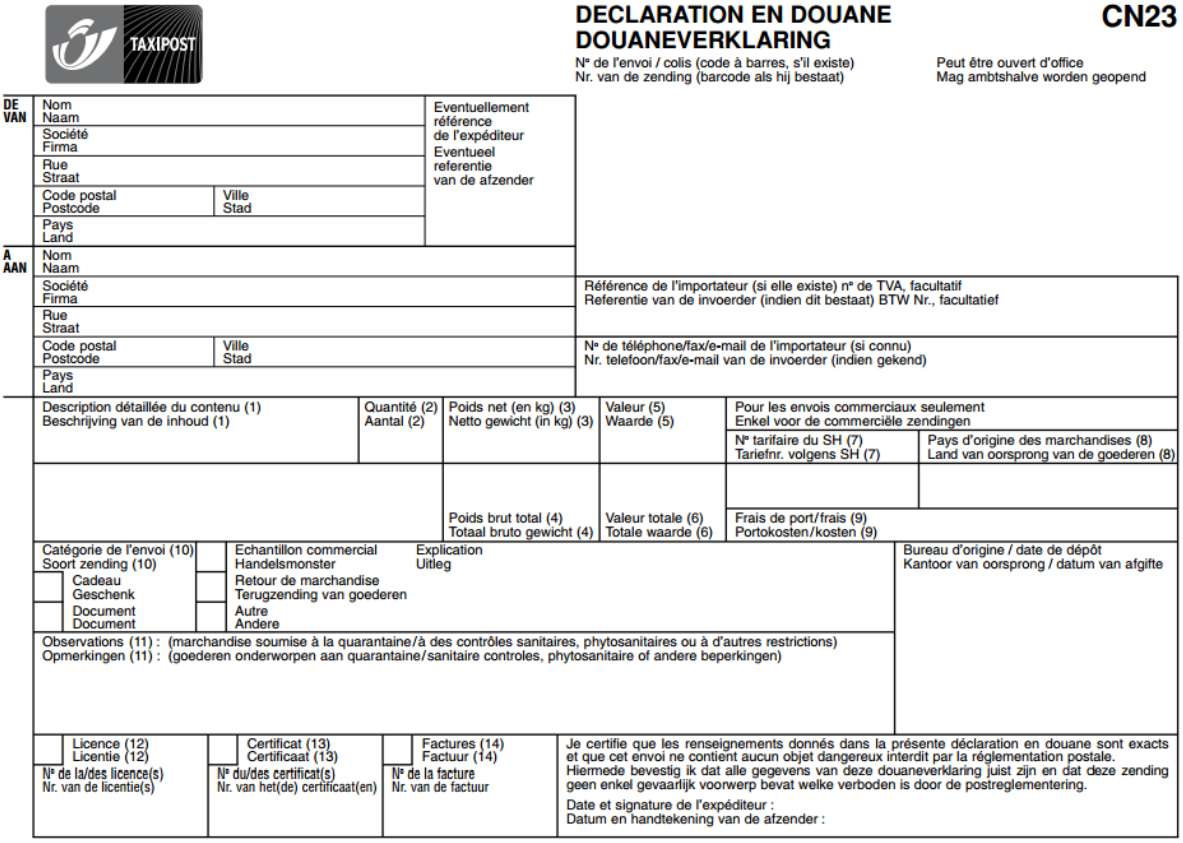
** The “Enig Administratief Document” can be found on the following links:

http://www.fiscus.fgov.be/interfdanl/nl/ed/enig_document.htm

http://www.fiscus.fgov.be/interfdanl/fr/dau/dau.htm

C.4.5.4.2 CN23 document

Please find an example of the CN23 document below.



DECLARATION EN DOUANE
DOUANEVERKLARING

CN23

N° de l'envoi / colis (code à barres, s'il existe)
Nr. van de zending (barcode als hij bestaat)

Peut être ouvert d'office
Mag ambtshalve worden geopend

DE VAN
Nom / Naam
Société / Firma
Rue / Straat
Code postal / Postcode
Ville / Stad
Pays / Land
Eventuellement référence de l'expéditeur / Eventueel referentie van de afzender

A AAN
Nom / Naam
Société / Firma
Rue / Straat
Code postal / Postcode
Ville / Stad
Pays / Land
Référence de l'importateur (si elle existe) n° de TVA, facultatif
Referentie van de invoerder (indien dit bestaat) BTW Nr., facultatief
N° de téléphone/fax/e-mail de l'importateur (si connu)
Nr. telefoon/fax/e-mail van de invoerder (indien gekend)

Description détaillée du contenu (1) / Beschrijving van de inhoud (1)	Quantité (2) / Aantal (2)	Poids net (en kg) (3) / Netto gewicht (in kg) (3)	Valeur (5) / Waarde (5)	Pour les envois commerciaux seulement / Enkel voor de commerciële zendingen	
				N° tarifaire du SH (7) / Tariefnr. volgens SH (7)	Pays d'origine des marchandises (8) / Land van oorsprong van de goederen (8)
		Poids brut total (4) / Totaal bruto gewicht (4)	Valeur totale (6) / Totale waarde (6)	Frais de port/frais (9) / Portokosten/kosten (9)	

Catégorie de l'envoi (10) / Soort zending (10)
- ☐ Cadeau / Geschenk
- ☐ Document / Document
- ☐ Echantillon commercial / Handelsmonster — Explication / Uitleg
- ☐ Retour de marchandise / Terugzending van goederen
- ☐ Autre / Andere

Bureau d'origine / date de dépôt / Kantoor van oorsprong / datum van afgifte

Observations (11) : (marchandise soumise à la quarantaine/à des contrôles sanitaires, phytosanitaires ou à d'autres restrictions)
Opmerkingen (11) : (goederen onderworpen aan quarantaine/sanitaire controles, phytosanitaire of andere beperkingen)

☐ Licence (12) / Licentie (12)	☐ Certificat (13) / Certificaat (13)	☐ Factures (14) / Factuur (14)	
N° de la/des licence(s) / Nr. van de licentie(s)	N° du/des certificat(s) / Nr. van het(de) certificaat(en)	N° de la facture / Nr. van de factuur	Je certifie que les renseignements donnés dans la présente déclaration en douane sont exacts et que cet envoi ne contient aucun objet dangereux interdit par la réglementation postale. / Hiermede bevestig ik dat alle gegevens van deze douaneverklaring juist zijn en dat deze zending geen enkel gevaarlijk voorwerp bevat welke verboden is door de postreglementering. Date et signature de l'expéditeur : / Datum en handtekening van de afzender :

The CN23 document can be downloaded using this link:
https://www.bpost.be/site/fr/residential/parcels/international/Formulaire_CN23_Resi.pdf

C.4.5.4.3 Additional information

Please find the complete documentation concerning the customs documents on the links below.
NL: http://www.bpost.be/sites/default/files/product/POSK0995_bpack_Documentsdedouane_NL.pdf
FR: http://www.bpost.be/sites/default/files/product/POSK0995_bpack_Documentsdedouane_FR.pdf

C.4.6 Validation & Approval process

During the development phase the customer can always take contact with Business Solutions for any questions. As soon as the customer has developed the label, the customer can sends to bpost a PDF version of the label in order to get feedback on the lay-out and structure of the barcode.

As soon as the PDF is approved, the customer must provide bpost with five (5) test items per option to be validated, in their original packaging (envelopes with windows, blister pack, uneven background) with printed barcode in accordance with the instructions in this annexe, printed with printers used in the production environment.

The test items must have different identification numbers (barcodes).

bpost will NOT send these test items to the receiver. They are used exclusively for barcode, layout and packaging verification purposes.

The test items may be sent to the following address:

MULTI - bpost – 5th floor
eSolutions team
Multi – Blvd Anspach 1/1 1000 BRUSSEL
Belgium

Items must fulfil three criteria if they are to be approved:

- Barcode quality
- Label layout and barcode structure
- Packaging

bpost must notify the customer in writing (by letter or email) within at most fourteen (14) days of the results of the tests conducted on the test items, clearly stating any reasons why the test items cannot be accepted.

If the results do not meet the conditions of this annexe, the customer must submit a new batch of test items.

Deposits are not permitted before the results of the test items meet the conditions of this annexe.

In the event of barcodes used more than once or unreadable barcodes, bpost reserves the right to reject the entire deposit or charge the customer extra handling costs.

C.4.7 Checklist for label generation

Parcel label layout	Yes	No
Sender address present?	□	□
Recipient address present and traced with a black box?	□	□
Addresses in Belgium?	□	□
Barcode & human readable barcode accurately printed?	□	□
VAS Zone (even empty) present?	□	□
VAS visuals correctly printed?	□	□
"P" in front of the barcode?	□	□
Samples of every VAS/product used exist?	□	□
In case of CoD: • Second barcode correctly printed? • Exclamation mark visible? • COD triangle visible? • Amount & bank account number correctly placed?	 □ □ □ □	 □ □ □ □

Parcel label measures	Yes	No
Barcode height exactly 14mm?	□	□
Space between barcode and address box exactly 5mm?	□	□
Quiet zones respected?	□	□
Height of "P" according to specifications?	□	□
In case of CoD: • Barcode height exactly 10mm? • Quiet zones respected?	 □ □	 □ □

Technology (barcode printing)	Yes	No
Barcode type Code 128C?	□	□
Coded numbers: 24 + check digit?	□	□
Sample material is equivalent to real life sample?	□	□
Packaging sample is present?	□	□

If all answers to the above items equal "Yes", please submit 5 labels per product/VAS combination to our services (for the address, please refer to §F.1) **at least 2 weeks before** the intended deposit of the parcels. However, the validation period is iterative per deposit of test labels and every new validation cycle can take up to 4 days.

The fact that the above items are fulfilled does **NOT** mean that the labels are approved. This checklist is only meant to be an aid to be able to achieve the necessary parcel label quality more easily.

C.5 Shipping requirements

C.5.1 Contrast

The reflection coefficient is the degree to which a surface reflects the light it is exposed to. Transparent windows, paper types or plastic foils chosen by the customer must have an adequate reflection coefficient such that the barcode can be read and the address details can be automatically read via OCR. bpost will test this requirement prior to permitting the customer to use the barcodes on its items (see the test procedure in chapter 7).

The customer must ensure that the contrast between the background and the bars is constant during printing (ink control). Adequate contrast between the dark bars and the light background of the barcode is essential.

The material also has an impact on contrast, so readability tests must be conducted. A good cartridge, a clean printer head and a good ink ribbon are especially vital to good print quality. The contrast is significantly lower when there is less ink or when the ink ribbon is worn out. It is therefore important to examine printers regularly.

Black or dark blue packaging is not authorized due to interference with our automatic sorting machines.

C.5.2 Packaging

C.5.2.1 Envelopes with window

If the customer prints the barcode on a document sent in an envelope with window, care must be taken to ensure the window is large enough to prevent barcode readability being reduced by the movement of the document in the envelope. Barcode, letter P, VAS zone and address must be easy to read and scan at all times.

C.5.2.2 Strapping

If a parcel is wrapped in strapping, the customer must ensure that the strapping is not within 15 mm of the barcode zone, VAS zone, shipper zone and address box. The general rule applies that the barcode, the letter P, the VAS zone and the address box must always be easy to read and scan.

C.5.2.3 Cling film

The barcode must remain easy to read and scan if a parcel is wrapped in cling film. Wrinkles in the film above the barcode make the barcode unreadable and this should accordingly be avoided. The reflection of the plastic must also be low enough.

C.5.2.4 Plastic bags

If the label is printed on a sheet or label that is placed in a plastic bag, the customer must ensure that the reflection of the plastic is low enough to allow the barcode to be scanned without the label having to be removed from the plastic bag. Moreover, the goods should not move under this plastic bag and a correct scanning of the label must always remain possible.

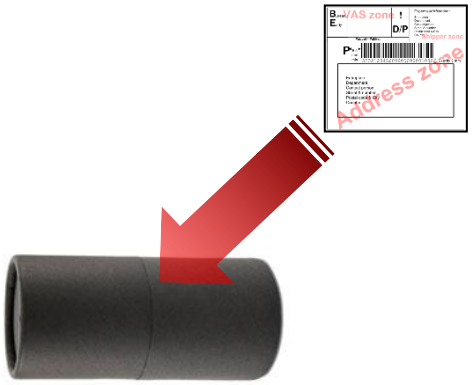
C.5.3 Label position

C.5.3.1 General

The label must be attached to the top and the largest side of the parcel such that it is clearly visible without the need to turn the parcel over. The label should never be placed under straps or over an edge, corner, seam or over the filling gap. Generally, the label has to be placed on a not interrupted and flat surface.

C.5.3.2 Tubes

The label must be attached such that the barcode is parallel to the long side of the tube to ensure the barcode can be read.



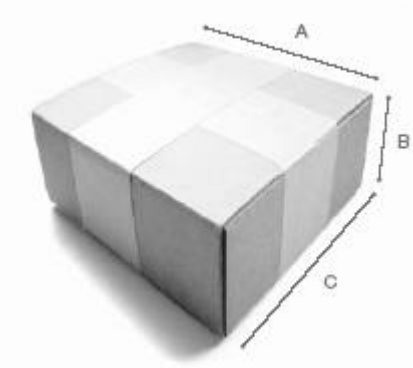
C.5.3.3 Multiple labels

As specified in section C.4.2.1, the use of internal barcodes is subjected to certain rules.

Moreover, in case of reuse of a packaging, all previously used labels have to be removed before using a new bpost label with a different tracking number.

C.5.3.4 Dimensions

A parcels' dimensions should meet the following requirements:



	Dimensions	Weight
Minimum	112 mm * 145 mm (for one of the largest sides), min 10mm height	50 g
Maximum	1,5 m or 3 m as a total of A + 2*B + 2*C	30 kg

C.5.3.4.1 Maximum dimensions for bpack 24/7

For the delivery in the bpack automates, the parcels have to meet more restrictive dimension requirements. The maximum dimension for this specific product is 43cm X 34cm X 65cm.

C.5.3.5 Masspost Kit

More information on the packaging rules can be found in the Masspost kit, available on the bpost website: www.bpost.be/masspost

D. Parcels Announcement

D.1 In a nutshell

Next to the label, parcels have to be announced so that bpost can use their data to enhance the operational process. The data should always be available before the first scan of the parcels and should be sent as close as possible to the deposit.

Using several tools of bpost that were described earlier in this document (see Choice of implementation tools - A.4) allows an automated generation of the announcement data.

Nevertheless, if the announcement is not generated via those applications, it has to be sent via another channel. Therefore, two possibilities are offered:

- Annoncement API – webservices can be used to announced parcels data and option, one parcel at the time.
- Large Customer Interface – Flat text or XML files can be send with several parcels in batch.

D.1.1 Timing

The customer should supply the electronic data **BEFORE** the parcels are inserted into bpost circuit. This is crucial: if not, it will cause operational problems and could result in non-execution of some VAS and in incomplete information in both status- and matching file!

Especially in case of Messaging VASes and value added products, it is of utmost importance that the LCI file is sent to bpost's LCI interface **BEFORE** the parcels are physically injected in the bpost network. In case of non-compliance, bpost cannot guarantee accurate distribution of the parcels since the necessary information (telephone n° or e-mail address) to send the messages is missing.

Most of the customers send their data before loading their parcels on the trucks.

D.2 Announcement API

D.2.1 Announcement

To use the bpack parcel announcement web service, you need to perform an HTTP operation on a URI that is constructed as follows:

URI: **serviceEndPoint/services/trackedmail/announcement**
Where **serviceEndPoint** is **https://api.parcel.bpost.cloud/**

The only HTTP operation that is allowed on the bpack parcel announcement URI is POST.

URI	POST	PUT	GET	DELETE
serviceEndPoint/customer	☑	X	X	X

In annex 'F.6 XSD schemes' you can find the location where the XSD files can be found.

D.2.2 Using the Announcement Service

When you want to announce a bpack parcel, you need to send the announcement information to the server using the HTTP POST operation on the URI. We will now show you how to send a valid request to create a bpack parcel annoucement and what the response of the server will look like.

D.2.2.1 Client Request

Use the HTTP **POST** request method to send the bpack parcel announcement information to the server. The announcement information needs to be sent to the following **URL**:

Attribute	Value
HTTP Operation	POST
URL	https://api.parcel.bpost.cloud/services/trackedmail/announcement

In the body of the HTTP POST request you need to put the XML code containing the bpack parcel announcement information.

The structure of the XML request and response messages must be validated against a schema definition. The sequence of the used tags is important. The XSD file used to describe the various XML elements exchanged between the external parties and bpost can be found at the end of this document.

One XSD file contains the definition of one version of the data to be sent in requests and responses. Eventually, this XSD will import other XSDs for bpost common definitions like addresses, names … Each version of the data has its own namespace.

Attribute	Description
HTTP Body	XML < announcement /> element

Legend attributes:
M: mandatory
O: optional
D: depending

< announcement > element tag

Name	Allowed Values	Description	Attribute
accountId	N..6	account id	M
type	N..2	Default “00”	M
itemCode	AN..30	Parcel barcode	M
productCode	N..3	VAS code (only for national shipments)	D
sender		See sender & receiver element tag	M
receiver		See sender & receiver element tag	M
receiverOpeningHours		See receiverOpeningHours element tag	O
receiverDesiredDeliveryPlace			O
weightInGrams	N..5	Max 30000 gr / Min 100 gr. Rem: A weight of 0gr will be automatically converted to 1kg.	M
customerReference	AN..50	Reference 1	O
costCenter	AN..50	This information is used on your invoice and allows you to attribute different cost centers (e.g. different shops, warehouses, suppliers, …). You can use different costCenter within all your barcodes to group your barcodes under a dedicated group on the invoice. Warning: Using unique values within your barcodes would mean a single group for each barcode which is NOT authorized by bpost.	O
freeTextCustomerReference1	AN..50	Customer Reference 4	O
freeTextCustomerReference2	AN..50	Customer Reference 5	O
international		See international element tag	D
deliveryMethod	“atHome” “atShop” “at24-7” “atIntlShop” “atIntlParcelDepot”	“atHome” (both national and international) “atShop” (only for national shipments to a nationalpickup point) “at24-7” (only for national shipments to a national parcel locker) “atIntlShop” (only for international shipments to an international pickup point) “atIntlParcelDepot” (only for international shipments to an international parcel locker)	M
options		See options element tag	O
dimensions		See dimensions tag	O/M (*)

(*) The dimensions are only mandatory for the product bpack XL.

< sender > and < receiver > element tag

Name	Allowed Values	Description	Attribute
name	AN..40	Company Name // Private Person's Name	M
addressDepartment	AN..40	Company Department	O
addressContactName	AN..40	Company Contact Person	O
addressPlace	AN..40	Extra information	O
address		See address element tag	M
contactDetail		See contactDetail tag	D

< address > element tag

Name	Allowed Values	Description	Attribute
streetName	AN..40	By preference, house number is supplied seperately	M
houseNumber	AN..8		O
boxNumber	AN..8		O
postalCode		Format depending on local postal code format	M
city	AN..40		M
countryCode	A..2	two-letter ISO-country code (NE, NL, FR, …)	M

< contactDetail > element tag

Name	Allowed Values	Description	Attribute
emailAddress	AN..40		O
telephoneNumber	AN..20	For international shipments phone or mobile number is mandatory	D
mobilePhone	AN..20	For international shipments phone or mobile number is mandatory	D

<international> element tag

Name	Allowed Values	Description	Attribute
parcelContent	AN..50	Description of Contents	M
itemCategory	"GIFT" "DOCUMENTS" "SAMPLE" "RETURNED GOODS" "GOODS" "OTHER" "GIFT"	For outbound shipments:	M
nonDeliveryInstructions	"RTS" "RTA" "ABANDONED"	For outbound shipments: - RTS (Return to sender) - RTA (Return by air) - ABANDONED (destruction)	M
valueCurrencySender		Value for customs e.g. 3123.02	M
currencySender	A..3	Amount currency code (EUR, USD, …)	M

<receiverOpeningHours> tag

To supply openings hours per working day you have one of the following possibilities:
- One range (e.g. 09:00-17:00): HH:MM-HH:MM
- Two ranges (e.g. 09:00-12:00/13:00-17:30): HH:MM-HH:MM/HH:MM-HH:MM
- Closed: -/- or -
- Unknown: empty field

HH should be in the range of 00 – 23
MM should be in the range of 00:59

Example:

```
<receiverOpeningHours>
        <Monday>10:00-17:30</Monday>
        <Tuesday>10:00-12:00/13:00-17:30</Tuesday>
        <Wednesday>-/-</Wednesday>
        <Thursday>13:00-17:30</Thursday>
        <Friday>10:00-12:00</Friday>
</receiverOpeningHours>
```

< options > element tag

Name	Allowed Values	Description	Attribute
signature			O
insurance		basicInsurance	O
additionalInsurance		See additionalInsuranceType	O
cashOnDelivery		See cashOnDelivery	O
infoDistributed		See notificationType	O
infoNextDay		See notificationType	O
infoReminder		See notificationType	O
automaticSecondPresentation			O
saturdayDelivery			O
fragile			O (*)

(*) The option fragile can only be used in combination with the product bpack XL. The basic insurance will be added automatically, additional insurance can be added as option.

< additionalInsuranceType > element tag

Name	Allowed Values	Description
maxAmount	N..2	The range in which the warranty (old insurance) amount is situated: 1 = basic insurance up to 500 EUR 2 = additional up to 2.500EUR 3 = additional up to 5.000 EUR

< cashOnDelivery > element tag

Name	Allowed Values	Description
amountTotalInEuroCents	N..6	Amount in eurocents (max € 7500,00 / min € 2,50)
bban	N..12	National Bank account number, without spaces or dashes.
iban	AN..30	International Bank account number. Only Belgian IBANs can be used.
bic	AN..11	Bank identification code

< notificationType > element tag

Name	Allowed Values	Description
language	"EN" "NL" "FR" "DE"	EN (default)
emailAddress	AN..50	
smsNumber	N..20	

< dimensions > element tag

Name	Allowed Values	Description
widthInMm	1->9999	
heightInMm	1->9999	
lengthInMm	1->9999	

e.g.

```
<inst:dimensions>
    <common:widthInMm>450</common:widthInMm>
    <common:heightInMm>180</common:heightInMm>
    <common:lengthInMm>1200</common:lengthInMm>
</inst:dimensions>
```

D.2.2.1.1 Header information

```
Content-type: application/vnd.bpost.announcement-v1+XML;charset=UTF-8
```

D.2.2.1.2 Authentication

Authentication is performed by the Server hosting the Web Services. We use pre-emptive Authentication over a secure channel: HTTPS.
This means the server will expect the Authorization: header to be sent along with the request. The value of this header is the authorization type (Basic) followed by the username concatenated with a colon and password. This concatenated value must be encoded in base64 before being actually set in the Authorization: header.

```
Authorization: Basic username:password
```

where the underlined value is encoded in Base64. The username is the Account ID.

Please note that these credentials should be requested separately.
Contact esolutions@bpost.be to receive them

Example:
The following example shows a valid request to announce a bpack parcel:

```
<?xml version="1.0" encoding="UTF-8"?>
```

```
<inst:announcement xmlns:common="http://schema.post.be/announcement/common/v1/"
xmlns:inst="http://schema.post.be/announcement/v1/" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance">
        <inst:accountId>123456</inst:accountId>
        <inst:type>00</inst:type>
        <inst:itemCode>32321234568910010119030</inst:itemCode>
        <inst:productCode>030</inst:productCode>
        <inst:sender>
            <common:name>Sender Company Name</common:name>
            <common:addressDepartment>Sender Dpt</common:addressDepartment>
            <common:addressContactName>Sender Name</common:addressContactName>
            <common:addressPlace>Extra information</common:addressPlace>
            <common:address>
                <common:streetName>Sender Streetname</common:streetName>
                <common:houseNumber>Housenumber</common:houseNumber>
                <common:boxNumber>Boxnumber</common:boxNumber>
                <common:postalCode>postal code</common:postalCode>
                <common:city>Cityname</common:city>
                <common:countryCode>BE</common:countryCode>
            </common:address>
            <common:contactDetail>
                <common:emailAddress>email address</common:emailAddress>
                <common:telephoneNumber>phone number</common:telephoneNumber>
                <common:mobilePhone>mobile number</common:mobilePhone>
            </common:contactDetail>
        </inst:sender>
        <inst:receiver>
            <common:name>Receiver Company Name</common:name>
            <common:addressDepartment>Receiver dpt</common:addressDepartment>
            <common:addressContactName>Receiver Name</common:addressContactName>
            <common:addressPlace>Extra information</common:addressPlace>
            <common:address>
                <common:streetName>Delivery street name</common:streetName>
                <common:houseNumber>house number</common:houseNumber>
                <common:boxNumber>box number</common:boxNumber>
                <common:postalCode>postal code</common:postalCode>
                <common:city>city name</common:city>
                <common:countryCode>BE</common:countryCode>
            </common:address>
            <common:contactDetail>
            <common:emailAddress>receiver email address</common:emailAddress>
                <common:telephoneNumber>receive phone</common:telephoneNumber>
                <common:mobilePhone>receiver mobile</common:mobilePhone>
            </common:contactDetail>
        </inst:receiver>
        <inst:weightInGrams>250</inst:weightInGrams>
        <inst:costCenter>cost center</inst:costCenter>
        <inst:customerReference>customer reference</inst:customerReference>
        <inst:deliveryMethod>
            <common:atHome/>
        </inst:deliveryMethod>
    </inst:announcement>
```

D.2.2.1.3 Server Response

If your request to create a bpack parcel announcement is successful, the server will respond with an HTTP **201 Created** status code.

Attribute	Value
HTTP Status	201 Created

In the body of the server response you will receive XML code containing the bpack announced item.

Attribute	Description
HTTP Body	XML < feedback /> element

The < feedback /> contains error and warnings with respect to the announcement of the item .

< feedback> element tags

Name	Allowed Values	Description
Warning		
Error		

Example:
The following example shows a response by the server giving you the bpack announcement feedback:

```
HTTP/1.1 201

<?xml version="1.0" encoding="UTF-8"?>
<feedback xmlns:ns2="http://schema.post.be/common/exception/v1/"
xmlns="http://schema.post.be/announcement/result/v1/"/>
```

D.2.2.2 Features and extra options

VAS code	Description
031	bpack 24h + CoD (with Signature)
036	bpack 24h + signature
040	bpack 24h + Basic warranty (old insurance) (with Signature)
043	bpack 24h + automatic 2nd presentation
046	bpack 24h + CoD (with Signature) + Basic warranty (old insurance)
047	bpack 24h + CoD (with Signature) + Additional warranty (old insurance)
048	bpack 24h + CoD (with signature) + automatic 2nd presentation
105	bpack 24h + Additional warranty (old insurance) (with Signature)
109	bpack 24h + Basic warranty (old insurance) + Signature + automatic 2nd presentation
112	bpack 24h + Signature + automatic 2nd presentation

D.2.2.2.1 Cash on Delivery

VAS code	Description
031	bpack 24h + CoD (with Signature)
046	bpack 24h + CoD (with Signature) + Basic warranty (old insurance)

D.2.2.2.1.1 031 - Cash on Delivery (COD) with use of IBAN account

```
<inst:options>
        <common:cashOnDelivery>
                <common:amountTotalInEuroCents>3000</common:amountTotalInEuroCents>
                <common:iban>IBAN BANK ACCOUNT</common:iban>
                <common:bic>BIC CODE</common:bic>
        </common:cashOnDelivery>
</inst:options>
```

Note: no need to supply extra signature tag since it is already included within COD service.

D.2.2.2.1.2 031 - Cash on Delivery (COD) with use of BBAN account

```
<inst:options>
        <common:cashOnDelivery>
                <common:amountTotalInEuroCents>2500</common:amountTotalInEuroCents>
                <common:bban>BANK ACCOUNT NUMBER</common:bban>
        </common:cashOnDelivery>
</inst:options>
```

D.2.2.2.1.3 046 - Cash on Delivery (COD) with use of IBAN account AND Basic Warranty (old Insurance)

```
<inst:options>
        <common:insurance>
                <common:basicInsurance/>
        </common:insurance>
        <common:cashOnDelivery>
                <common:amountTotalInEuroCents>5000</common:amountTotalInEuroCents>
                <common:iban>IBAN BANK ACCOUNT</common:iban>
                <common:bic>BIC CODE</common:bic>
        </common:cashOnDelivery>
</inst:options>
```

D.2.2.2.2 Signature

VAS code	Description
036	bpack 24h + signature

D.2.2.2.2.1 036 – Bpack 24 with Signature

```
<inst:options>
        <common:signature/>
</inst:options>
```

D.2.2.2.3 Automatic 2nd Presentation

VAS code	Description
043	bpack 24h + automatic 2nd presentation
048	bpack 24h + CoD (with signature) + automatic 2nd presentation
109	bpack 24h + Basic warranty (old insurance) + Signature + automatic 2nd presentation
112	bpack 24h + Signature + automatic 2nd presentation

D.2.2.2.3.1 043 – Bpack 24h with Automatic 2nd Presentation

```
<inst:options>
```

```
        <common:automaticSecondPresentation/>
</inst:options>
```

D.2.2.2.3.2 048 – Bpack 24h with COD and Automatic 2nd Presentation

```
<inst:options>
        <common:cashOnDelivery>
                <common:amountTotalInEuroCents>5000</common:amountTotalInEuroCents>
                <common:iban>IBAN BANK ACCOUNT</common:iban>
                <common:bic>BIC CODE</common:bic>
        </common:cashOnDelivery>
        <common:automaticSecondPresentation/>
</inst:options>
```

D.2.2.2.3.3 109 – Bpack 24h with Basic Warranty (old Insurance), Signature and Automatic 2nd Presentation

```
<inst:options>
        <common:signature/>
        <common:insurance>
                <common:basicInsurance/>
        </common:insurance>
        <common:automaticSecondPresentation/>
</inst:options>
```

D.2.2.2.3.4 112 – Bpack 24h with Signature and Automatic 2nd Presentation

```
<inst:options>
        <common:signature/>
        <common:automaticSecondPresentation/>
</inst:options>
```

D.2.2.2.4 Basic Warranty (old Insurance) and Additional Warranty (old Insurance)

VAS code	Description
040	bpack 24h + Basic warranty (old insurance) (with Signature)
046	bpack 24h + CoD (with Signature) + Basic warranty (old insurance)
047	bpack 24h + CoD (with Signature) + Additional warranty (old insurance)
105	bpack 24h + Additional warranty (old insurance) (with Signature)
109	bpack 24h + Basic warranty (old insurance) (with Signature) + Automatic 2nd presentation

D.2.2.2.4.1 040 – Bpack 24h with Basic Warranty (old Insurance)

```
<inst:options>
        <common:insurance>
                <common:basicInsurance/>
        </common:insurance>
</inst:options
```

Note: no need to supply extra signature tag since it is already included within warranty (old insurance) service.

D.2.2.2.4.2 046 – Bpack 24h with COD and Basic Warranty (old Insurance)

```
<inst:options>
        <common:insurance>
                <common:basicInsurance/>
        </common:insurance>
        <common:cashOnDelivery>
                <common:amountTotalInEuroCents>5000</common:amountTotalInEuroCents>
                <common:iban>IBAN BANK ACCOUNT</common:iban>
                <common:bic>BIC CODE</common:bic>
        </common:cashOnDelivery>
</inst:options>
```

D.2.2.2.4.3 047 – Bpack 24h with COD and Additional Warranty (old Insurance)

```
<inst:options>
        <common:insurance>
                <common:additionalInsurance maxAmount="3"/>
        </common:insurance>
        <common:cashOnDelivery>
                <common:amountTotalInEuroCents>5000</common:amountTotalInEuroCents>
                <common:iban>IBAN BANK ACCOUNT</common:iban>
                <common:bic>BIC CODE</common:bic>
        </common:cashOnDelivery>
</inst:options>
```

The range in which the warranty (old insurance) amount is requested:

1 = basic insurance up to 500 EUR
2 = additional up to 2.500EUR
3 = additional up to 5.000 EUR

D.2.2.2.4.4 105 – Bpack 24h with Additional Warranty (old Insurance)

```
<inst:options>
        <common:insurance>
                <common:additionalInsurance maxAmount="2"/>
        </common:insurance>
</inst:options>
```

109 – Bpack 24h with Basic Warranty (old Insurance), Signature and Automatic 2nd Presentation

```
<inst:options>
        <common:signature/>
        <common:insurance>
                <common:basicInsurance/>
        </common:insurance>
        <common:automaticSecondPresentation/>
</inst:options>
```

D.2.2.2.5 Messaging

- All messaging VASes, bpack@bpost and bpack@bpost CoD can only be used if present in the XML announcement. To ensure correct treatment of the parcels, the announcement must be sent to bpost **BEFORE** the parcels are physically injected in the bpost network. In case of non-compliance, bpost cannot guarantee accurate operational execution of the parcels.

- The “sender name” field is used as a reference in the message (SMS or e-mail) that is sent to the recipient. Please make sure to fill out an appropriate name that is easily recognizable by the recipient. Providing correct information will prevent a lot of confusion that might occur when the recipient decides to collect his parcel.
  We advise you to fill out the actual sender name in the “sender name” field and the actual shipping party preceded by ‘P/a’ in the “sender contact name” field.
  e.g. Customer Testtoys NV ships its parcels from Supply Chain BVBA (and the parcels are returned at Supply Chain too). This would lead to:
  - Sender name: Testtoys NV
  - Sender contact name: P/a Supply Chain BVBA

D.2.2.2.5.1 Info “Distributed”

D.2.2.2.5.1.1 Via email

Example:

```
<inst:options>
        <common:infoDistributed language="EN">
                <common:emailAddress>someone@telenet.be</common:emailAddress>
        </common:infoDistributed>
</inst:options>
```

D.2.2.2.5.1.2 Via SMS

Example:

```
<inst:options>
        <common:infoDistributed language="EN">
                <common:smsNumber>0497123456</common:smsNumber>
        </common:infoDistributed>
</inst:options>
```

Note: only one method per type of messaging is accepted.

D.2.2.2.5.2 Info “Reminder”

Example:

```
<inst:options>
        <common:infoReminder language="NL">
                <common:emailAddress>someone@telenet.be</common:emailAddress>
        </common:infoReminder>
</inst:options>
```

D.2.2.2.5.3 Info “Next Day”

Example:

```
<inst:options>
        <common:infoNextDay language="FR">
                <common:smsNumber>0497123456</common:smsNumber>
        </common:infoNextDay>
</inst:options>
```

D.2.2.2.6 Bpack@bpost

VAS code	Description
037	bpack@bpost
038	bpack@bpost CoD

< receiver > & < address > element tag:

Receiver name = name of the final receiver
Receiver contact name = name of the pick-up point
Receiver street name = street name of the pick-up point
Receiver house number= house number of the pick-up point
Receiver postal code = postal code of the pick-up point
Receiver city = city of the pick-up point

Name	Allowed Values	Example
deliveryMethod	“atShop”	atShop

D.2.2.2.6.1 bpack@bpost

< atShop> element tags

Name	Allowed Values	Description
Language	“EN” “NL” “FR” “DE”	EN (default)
emailAddress	AN..50	
smsNumber	N..20	
pickupLocatorId	N..6	See GEO6 locator

Example:

```
<inst:deliveryMethod>
        <common:atShop language="EN">
```

```
            <common:emailAddress>barcodesparcels@bpost.be</common:emailAddress>
            <common:pickupLocatorId>231700</common:pickupLocatorId>
        </common:atShop>
</inst:deliveryMethod>
```

D.2.2.2.6.2 bpack@bpost CoD

In combination with CoD, elements signature and cashOnDelivery need to be added under options tag of the bpack@bpost tags.

Example:

```
<inst:deliveryMethod>
        <common:atShop language="NL">
            <common:emailAddress>barcodesparcels@bpost.be</common:emailAddress>
            <common:pickupLocatorId>231700</common:pickupLocatorId>
        </common:atShop>
</inst:deliveryMethod>
<inst:options>
        <common:signature/>
        <common:cashOnDelivery>
            <common:amountTotalInEuroCents>3000</common:amountTotalInEuroCents>
            <common:iban>IBAN BANK ACCOUNT</common:iban>
            <common:bic>BIC CODE</common:bic>
        </common:cashOnDelivery>
</inst:options>
```

D.2.2.2.7 bpack parcel locker

VAS code	Description
247	bpack parcel locker

< receiver > & < address > element tag:

Receiver name = name of the final receiver
Receiver street name = name of the parcel locker
Receiver house number= empty
Receiver postal code = postal code of the parcel locker
Receiver city = city of the parcel locker

Name	Allowed Values	Example
deliveryMethod	“at24-7”	At24-7

< at24-7> element tags

Name	Allowed Values	Description
parcelsDepotId	N..6	See GEO6 locator. Type is “4”.
messageLanguage	“NL”/”FR”/”EN”	Language of the messaging to the receiver
mobilePhone	N..20	Mobile phone number of the receiver
email	AN..50	Email address of the receiver
reducedMobilityZone	“true”/”false”	The customer has reduced mobility (parcel will be placed in lower locker - optional)

Example:

```
<inst:deliveryMethod>
        <common:at24-7>
                <common:parcelsDepotId>014472</common:parcelsDepotId>
                <common:messageLanguage>NL</common:messageLanguage>
                <common:mobilePhone>0496310801</common:mobilePhone>
                <common:email>toon.verlaak@bpost.be</common:email>
                <common:reducedMobilityZone>true</common:reducedMobilityZone>
        </common:at24-7>
</inst:deliveryMethod>
```

D.2.2.2.8 bpack@bpost international

VAS code	Description
337	bpack@bpost international

< receiver > & < address > element tag:
Receiver name = name of the final receiver
Receiver contact name = name of the pick-up point
Receiver street name = street name of the pick-up point
Receiver house number= house number of the pick-up point
Receiver postal code = postal code of the pick-up point
Receiver city = city of the pick-up point

Name	Allowed Values	Example
deliveryMethod	“IntlShop”	IntlShop

< IntlShop> element tags

Name	Allowed Values	Description
emailAddress	AN..50	Email address of the receiver
pickupLocatorId	N..6	See GEO6 locator. Type is “4”.

Example:

```
<inst:deliveryMethod>
        <common:atIntlShop language="FR">
                <common:emailAddress>final_receiver_email@test.be</common:emailAddress>
                <common:pickupLocatorId>62049</common:pickupLocatorId>
        </common:atIntlShop>
</inst:deliveryMethod>
```

D.2.2.2.9 Bpack 24/7 international

VAS code	Description
347	Bpack 24/7 international

< receiver > & < address > element tag:
Receiver name = name of the final receiver
Receiver contact name = name of the international parcel locker
Receiver street name = street name of the international parcel locker
Receiver house number= house number of the international parcel locker
Receiver postal code = postal code of international the parcel locker

Receiver city = city of the international parcel locker

Name	Allowed Values	Example
deliveryMethod	“IntlParcelDepot”	IntlParcelDepot

< at24-7> element tags

Name	Allowed Values	Description
emailAddress	AN..50	Email address of the receiver
smsNumber	N..20	Mobile phone number of the receiver
parcelsDepotId	N..6	See GEO6 locator. Type is “4”.

Example:

```
<inst:deliveryMethod>
        <common:atIntlParcelDepot language="NL">
        <common:emailAddress>final_receiver_email@test.be</common:emailAddress>
        <common:smsNumber>123456789</common:smsNumber>
        <common:parcelsDepotId>202175</common:parcelsDepotId>
        </common:atIntlParcelDepot>
</inst:deliveryMethod>
```

D.3 Large Customer Interface – input file (flat text)

D.3.1 In a nutshell

The “Large Customer Interface” (LCI) is meant for customers that want to ship parcels on a regular basis and who wish to generate announcement from their own IT-system or IT–application, using batch processes.

These customers supply the data related to the parcels (barcode, account ID, destination address, and type of product…) electronically before depositing the goods physically in bpostal network. The status of the parcels can be provided electronically in return (see E.4).

D.3.1.1 Setting up a New LCI Environment

The process flow to set up a new LCI environment is defined as follows:

- The customer reads this document.
- The parameters (account ID, mother account ID, sender ID…) that must be used in the LCI files, are sent to the customer.
- The customer creates a few example labels and provides these for testing
- The customer programs the LCI file in format “TXT” & ISO-8859-15 (ANSI) encoding.
- The customer creates a representative test file and sends it to the test environment of bpost.
- If the test file is processed without errors then the production environment can be set up.

The coordinates of the department that guides this process can be found in annex.

D.3.1.2 Sending LCI files to Bpost

D.3.1.2.1 Via FTPS

To interchange data using FTPS, you will receive your own username and password to log in.

Each LCI input file has to be sent to **filetransfer.bpost.be**. Within seconds, the file is picked from our server and processed by our systems. Each day or several times a day (depending on the configuration and the type of file), a status– and/or matching file are generated. These files are put in the same folder on the FTPs server.

Please note that the FTPS details should be requested separately.
Contact esolutions@bpost.be to receive them

D.3.1.2.2 Naming convention

The file name cannot contain spaces. We prefer to use the following naming convention for the filename:

"sender account ID + sequential number of the file + date"

E.g.: on 9/10/2010 the 3rd file sent by customer with account ID 123456 to bpost is:
123456_00003_20101009.txt

D.3.1.3 Important remarks upfront

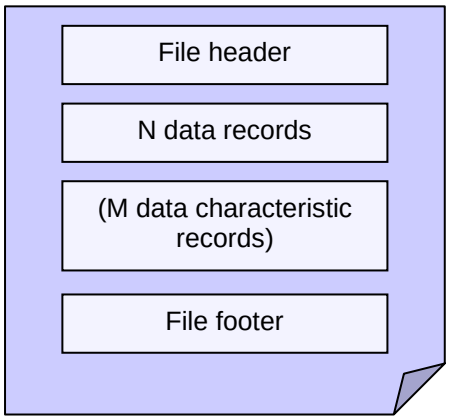
- All fields have a **fixed length**. Unless differently mentioned in the explanation, the input of the data per field always starts utmost left (**left aligned**). To reach the exact field length, the field will be further filled to the right with **spaces**.

  Example: The field "sender address name" always contains 40 characters. If the name is only 20 characters long, then the name should be followed by 20 spaces to reach the field length of 40 characters.
  If you wish to leave a field blank, it has to be filled completely with **spaces**. It is crucial that this structure is kept; otherwise problems will arise during the file processing. An incorrect processed file may result in missing data to execute certain VAS.

- In the text below a lot of examples are given. Since this document is limited in width and some of the lines in the files have a length of several hundreds of characters, the visual reproduction of the examples is slightly misrepresented (1 line in the file is sometimes split up into several lines in this document).

D.3.2 LCI Input File

The file format is “TXT” and has the following structure:



- The HEADER (first line) allows recognition of the file.
- The BODY contains 1 data record for each parcel with all the common data of the parcel (account ID, receiver data…). Each data record MAY be followed by one or more characteristic records. These characteristic records indicate if a certain VAS is desired or contain the necessary data to process this VAS correctly.
- The FOOTER (last line) allows to identify the end of the file and to check if all the lines (parcel data) were actually received.

The structure of the file is the same for domestic and outbound products. The difference consist in the data characteristic records that will have to be used (See XXXXXXXXXXX).

D.3.2.1 Example file - Domestic

Below you can find an example file. Further below all fields and their possible options are explained.

```
*LCI IN*            123456  *V 3.0 *00003
A0100323212345601234567810030      123456  030VERMALENS PROJECT                      MARKETING
Tine Scherens                              Bureau 302                                kerkstraat
34        bus  3    2000      Antwerpen                                        BE  031234567
info@vermalensprojects.be                                  0475123456            VERMEULEN BVBA
Sales                                  Jos Vermeulen                              Industriepark
Z4                       Broekooi                                  34             1730    Asse-
Kobbegem                                        BE  027263270               joske@vermeulen.be
0495678934          0001000000
A0100323212345601234567811030      123456  030VERMALENS PROJECT                      MARKETING
Martine Scherens                           Bureau 303                                kerkstraat
34        bus  3    2000      Antwerpen                                        BE  031234567
info@vermalensprojects.be                                   0475123456            VERMANDELE NV
IT                                       Piet Debruyne                                bureau 705
Loppemse steenweg                    708           8210    Loppem                           BE
050894514          ruud@vermandele.be                                 0478123465         0000450000
A0101323212345601234567812030      123456  030VERMALENS PROJECT                      MARKETING
Martine Scherens                           Bureau 303                                kerkstraat
34        bus  3    2000      Antwerpen                                        BE  031234567
info@vermalensprojects.be                                  0475123456            August De Lopere
Koningslaan                           12            1000    Brussel                          BE
021472563          August.De.Lopere@provider.com                                    0001800000
*END*               00000003
```

D.3.2.2 Example file - Outbound

Below you can find an example file. Further below all fields and their possible options are explained.

```
*LCI IN*            123456  *V 3.0 *00001
A0101CD090046003BE                                  123456          TOYS  'R  US  Belgium
1000       Brussel                                                          BE  022762259
Playdo'oha                                                                        Boli
Rio de la paz                                  123454  La Paz                      BO
0032123456                                                                0001000010
D01500test inhoud
D01900GIFT
D01903205
D01904EUR
D01901RTA
D01540Y
D015411
*END*               00000008
```

D.3.2.3 File header

```
*LCI IN*            123456  *V 3.0 *00003
```

The header allows identifying the file and contains following information:

Field	Length	Start	End	Type	Value	Remarks
Start of file	20	1	20	Alphanumeric	*LCI IN*	
Sender ID	8	21	28	Alphanumeric	Identification code of the sender of the file	This 6 character code will be granted by POST (left aligned, the two last positions justified with blanks) The Sender ID is the account linked to the (s)FTP(s) user.
Version number	8	29	36	Alphanumeric	*V 3.0 *	Version number of the file (fixed information)
Sequential number of the file	5	37	41	Numeric	Sequential number of the delivered files	This number can be used to check if all the files are properly received. The number is aligned to the right and filled with zeroes to the left

D.3.2.4 Data records

```
A0100323212345601234567810030                    123456       030VERMALENS    PROJECT
MARKETING                              Tine Scherens                              Bureau
302                                 kerkstraat                                34       bus
3     2000      Antwerpen                                                BE  003231234567
info@vermalensprojects.be                          0032475123456        VERMEULEN BVBA
Sales                                  Jos Vermeulen                        Industriepark
Z4                        Broekooi                                 34              1730
Asse-Kobbegem                              BE 003227263270         joske@vermeulen.be
0032495678934       0001000000
```

The data records (recognizable by the first 3 characters “A01”) contain data per parcel. Per parcel one line should be present in the file. The data record contains of the following information:

Field	Length	Start	End	Type	Mandatory	Value	Remarks
Identifier	3	1	3	Alphanum.	√	“A01”	Code that identifies the line as a data record
Content Type	2	4	5	Alphanum.	√	“00”	Type of content: 00 = send (to be used to send parcels) 02 = collect + send (to be used in case of “repair logistics”) 03 = collect (to be used in case you want to request a flex collect – see hereunder)
Parcel number	30	6	35	Alphanum.	√		Barcode number filled to the right with spaces
Account ID (6-digit)	8	36	43	Alphanum.	√		Unique identifier for invoicing and Track & Trace purposes, filled to the right with spaces
Product code (VAS code)	3	44	46	Alphanum.			Left blank or VAS code
Sender (Company) name	40	47	86	Alphanum.	√		Name of the sender, mostly the company name
Sender department	40	87	126	Alphanum.			
Sender contact name	40	127	166	Alphanum.			
Sender place	40	167	206	Alphanum.			A specific place, e.g. ‘desk 405‘
Sender street name	40	207	246	Alphanum.	√		
Sender house number	8	247	254	Alphanum.			
Sender box number	8	255	262	Alphanum.			
Sender postal code	8	263	270	Alphanum.	√		If the receiver is located in Belgium, the 4 digit postal code should be used.
Sender city	40	271	310	Alphanum.	√		
Sender country code	3	311	313	Alphanum.	√	“BE”	The country according to ISO alpha 2 – Should always be BE as the sender address has to be located in Belgium.
Sender telephone number	20	314	333	Alphanum.			
Sender e-mail address	50	334	383	Alphanum.			
Sender mobile phone number	20	384	403	Alphanum.			
Receiver name	40	404	443	Alphanum.	√		
Receiver department	40	444	483	Alphanum.			
Receiver contact name	40	484	523	Alphanum.			

Receiver place	40	524	563	Alphanum.			A specific place, e.g. 'desk 405'
Receiver street name	40	564	603	Alphanum.	√		
Receiver house number	8	604	611	Alphanum.			
Receiver box number	8	612	619	Alphanum.			
Receiver postal code	8	620	627	Alphanum.	√		If the receiver is located in Belgium, the 4 digit postal code should be used.
Receiver city	40	628	667	Alphanum.	√		
Receiver country code	3	668	670	Alphanum.	√		The country according to ISO alpha 2 – in capital (e.g. BE for Domestic, FR, NL... for Outbound)
Receiver telephone number	20	671	690	Alphanum.			e.g. 003221234578
Receiver e-mail address	50	691	740	Alphanum.	√		e.g. Jan.Vermeulen@provider.be
Receiver mobile phone number	20	741	760	Alphanum.			e.g. 0032475897867
Weight in g (leading zero's)	7	761	767	Decimal	√	Max 0030000	The weight (in grams!) of the INDIVIDUAL shipped parcel. Should be between 100 and 30000 g Rem: A weight of 0gr will be automatically converted to 1kg. In case of shipments outside Europe. This field must = sum of all parcel contents weight. See paragraph D.3.3.16.1
Number of characteristics (leading zero's)	3	768	770	Numeric	√		If the data record is followed by characteristic records, indicate the number of characteristics that follow

Below you can find an analysis of the above example.

Identificationcode	Content Type	Parcel number	Account ID	Product Code	Senders' name
A01	00	3232123456012345678100 30	123456	030	VERMALENS PROJECT
3	2	30	8	3	40

Senders' department	Senders' contact name	Senders' place	Senders' street name	Senders' House number	Senders' Box number	Senders' Postal code
MARKETING	Tine Scherens	Bureau 302	kerkstraat	34	bus 3	2000
40	40	40	40	8	8	8

Senders' City	Country code	Senders' telephone number	Senders' e-mail address	Senders' Mobile phone number	Addressee name
Antwerpen	BE	003231234567	info@vermalensprojects.be	0032475123456	VERMEULEN BVBA
40	3	20	50	20	40

Addressee department	Addressee contact name	Addressee place	Addressee street name	Addressee House number	Addressee Box number	Addressee Postal code
Sales	Jos Vermeulen	Industriepark Z4	Broekooi	34		1730
40	40	40	40	8	8	8

Addressee city	Addressee country	Addressee telephone number	Addressee e-mail address	Addressee Mobile phone number	Weight	Number of Characteristics
Asse-Kobbegem	BE	003227263270	joske@vermeulen.be	0032495678934	0001000	000
40	3	20	50	20	7	3

D.3.2.5 Specific products

D.3.2.5.1 Collect on demand (Flex collect)

It is possible to request a collect of parcels at a specific address in an automated way, by sending the information via LCI, using the content type “03”. This line only indicates that the customer wants to have a collect at a certain address on a certain date.
This is only needed if there is no fixed arrangement to collect the parcels.

D.3.2.5.1.1 Collect identifier

For every flex collect, a unique ID has to be used, and should be different from the barcode.
The structure of this ID is as following: PCKAAAAAAUUUUUU
Where:

- AAAAAA is the account ID of the customer.
- UUUUUU is the unique number of this collect request

D.3.2.5.1.2 Addresses

The sender address is the place where the parcel will be picked up, and the receiver address is the destination of the main parcel.

D.3.2.5.1.3 Timing considerations for Collect

It is very important to determine the date when the collect has to occur.
The standard rule for the determination of the collect date is as following:

- If the LCI is sent before 11h30 for a collect the same day
  → the collect will occur in the afternoon
- If the LCI is sent after 11h30 for a collect the same day
  → the collect will occur the next working day

If you want your collect later (earlier is operationally not possible) than the standard rule above, then you may use an optional characteristic line (see appendix D.3.3.3).

D.3.2.6 Data characteristic records

As mentioned before, every parcel needs to have 1 data record line in the LCI file. Specific characteristics that cannot be specified in the data record are added in (an) extra data-characteristic record(s).

The data characteristic records are inserted immediately after the related data record. They always begin with the 3 characters “D01”. For each characteristic an additional line is inserted.

Field	Length	Start	End	Type	Value	Remarks
Identification code	3	1	3	Alphanum	“D01”	Identification Code specifying it’s a “characteristic” record
Characteristic code	3	4	6	Numeric	N..3	An overview of the possible characteristic can be found in the attachments.
Characteristic value	50	7	56	Alphanum		The values of the characteristic

When it’s a characteristic value, the format is as follows: Alpha numeric field with length of 50. The value is justified to the right with spaces.

The data characteristic records are used to indicate that a certain VAS (value added services) is desired and to provide the necessary data to process this VAS.

The data characteristic records are mandatory for international products.

The different VASes are explained in more detail in the following section.

D.3.2.7 Analysis of an example with data record and characteristic record – Domestic

```
A0100323212345601234567810031              123456     031VERMALENS   PROJECT
MARKETING                          Tine Scherens                        Bureau
302                               kerkstraat                              34
bus 3    2000     Antwerpen                                  BE 003231234567
info@vermalensprojects.be                      0032475123456      VERMEULEN
BVBA                             Sales                                   Jos
Vermeulen                         Industriepark Z4                    Broekooi
34                 1730     Asse-Kobbegem                                 BE
003227263270       joske@vermeulen.be                          0032495678934
0001000005
D01310Y
D013110000000000000000000000000000000000000000000075,89
```

The first part (beginning with A01) is the data record (see 4.3). The last 3 digits of this line indicate that 5 characteristic lines for that shipment will follow:

Identification code		Weight	Number of characteristics
A01	...	...	0001000005
3	...	...	7	3

Below, we analyze each of the 5 characteristic lines (recognizable by the first 3 characters “D01”). Each characteristic line exists of 3 fields:

Line 1:

D01	310	Y
3	3	50

Field 1: D01 Identifies this line as a characteristic record;
Field 2: 310 Code of the characteristic, 310 is the code for CoD (cash on delivery);
Field 3: Y The VAS CoD is desired (left aligned)

Line 2:

D01	311	0000000000000000000000000000000000000000075,89
3	3	50

Field 1: D01 Identifies this line as a characteristic record;
Field 2: 311 Code of the characteristic, 311 is the code of the CoD amount
Field 3: 0000…00075,89 The amount of the CoD is € 75,89 (The amount is filled with leading zeros until the maximum length of the line is reached, only a comma Can be used to separate the eurocent from the Euro)

Line 3:

D01	312	Ref.25142
3	3	50

Field 1: D01 Identifies this line as a characteristic record;
Field 2: 312 Code of the characteristic, 312 is the code for “communication”;
Field 3: Ref.25142 This notation will later on be used as the reference on the bank reports instead of the parcel number. This is foreseen in a future release.

Line 4:

D01	313	000325197954
3	3	50

Field 1: D01 Identifies this line as a characteristic record;
Field 2: 313 Code of the characteristic, 313 is the code to specify the account number on which the CoD amount has to be reimbursed;
Field 4: 000325197954 The actual account number to which the due amount has to be reimbursed.

Line 5:

D01	314	BANK ACCOUNT
3	3	50

Field 1: D01 identifies this line as a characteristic record;
Field 2: 314 Code of the characteristic, 314 is the code used for the method of payment;
Field 3: BANK ACCOUNT The money will be transferred onto the customer’s bank account.

D.3.2.8 File footer

Just like the file begins with a structured header, the file also ends with a structured footer. The footer looks like this:

```
*END*                00000009
```

Field	Length	Start	End	Type	Value	Remarks
End of file	20	1	20	Alphanum	"*END*"	Fixed information
Number of data lines	8	21	28	Numeric		The number of data lines equals the number of A01 lines + the number of D01

D.3.3 Data characteristic blocks

Remark : The contractual conditions of some for the options described below may vary.
Please contact your sale representative for detailed information about their availability.

D.3.3.1 Cash on Delivery (CoD)

Code	Name	Type	Value	Remarks
310	CoD	Alphanum.	Y	Only a 'Y' indicates that this VAS is desired
311	CoD – Amount Total	Alphanum.	e.g. 00000…00087,99	The value that the receiver must pay. The amount is filled with leading zeros until the maximum length of the line is reached. (This is, in case of an international parcel, the sum of the values of the international fee and the CoD amount to sender.)
312	CoD – Communication	Alphanum.		Default value: the barcode Future use: overrides parcel number as a reference, if filled in
313	CoD – Bank account Number	Alphanum.		IBAN (International Bank Account Number). Only Belgian IBANs can be used.
314	CoD – Type of Payment	Alphanum.	BANK REKENING	The money will be transferred onto the customer's bank account

The product code with the corresponding description:

Product code	Description
031	CoD

The different VAS codes with their description:

VAS code	Description
031	bpack 24h + CoD (with Signature)
046	bpack 24h + CoD (with Signature) + Basic warranty (old insurance)

D.3.3.2 Signature

Code	Name	Type	Value	Remarks

300	Signature	Alphanum.	"Y"	Only a 'Y' indicates that this VAS is desired

The different VAS codes with their description:

VAS code	Description
036	bpack 24h + signature

D.3.3.3 Collect on demand (flex collect)

Code	Name	Type	Value	Remarks
480	Collect on demand	Alphanum.	"Y"	Only a 'Y' indicates that this VAS is desired
481	Number of parcels in the collect	Numeric		Indicates the number of parcels that should be collected
482	Date requested for collect	DDMMYYYY		Indicates the date at which the collect is requested

The content type for the flex collect should be 03 - see D.3.2.5.1 for more details.

D.3.3.4 Automatic 2nd presentation

Code	Name	Type	Value	Remarks
330	Automatic 2nd Presentation	Alphanum.	Y	Only a 'Y' indicates that this VAS is desired

The different VAS codes with their description:

VAS code	Description
043	bpack 24h + automatic 2nd presentation
048	bpack 24h + CoD (with signature) + automatic 2nd presentation
109	bpack 24h + Basic warranty (old insurance) + Signature + automatic 2nd presentation
112	bpack 24h + Signature + automatic 2nd presentation

D.3.3.5 Basic Warranty (old Insurance) and Additional Warranty (old Insurance)

Code	Name	Type	Value	Remarks
350	Warranty (old Insurance)	Alphanum.	Y	Only a 'Y' indicates that this VAS is desired
351	Warranty (old Insurance) – Range	Numeric		The range in which the warranty (old insurance) amount i 1 = basic warranty (old insurance) up to 500 EUR 2 = additional up to 2.500EUR 3 = additional up to 5.000 EUR

The different VAS codes with their description:

VAS code	Description
040	bpack 24h + Basic warranty (old insurance) (with Signature)
105	bpack 24h + Additional warranty (old insurance) (with Signature)
109	bpack 24h + Basic warranty (old insurance) (with Signature) + Automatic 2nd presentation
046	bpack 24h + CoD (with Signature) + Basic warranty (old insurance)
047	bpack 24h + CoD (with Signature) + Additional warranty (old insurance)

D.3.3.6 OpeningHours

Code	Name	Type	Value	Remarks
450	Monday			
451	Tuesday			
452	Wednesday			
453	Thursday			
454	Friday			
455	Saturday			
456	Sunday			
457	Desired Delivery Place			

Per day you have one of the possibilities

- One range (e.g. 09:00-17:00): *HH:MM-HH:MM*
- Two ranges (e.g. 09:00-12:00/13:00-17:30): *HH:MM-HH:MM/HH:MM-HH:MM*
- Closed: -/- or -
- Unknown: empty field

HH should be in the range of 00 - 23 - MM should be in the range of 00:59

The different VAS codes with their description:

VAS code	Description
126	bpack 24h Business
127	bpack 24h Business with COD

D.3.3.7 Messaging

- All messaging VASes, bpack@bpost and bpack@bpost CoD can only be used in combination with LCI. To ensure correct treatment of the parcels, the accompanying LCI file(s) must be sent to bpost's LCI interface **BEFORE** the parcels are physically injected in the bpost network. In case of non-compliance, bpost cannot guarantee accurate operational execution of the parcels.

- The "sender name" field is used as a reference in the message (SMS or e-mail) that is sent to the recipient. Please make sure to fill out an appropriate name that is easily recognizable by the recipient. Providing correct information will prevent a lot of confusion that might occur when the recipient decides to collect his parcel.
  We advise you to fill out the actual sender name in the "sender name" field and the actual shipping party preceded by 'P/a' in the "sender contact name" field.
  e.g. Customer Testtoys NV ships its parcels from Supply Chain BVBA (and the parcels are returned at Supply Chain too). This would lead to:
  - Sender name: Testtoys NV
  - Sender contact name: P/a Supply Chain BVBA

D.3.3.7.1 Info "Distributed"

Code	Name	Type	Value	Remarks

420	MDis – Info 'Distributed'	Alphanum.	Y	Only a 'Y' indicates that this VAS is desired
421	MDis – Notification Language	Alphanum.	"NL" "FR" "DE" "EN"	Desired language for the notification message. NL = dutch FR = French DE = German EN = English (default)
422	Mdis – Notification Type	Numeric	"1" "2"	Indicates the desired type of notification 1 = e-mail 2 = SMS
423	MDis – E-mail Address	Alphanum.		If type includes e-mail, use this address as destination for the notification. e.g. Jan.Vermeulen@pudo.be
424	MDis – SMS number	Alphanum.		If type includes SMS, use this number as destination for the notification e.g. 0032475897867

D.3.3.7.2 Info “Reminder”

Code	Name	Type	Value	Remarks
380	MPO – Info ‘Reminder’	Alphanum.	Y	Only a ‘Y’ indicates that this VAS is desired
381	MPO – Notification Language	Alphanum.	“NL” “FR” “DE” “EN”	Desired language for the notification message. NL = Dutch FR = French DE = German EN = English (default)
382	MPO – Notification Type	Numeric	“1” “2”	Indicates the desired type of notification 1 = e-mail 2 = SMS
383	MPO – E-mail Address	Alphanum.		If type includes e-mail, use this address as destination for the notification. e.g. Jan.Vermeulen@pudo.be
384	MPO – SMS number	Alphanum.		If type includes SMS, use this number as destination for the notification e.g. 0032475897867

D.3.3.7.3 Info “Next Day”

Code	Name	Type	Value	Remarks
400	MSor – Info “Next Day”	Alphanum.	Y	Only a ‘Y’ indicates that this VAS is desired
401	MSor – Notification Language	Alphanum.	“NL” “FR” “DE” “EN”	Desired language for the notification message. NL = dutch FR = French DE = German EN = English (default)
402	MSor – Notification Type	Numeric	“1” “2”	Indicates the desired type of notification 1 = e-mail 2 = SMS
403	MSor – E-mail Address	Alphanum.		If type includes e-mail, use this address as destination for the notification. e.g. Jan.Vermeulen@pudo.be
404	MSor – SMS number	Alphanum.		If type includes SMS, use this number as destination for the notification e.g. 0032475897867

D.3.3.7.4 bpack@bpost

Code	Name	Type	Value	Remarks
440	bpack@bpost	Alphanum.	"Y"	Only a 'Y' indicates that this VAS is desired
441	bpack@bpost	Alphanum.	N..6	The bpack@bpost locator ID
442	bpack@bpost – Notification Type	Numeric	"1" "2"	Indicates the desired type of notification 1 = e-mail 2 = SMS
443	bpack@bpost – Notification Language	Alphanum.	"NL" "FR" "DE" "EN"	Desired language for the notification message. NL = Dutch FR = French DE = German EN = English (default)
444	bpack@bpost – E-mail Address	Alphanum.		If type includes e-mail, use this address as destination for the notification. e.g. Jan.Vermeulen@pudo.be
445	bpack@bpost – SMS number	Alphanum.		If type includes SMS, use this number as destination for the notification e.g. 0032475897867

The different VAS codes with their description:

VAS code	Description
037	bpack@bpost
038	bpack@bpost CoD

Data records:
Receiver name = name of the final receiver
Receiver contact name = name of the pick-up point
Receiver street name= street name of the pick-up point
Receiver house number = house number of the pick-up point
Receiver postal code = postal code of the pick-up point
Receiver city = city of the pick-up point

D.3.3.7.5 Bpack Parcel Locker (Vas code 247)

Code	Name	Type	Value	Remarks
550	bpack 24/7	Alphanum.	"Y"	Only a 'Y' indicates that this VAS is desired
552	Bpack 24/7 automate	Numeric	N..6	Unique identifier of the bpack 24/7 automate
553	Language	Alphanum.	"NL" "FR" "EN"	Language of the messaging to the receiver
554	Mobile phone	Numeric		Belgian mobile phone number of the receiver
555	Email address	Alphanum.		Mandatory! Email address of the receiver
556	Reduced Mobility	Alphanum.	"Y" "N"	The customer has reduced mobility (parcel will be placed in lower locker - optional)

Data records:
Receiver name = name of the final receiver
Receiver street name = name of the parcel locker
Receiver house number = empty
Receiver postal code = postal code of the parcel locker
Receiver city = city of the parcel locker

D.3.3.8 Repair Logistics

Code	Name	Type	Value	Remarks
490	Repair Logistics	Alphanum.	"Y"	Only a 'Y' indicates that this VAS is desired
491	Repair Logistics – Bpost prints label	Alphanum.	"Y"	If 'Y', then Bpost will print the label, otherwise, the customer made his own label (Only possible in case of 3232 barcode)

For "repair logistics" the content type value 02 must be used. This is a contractually limited product

D.3.3.9 References

Code	Name	Type	Value	Remarks
460	Customer Reference 1	Alphanum.		Customer Reference customer reference 1, custRef1
461	Customer Reference 2	Alphanum		Additional Customer Reference* customer reference 2, custRef2
462	Customer Reference 3	Alphanum.		Cost Center customer reference 3, custRef3. This information is used on your invoice and allows you to attribute different cost centers (e.g. different shops, warehouses, suppliers, …). You can use different costCenter within all your barcodes to group your barcodes under a dedicated group on the invoice. Warning: Using unique values within your barcodes would mean a single group for each barcode which is NOT authorized by bpost.
463	Customer references free text 1	Alphanum.		Additional Customer Reference* customer reference 4, custRef4 to be used to specify the application name
464	Customer references free text 2	Alphanum.		Additional Customer Reference* customer reference 5, custRef5

All above references are available in the e-tracker tool when using the reference field.
*Customer reference free text are exported in the status file in xml version only.

D.3.3.10 Sender commercial name

Code	Name	Type	Value	Remarks

760	Sender commercial name	Alphanum.		Commercial name of the sender

D.3.3.11 Saturday

Code	Name	Type	Value	Remarks
470	Saturday	Alphanum.	"Y"	'Y' indicates that Saturday delivery is activated

D.3.3.12 Fragile

Code	Name	Type	Value	Remarks
640	fragile	Alphanum.	"Y"	'Y' indicates that fragile is activated. The option fragile can only be used in combination with the bproduct bpack XL. This option includes automatically (so not needed to announce) the option basic warranty (old insurance). If an additional warranty (old insurance) is needed it should be added to the announcement file.

D.3.3.13 bpack Easy Retour

The VAS code with the according description:

VAS code	Description
050	bpack Easy Retour

D.3.3.14 bpack XL

The VAS code with the according description:

VAS code	Description
035	bpack XL

Code	Name	Type	Value	Remarks
631	height	Numeric		
632	width	Numeric		
633	length	Numeric		

D.3.3.15 Outbound shipments within Europe

Code	Name	Type	Value	Remarks
500	Parcel content	Alphanum.		Free description of the parcel's content
900	Item category	Alphanum.	"GIFT", "DOCUMENTS", "SAMPLE", "RETURNED" "GOODS", or "OTHER"	Indicates the category of the item

901	Non delivery instructions	Alphanum.	“RTS”, “RTA” or “ABANDONED”	Indication of what needs to be done with the parcel in case it could not be delivered. RTS = return to sender via road transport RTA = return to sender via air transport ABANDONED = destroyed
903	Value of the parcel in the currency of the sender	Integer format		e.g. value in cents 1025
904	Currency of the sender	Alphanum.	e.g. “EUR”, “USD”, etc.	
540	International operational warranty (old insurance)	Alphanum.	“Y”	Only a ‘Y’ indicates that this VAS is desired
541	Insured value	Numeric		The range in which the warranty (old insurance) amount is situated 1 = basic warranty (old insurance) up to 500 EUR 2 = additional up to 2.500EUR 3 = additional up to 5.000 EUR

D.3.3.16 Outbound shipments outside Europe

Code	Name	Type	Value	Remarks
500	Parcel content	Alphanum.		Free description of the parcel’s content
900	Item category	Alphanum.	“GIFT”, “DOCUMENTS”, “SAMPLE”, “RETURNED” “GOODS”, or “OTHER”	Indicates the category of the item
901	Non delivery instructions	Alphanum.	“RTS”, “RTA” or “ABANDONED”	Indication of what needs to be done with the parcel in case it could not be delivered. RTS = return to sender via road transport RTA = return to sender via air transport ABANDONED = destroyed
903	Value of the parcel in the currency of the sender	Integer format		e.g. value in cents 1025 In case of shipments outside Europe. This field must = sum of all parcel contents value field “VALUE OF ITEMS”, see D.3.3.16.1.

904	Currency of the sender	Alphanum.	e.g. “EUR”, “USD”, etc.	Currency in 3 letters format.
912	Amount postage paid			This field is required only for shipments outside Europe. Amount paid by the sender for the sending of this shipment. See contract pricing with bpost. Decimal format field (3.2) Minimum value : 0 Maximum value : 999.99 Currency for this field is always EUR!
540	International operational warranty (old insurance)	Alphanum.	“Y”	Only a ‘Y’ indicates that this VAS is desired
541	Insured value	Numeric		The range in which the warranty (old insurance) amount is situated 1 = basic warranty (old insurance) up to 500 EUR 2 = additional up to 2.500EUR 3 = additional up to 5.000 EUR

D.3.3.16.1 Parcel contents

Please make sure to have filled in the characteristics requested on paragraph D.3.3.16 before filled in the parcel contents specification defined here below:

Attention: for shipments outside Europe, you must be compliant with the new global international data requirement. This is a new requirement in the e-commerce industry (as from 2021) and thus applied for all your shipments outside Europe containing goods.

The new regulation requires you to send a set of information that contains details about your shipments, this is called **Electronic Advance Data** or **EAD**.

Providing these data in a correct format will enable a swift customs clearance in the destination country outside EU custom zone and avoid any delays (in worst case even sending back the parcel to sender) and/or extra charges linked to missing data.

For shipments outside Europe, you have therefore to provide parcel contents data. You can split your package content into 1 until 10 parcel content (of each type). Each parcel content must be declared as follows:

Sample –

A02000001000000000011ITEM DESCRIPTION 0000000000010110 1 BE

Where line items are distributed as follows –

Field	*Length*	*Start*	*End*	*Description*	*Type*	*Mandatory*	*Value*	*Remarks*
START OF LINE	3	1	3	Start of line to identify the existence of parcel contents.	alphanumeric	√	A02	Always use the default value "A02"
NUMBER OF ITEMS	6	4	9	Tells how many number of items present in this parcel content	Integer	√	000001	Should be integer number
VALUE OF ITEMS	13	10	22	Value of items in this parcel content. Value for the number of items of each type and NOT per item.	Integer in cents	√	0000000000011	Integer format, NO decimal! In centimes Currency used is the one defined in option *D01904*
ITEM DESCRIPTION	30	23	52	Description of item	ALPHANUMERIC	√	ITEM DESCRIPTION	Maximum 30 characters
ITEM NET WEIGHT	16	53	68	Weight of parcel items in this parcel content	NUMERIC	√	0000000000010110	Integer format, NO decimal ! Weight for the number of items of each type and NOT per item. Maximum value (30 kgs): 0000000000030000
HS TARIFF CODE	9	69	77	HS Tariff code	NUMERIC	√	1	If not provided then default value will be 9999. HS stands for Harmonized System. It's a multipurpose international product nomenclature that describes the type of good that is shipped. Today, customs officers must use HS code to clear every commodity that enters or crosses any international borders. Integer format, maximum 9 digits, you can find the code on https://www.tariffnumber.com/
ORIGIN OF GOODS	2	78	79	Origin of goods	ALPHANUMERIC	√	BE	2 letters country code from the orign of goods, you can find the code on https://countrycode.org/

Example with 3 parcel contents :

```
*LCI IN*          TES     *V 3.0 *00001
A0101EE199977124BE                                              999010               Test    customer
Munt                             1              1000     Brussel                          BE 0032/12345678
RECEIVER NAME                              RECEIVER DPT                                    WASHINGTON
STREET                      487              10012    NEW YORK                              US 0603118332
0009750007
D01460CUSTOMER REFERENCE
D01500Software/Hardware
D01900OTHER
D01901RTS
D019034198
D01904USD
D0191252.99
A02000002000000000001100T-shirts BRAND X MODEL Y     0000000000000600       IT
A02000006000000000002099JACKET MODEL 2021 BRAND Z    0000000000009000999     CN
A02000001000000000000999Socket brand Y SIZE         0000000000000150999     BE
*END*           00000011
```

D.3.3.17 bpack@bpost international

Code	Name	Type	Value	Remarks
440	bpack@bpost	Alphanum.	"Y"	Only a 'Y' indicates that this VAS is desired
441	bpack@bpost	Alphanum.	N..6	The bpack@bpost locator ID
442	bpack@bpost – Notification Type	Numeric	"1"	Indicates the desired type of notification 1 = e-mail
443	bpack@bpost – Notification Language	Alphanum.	"NL" "FR" "DE" "EN"	Desired language for the notification message. NL = Dutch FR = French DE = German EN = English (default)
444	bpack@bpost – E-mail Address	Alphanum.		If type includes e-mail, use this address as destination for the notification. e.g. Jan.Vermeulen@pudo.be
445	bpack@bpost – SMS number	Alphanum.		If type includes SMS, use this number as destination for the notification e.g. 0032475897867
500	Parcel content	Alphanum.		Free description of the parcel's content
900	Item category	Alphanum.	"GIFT", "DOCUMENTS", "SAMP	Indicates the category of the item

			LE", "RETURNED" "GOODS", or "OTHER"	
901	Non delivery instructions	Alphanum.	"RTS", "RTA" or "ABANDONED"	Indication of what needs to be done with the parcel in case it could not be delivered. RTS = return to sender via road transport RTA = return to sender via air transport ABANDONED = destroyed
903	Value of the parcel in the currency of the sender	Numeric		e.g. 1025 or 201,99 or 333.65
904	Currency of the sender	Alphanum.	e.g. "EUR", "USD", etc.	

- The receiver name in the data record line should be the name of the final receiver (not the name of the bpack@bpost point).
- The receiver address in the data record line (starts at position 564) should be the address of the bpack@bpost point.
- The receiver contact name in the data record line should be the name of the bpack@bpost point

Example:

```
*LCI IN*          TES     *V 3.0 *00003
A0100329999901021081600003337                                    999010          337Sender_name
sender_street_name                1          1000    sender_city                BE 0032123456789
sender@test.be                                       0032123456789          name_of_final_receiver
name_of_delivery_point                          street_name_of_delivery_point    2          75001
city_of_delivery_point          FR 0033121212121    finalreceiver@test.be          0033123456789
0000250010
D01440Y
D0144162049
D014421
D01443FR
D01444finalreceiver@test.be
D01500parcel content - description of parcel content
D01900Documents
D01901Abandoned
D0190350,50
D01904EUR
*END*          00000011
```

D.3.3.18 bpack 24/7 international

Code	Name	Type	Value	Remarks
550	bpack 24/7 international	Alphanum.	"Y"	Only a 'Y' indicates that this VAS is desired
552	bpack 24/7 international	Alphanum.	N..6	The bpack@bpost locator ID
553	bpack 24/7 international – Notification Language	Alphanum.	"NL" "FR" "DE" "EN"	Desired language for the notification message. NL = Dutch FR = French EN = English (default)
554	bpack 24/7 international – SMS number	Alphanum.		If type includes SMS, use this number as destination for the notification e.g. 0032475897867
555	bpack 24/7 international – E-mail Address	Alphanum.		If type includes e-mail, use this address as destination for the notification. e.g. Jan.Vermeulen@pudo.be
500	Parcel content	Alphanum.		Free description of the parcel's content
900	Item category	Alphanum.	"GIFT", "DOCUMENTS", "SAMPLE", "RETURNED" "GOODS", or "OTHER"	Indicates the category of the item
901	Non delivery instructions	Alphanum.	"RTS", "RTA" or "ABANDONED"	Indication of what needs to be done with the parcel in case it could not be delivered. RTS = return to sender via road transport RTA = return to sender via air transport ABANDONED = destroyed
903	Value of the parcel in the currency of the sender	Numeric		e.g. 1025 or 201,99 or 333.65
904	Currency of the sender	Alphanum.	e.g. "EUR", "USD", etc.	

- The receiver name in the data record line should be the name of the final receiver (not the name of the parcel locker).
- The receiver address in the data record line (starts at position 564) should be the address of the parcel locker.
- The receiver contact name in the data record line should be the name of the parcel locker

Example:

```
D01500Testparcel customer
D01550Y
D01552195175
D01553NL
D015540031612771959
D01555peter.vankeulen@dhl.com
D01556N
D01900Goods
D01901RTS
D0190302,00
D01904EUR
```

D.4 Large Customer Interface – input file (XML)

D.4.1 In a nutshell

The "Large Customer Interface" (LCI) is meant for customers that want to ship parcels on a regular basis and who wish to generate announcement from their own IT-system or IT–application, using batch processes. These customers supply the data related to the parcels (barcode, account ID, destination address, and type of product…) electronically before depositing the goods physically in bpostal network.

The status of the parcels can be provided electronically in return (see E.5).

D.4.1.1 Setting up a New LCI Environment

The process flow to set up a new LCI environment is defined as follows:

- The customer reads this document.
- The parameters (account ID, mother account ID, sender ID…) that must be used in the XML LCI files, are sent to the customer.
- The customer creates a few example labels and provides these for testing
- The customer programs the LCI file in format "XML".
- The customer creates a representative test file and sends it to the test environment of bpost.
- If the test file is processed without errors then the production environment can be set up.

The coordinates of the department that guides this process can be found in annex.

In annex 'F.6 XSD schemes' you can find the location where the XSD files can be found.

D.4.1.2 Sending XML LCI files to bpost

D.4.1.2.1 Via FTPS

To interchange data using FTPS, you will receive your own username and password to log in.
Each LCI input file has to be sent to **filetransfer.bpost.be**. Within seconds, the file is picked from our server and processed by our systems. Each day or several times a day (depending on the configuration and the type of file), a status– and/or matching file are generated. These files are put in the same folder on the FTPs server.

Please note that the FTPS details should be requested separately.
Contact esolutions@bpost.be to receive them

D.4.1.2.2 Naming convention

The file name cannot contain spaces. We prefer to use the following naming convention for the filename:
"sender account ID + sequential number of the file + date"
E.g.: on 9/10/2010 the 3rd file sent by customer with account ID 123456 to bpost is:
123456_00003_20101009.xml

D.4.1.3 XSD file layout

XSD file layout is available upon request. In the following chapters we will explain the different data fields.

D.4.2 XML LCI input file

D.4.2.1 XML header

<?xml version="1.0" encoding="UTF-8"?>

D.4.2.2 Announcement List

<announcementList xmlns="http://schema.post.be/announcement/bulk/v1/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:inst="http://schema.post.be/announcement/v1/"
xmlns:common="http://schema.post.be/announcement/common/v1/">

Name	Allowed Values	Description	Example
senderId	N..6	The bpost account linked tot the (s)FTP(s) user.	123456
custRef	N..5	Sequential file number	00001
Announcement		Parcel information (*)	See below

In order to limit the number of transmission, multiple parcels can be announced within one XML LCI by repeating the announcement tag for each parcel.

< announcement > element tag

Name	Allowed Values	Description	Example
accountId	N..6	account id	123456
type	N..2		Default "00"
itemCode	N..30	Parcel barcode	32321234568910010111 9030
productCode	N..3	VAS code	030
sender		Sender details	See below
receiver		Receiver details	See below
receiverOpeningsho			See below

receiverDesiredDeliveryPlace			
weightInGrams	N..5	Min 100gr Max 30000 gr	250 Rem: A weight of 0gr will be automatically converted to 1kg.
customerReference	AN..50		Customer Reference
costCenter	AN..50	This information is used on your invoice and allows you to attribute different cost centers (e.g. different shops, warehouses, suppliers, …). You can use different costCenter within all your barcodes to group your barcodes under a dedicated group on the invoice.	Cost Center. Unique value not allowed.
freeTextCustomerReference1	AN..50		Customer Reference 4
freeTextCustomerReference2	AN..50		Customer Reference 5
international			See below
deliveryMethod	"atHome" "atShop" "at24-7"	Select "atHome" if you want to have the parcel delivered at someone's home- or office address.	
options			See below (optional)
senderCommercialName	AN..50		Sender commercial name
dimensions		See dimensions tag	O/M (*)

(*) The dimensions are only mandatory for the product bpack XL.

< sender > and < receiver > element tag

Name	Allowed Values	Description	Example
name			
addressDepartment			
addressContactName			
addressPlace		Extra information	
address			See address element tag
contactDetail			See contactDetail tag

< address > element tag

Name	Allowed Values	Description	Example
streetName			
houseNumber			
boxNumber			
postalCode			
city			
countryCode			BE

< contactDetail > element tag

Name	Allowed Values	Description	Example
emailAddress			
telephoneNumber			
mobilePhone			

<receiverOpeningHours> tag

To supply openings hours per working day you have one of the following possibilities:
- One range (e.g. 09:00-17:00): HH:MM-HH:MM
- Two ranges (e.g. 09:00-12:00/13:00-17:30): HH:MM-HH:MM/HH:MM-HH:MM
- Closed: -/- or -
- Unknown: empty field

HH should be in the range of 00 – 23
MM should be in the range of 00:59

Example:

```
<receiverOpeningHours>
        <Monday>10:00-17:30</Monday>
        <Tuesday>10:00-12:00/13:00-17:30</Tuesday>
        <Wednesday>-/-</Wednesday>
        <Thursday>13:00-17:30</Thursday>
        <Friday>10:00-12:00</Friday>
</receiverOpeningHours>
```

< options > element tag

Name	Allowed Values	Description	Example
signature			
insurance			basicInsurance
additionalInsurance			See below
itemCategory		For outbound shipments: - GIFT - DOCUMENTS - SAMPLE - RETURNED GOODS - OTHER	
nonDeliveryInstructions		For outbound shipments: - RTS - RTA - ABANDONED	
parcelContent	AN..50	For outbound, description of goods	
valueCurrencySender		Value parcel for customs	3123.02
cashOnDelivery			See cashOnDelivery
infoDistributed			See notificationType
infoNextDay			See notificationType

infoReminder			See notificationType
automaticSecondPresentation			
saturdayDelivery	true		
fragile(*)	true		

(*) The option fragile can only be used in combination with the product bpack XL. The basic warranty (old insurance) will be added automatically, additional warranty (old insurance) can be added as option.

< additionalInsuranceType > element tag

Name	Allowed Values	Description
maxAmount	N..1	The range in which the warranty (old insurance) amount is situated: 1 = basic warranty (old insurance) up to 500 EUR 2 = additional up to 2.500EUR 3 = additional up to 5.000 EUR

< cashOnDelivery > element tag

Name	Allowed Values	Description
amountTotalInEuroCents		Amount in eurocents
bban	N..12	National Bank account number, without spaces or dashes.
iban	AN..30	International Bank account number. Only Belgian IBANs can be used.
bic	AN..11	Bank identification code

< notificationType > element tag

Name	Allowed Values	Description
language	AN..2	- EN (default) - NL - FR - DE
emailAddress	AN..50	
smsNumber	N..20	

< notificationType > element tag

Name	Allowed Values	Description
language	“EN” “NL” “FR” “DE”	EN (default)
emailAddress	AN..50	
smsNumber	N..20	

< dimensions > element tag

Name	Allowed Values	Description

widthInMm	1->9999	
heightInMm	1->9999	
lengthInMm	1->9999	

e.g.

```
<inst:dimensions>
    <common:widthInMm>450</common:widthInMm>
    <common:heightInMm>180</common:heightInMm>
    <common:lengthInMm>1200</common:lengthInMm>
</inst:dimensions>
```

D.4.2.3 Example

The following example shows a valid request to announce a bpack parcel:

```
<?xml version="1.0" encoding="UTF-8"?>
<announcementList xmlns="http://schema.post.be/announcement/bulk/v1/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:inst="http://schema.post.be/announcement/v1/"
xmlns:common="http://schema.post.be/announcement/common/v1/">
    <senderId>123456</senderId>
    <custRef>00001</custRef>
    <inst:announcement>
        <inst:accountId>123456</inst:accountId>
        <inst:type>00</inst:type>
        <inst:itemCode>323212345689100101119030</inst:itemCode>
        <inst:productCode>030</inst:productCode>
        <inst:sender>
            <common:name>Sender Company Name</common:name>
            <common:addressDepartment>Sender Dpt</common:addressDepartment>
            <common:addressContactName>Sender Name</common:addressContactName>
            <common:addressPlace>Extra information</common:addressPlace>
            <common:address>
                <common:streetName>Sender Streetname</common:streetName>
                <common:houseNumber>Housenumber</common:houseNumber>
                <common:boxNumber>Boxnumber</common:boxNumber>
                <common:postalCode>postal code</common:postalCode>
                <common:city>Cityname</common:city>
                <common:countryCode>BE</common:countryCode>
            </common:address>
            <common:contactDetail>
                <common:emailAddress>email address</common:emailAddress>
                <common:telephoneNumber>phone number</common:telephoneNumber>
                <common:mobilePhone>mobile number</common:mobilePhone>
            </common:contactDetail>
        </inst:sender>
        <inst:receiver>
            <common:name>Receiver Company Name</common:name>
            <common:addressDepartment>Receiver dpt</common:addressDepartment>
            <common:addressContactName>Receiver Name</common:addressContactName>
            <common:addressPlace>Extra information</common:addressPlace>
            <common:address>
                <common:streetName>Delivery street name</common:streetName>
```

```
                        <common:houseNumber>house number</common:houseNumber>
                        <common:boxNumber>box number</common:boxNumber>
                        <common:postalCode>postal code</common:postalCode>
                        <common:city>city name</common:city>
                        <common:countryCode>BE</common:countryCode>
                    </common:address>
                    <common:contactDetail>
                    <common:emailAddress>receiver email address</common:emailAddress>
                        <common:telephoneNumber>receive phone</common:telephoneNumber>
                        <common:mobilePhone>receiver mobile</common:mobilePhone>
                    </common:contactDetail>
                </inst:receiver>
                <inst:weightInGrams>250</inst:weightInGrams>
                <inst:costCenter>cost center</inst:costCenter>
                <inst:customerReference>customer reference</inst:customerReference>
                <inst:deliveryMethod>
                    <common:atHome/>
                </inst:deliveryMethod>
        </inst:announcement>
</announcementList>
```

D.4.2.4 Features and extra options

VAS code	Description
031	bpack 24h + CoD (with Signature)
036	bpack 24h + signature
040	bpack 24h + Basic warranty (old insurance) (with Signature)
043	bpack 24h + automatic 2nd presentation
046	bpack 24h + CoD (with Signature) + Basic warranty (old insurance)
047	bpack 24h + CoD (with Signature) + Additional warranty (old insurance)
048	bpack 24h + CoD (with signature) + automatic 2nd presentation
105	bpack 24h + Additional warranty (old insurance) (with Signature)
109	bpack 24h + Basic warranty (old insurance) + Signature + automatic 2nd presentation
112	bpack 24h + Signature + automatic 2nd presentation

D.4.2.4.1 Cash on Delivery

VAS code	Description
031	bpack 24h + CoD (with Signature)
046	bpack 24h + CoD (with Signature) + Basic warranty (old insurance)

D.4.2.4.2 031 - Cash on Delivery (COD) with use of IBAN account

```
<inst:options>
        <common:cashOnDelivery>
                <common:amountTotalInEuroCents>3000</common:amountTotalInEuroCents>
                <common:iban>IBAN BANK ACCOUNT</common:iban>
                <common:bic>BIC CODE</common:bic>
        </common:cashOnDelivery>
</inst:options>
```

Note: no need to supply extra signature tag since it is already included within COD service.

D.4.2.4.3 031 - Cash on Delivery (COD) with use of BBAN account

```
<inst:options>
        <common:cashOnDelivery>
                <common:amountTotalInEuroCents>2500</common:amountTotalInEuroCents>
                <common:bban>BANK ACCOUNT NUMBER</common:bban>
        </common:cashOnDelivery>
</inst:options>
```

D.4.2.4.4 046 - Cash on Delivery (COD) with use of IBAN account AND Basic Warranty (old Insurance)

```
<inst:options>
        <common:insurance>
                <common:basicInsurance/>
        </common:insurance>
        <common:cashOnDelivery>
                <common:amountTotalInEuroCents>5000</common:amountTotalInEuroCents>
                <common:iban>IBAN BANK ACCOUNT</common:iban>
                <common:bic>BIC CODE</common:bic>
        </common:cashOnDelivery>
</inst:options>
```

D.4.2.4.5 Signature

VAS code	Description
036	bpack 24h + signature

D.4.2.4.5.1 036 – Bpack 24 with Signature

```
<inst:options>
        <common:signature/>
</inst:options>
```

D.4.2.4.6 Automatic 2nd Presentation

VAS code	Description
043	bpack 24h + automatic 2nd presentation
048	bpack 24h + CoD (with signature) + automatic 2nd presentation
109	bpack 24h + Basic warranty (old insurance) + Signature + automatic 2nd presentation
112	bpack 24h + Signature + automatic 2nd presentation

D.4.2.4.6.1 043 – Bpack 24h with Automatic 2nd Presentation

```
<inst:options>
        <common:automaticSecondPresentation/>
</inst:options>
```

D.4.2.4.7 048 – Bpack 24h with COD and Automatic 2nd Presentation

```
<inst:options>
        <common:cashOnDelivery>
                <common:amountTotalInEuroCents>5000</common:amountTotalInEuroCents>
                <common:iban>IBAN BANK ACCOUNT</common:iban>
                <common:bic>BIC CODE</common:bic>
```

```
        </common:cashOnDelivery>
        <common:automaticSecondPresentation/>
</inst:options>
```

D.4.2.4.8 109 – Bpack 24h with Basic Warranty (old Insurance), Signature and Automatic 2nd Presentation

```
<inst:options>
        <common:signature/>
        <common:insurance>
                <common:basicInsurance/>
        </common:insurance>
        <common:automaticSecondPresentation/>
</inst:options>
```

D.4.2.4.9 112 – Bpack 24h with Signature and Automatic 2nd Presentation

```
<inst:options>
        <common:signature/>
        <common:automaticSecondPresentation/>
</inst:options>
```

D.4.2.4.10 Saturday Delivery

This option is available for all VAS codes

```
<inst:options>
        <common:saturdayDelivery>true</common:saturdayDelivery>
</inst:options>
```

D.4.2.4.11 Basic Warranty (old Insurance) and Additional Warranty (old Insurance)

VAS code	Description
040	bpack 24h + Basic warranty (old insurance) (with Signature)
046	bpack 24h + CoD (with Signature) + Basic warranty (old insurance)
047	bpack 24h + CoD (with Signature) + Additional warranty (old insurance)
105	bpack 24h + Additional warranty (old insurance) (with Signature)
109	bpack 24h + Basic warranty (old insurance) (with Signature) + Automatic 2nd presentation

D.4.2.4.12 040 – Bpack 24h with Basic Warranty (old Insurance)

```
<inst:options>
        <common:insurance>
                <common:basicInsurance/>
        </common:insurance>
</inst:options
```

Note: no need to supply extra signature tag since it is already included within warranty (old insurance) service.

D.4.2.4.13 046 – Bpack 24h with COD and Basic Warranty (old Insurance)

```
<inst:options>
        <common:insurance>
                <common:basicInsurance/>
        </common:insurance>
        <common:cashOnDelivery>
                <common:amountTotalInEuroCents>5000</common:amountTotalInEuroCents>
                <common:iban>IBAN BANK ACCOUNT</common:iban>
                <common:bic>BIC CODE</common:bic>
        </common:cashOnDelivery>
</inst:options>
```

D.4.2.4.14 047 – Bpack 24h with COD and Additional Warranty (old Insurance)

```
<inst:options>
        <common:insurance>
                <common:additionalInsurance maxAmount="3"/>
        </common:insurance>
        <common:cashOnDelivery>
                <common:amountTotalInEuroCents>5000</common:amountTotalInEuroCents>
                <common:iban>IBAN BANK ACCOUNT</common:iban>
                <common:bic>BIC CODE</common:bic>
        </common:cashOnDelivery>
</inst:options>
```

The range in which the warranty (old insurance) amount is requested:

1 = basic warranty (old insurance) up to 500 EUR
2 = additional up to 2.500EUR
3 = additional up to 5.000 EUR

D.4.2.4.15 105 – Bpack 24h with Additional Warranty (old Insurance)

```
<inst:options>
        <common:insurance>
                <common:additionalInsurance maxAmount="2"/>
        </common:insurance>
</inst:options>
```

D.4.2.4.16 109 – Bpack 24h with Basic Warranty (old Insurance), Signature and Automatic 2nd Presentation

```
<inst:options>
        <common:signature/>
        <common:insurance>
                <common:basicInsurance/>
        </common:insurance>
        <common:automaticSecondPresentation/>
</inst:options>
```

D.4.2.4.17 Messaging

- All messaging VASes, bpack@bpost and bpack@bpost CoD can only be used if present in the XML announcement. To ensure correct treatment of the parcels, the announcement must be sent to bpost **BEFORE** the parcels are physically injected in the bpost network. In case of non-compliance, bpost cannot guarantee accurate operational execution of the parcels.

- The “sender name” field is used as a reference in the message (SMS or e-mail) that is sent to the recipient. Please make sure to fill out an appropriate name that is easily recognizable by the recipient. Providing correct information will prevent a lot of confusion that might occur when the recipient decides to collect his parcel.
  We advise you to fill out the actual sender name in the “sender name” field and the actual shipping party preceded by ‘P/a’ in the “sender contact name” field.
  e.g. Customer Testtoys NV ships its parcels from Supply Chain BVBA (and the parcels are returned at Supply Chain too). This would lead to:
  - Sender name: Testtoys NV
  - Sender contact name: P/a Supply Chain BVBA

D.4.2.4.17.1 Info “Distributed”

D.4.2.4.17.1.1 Via email

Example:

```
<inst:options>
        <common:infoDistributed language="EN">
                <common:emailAddress>someone@telenet.be</common:emailAddress>
        </common:infoDistributed>
</inst:options>
```

D.4.2.4.17.1.2 Via SMS

Example:

```
<inst:options>
        <common:infoDistributed language="EN">
                <common:smsNumber>0497123456</common:smsNumber>
        </common:infoDistributed>
</inst:options>
```

Note: only **one** method per type of messaging is accepted.

D.4.2.4.17.2 Info “Reminder”

Example:

```
<inst:options>
        <common:infoReminder language="NL">
                <common:emailAddress>someone@telenet.be</common:emailAddress>
        </common:infoReminder>
</inst:options>
```

D.4.2.4.17.3 Info “Next Day”

Example:

```
<inst:options>
        <common:infoNextDay language="FR">
                <common:smsNumber>0497123456</common:smsNumber>
        </common:infoNextDay>
</inst:options>
```

D.4.2.4.18Bpack @ bpost

VAS code	Description
037	bpack@bpost
038	bpack@bpost CoD

Name	Allowed Values	Description
deliveryMethod	“atHome” “atShop” “at24-7”	Select “atShop” if you want to have the parcel delivered in a pick-up point.

< receiver > & < address > element tag:
Receiver name = name of the final receiver
Receiver contact name = name of the pick-up point
Receiver street name = street name of the pick-up point
Receiver house number= house number of the pick-up point
Receiver postal code = postal code of the pick-up point
Receiver city = city of the pick-up point

D.4.2.4.18.1 bpack@bpost

< atShop> element tags

Name	Allowed Values	Description
Language	AN..2	- EN (default) - NL - FR - DE
emailAddress	AN..50	
smsNumber	N..20	
pickupLocatorId	N..6	See GEO6 locator

Example:

```
<inst:deliveryMethod>
        <common:atShop language="EN">
                <common:emailAddress>barcodesparcels@bpost.be</common:emailAddress>
                <common:pickupLocatorId>231700</common:pickupLocatorId>
        </common:atShop>
</inst:deliveryMethod>
```

D.4.2.4.18.2 bpack@bpost CoD

In combination with CoD, elements signature and cashOnDelivery need to be added under options tag.

Example:

```
<inst:deliveryMethod>
        <common:atShop language="NL">
                <common:emailAddress>barcodesparcels@bpost.be</common:emailAddress>
                <common:pickupLocatorId>231700</common:pickupLocatorId>
        </common:atShop>
</inst:deliveryMethod>
<inst:options>
        <common:signature/>
        <common:cashOnDelivery>
                <common:amountTotalInEuroCents>3000</common:amountTotalInEuroCents>
                <common:iban>IBAN BANK ACCOUNT</common:iban>
                <common:bic>BIC CODE</common:bic>
        </common:cashOnDelivery>
</inst:options>
```

D.4.2.4.19 Bpack Parcel Locker (24/7)

Name	Allowed Values	Description
deliveryMethod	“atHome” “atShop” “at24-7”	Select “at24-7” if you want to have the parcel delivered in a parcel locker.

< receiver > & < address > element tag:

Receiver name = name of the final receiver
Receiver street name = name of the parcel locker
Receiver house number= empty
Receiver postal code = postal code of the parcel locker
Receiver city = city of the parcel locker

< at24-7> element tags

Name	Allowed Values	Description
parcelsDepotId	N..6	See GEO6 locator. Type is “4”.
messageLanguage	“NL”/”FR”/”EN”	Language of the messaging to the receiver
mobilePhone	N..20	Mobile phone number of the receiver
Email	AN..50	Mandatory! Email address of the receiver
reducedMobilityZone	“true”/”false”	The customer has reduced mobility (parcel will be placed in lower locker - optional)

Example:

```
<inst:deliveryMethod>
        <common:at24-7>
                <common:parcelsDepotId>16549</common:parcelsDepotId>
                <common:messageLanguage>NL</common:messageLanguage>
                <common:mobilePhone>0497123456</common:mobilePhone>
```

```
            <common:email>esolutions@bpost.be</common:email>
            <common:reducedMobilityZone>false</common:reducedMobilityZone>
        </common:at24-7>
</inst:deliveryMethod>
```

D.4.2.4.20bpack@bpost international

VAS code	Description
337	bpack@bpost international

< international > element tag

Name	Allowed Values	Description
parcelContent	Alphanum.	Free description of the parcel's content
itemCategory	"GIFT", "DOCUMENTS", "SAMPLE", "RETURNED" "GOODS", or "OTHER"	Indicates the category of the item
nonDeliveryInstructions	"RTS", "RTA" or "ABANDONED"	Indication of what needs to be done with the parcel in case it could not be delivered. RTS = return to sender via road transport RTA = return to sender via air transport ABANDONED = destroyed
valueCurrencySender	Numeric	e.g. 1025 or 201,99 or 333.65
currencySender	Alphanum.	e.g. "EUR", "USD"

Example:

```
<inst:international>
        <inst:parcelContent>description of content</inst:parcelContent>
        <inst:itemCategory>GIFT</inst:itemCategory>
        <inst:nonDeliveryInstructions value="RTS"/>
        <inst:valueCurrencySender>1234</inst:valueCurrencySender>
        <inst:currencySender>EUR</inst:currencySender>
</inst:international>
```

Name	Allowed Values	Description
deliveryMethod	"atIntlShop"	Select "atIntlShop" if you want to have the parcel delivered in a pick-up point.

< atIntlShop> element tags

Name	Allowed Values	Description
Language	AN..2	- EN (default) - NL - FR - DE

emailAddress	AN..50	
pickupLocatorId	N..6	See GEO6 locator

Example:

```
<inst:deliveryMethod>
        <common:atIntlShop language="FR">
                <common:emailAddress>final_receiver_email@test.be</common:emailAddress>
                <common:pickupLocatorId>62049</common:pickupLocatorId>
        </common:atIntlShop>
</inst:deliveryMethod>
```

E. Track & Trace

E.1 Introduction

Bpack supplies a variety of tools that allows the sender to keep track of the parcels that are in our network.

These consists of online tools that offer an html rendering, an API for custom integration of parcel tracking in your system and batch files (LCI) that may be use for custom integration or reporting purposes.

All these solutions may be used concurrently to answer specific business needs (towards senders, for internal reporting). The different major physical events are aligned between these application but it may be that, due to architecture design, some more specific events are only visible using our online tools.

E.2 Online tools

E.2.1 In a nutshell

Two online tools are available. One can be reached by any user over the internet, allowing the end consumer to track his parcel easily. Confidential information is not displayed in this tool

The other tool needs a login and allows to have the full information over the parcels, including a link to the reception signature (proof of delivery – POD). This tool is supposed to remain for internal usage only.

E.2.2 E-Tracker Public (bTracker)

The general track & trace tool of bpack is accessible on the following address:

www.bpost.be/track

This portal is available in 3 languages (Dutch, French and English) and offers two search possibilities:

- Search via barcode number and postal code
- Search via customer reference and postal code
  The customer reference corresponds to the info that has been sent via the LCI API or LCI file or the reference that has been assigned to the order via the shipping manager

E.2.2.1 Deeplink URL

Instead of typing the barcode in the search field, it is possible to create a link to the track & trace system, on basis of the barcode, allowing a faster redirection to the detail page.

The link is composed as follows:

Part	Description	Example value
https base	Base URL	https://track.bpost.cloud/btr/web/#/search?
itemCode	Barcode	itemCode=3232999010000000000001030
	Or customerReference, The reference given to the parcel by the customer when announcing the parcel in our environment. Can	itemCode=customer_referenceabc123

	not be separated by commas.	
postalCode	Postal code	&postalCode=1000
lang	Parameter for the language of the landing page. Three languages available, indicated as ISO codes (NL, FR, EN)	&lang=EN

Examples:

- Link to one barcode track & trace

https://track.bpost.cloud/btr/web/#/search?itemCode=3232999010000000000001030&postalCode=1000&lang=EN

- Link to itemcode track&trace

https://track.bpost.cloud/btr/web/#/search?itemCode=customer_referenceabc123&postalCode=1000&lang=EN

Most of bpack senders are using the deeplink URL in communication to the consumer. This allows the receiver to follow the parcel himself and significantly reduces the number of call to the customer service.

E.2.3 E-Tracker bpost business (E-Tracker Pro)

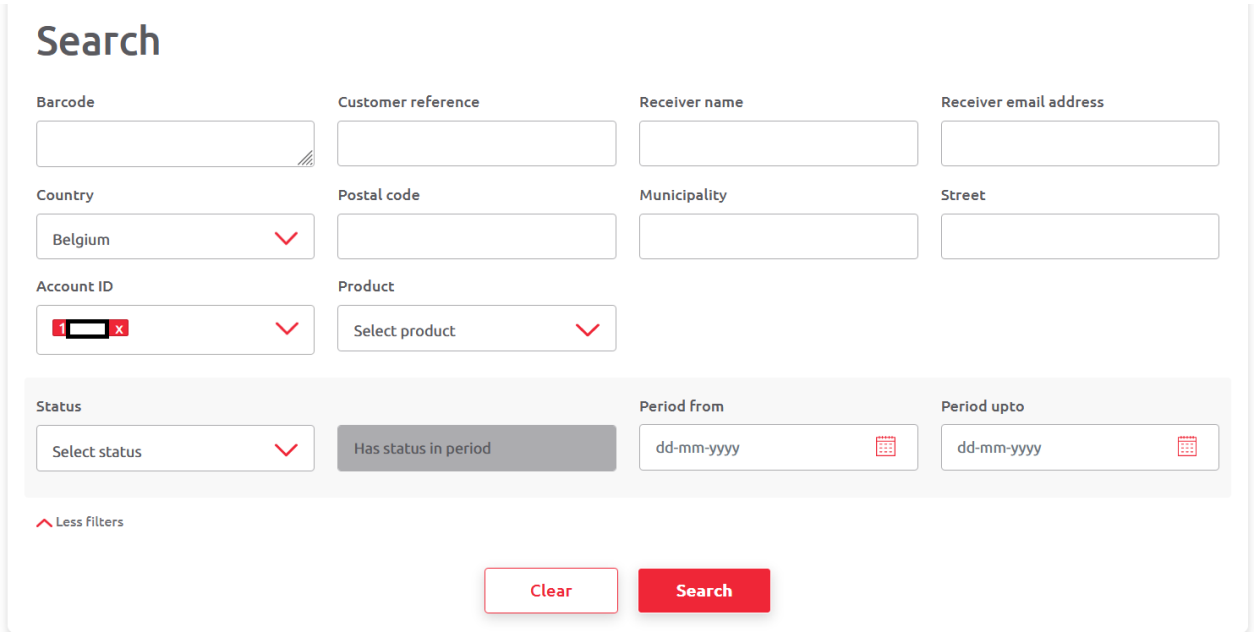
eTracker bpost business is one of the applications available through the portal, via the login received at account creation. It gives access to different search criteras and all the information of the parcels that have been sent by the customer. The data can also be exported as CSV file.

Direct access to eTracker: https://etracker.bpost.cloud/pro

The search criterias are:

- Account ID (s) (only the customer account IDs are available)
- Barcode(s)
- Customer Reference
- Date from… to…
- Postal code of destination
- Product
- Status
- Country of destination
- Receiver Name
- Receiver email address

All these can be combined to refine the search.



E.3 Track & Trace APIs

E.3.1 In a nutshell

Bpost offers the possibility to follow the status and information of the parcels via webservices.

A first web page gives the possibility to retrieve all parcel information (destination, statuses and weight), based on the barcode number. The different statuses correspond to the LCI out statuses and can be found in §E.6.2 Status List.

BASE URL: http://track.bpost.cloud/etr/light/performSearch.do?
Language selection: EN, NL, FR, DE
(See also Deeplink URL)

The structure of the XML request and response messages must be validated against a schema definition. The sequence of the used tags is important. The XSD file used to describe the various XML elements exchanged between the external parties and bpost can be found at the end of this document.

One XSD file contains the definition of one version of the data to be sent in requests and responses. Eventually, this XSD will import other XSDs for bpost common definitions like addresses, names … Each version of the data has its own namespace.

E.3.2 Item Barcode

After the BASE URL, use following parameters:

- searchByItemCode=true
- &oss_language=
- &itemCodes=

Example:
http://track.bpost.cloud/etr/light/performSearch.do?searchByItemCode=true&oss_language=nl&itemCodes=3232101184000023727350 43

E.3.3 Customer Reference / Order Reference

After the BASE URL, use following parameters:

- searchByCustomerReference=true
- &oss_language=
- &customerReference=

Remark: please note that in this scenario, the order or customer reference must have been announced in the data exchange towards bpost. If not, there is no link between the actual parcel and this reference.

Example:
http://track.bpost.cloud/etr/light/performSearch.do?searchByCustomerReference=true&oss_language=nl&customerReference=TEST%20AUTOMATIC%20SORTER%20101184

Moreover, if the shipping manager frontend or webservice has been used to create an order, it is possible to retrieve the complete order information via webservice. This could be used for specific set-ups, where another building block needs to reuse the order and/or sending information.

E.3.4 XML Tracking info webservice

E.3.4.1 trackingInfo

The bpack trackingInfo web service retrieves a bpack parcel by its barcode.
To use the bpack parcel trackingInfo web service, you need to perform an HTTP operation on a URI that is constructed as follows:

URI: **https://api.parcel.bpost.cloud/services/trackedmail/item/{item_nb}/trackingInfo** where serviceEndpoint is **https://api.parcel.bpost.cloud/**

The only HTTP operation that is allowed on the bpack trackingInfo URI is **GET**.

URI	POST	PUT	GET	DELETE
serviceEndPoint/ services/trackedmail/item/{item_nb}/trackingInfo	X	X	☑	X

E.3.4.2 Retrieving bpack trackingInfo information

When you want to retrieve a bpack parcel information, you need to send a request to the server to receive parcel information using the HTTP GET operation on the URI. We will now show you how to send a valid request to retrieve bpack parcel information and what the response of the server will look like.

In annex 'F.6 XSD schemes' you can find the location where the XSD files can be found.

E.3.4.2.1 Client Request

Use the HTTP **GET** request method to retrieve bpack trackingInfo.

Attribute	Value
HTTP Operation	GET
URL	https://api.parcel.bpost.cloud/services/trackedmail/item/{item_nb}/trackingInfo

The body of the GET request will be empty, because there is no XML code that needs to be sent to the server.

Attribute	Description
HTTP Body	Empty

Example:
The following example shows a valid request to retrieve bpack trackingInfo information:

```
GET /services/trackedmail/item/3232123456599000040669030/trackingInfo
```

E.3.4.2.2 Authentication

Authentication is performed by the Server hosting the Web Services. We use pre-emptive Authentication over a secure channel: HTTPS.

This means the server will expect the Authorization: header to be sent along with the request. The value of this header is the authorization type (Basic) followed by the username concatenated with a colon and password. This concatenated value must be encoded in base64 before being actually set in the Authorization: header.

Authorization: Basic username:password
The underlined value is encoded in Base64.

The username is the Account ID. The password can be requested by sending an e-mail to **esolutions@bpost.be**

E.3.4.2.3 Server Response

If your request to retrieve bpack trackingInfo is successful, the server will respond with an HTTP **200 OK** status code.

Attribute	Value
HTTP Status	200 OK

In the body of the server response you will receive XML code containing the bpack parcel trackingInfo.

Attribute	Description
HTTP Body	XML < itemTracking /> element

The < itemTracking /> element will contain the address details, item details and status history of the bpack parcel.

< itemTracking > element tags

Name	Description	Example
itemCode	Bpack parcel number	32321234565990004066903O
sender	Sender details	
addressee	Receiver details	
cityOrCountryOfdeparture	Origin City or Country	BRUSSELS
cityOrCountryOfDestination	Destination City or Country	BRUSSELS
nameOfDestination		BARCODE TEAM TAXIPOST
deliveryTime		2012-11-23T09:31:07+01:00
customerReference		TEST AUTOMATIC SORTER
itemDetail	Info on parcel	
stateInfo	status	

< sender > element tags

Name	Description	Example
name		TEST COMPANY NAME

address		

< address > element tags

Name	Description	Example
streetName		WETSTRAAT
houseNumber		1
postalCode		1000
city		BRUSSELS
countryCode		BE

< addressee> element tags

Name	Description	Example
Name		BARCODE TEAM BPACK
address		

< address > element tags

Name	Description	Example
streetName		MUNTCENTRUM
houseNumber		1
postalCode		1000
city		BRUSSELS
countryCode		BE

< itemDetail> element tags

Name	Description	Example
weightInGrams		380
type		01
options		

< stateInfo> element tags

Name	Description	Example
time		2012-11-23T09:31:07.427+01:00
stateCode		U01 *(*)*
stateDescription		DistributedNormally - regular

(*)For an overview of the different status codes, please refer to §E.6.2 Status List.

<trackingId> element tag

Attribute	Description	Example
value	Trackingcode that will be used to communicate with customers. URL: **http://track.bpost.be/id/**<TrackingId>	

Element	Description	Example
	No child elements	

<PickupPoint> element tag

Attribute	Allowed Values	Description	Example
value		Information about the physical location where the parcel can be picked up.	

Element	Allowed Values	Description	Example
id			
name			
street			
houseNumber			
postalCode			
city			

Example:
The following example shows a response by the server giving you the bpack trackingInfo:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<itemTracking xmlns="http://schema.post.be/tracking/v1/"
xmlns:ns2="http://schema.post.be/announcement/common/v1/">
<itemCode>32321234565990004066903O</itemCode>
        <sender>
                <ns2:name>TEST COMPANY NAME</ns2:name>
                <ns2:address>
                        <ns2:streetName>WETSTRAAT</ns2:streetName>
                        <ns2:houseNumber>1</ns2:houseNumber>
                        <ns2:postalCode>1000</ns2:postalCode>
                        <ns2:city>BRUSSELS</ns2:city>
                        <ns2:countryCode>BE</ns2:countryCode>
                </ns2:address>
        </sender>
        <addressee>
                <ns2:name>BARCODE TEAM BPACK</ns2:name>
                <ns2:address>
                        <ns2:streetName>MUNTCENTRUM</ns2:streetName>
                        <ns2:postalCode>1000</ns2:postalCode>
                        <ns2:city>BRUSSELS</ns2:city>
                        <ns2:countryCode>BE</ns2:countryCode>
                </ns2:address>
                <ns2:contactDetail>
                        <ns2:emailAddress>BARCODESPARCELS@POST.BE</ns2:emailAddress>
                </ns2:contactDetail>
        </addressee>
        <cityOrCountryOfdeparture>BRUSSELS</cityOrCountryOfdeparture>
        <cityOrCountryOfDestination>BRUSSELS</cityOrCountryOfDestination>
        <nameOfDestination>BARCODE TEAM BPACK</nameOfDestination>
        <deliveryTime>2012-11-23T09:31:07+01:00</deliveryTime>
        <customerReference>TEST AUTOMATIC SORTER</customerReference>
        <itemDetail>
                <weightInGrams>380</weightInGrams>
                <type>01</type>
```

```
            <options/>
        </itemDetail>
        <stateInfo>
            <time>2012-11-22T23:19:29+01:00</time>
            <stateCode>T00</stateCode>
            <stateDescription>Sorted - sorted_out</stateDescription>
        </stateInfo>
        <stateInfo>
            <time>2012-11-23T07:11:18.923+01:00</time>
            <stateCode>L00</stateCode>
            <stateDescription>BoundToRound - out_for_distribution</stateDescription>
        </stateInfo>
        <stateInfo>
            <time>2012-11-23T09:31:07.427+01:00</time>
            <stateCode>U01</stateCode>
            <stateDescription>DistributedNormally - regular</stateDescription>
        </stateInfo>
        <trackingId>gqwxvsyt</trackingId>
        <pickupPoint>
            <id>805140</id>
          <name>LIBRAIRIE WILSON</name>
         <streetName>RUE WASHINGTON / WASHINGTONSTRAAT</streetName>
         <houseNumber>66</houseNumber>
         <postalCode>1050</postalCode>
         <city>IXELLES / ELSENE</city>
        </pickupPoint>

</itemTracking>
```

E.4 Large Customer Interface – Outputs

E.4.1 In a nutshell

LCI output files provide information about the sender's parcels and or instructions for which bpost has produced or received an event or action.

Three types of electronic files can be provided:
- a Matching file;
- a Status file;
- a Feedback file.

The content of the files is explained hereunder, while their structure, depending on the type of format is explained in the following sections.

E.4.1.1 Transfer means

Bpost offers the following transfer possibilities:

FTPS – two possibilities
- Files are stored on bpost servers
- Files are transferred to your FTP servers

E.4.1.2 Status file

E.4.1.2.1 Content

The Status file gives an overview of the status of all parcels for which an event took place since the creation of a previous file. For each event (delivery to the receiver, etc.) a separate code exists. The information the sender receives can be integrated in his back office system.

The parcel selection (which barcodes occur in the list and which do not) can be configured. It's possible to link multiple account ID into one matching and one status file.

E.4.1.2.2 Frequency

The LCI generation can be scheduled following two different schedules, referred as single run and multi run.

In the single run, the status files are generated once a day, concurrently to the matching file (between 6AM and 7AM in normal workload conditions).

In the multi run, the process to generate the status files runs every 30 minutes with an exception at 06:30.

In any case, we strongly suggest to foresee an hourly cronjob to process the files to ensure that the most data is always available in your system.

E.4.1.3 Matching file

E.4.1.3.1 Content

This file gives all the parcel numbers for which:

- The sender supplied the data electronically but no parcel (arrival, departure,…) was registered or
- The sender did not supply the electronic data but an event was registered

Remark: the selection is based on the account ID of the barcode; if this does not match your account ID, no matching of this type can be delivered.

It is possible to provide the matching information for several account ID's into one file.

E.4.1.3.2 Frequency

The matching is generated daily between 6AM and 7AM in normal workload conditions.

The matching data concerning a parcel continues to appear until:
- The matching took place (the parcel or the data is effectively supplied);
- The data from the database is archived (after 3 days).

E.4.1.4 Feedback file

E.4.1.4.1 Content

A Feedback file is generated every time an LCI file is received and processed. It communicates the result of the LCI validation and lists all instructions with the outcome of the processing.
An instruction can be accepted, deemed duplicate, accepted with warnings, or rejected.

It is of the utmost importance to process all feedback files and analyse their content. Warnings might point towards improvements to be made on the level of data quality, or service delivered.
Errors identify instructions that have been rejected, meaning a correction should be sent. Failing to do so, might result in a deterioration of quality of the service.

E.4.1.4.2 Frequency

Feedback files are continuously, triggered by an LCI file being processed. As a rule of thumb, check for a feedback file 1.5 hours after having sent an LCI file.

In any case, we strongly suggest to foresee an hourly cronjob to process the files and analyse the quality of the LCI file sent.

E.4.2 Flat Text

E.4.2.1 Status file – txt

E.4.2.1.1 Naming convention

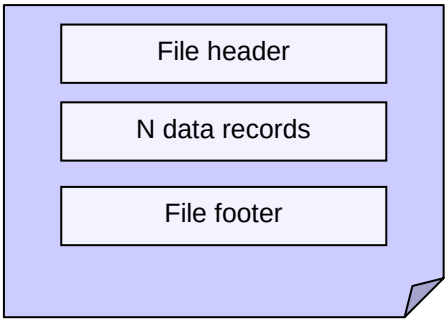
[auditnr].status.[yyyymmddhhmmss].txt

- [auditnr]: internal bpost reference
- [yyyymmddhhmmss]: date on which the file is generated

e.g. 0245678.status.20101009075833.txt

E.4.2.1.2 Structure

The structure is defined as follows:



E.4.2.1.2.1 File header

Field	Length	Type	Value	Remarks
Start of file	20	Alpha num	*StatusFileNormal*	Fixed information
Receiver ID	8	Alpha num	Customers identification code	This is the mother account ID code granted by POST
Version number	8	Alpha num	*V 3.0 *	Version number of the file (fixed information)
Audit number	8	Numeric	Sequential number of the supplied files	This number allows the sender to check whether he received all the files

E.4.2.1.2.2 Data records

The data records return the actual status of the parcel. The status is identified with a 3-character code. The list with the different status codes can be found in the attachments.

Field	Length	Type	Value	Remarks
Status type code	3	Alphanum.	xxx	See table in attachment
Parcel number	30	Alphanum.		
Date	8	Alphanum.		YYYYMMDD
Time	4	Alphanum.		HHMM
Location	30	Alphanum.		Place of scanning consisting of UNITCEP (=postal code [4] & technical identifier [4]) and location name
Content Type	2	Numeric		Sending (00) or Collect (01)
Addressee Name	40	Alphanum		
VAS code	3	Numeric		See list in attachment
Amount paid by the addressee in EUR	7	Alphanum.		Format: 0000,00
Customer Reference 1	50	Alphanum.		The customer reference
Customer Reference 2	50	Alphanum.		The cross barcode reference may be used internally by the BPG in case of exception handling
Customer Reference 3	50	Alphanum.		Cost Center

E.4.2.1.2.3 File footer

Just like the LCI matching file the footer has similar structure. The structure is as follows:

Field	Length	Type	Value	Remarks
End of file	5	Alphanum.	*End*	Fixed information
Number of data records	5	Numeric		Number of data lines

E.4.2.1.3 Analysis of an example

```
*StatusFileNormal*  123456  * V3.0 *00003531
U013232123456012345678100312007071809259800125 0  MAIL  DEINZE
00VERMEULEN                                          0310024,99100124
Afd.Mechelen
U013232123456012345678100312007071809259800125 0  MAIL  DEINZE
00VERMEULEN                                          0310024,99100125
Afd.Mechelen
U013232123456012345678120312007071809253910123 4  MAIL  NEERPELT
00VERMEULEN                                          0310024,99100126
Afd.Brussel
U013232123456012345678130312007071809259600345 5  MAIL  RONSE
00VERMEULEN                                           0310024,99100127
*End*00004
```

U01	32321234560123456781003	20070718	0925	MAIL DEINZE	01	VERMEULEN	031	0024,99	100124		Afd.Mechelen
3	30	8	4	30	2	40	3	7	50	50	50

U01:	The parcel is delivered
32321234560123456781003:	Parcel number
20070718:	The parcel was delivered on the 18th of July of 2007
0925:	The parcel was delivered at 9h25
98001250:	Postal code (9800) and technical identifier (1250) of Deinze
Mail Deinze:	The scan is taken in 'Mail Deinze'
01:	The content type was a 'sending' and not e.g. a collect
VERMEULEN:	Addressee name
031:	VAS code
0024,99:	Amount received in EUR
100124:	Customer Reference 1: the customer reference
	Customer Reference 2: not used here
Afd.Mechelen:	Customer Reference 3: The cost center

E.4.2.2 Matching file – txt

E.4.2.2.1 Naming convention

[auditnr].matching.[yyyymmddhhmmss].txt

- [auditnr]: internal bpost reference
- [yyyymmddhhmmss]: date on which the file is generated

e.g. 0245679.matching.20101009075833.txt

E.4.2.2.2 Structure

E.4.2.2.2.1 File header

A header is used in the file to identify the sender and the file unique number.

Field	Length	Type	Value	Remarks
Start of file	20	Alphanum	*MATCHINGFILE*	Fixed information
Mother account ID code	8	Alphanum	sender identification code	This is the mother account ID code granted by POST
Version number	8	Alphanum	*V 3.0 *	Version number of the file (fixed information)
Sequential number	8	Numeric	Sequential number of the supplied files	This number allows the sender to check whether he received all the files

E.4.2.2.2.2 Data records

Field	Length	Type	Description	Parcel	LCI input
Status	1	Alphanum	1 = reception of data but no physical scan (i.e. Data, no goods) 2 = physical reception but no data received (Goods, no data)	√	√
Parcel number	30	Alphanum	Barcode number		
Customer reference 1	50	Alphanum	Customer reference (only for status = 1)		
Customer reference 2	50	Alphanum	The cross barcode reference (only for status = 1) may be used internally by bpost in case of exception handling		
Date	8	Alphanum	Date of reception of data YYYYMMDD (only for status = 1)		
Time	4	Alphanum	Hour of reception of data HHMM (only for status = 1)		

E.4.2.2.2.3 File footer

Field	Length	Type	Value	Remarks
End of file	5	Alphanumeric	*END*	Fixed information
Number of data lines	5	Numeric		

E.4.2.2.2.4 Example of a Matching file

```
*MATCHINGFILE*      123456  * V3.0 *00000001
13232123456012345678100301                                          100124
200707011334
23232123456012345678110301
13232123456012345678120301                                          100126
200707011335
13232123456012345678130301                                          100127
200707011336
*END*00004
```

Example below is shown without correct number of spaces, to make it easier to read:

```
*MATCHINGFILE*      123456  * V3.0 *00001
132321234560123456781003O       100124                          200707011334
232321234560123456781103O
132321234560123456781203O       100126                          200707011335
132321234560123456781303O       100127                          200707011336
*END*00004
```

the
ean

The type 2 record means that the parcel with number 32321234560123456781103O had a physical scan by the depot/driver but no input file has been sent to insert the data in the bpost system.

E.4.2.3 Feedback File – TXT

E.4.2.3.1 Naming convention

[auditnr].feedback.[yyyymmddhhmmss].txt

- [auditnr]: internal bpost reference
- [yyyymmddhhmmss]: date on which the file is generated

e.g. 0245679.feedback.20101009075833.txt

The different fields are pipe ("|") delimited, and the number of fields may vary depending on the type of line (header, data or footer).

E.4.2.3.1.1 File header

A header is used in the file to identify the sender and the file unique number.

Field	Type	Value	Remarks
Start of file	Alphanum	MatchingFile	Fixed information
Mother account ID code	Alphanum	Senders identification code	This is the parent account ID code granted by bpost
Version number	Alphanum	V 1.0	Version number of the file (fixed value)
Sequential number	Numeric	Sequential number of the supplied file	This number allows the sender to check whether he received all the files

E.4.2.3.1.2 Data records

Field	Type	Description	
Parcel #	Alphanum	Barcode number	
Type	Alphanum	OK	All is OK with the announcement of this parcel
		DUPLICATE	A parcel with the exact same data has already been announced in the past
		WARNING	There was something wrong with the announcement but the announced information will be available in the Track & Trace tools
		ERROR	There was something wrong with the announcement; the announced information will not be available in the Track & Trace tools
Date	Numeric	YYYYMMDD	

Time	Numeric	HHMM
Description	Alphanum	The exact description of the issue

E.4.2.3.1.3 File footer

Field	Type	Value	Remarks
End of file	Alphanumeric	End	Fixed information
Number of data lines	Numeric		

E.4.2.3.1.4 Example of a Feedback file

```
FeedbackFileNormal|110155|V1.0|00000011
32323030310000034895305O|DUPLICATE|20150408|0737|Item was already announced on 07/04/2015 16:03:02.
End|00001
```

E.4.3 XML

E.4.3.1 Status File – XML

E.4.3.1.1 Structure

<statusFile> element tag

Element	Allowed Values	Description	Example
accountID			123456
items			

<item> element tag

Attribute	Allowed Values	Description	Example
contentType			
barcode		Item barcode	

Element	Allowed Values	Description	Example
itemdetail			
status			

<itemdetail> element tag

Element	Allowed Values	Description	Example
addressee			
VAS			
weight			
custRef1			
custRef2			
custRef3			
custRef4			
custRef5			
deliveryWindow			

characteristics			
trackingId			
pickupPoint			

<addressee> element tag

Element	Allowed Values	Description	Example
name			
department			
contactName			
place			
street			
houseNumber			
boxNumber			
postalCode			
city			
country			

< deliveryWindow> element tag

Only provided if the delivery window is known.

Element	Allowed Values	Description	Example
plannedDeliveryDateWindowStart			
plannedDeliveryDateWindowEnd			

<characteristics> element tag

Attribute	Allowed Values	Description	Example
name			
number			

<trackingId> element tag

Attribute	Allowed Values	Description	Example
value		Trackingcode that will be used to communicate with customers. URL: **http://track.bpost.be/id/**<TrackingId>	

Element	Allowed Values	Description	Example
	No child elements		

<PickupPoint> element tag

Attribute	Allowed Values	Description	Example
value		Information about the post point or post office where the parcel is located.	

Element	Allowed Values	Description	Example

id			
name			
street			
houseNumber			
postalCode			
city			

<statuses> element tag

Element	Allowed Values	Description	Example
status			

<status> element tag

Attribute	**Allowed Values**	**Description**	**Example**
value		Status code	

Element	**Allowed Values**	**Description**	**Example**
date			
location			

E.4.3.1.2 Example

```
<?xml version="1.0" encoding="ISO-8859-1" ?>
<statusFile version="3.0" auditNr="12" type="Normal" xmlns="http://schema.post.be/lci-out/status/v1/">
	<accountID>123456</accountID>
	<items>
		<item contentType="" barcode=" 32321234560000000522036">
			<itemdetail>
				<addressee>
					<name>bpost - bpack</name>
					<department>Business Solutions</department>
					<contactName />
					<place />
					<street>Muntcentrum</street>
					<houseNumber>1</houseNumber>
					<boxNumber/>
					<postalCode>1000</postalCode>
					<city>BRUSSEL</city>
					<country>BE</country>
				</addressee>
				<VAS />
				<weight>100</weight>
				<custRef1 />
				<custRef2 />
				<custRef3 />
				<characteristics>
					<characteristic name="Signature" number="300" />
				</characteristics>
			</itemdetail>
			<statuses>
				<status value="L00">
					<date>2013-01-07T15:18:02</date>
					<location> 10001031 BRUXELLES VILLE MAIL</location>
					<addressName>JANSSENS M.</addressName>
```

```
                                    <VAS />
                                    <CODamount>0</CODamount>
                                    <custRef1 />
                                    <custRef2 />
                                    <custRef3 />
                                </status>
                            </statuses>
                            <trackingId>gqwxvsyt</trackingId>
                            <pickupPoint>
                                <id>805140</id>
                                <name>LIBRAIRIE WILSON</name>
                                <streetName>RUE WASHINGTON / WASHINGTONSTRAAT</streetName>
                                <houseNumber>66</houseNumber>
                                <postalCode>1050</postalCode>
                                <city>IXELLES / ELSENE</city>
                            </pickupPoint>
                        </item>
                    </items>
</statusFile>
```

E.4.3.2 Matching File – XML

E.4.3.2.1 Structure

< matchingFile > element tag

Element	Allowed Values	Description	Example
accountID	6-digit account id		
items			

<item> element tag

Element	Allowed Values	Description	Example
status	1 = Received and Scanned 2 = Data, but no parcel		
parcelNumber			
custRef1	Customer Reference		
custRef2	Cost Center		
date	YYYY-MM-DD HH:MM:SS		2013-01-07T09:15:04

E.4.3.2.2 Example

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<matchingFile xmlns="http://schema.post.be/lci-out/matching/v1/" version="3.0" auditNr="25">
	<accountID>123456</accountID>
	<items>
		<item>
			<status>2</status>
			<parcelNumber>323212345600000000522036</parcelNumber>
		</item>
		<item>
			<status>1</status>
			<parcelNumber>323212345600000011111030</parcelNumber>
			<custRef1></custRef1>
			<custRef2></custRef2>
			<date>2013-01-07T09:15:04</date>
		</item>
	</items>
</matchingFile>
```

E.4.3.1 Feedback File – XML

E.4.3.1.1 Structure

< feedbackFile> element tag

Element	Allowed Values	Description	Example
accountID	6-digit account id		
itemAnnouncements			

< itemAnnouncements> element tag

Element	Property / Allowed Values	Description	Example
itemAnnouncement	barcode	Parcel number	
status			
date	YYYY-MM-DD HH:MM:SS		2013-01-07T09:15:04
messages			

< messages > element tag *(multiple child tags are allowed)*

Element	Property	Allowed Values	Example
message	type	OK	All is OK with the announcement of this parcel
		DUPLICATE	A parcel with the exact same data has already been announced in the past
		WARNING	There was something wrong with the announcement but the announced information will be available in the Track & Trace tools
		ERROR	There was something wrong with the announcement; the announced information will not be available in the Track & Trace tools
value of message	Exact description of the issue		

E.4.3.1.2 Example

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<feedbackFile xmlns="http://schema.post.be/lci-out/feedback/v1/" version="1.0" auditNr="12">
  <accountID>110155</accountID>
        <itemAnnouncements>
                <itemAnnouncement barcode="CD123456026BE">
                        <status>ERROR</status>
                        <date>2015-04-08T07:37:15</date>
                        <messages>
                                <message type="WARNING">The number of characteristics is different than the characteristics number of the item. expected: 8, got: 6</message>
                                <message type="WARNING">Weight was zero, empty or invalid (value: &amp;apos;0000000&amp;apos;) in the announcement. Using default weight of 1000 grams.</message>
                        </messages>
                </itemAnnouncement>
        </itemAnnouncements>
</feedbackFile>
```

E.4.4 CSV

E.4.4.1 Status File – CSV

E.4.4.1.1 Naming convention

[auditnr].status.[yyyymmddhhmmss].csv

- [auditnr]: internal bpost reference
- [yyyymmddhhmmss]: date on which the file is generated

e.g. 0245678.status.20101009075833.csv

The different fields are pipe ("|") delimited, and the number of fields may vary depending on the type of line (header, data or footer).

E.4.4.1.2 Structure

E.4.4.1.2.1 File header

Field	Length	Type	Value	Remarks
Start of file	20	Alphanum	StatusFileNormal	Fixed information
Receiver ID	8	Alphanum	Senders identification code	This is the mother account ID code granted by POST
Version number	8	Alphanum	V 3.0	Version number of the file (fixed information)
Audit number	8	Numeric	Sequential number of the supplied files	This number allows the sender to check whether he received all the files

E.4.4.1.2.2 Data records

Field	Length	Type	Value	Remarks
Status type code	3	Alphanum.	xxx	See table in attachment
Parcel number	30	Alphanum.		
Date	8	Alphanum.		YYYYMMDD
Time	4	Alphanum.		HHMM
Location	30	Alphanum.		Place of scanning consisting of UNITCEP (=postal code [4] & technical identifier [4]) and location name
Content Type	3	Numeric		Sending (00) or Collect (01)
Addressee Name	40	Alphanum		
VAS code	3	Numeric		See list in attachment
Amount paid by the addressee in EUR	7	Alphanum.		Format: 0000,00
Customer Reference 1	50	Alphanum.		The customer reference
Customer Reference 2	50	Alphanum.		The cross barcode reference may be used internally by the BPG in case of exception handling
Customer Reference 3	50	Alphanum.		Cost Center

E.4.4.1.2.3 File footer

Field	Length	Type	Value	Remarks
End of file	5	Alphanumeric	END	Fixed information
Number of data lines	5	Numeric		

E.4.4.1.3 Example of CSV Status file

```
StatusFileNormal|999586|V3.0|00000545
L00|32329999900000052988031|20111118|0808|40000395 LIEGE RIVE GAUCHE MAIL||BENOIT WALTREGNY|100,30|Ref38||Dep Affligem|
End|00043
```

E.4.4.2 Matching File – CSV

E.4.4.2.1 Naming convention

[auditnr].matching.[yyyymmddhhmmss].csv

- [auditnr]: internal bpost reference
- [yyyymmddhhmmss]: date on which the file is generated

e.g. 0245679.matching.20101009075833.csv

The different fields are pipe ("|") delimited, and the number of fields may vary depending on the type of line (header, data or footer).

E.4.4.2.1.1 File header

A header is used in the file to identifier the sender and the file unique number.

Field	Length	Type	Value	Remarks
Start of file	20	Alphanum	MatchingFile	Fixed information
Mother account ID code	8	Alphanum	Senders identification code	This is the mother account ID code granted by POST
Version number	8	Alphanum	V 3.0	Version number of the file (fixed information)
Sequential number	8	Numeric	Sequential number of the supplied files	This number allows the sender to check whether he received all the files

E.4.4.2.1.2 Data records

Field	Length	Type	Description	Parcel	LCI input
Status	1	Alphanum	1 = reception of data but no physical scan 2 = physical reception but no data received	 √	√
Parcel number	30	Alphanum	Barcode number		

Customer reference 1	50	Alphanum	Customer reference (only for status = 1)
Customer reference 2	50	Alphanum	The cross barcode reference (only for status = 1) may be used internally by bpost in case of exception handling
Date	8	Alphanum	Date of reception of data YYYYMMDD (only for status = 1)
Time	4	Alphanum	Hour of reception of data HHMM (only for status = 1)

E.4.4.2.1.3 File footer

Field	Length	Type	Value	Remarks
End of file	5	Alphanumeric	END	Fixed information
Number of data lines	5	Numeric		

E.4.4.2.1.4 Example of a Matching file

```
MatchingFile|003388|V3.0|00000960
2|32329999990000005298803 1||||
End|00001
```

E.5 Track & Trace via URL

In order to facilitate visibility you may want to pass the tracking URL to your receiver. This URL can also be useful to link your order reference or assigned barcode to our Track & Trace web page.

BASE URL: https://track.bpost.cloud/btr/web/#/home?

After the BASE URL, use following parameters:

- itemCode=
- &postalCode=
- &lang=

ItemCode: barcode or announced customer reference / order reference
postalCode: postal code of the receiver
lang : language (EN or NL or FR)

E.5.1 Item Barcode

Example:
https://track.bpost.cloud/btr/web/#/search?itemCode=3232999010000000000001030&postalCode=1000&lang=EN

E.5.2 Customer Reference / Order Reference

Remark: please note that in this scenario, the order or customer reference must have been announced in the data exchange towards bpost. If not, there is no link between the actual parcel and this reference.

Example:
https://track.bpost.cloud/btr/web/#/search?itemCode=customer_referenceabc123&postalCode=1000&lang=EN

E.6 API & EDI status description

E.6.1 In a nutshell

In EDI & API for track & trace, bpost supplies specific codes that correspond to different track & trace events. The exhaustive list of these can be found hereunder. Nevertheless, depending on the network and the type of product, it may be that some scans occur very rarely, or never.

In order to better illustrate the Track & Trace process, the most common scan sequences (for domestic parcels) are depicted in the last point of this section.

E.6.2 Status list

Hereby an example of our statuses.

Status code	Description
A01	HandedIn - back_office
A02	HandedIn - collect
A03	HandedIn - corner
A04	HandedIn - drop_off_customer
A05	HandedIn - office_of_arrival
A06	HandedIn - vas_factory
A07	QualityChecked - check_masspost
A08	HandedIn - foreign_office
A09	DroppedRetourAtShop - dropped_retour_in_shop
B00	AddressNotFound - addressee_unknown
B01	AddressNotFound - address_incomplete
B02	AddressNotFound - item_refused_not_ordered
B03	DeliveryNotPossible - addressee_does_not_receive_mail_at_address
B04	RefusedByReceiverInShop - refused
B04	ItemRefused - item_refused
B05	ItemRefused - item_refused_damaged
B06	AddressNotFound - other
B07	ItemRefused - payment_refused
B08	DeliveryNotPossible - importation_restricted
B09	AddressNotFound - destination_unknown
B10	DeliveryNotPossible - addressee_moved
B11	NotPickedUpByReceiverInShop - not_picked_up
B11	ItemUnclaimed - item_unclaimed
B11	ItemUnclaimed - item_unclaimed_special
B12	DeliveryNotPossible - item_damaged
B13	Undelivered - delivery-not-possible addressee_absent
B18	Undelivered- undeliverable return to sender
B23	Undelivered – Pickup failed
B24	Undelivered – Pickup cancelled
B28	Undelivered-return to sender- pickup point closed after the second attempt
C00	InExceptionHandling - departure_export_hub
I03	InExceptionHandling - wrong_label

I10	InExceptionHandling – sorting error
I12	InExceptionHandling - item_damaged
I13	Reproduced - barcode_not_readable
I18	InExceptionHandling – transferred to partner DHL
I19	InExceptionHandling – delivery not possible in parcel locker
I58	DistributedNormally - forced_nb_sp
I61	InExceptionHandling - barcode
I66	InExceptionHandling - force_majeure
I67	InExceptionHandling - distribution_postponed
I68	InExceptionHandling - item_temporarily_blocked
I68	InExceptionHandling - item_over_weight
I72	InExceptionHandling - item_packaging_repaired
I88	InExceptionHandling - item_no_content
L00	AtDistributionOffice - out_for_distribution
L00	BoundForRetail - out_for_distribution
L00	BoundToRound - out_for_distribution
L00	BoundToRound - out_for_deposit
L00	BoundToRound - stopped_cod_bank_account_missing
L00	BoundToRound - stopped_cod_amount_missing
L00	BoundToRound - stopped_cod_bank_account_and_amount_missing
L00	BoundToRound - stopped_pension_delivery_date_not_reached
L00	BoundToRound - stopped_pension_delivery_date_missing
N01	AddressNotFound - address_incorrect
N02	InTransfer - address_incorrect
N03	AddressNotFound - addressee_cannot_be_located
N03	AddressNotFound - addressee_cannot_be_located_special
N03	AddressNotFound - addressee_incorrect_special
N04	InTransfer - addressee_cannot_be_located
N05	AwaitingRepresentationNextDay - addressee_absent
N06	AwaitingRepresentationNextDay - addressee_absent_warehouse
N07	RoutedToPickupPoint - addressee_absent_message_left
N07	RoutedToPickupPoint - addressee_absent
N07	RoutedToPickupPoint - Neighbor_inaccessible
N07	RoutedToPickupPoint – Neighbor not at home
N07	RoutedToPickupPoint – Neighbor refused the parcel
N07	RoutedToPickupPoint – Not possible to deliver to neighbor for unknown reason
N07	RoutedToPickupPoint – Neighbour house is too far
N07	RoutedToPickupPoint – The safeplace is not accessible
N07	RoutedToPickupPoint – The safeplace is not found
N07	RoutedToPickupPoint – The safeplace is too far
N07	RoutedToPickupPoint – Weather conditions don't allow delivery in safe place
N08	AwaitingInstructionFromAddressee - company_temporarily_closed
N10	AwaitingInstructionFromAddressee - addressee_cannot_be_located
N11	AwaitingInstructionFromSender - prohibited_articles
N12	AwaitingRepresentationNextDay - addressee_agreed
N13	AwaitingRepresentationNextDay - missed_delivery_delay
N13	AwaitingRepresentationNextDay – delivery not not on my round

N14	InTransfer - unspecified
N16	AwaitingRepresentationNextDay - unknown_reason
N16	AwaitingRepresentationNextDay - obligatory_second_presentation
N16	AwaitingRepresentationNextDay - missed_delivery_several_reasons
N16	AwaitingRepresentationNextDay - Neighbor_not at home
N16	AwaitingRepresentationNextDay - Neighbor_inaccessible
N16	AwaitingRepresentationNextDay – Neighbor has refused the parcel
N16	AwaitingRepresentationNextDay – Not possible to deliver to neighbour for unknown reason
N16	AwaitingRepresentationNextDay – Neighbour house is too far
N16	AwaitingRepresentationNextDay – The safeplace is not accessible
N16	AwaitingRepresentationNextDay – The safeplace is not found
N16	AwaitingRepresentationNextDay – The safeplace is too far
N16	AwaitingRepresentationNextDay – Weather conditions don't allow delivery in safe place
N28	AwaitingRepresentationNextDay – Weekly closing day or special closing day
N32	AwaitingRepresentationNextDay – Interruption- force majeure
N74	AwaitingPickupByClient - deposit_special_package
N74	AwaitingPickupByClientAtParcelDepot - deposit_special_package
N91	DeliveryPostponed - Automatic_replanification
N92	RoutedToPickupPoint – addressee has no required amount – No exact money
N93	AwaitingRepresentationNextDay - Address inaccessible
N94	AwaitingRepresentationNextDay - Address not found
N95	AwaitingRepresentationNextDay - Parcel machine inaccessible
N95	AwaitingRepresentationNextDay - No locker available
N95	AwaitingRepresentationNextDay - Parcel machine out-of-order
N96	AwaitingRepresentationNextDay – Pugo point closed
N96	AwaitingRepresentationNextDay - Pugo point inaccessible
N96	AwaitingRepresentationNextDay – PuGo Point not on my round
N96	Undelivered unsuccessful-attempt – Pugo point refused parcel
P00	InBag - redirected
P00	RoutedToPickupPoint - redirected
P00	HandedIn - redirected
R00	AtDistributionOffice - checkpoint
R00	ReceivedByPartner - null
R01	InTransfer - addressee_moved_address_changed
R02	InTransfer - unknown
R03	InTransfer - successful
R04	InTransfer - unsuccessful
R05	InTransfer - ready_for_rerouting
R11	InTransfer - disposed
R12	InTransfer - return_on_palette
R13	InTransfer - pickup_by_customer
S00	DistributedAfterBTS - control
S00	DistributedAfterBTS - regular
S00	DistributedAfterBTS - after_return
S02	DistributedAfterBTS - by_third_party
S03	DistributedAfterBTS - at_neighbours
S04	DistributedAfterBTS - assumed_delivered

S05	DistributedAfterBTS - damaged
T00	ArrivalAtOutwardOE - outbound
T00	Sorted - sorted_out
T00	Sorted - UD10_sorting
T00	Sorted - UD10_distribution_problem
T00	Sorted - remain_sorting_treated
T00	Sorted - CERA
T00	InTransit - check_by_carrier
T03	DistributedToShopChecked - control
T03	DistributedToShopNormally - regular
T03	DeliveredToReceiverInShop - control
T03	RefusedByReceiverInShop - control
T03	RefusedByReceiverInShop - regular
T03	NotPickedUpByReceiverInShop - control
T03	NotPickedUpByReceiverInShop - regular
T03	AwaitingPickupByClient - drop_off_postman
T03	RedeliveryRequestedWhileAwaitingPickupByClient - drop_off_postman
T08	Relabeled by Landmark
T22	Sorted – scanned abroad
U01	DistributedChecked - control
U01	DistributedNormally - regular
U01	DistributedNormally - in_mailbox
U01	DistributedNormally - in_person
U01	DeliveredToReceiverInShop - regular
U02	DistributedNormally - by_third_party
U03	DistributedNormally - at_neighbours
U04	DistributedNormally - assumed_delivered
U05	DistributedNormally - damaged
U06	DistributedNormally - at_safeplace
U07	DistributedNormally – forced by postman at neighbours
U08	DistributedNormally – forced by postman at safeplace
Z01	Announcement received

E.6.3 Scan sequences

The most common scan sequences are described hereunder, in order to facilitate the integration within the sender system.

The same sequences are described, first under a textual format, then in flowcharts.

E.6.3.1 Text descriptions

E.6.3.1.1 Distribution at first delivery attempt

Status Code	Description
T00	Parcel has been sorted
L00	Parcel is out for delivery

U01	Parcel has been delivered

E.6.3.1.2 Distribution in pick-up point after first delivery attempt

Status Code	Description
T00	Parcel has been sorted
L00	Parcel is out for delivery
N07	Customer not at home – message left in the letter box
T03	Parcel arrived in post office/postal point
U01	Parcel has been delivered

E.6.3.1.3 Refused by the customer during first delivery attempt

Status Code	Description
T00	Parcel has been sorted
L00	Parcel is out for delivery
B04	Customer refused parcel
T00	Parcel has been sorted
L00	Parcel is out for delivery (on his way back to sender)
S00	Parcel is delivered to sender

E.6.3.1.4 Not collected 14 days after first unsuccessful delivery attempt

Status Code	Description
T00	Parcel has been sorted
L00	Parcel is out for delivery
N07	Customer not at home – message left in the letter box
T03	Parcel arrived in post office/postal point
B11	Parcel has not been collected in the post office/postal point
T00	Parcel has been sorted
L00	Parcel is out for delivery (on his way back to sender)
S00	Parcel is delivered to sender

E.6.3.1.5 Back to sender because of Incorrect address

Status Code	Description
T00	Parcel has been sorted
L00	Parcel is out for delivery
B03	Not Delivered – Wrong Address
T00	Parcel has been sorted
L00	Parcel is out for delivery (on his way back to sender)
S00	Parcel is delivered to sender

E.6.3.1.6 bpack@bpost: normal delivery after arrival at pick-up point

Status Code	Description
T00	Parcel has been sorted
L00	Parcel is out for delivery
T03	Parcel arrived in post office/postal point
U01	Parcel has been delivered

E.6.3.1.7 bpack@bpost: not collected 14 days after arrival at pick-up point

Status Code	Description
T00	Parcel has been sorted
L00	Parcel is out for delivery
T03	Parcel arrived in post office/postal point
B11	Parcel has not been collected in the post office/postal point
T00	Parcel has been sorted
L00	Parcel is out for delivery (on his way back to sender)

S00	Parcel is delivered to sender

E.6.3.1.8 Parcels depot: successful delivery

Status Code	Description
T00	Parcel has been sorted
L00	Parcel is out for delivery
N74	Parcel is delivered to automate
U01	Parcel has been delivered

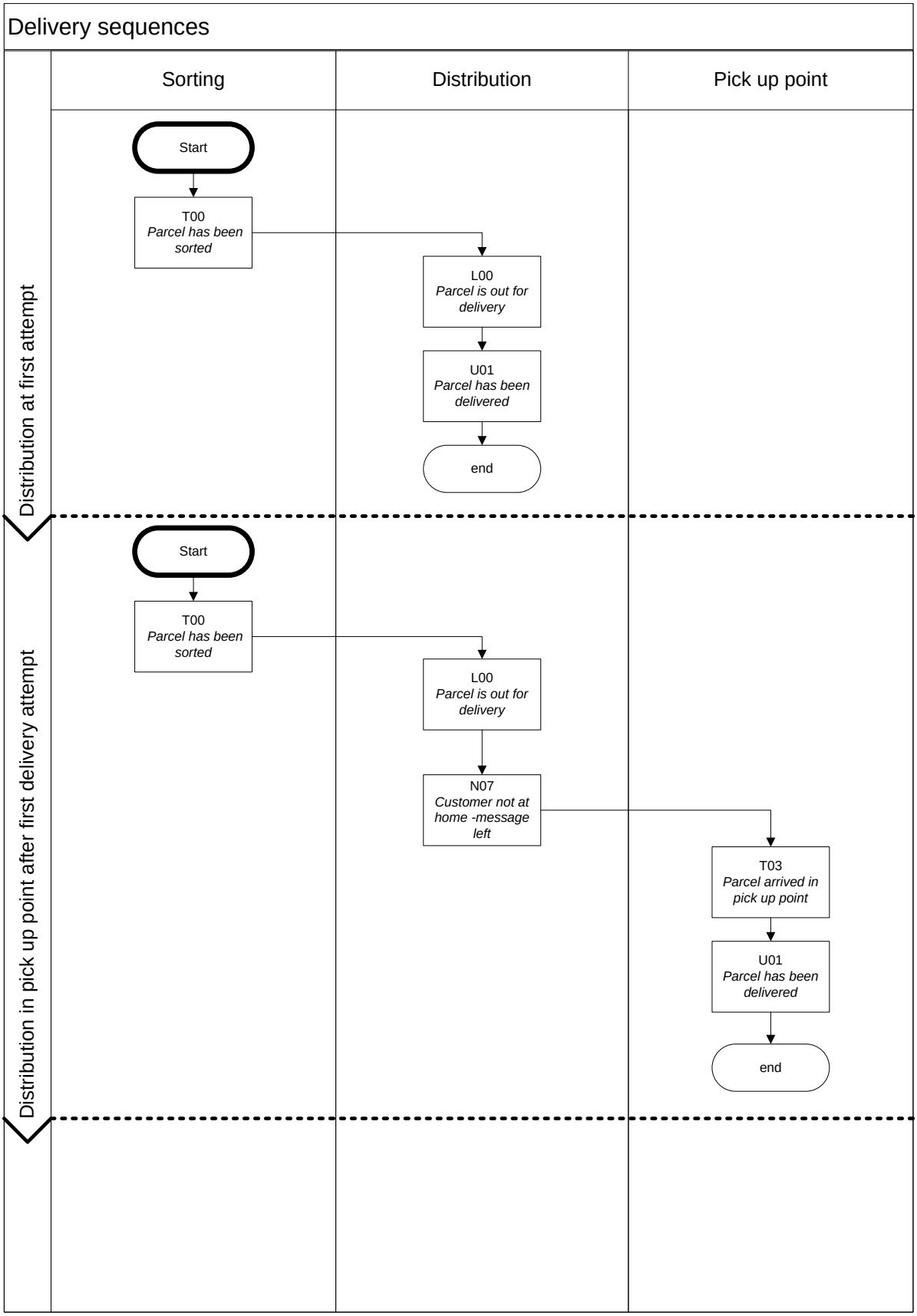
E.6.3.1.9 Parcels depot: incorrect RC code

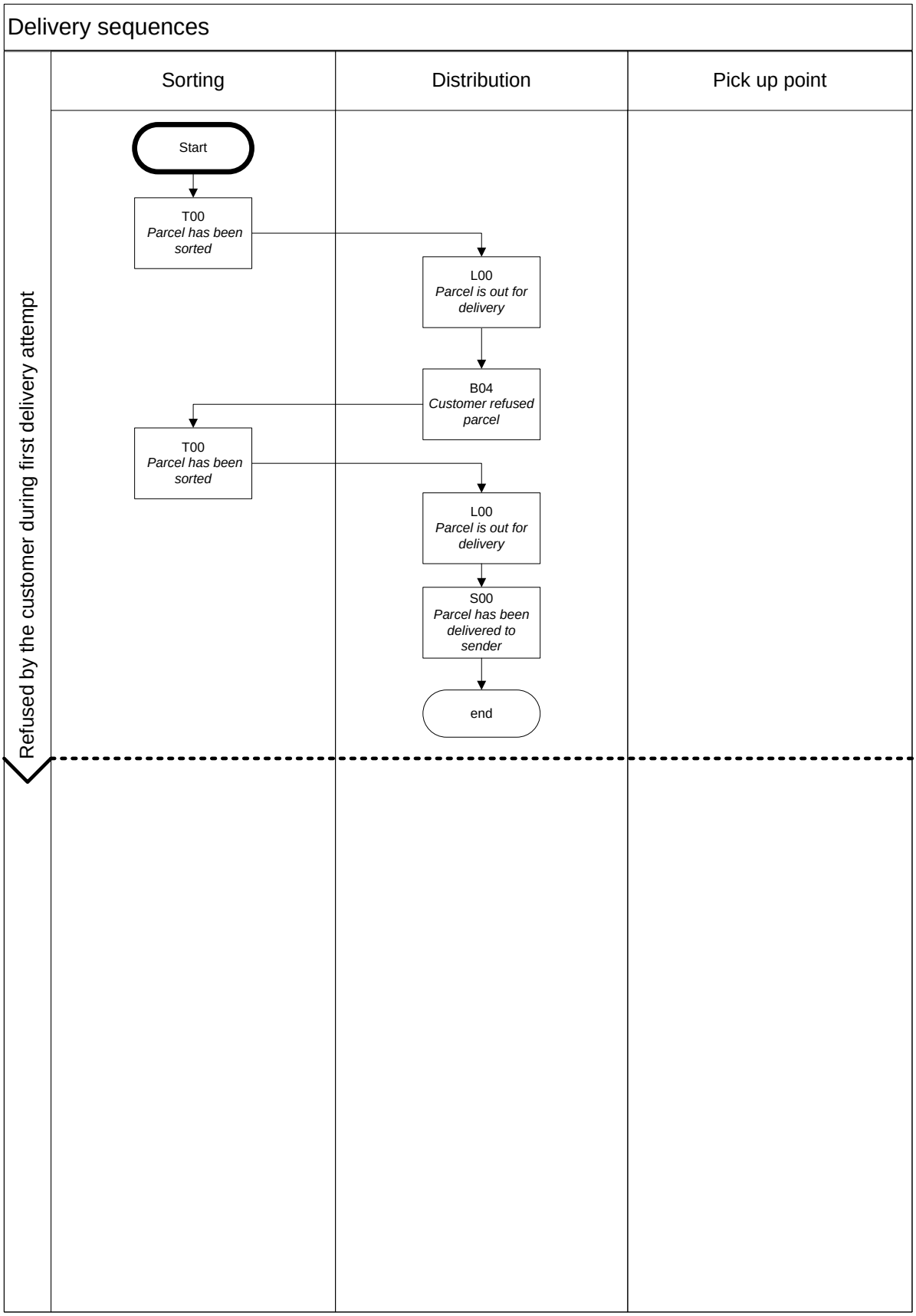
Status Code	Description
T00	Parcel has been sorted
L00	Parcel is out for delivery
N03	Not delivered – incorrect member ID
T00	Parcel has been sorted
L00	Parcel is out for delivery (on his way back to sender)
S00	Parcel is delivered to sender

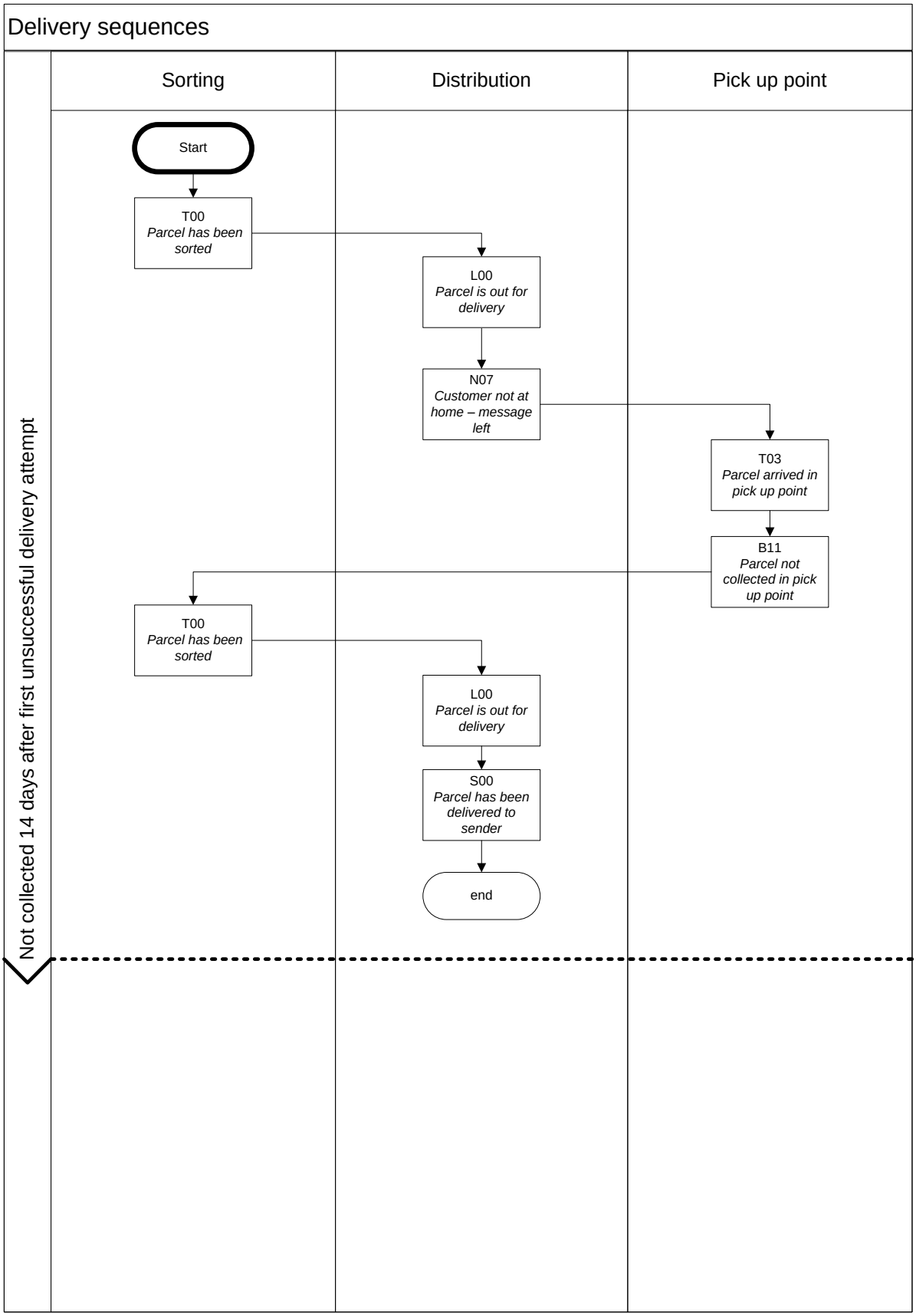
E.6.3.1.10 Parcels depot: incorrect RC code

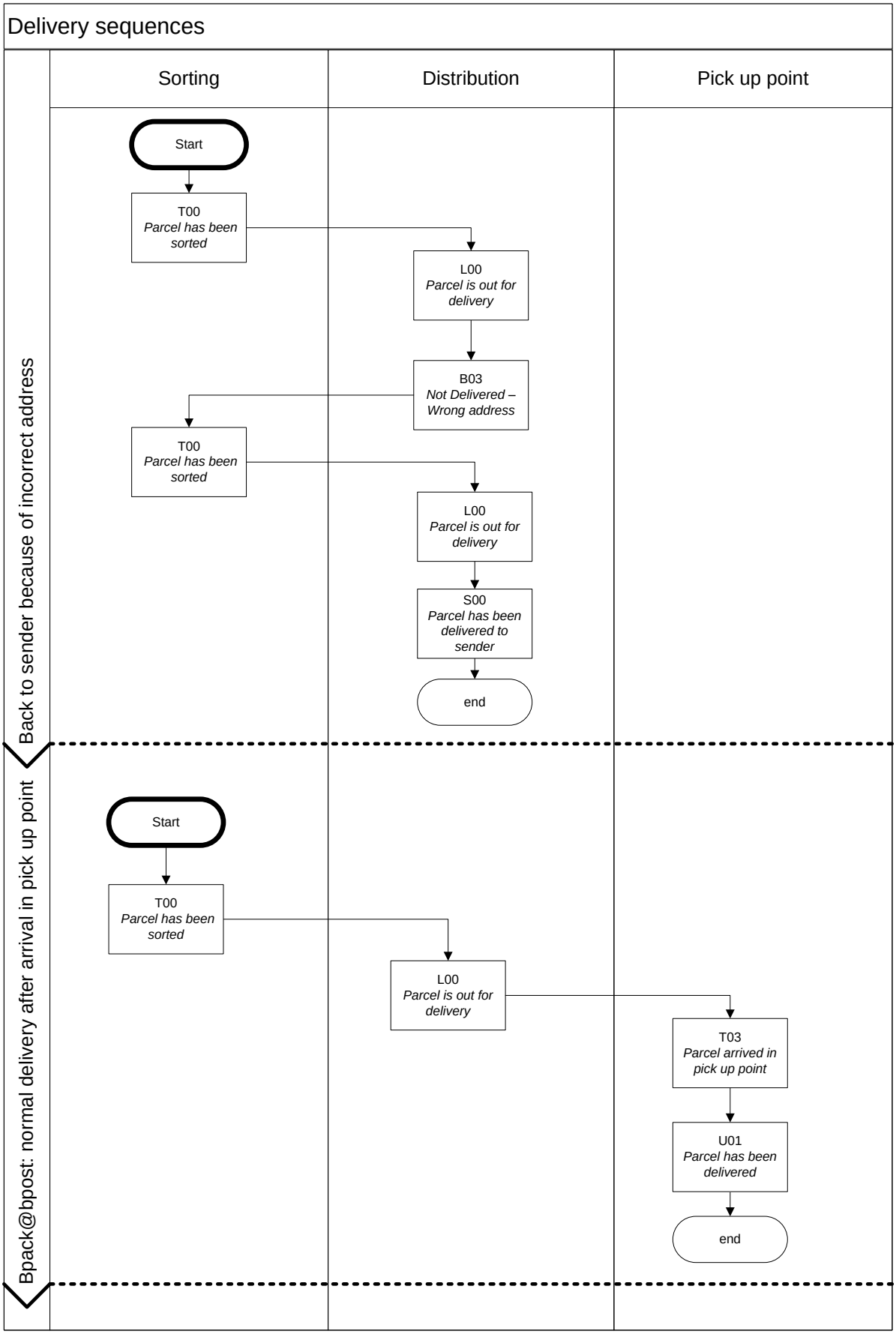
Status Code	Description
T00	Parcel has been sorted
L00	Parcel is out for delivery
N74	Parcel Delivered to automate
B11	Not collected by customer
T00	Parcel has been sorted
L00	Parcel is out for delivery (on his way back to sender)
S00	Parcel is delivered to sender

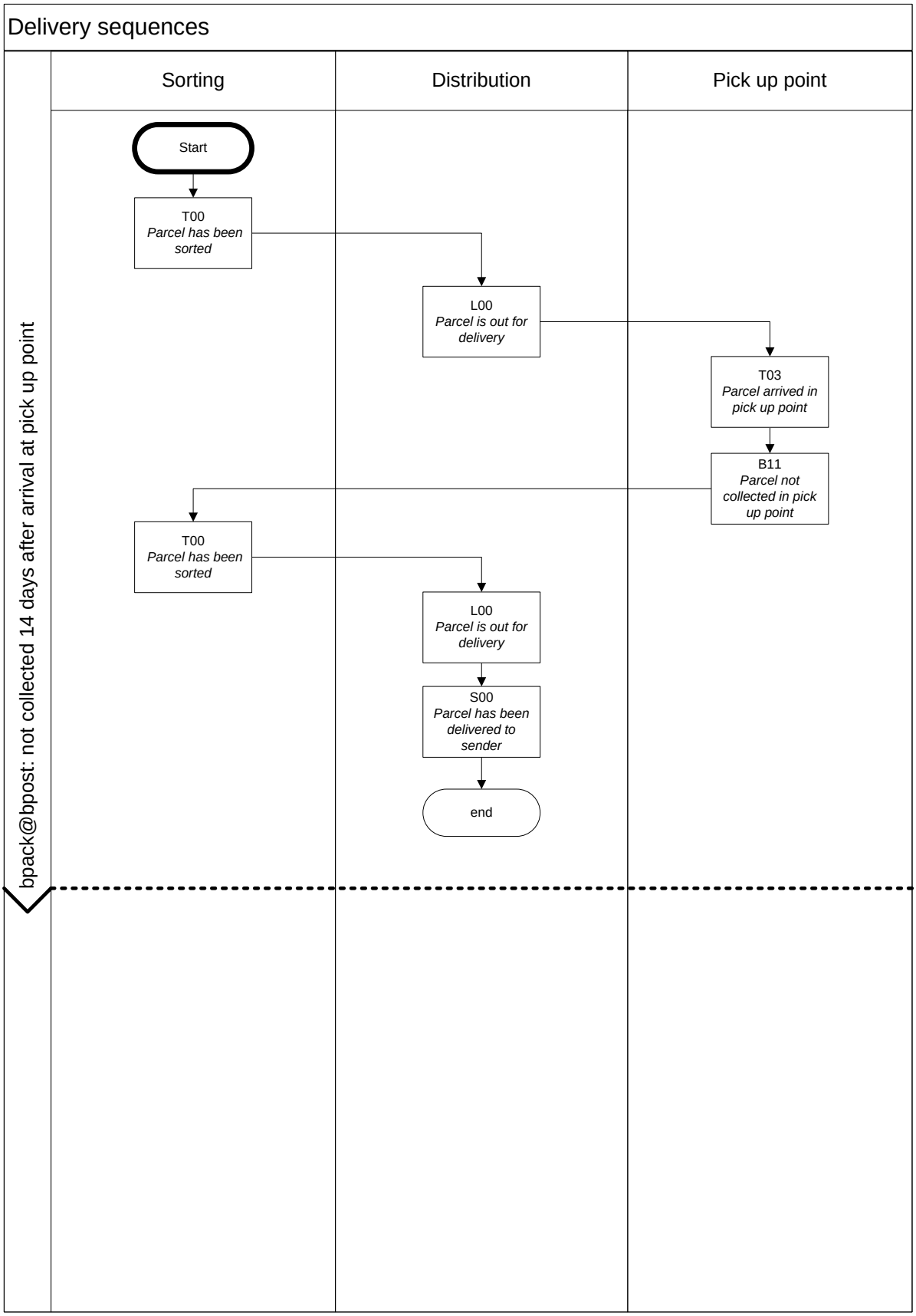
E.6.3.2 Visuals

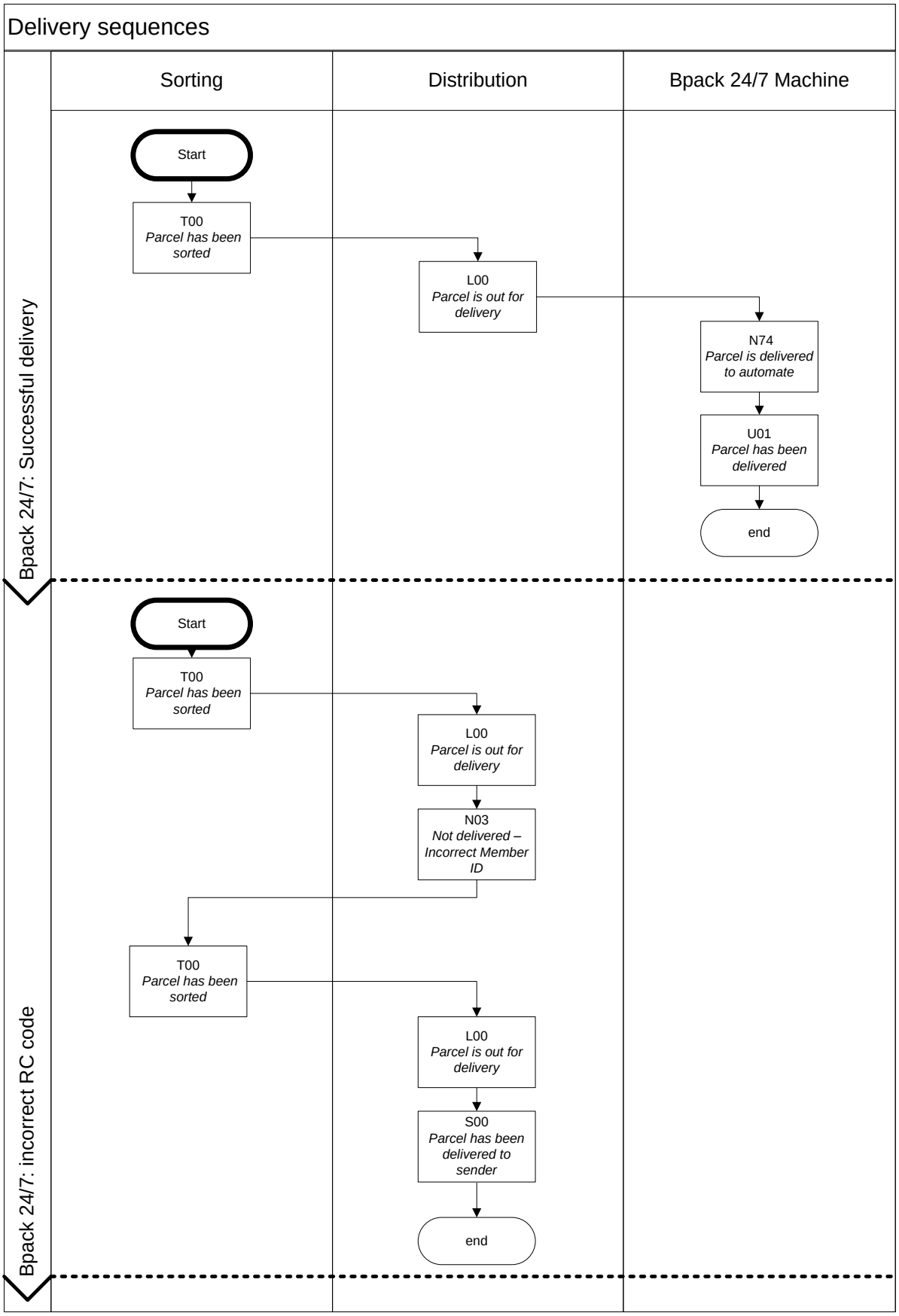


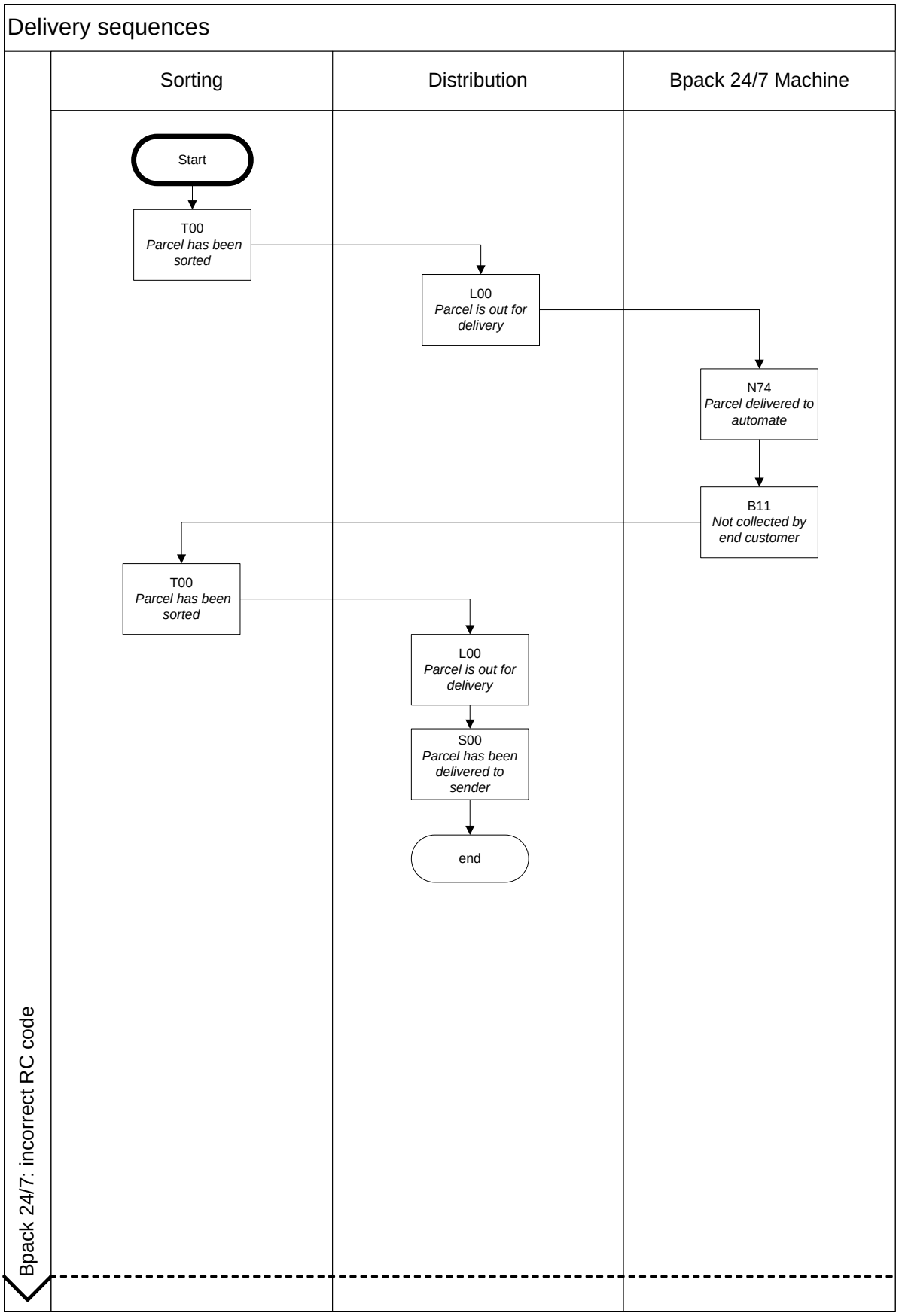

Delivery sequences
Sorting
Distribution
Pick up point
Refused by the customer during first delivery attempt
Start
T00
Parcel has been sorted
L00
Parcel is out for delivery
B04
Customer refused parcel
T00
Parcel has been sorted
L00
Parcel is out for delivery
S00
Parcel has been delivered to sender
end

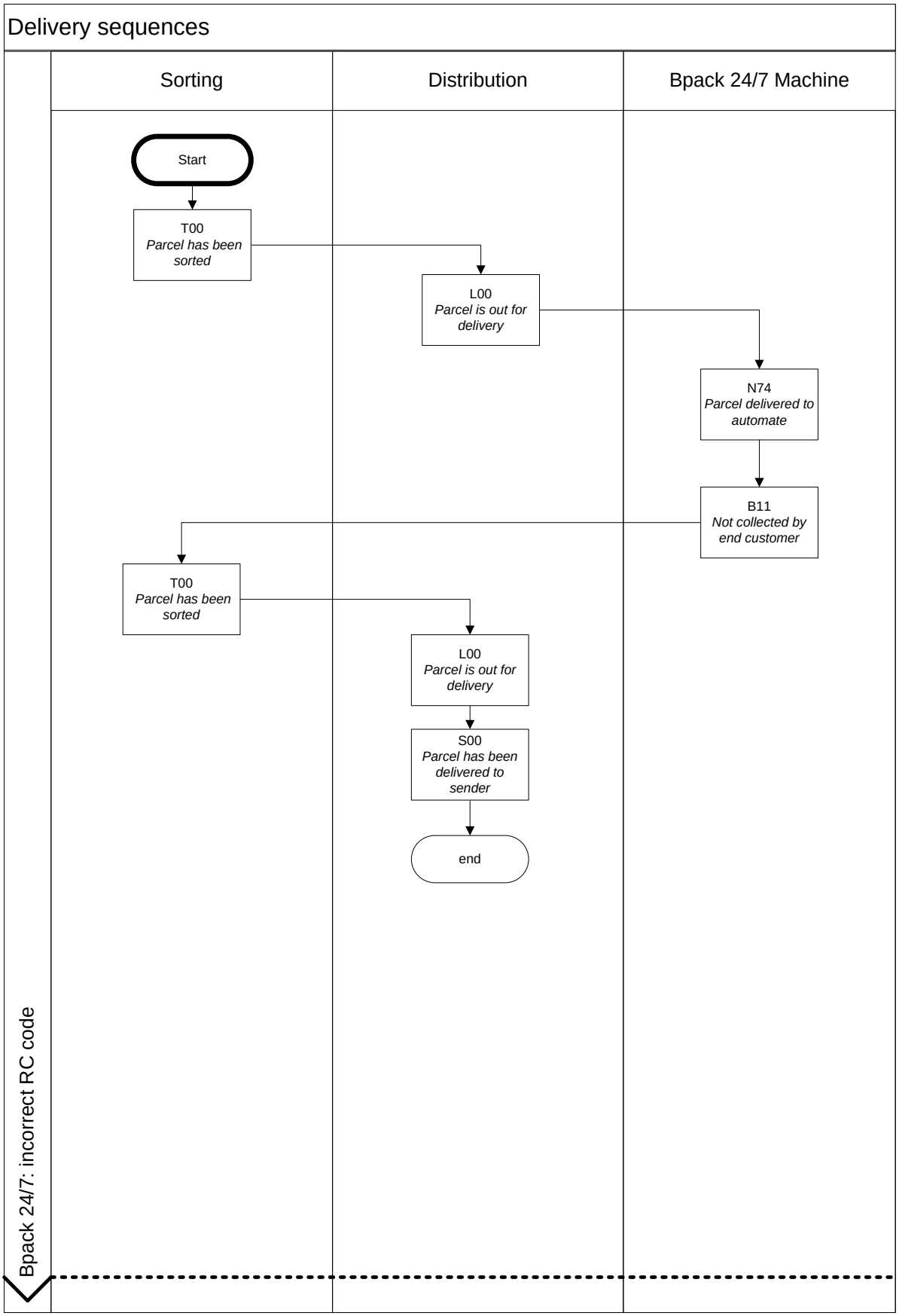

Delivery sequences
Sorting
Distribution
Pick up point
Start
T00
Parcel has been sorted
L00
Parcel is out for delivery
N07
Customer not at home – message left
T03
Parcel arrived in pick up point
B11
Parcel not collected in pick up point
T00
Parcel has been sorted
L00
Parcel is out for delivery
S00
Parcel has been delivered to sender
end
Not collected 14 days after first unsuccessful delivery attempt


Delivery sequences
Sorting
Distribution
Pick up point
Back to sender because of incorrect address
Start
T00
Parcel has been sorted
L00
Parcel is out for delivery
B03
Not Delivered – Wrong address
T00
Parcel has been sorted
L00
Parcel is out for delivery
S00
Parcel has been delivered to sender
end
Bpack@bpost: normal delivery after arrival in pick up point
Start
T00
Parcel has been sorted
L00
Parcel is out for delivery
T03
Parcel arrived in pick up point
U01
Parcel has been delivered
end


Delivery sequences
Sorting
Distribution
Pick up point
bpack@bpost: not collected 14 days after arrival at pick up point
Start
T00
Parcel has been sorted
L00
Parcel is out for delivery
T03
Parcel arrived in pick up point
B11
Parcel not collected in pick up point
T00
Parcel has been sorted
L00
Parcel is out for delivery
S00
Parcel has been delivered to sender
end


Delivery sequences
Sorting
Distribution
Bpack 24/7 Machine
Bpack 24/7: Successful delivery
Start
T00
Parcel has been sorted
L00
Parcel is out for delivery
N74
Parcel is delivered to automate
U01
Parcel has been delivered
end
Bpack 24/7: incorrect RC code
Start
T00
Parcel has been sorted
L00
Parcel is out for delivery
N03
Not delivered – Incorrect Member ID
T00
Parcel has been sorted
L00
Parcel is out for delivery
S00
Parcel has been delivered to sender
end


Delivery sequences
Sorting
Distribution
Bpack 24/7 Machine
Start
T00
Parcel has been sorted
L00
Parcel is out for delivery
N74
Parcel delivered to automate
B11
Not collected by end customer
T00
Parcel has been sorted
L00
Parcel is out for delivery
S00
Parcel has been delivered to sender
end
Bpack 24/7: incorrect RC code


Delivery sequences
Sorting
Distribution
Bpack 24/7 Machine
Start
T00
Parcel has been sorted
L00
Parcel is out for delivery
N74
Parcel delivered to automate
B11
Not collected by end customer
T00
Parcel has been sorted
L00
Parcel is out for delivery
S00
Parcel has been delivered to sender
end
Bpack 24/7: incorrect RC code

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F. ANNEXES

F.1 COORDINATES SUPPORT DEPARTMENT

F.1.1 Helpdesk

How can we help you today? Find answer to most of your questions and contact us by creating a ticket via **http://bpost.freshdesk.com/**.

F.1.2 Contact

Alternatively, should you not have found the answer to your question, you can e-mail us at **esolutions@bpost.be**.

F.2 BARCODES DOMESTIC

F.2.1 Table of ASCII Code 128 values

Code 128 value	Subset A	Subset B	Subset C	ASCII	Pattern B W B W B W
0	SP	SP	0	0032	2 1 2 2 2 2
1	!	!	1	0033	2 2 2 1 2 2
2	"	"	2	0034	2 2 2 2 2 1
3	#	#	3	0035	1 2 1 2 2 3
4	$	$	4	0036	1 2 1 3 2 2
5	%	%	5	0037	1 3 1 2 2 2
6	&	&	6	0038	1 2 2 2 1 3
7	'	'	7	0039	1 2 2 3 1 2
8	(	(	8	0040	1 3 2 2 1 2
9	)	)	9	0041	2 2 1 2 1 3
10	*	*	10	0042	2 2 1 3 1 2
11	+	+	11	0043	2 3 1 2 1 2
12	,	,	12	0044	1 1 2 2 3 2
13	-	-	13	0045	1 2 2 1 3 2
14	.	.	14	0046	1 2 2 2 3 1
15	/	/	15	0047	1 1 3 2 2 2
16	0	0	16	0048	1 2 3 1 2 2
17	1	1	17	0049	1 2 3 2 2 1
18	2	2	18	0050	2 2 3 2 1 1
19	3	3	19	0051	2 2 1 1 3 2
20	4	4	20	0052	2 2 1 2 3 1
21	5	5	21	0053	2 1 3 2 1 2
22	6	6	22	0054	2 2 3 1 1 2
23	7	7	23	0055	3 1 2 1 3 1
24	8	8	24	0056	3 1 1 2 2 2
25	9	9	25	0057	3 2 1 1 2 2
26	:	:	26	0058	3 2 1 2 2 1
27	;	;	27	0059	3 1 2 2 1 2
28	<	<	28	0060	3 2 2 1 1 2
29	=	=	29	0061	3 2 2 2 1 1
30	>	>	30	0062	2 1 2 1 2 3
31	?	?	31	0063	2 1 2 3 2 1
32	@	@	32	0064	2 3 2 1 2 1
33	A	A	33	0065	1 1 1 3 2 3
34	B	B	34	0066	1 3 1 1 2 3
35	C	C	35	0067	1 3 1 3 2 1
36	D	D	36	0068	1 1 2 3 1 3
37	E	E	37	0069	1 3 2 1 1 3
38	F	F	38	0070	1 3 2 3 1 1
39	G	G	39	0071	2 1 1 3 1 3
40	H	H	40	0072	2 3 1 1 1 3
41	I	I	41	0073	2 3 1 3 1 1
42	J	J	42	0074	1 1 2 1 3 3
43	K	K	43	0075	1 1 2 3 3 1
44	L	L	44	0076	1 3 2 1 3 1
45	M	M	45	0077	1 1 3 1 2 3

46	N	N	46	0078	1 1 3 3 2 1
47	O	O	47	0079	1 3 3 1 2 1
48	P	P	48	0080	3 1 3 1 2 1
49	Q	Q	49	0081	2 1 1 3 3 1
50	R	R	50	0082	2 3 1 1 3 1
51	S	S	51	0083	2 1 3 1 1 3
52	T	T	52	0084	2 1 3 3 1 1
53	U	U	53	0085	2 1 3 1 3 1
54	V	V	54	0086	3 1 1 1 2 3
55	W	W	55	0087	3 1 1 3 2 1
56	X	X	56	0088	3 3 1 1 2 1
57	Y	Y	57	0089	3 1 2 1 1 3
58	Z	Z	58	0090	3 1 2 3 1 1
59	[	[	59	0091	3 3 2 1 1 1
60	\	\	60	0092	3 1 4 1 1 1
61	]	]	61	0093	2 2 1 4 1 1
62	^	^	62	0094	4 3 1 1 1 1
63	_	_	63	0095	1 1 1 2 2 4
64	NUL	'	64	0096	1 1 1 4 2 2
65	SOH	a	65	0097	1 2 1 1 2 4
66	STX	b	66	0098	1 2 1 4 2 1
67	ETX	c	67	0099	1 4 1 1 2 2
68	EOT	d	68	0100	1 4 1 2 2 1
69	ENQ	e	69	0101	1 1 2 2 1 4
70	ACK	f	70	0102	1 1 2 4 1 2
71	BEL	g	61	0103	1 2 2 1 1 4
72	BS	h	72	0104	1 2 2 4 1 1
73	HT	i	73	0105	1 4 2 1 1 2
74	LF	j	74	0106	1 4 2 2 1 1
75	VT	k	75	0107	2 4 1 2 1 1
76	FF	l	76	0108	2 2 1 1 1 4
77	CR	m	77	0109	4 1 3 1 1 1
78	SO	n	78	0110	2 4 1 1 1 2
79	SI	o	79	0111	1 3 4 1 1 1
80	DLE	p	80	0112	1 1 1 2 4 2
81	DC1	q	81	0113	1 2 1 1 4 2
82	DC2	r	82	0114	1 2 1 2 4 1
83	DC3	s	83	0115	1 1 4 2 1 2
84	DC4	t	84	0116	1 2 4 1 1 2
85	NAK	u	85	0117	1 2 4 2 1 1
86	SYN	v	86	0118	4 1 1 2 1 2
87	ETB	w	87	0119	4 2 1 1 1 2
88	CAN	x	88	0120	4 2 1 2 1 1
89	EM	y	89	0121	2 1 2 1 4 1
90	SUB	z	90	0122	2 1 4 1 2 1
91	ESC	{	91	0123	4 1 2 1 2 1
92	FS	|	92	0124	1 1 1 1 4 3
93	GS	}	93	0125	1 1 1 3 4 1
94	RS	~	94	0126	1 3 1 1 4 1
95	US	DEL	95	0195	1 1 4 1 1 3
96	FNC 3	FNC 3	96	0196	1 1 4 3 1 1
97	FNC 2	FNC 2	97	0197	4 1 1 1 1 3
98	SHIFT	SHIFT	98	0198	4 1 1 3 1 1

99	CODE C	CODE C	99	0199	1 1 3 1 4 1
100	CODE B	FNC 4	CODE B	0200	1 1 4 1 3 1
101	FNC 4	CODE A	CODE A	0201	3 1 1 1 4 1
102	FNC 1	FNC 1	FNC 1	0202	4 1 1 1 3 1
103	START A	START A	START A	0203	2 1 1 4 1 2
104	START B	START B	START B	0204	2 1 1 2 1 4
105	START C	START C	START C	0205	2 1 1 2 3 2
106	STOP	STOP	STOP	0206	2 3 3 1 1 1 2

F.2.2 Calculating barcodes characters

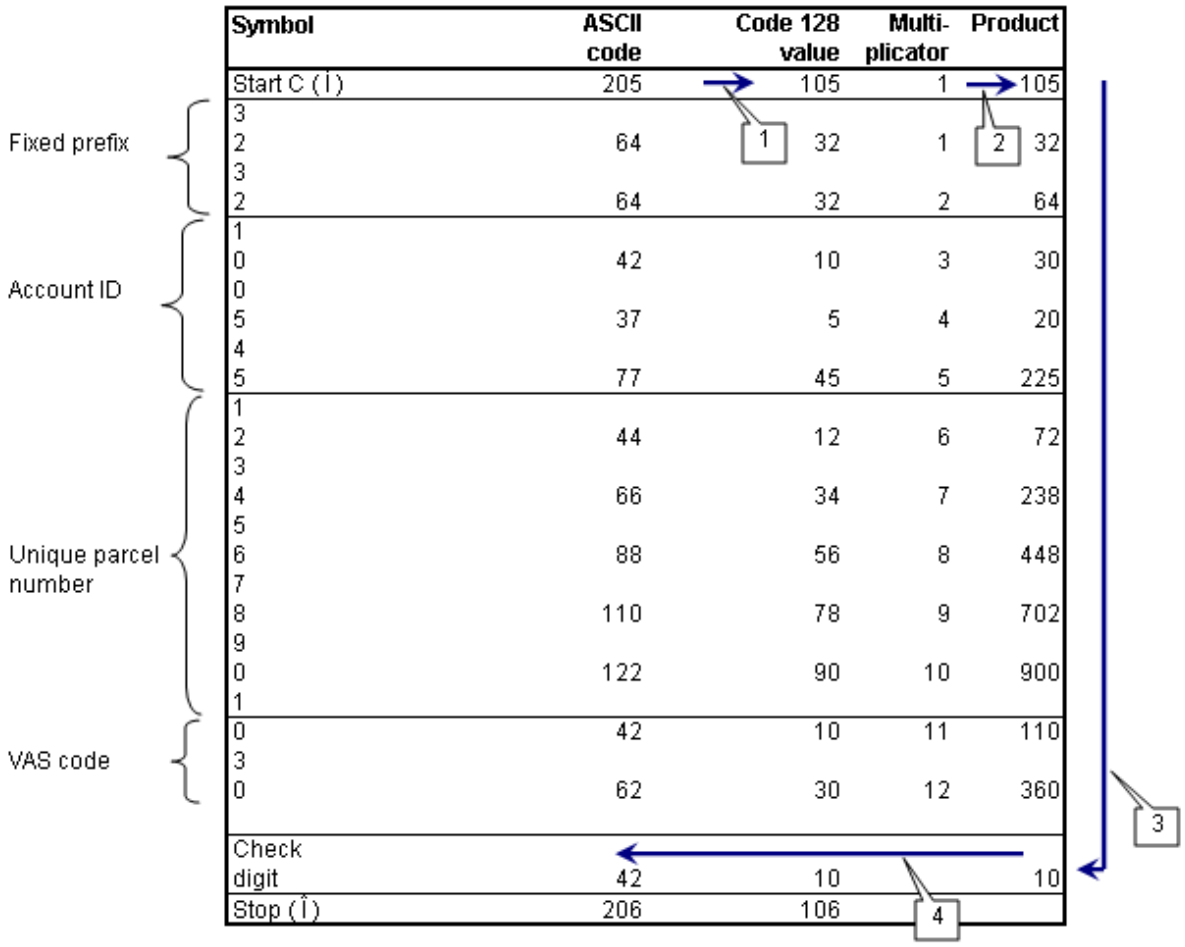
F.2.2.1 Algorithm

The algorithm for a modulo 103 calculation for the control digit is as follows:

- The start sum adopts the code 128 value of the start code. In a table C this is 105.
- The multiplicator starts with a value 1.
- Start with the first digit of your barcode (work from left to right). Match to the corresponding code 128 value and multiply by the multiplicator.
- Add the result of the calculation to the previous result (in this case 105). Increase the value of the multiplicator by 1.
- Repeat until the end. Divide the sum obtained by 103. The rest of this calculation is the control digit. Match this value to the corresponding character in table C.

Insert this control digit between the value of your barcode and the stop code.

The table below shows this method in practice.



As a result, you get:

Í@@*%M,BXnz*>*Î

Apply the Code 128 font, and you become:

3232100545123456789010 30

Calculation of the barcode symbols:

- Start with the start code (ASCII value 205)
- Group the digits in the readable part in twos. This produces the code 128 value.
- Transform this to the correct character set
  e.g. ASCII: code 128 value < 95 → ASCII value = code 128 value + 32
  code 128 value > 95 → ASCII value = code 128 value + 100
- Add this character
- Add the control digit
- Add the stop code (ASCII value 206)

F.2.2.2 Macro

If a barcode is generated using a font, it usually needs to be converted to barcode symbols. The VBA macro below automatically converts the readable part into barcode symbols. It adds the start and end code, calculates the control digit and groups the digits in twos, as laid down by the code 128 standard.

```
Public Function string2Code 128C(Text_Input As String) As String
     ' variables
     Dim temp As Long
     Dim multiplicator As Long
     Dim i As Integer
     Dim checkDigit As String

     ' Calculate the check digit
     temp = 105
     multiplicator = 0

     For i = 1 To Len(Text_Input) Step 2
        multiplicator = multiplicator + 1
        temp = temp + Mid(Text_Input, i, 2) * multiplicator
     Next i
     checkDigit = ChrW(IIf(temp Mod 103 < 95, _
                           temp Mod 103 + 32, _
                           temp Mod 103 + 100))

     ' make barcode - start with startcode
     string2Code 128C = ChrW(205)
     ' make barcode - process string
     For i = 1 To Len(Text_Input) Step 2
         string2Code 128C = string2Code 128C & _
                            IIf(Mid(Text_Input, i, 2) < 95, _
                                ChrW(Mid(Text_Input, i, 2) + 32), _
                                ChrW(Mid(Text_Input, i, 2) + 100))
     Next i
     ' make barcode - concatenate
     string2Code 128C = string2Code 128C & checkDigit & ChrW(206)

End Function
```

F.2.3 Calculating barcode width

To ensure optimal readability, the bars of a barcode must always be made up of a whole number of dots. The tables below show the optimal widths based on the optimal X-dimensions. The X- dimension is the width of the thinnest bar.

F.2.3.1 Parcel barcode

X dim (mm)	Barcode width (mm)
0.381000	63.63
0.423333	70.70
0.465667	77.77
0.508000	84.84
0.550333	91.91
0.592667	98.98
0.635000	106.05
0.677333	113.11
0.719667	120.18

X dim (inches)	Barcode width (inches)
0.015000	2.51
0.016667	2.78
0.018333	3.06
0.020000	3.34
0.021667	3.62
0.023333	3.90
0.025000	4.18
0.026667	4.45
0.028333	4.73

F.2.3.2 CoD barcode

X dim (mm)	Barcode width (mm)
0.254000	28.45
0.296333	33.19
0.338667	37.93
0.381000	42.67
0.423333	47.41
0.465667	52.15
0.508000	56.90
0.550333	61.64
0.592667	66.38
0.635000	71.12
0.677333	75.86
0.719667	80.60

X dim (inches)	Barcode width (inches)
0.010000	1.12
0.011667	1.31
0.013333	1.49
0.015000	1.68
0.016667	1.87
0.018333	2.05
0.020000	2.24
0.021667	2.43
0.023333	2.61
0.025000	2.80
0.026667	2.99
0.028333	3.17

F.2.4 List of VAS codes

VAS code	Description
030	bpack 24h Pro
036	bpack 24h Pro & Signature
031	bpack 24h Pro & Cash on Delivery (with Signature)
040	bpack 24h Pro & Basic Warranty (with Signature)
043	bpack 24h Pro & Automatic 2nd Presentation
046	bpack 24h Pro & Cash on Delivery (with Signature) & Basic Warranty
047	bpack 24h Pro & Cash on Delivery (with Signature) & Additional Warranty
105	bpack 24h Pro & Additional Warranty (with Signature)
109	bpack 24h Pro & Basic Warranty (with Signature) & Automatic 2nd Presentation
048	bpack 24h Pro & Cash on Delivery (with Signature) & Automatic 2nd Presentation
112	bpack 24h Pro & Signature & Automatic 2nd Presentation
037	bpack@bpost (with Messaging)
038	bpack@bpost Cash on Delivery (with Signature & Messaging)
247	bpack parcel locker
131	bpack Click & Collect
126	bpack 24h Business (B2B) (with Signature, Basic Warranty & 2nd Presentation)
127	bpack 24h Business (B2B) (with Signature, Basic Warranty & 2nd Presentation) & COD Cash on Delivery
CD...BE	bpack World Business
EE...BE	bpack World Express Pro
225	Bpack Europe Business
050	bpack Easy Retour
051	bpack Easy Retour & Signature
125	bpack Easy Retour & Basic Warranty
337	bpack@bpost international
347	bpack 24/7 international
035	Bpack XL & Fragile

F.3 BARCODES OUTBOUND

F.3.1 Table of ASCII Code 128 values

Code 128 value	Subset A	Subset B	Subset C	ASCII	Pattern B W B W B W
0	SP	SP	0	0032	2 1 2 2 2 2
1	!	!	1	0033	2 2 2 1 2 2
2	"	"	2	0034	2 2 2 2 2 1
3	#	#	3	0035	1 2 1 2 2 3
4	$	$	4	0036	1 2 1 3 2 2
5	%	%	5	0037	1 3 1 2 2 2
6	&	&	6	0038	1 2 2 2 1 3
7	'	'	7	0039	1 2 2 3 1 2
8	(	(	8	0040	1 3 2 2 1 2
9	)	)	9	0041	2 2 1 2 1 3
10	*	*	10	0042	2 2 1 3 1 2
11	+	+	11	0043	2 3 1 2 1 2
12	,	,	12	0044	1 1 2 2 3 2
13	-	-	13	0045	1 2 2 1 3 2
14	.	.	14	0046	1 2 2 2 3 1
15	/	/	15	0047	1 1 3 2 2 2
16	0	0	16	0048	1 2 3 1 2 2
17	1	1	17	0049	1 2 3 2 2 1
18	2	2	18	0050	2 2 3 2 1 1
19	3	3	19	0051	2 2 1 1 3 2
20	4	4	20	0052	2 2 1 2 3 1
21	5	5	21	0053	2 1 3 2 1 2
22	6	6	22	0054	2 2 3 1 1 2
23	7	7	23	0055	3 1 2 1 3 1
24	8	8	24	0056	3 1 1 2 2 2
25	9	9	25	0057	3 2 1 1 2 2
26	:	:	26	0058	3 2 1 2 2 1
27	;	;	27	0059	3 1 2 2 1 2
28	<	<	28	0060	3 2 2 1 1 2
29	=	=	29	0061	3 2 2 2 1 1
30	>	>	30	0062	2 1 2 1 2 3
31	?	?	31	0063	2 1 2 3 2 1
32	@	@	32	0064	2 3 2 1 2 1
33	A	A	33	0065	1 1 1 3 2 3
34	B	B	34	0066	1 3 1 1 2 3
35	C	C	35	0067	1 3 1 3 2 1
36	D	D	36	0068	1 1 2 3 1 3
37	E	E	37	0069	1 3 2 1 1 3
38	F	F	38	0070	1 3 2 3 1 1
39	G	G	39	0071	2 1 1 3 1 3
40	H	H	40	0072	2 3 1 1 1 3
41	I	I	41	0073	2 3 1 3 1 1
42	J	J	42	0074	1 1 2 1 3 3
43	K	K	43	0075	1 1 2 3 3 1
44	L	L	44	0076	1 3 2 1 3 1
45	M	M	45	0077	1 1 3 1 2 3

46	N	N	46	0078	1 1 3 3 2 1
47	O	O	47	0079	1 3 3 1 2 1
48	P	P	48	0080	3 1 3 1 2 1
49	Q	Q	49	0081	2 1 1 3 3 1
50	R	R	50	0082	2 3 1 1 3 1
51	S	S	51	0083	2 1 3 1 1 3
52	T	T	52	0084	2 1 3 3 1 1
53	U	U	53	0085	2 1 3 1 3 1
54	V	V	54	0086	3 1 1 1 2 3
55	W	W	55	0087	3 1 1 3 2 1
56	X	X	56	0088	3 3 1 1 2 1
57	Y	Y	57	0089	3 1 2 1 1 3
58	Z	Z	58	0090	3 1 2 3 1 1
59	[	[	59	0091	3 3 2 1 1 1
60	\	\	60	0092	3 1 4 1 1 1
61	]	]	61	0093	2 2 1 4 1 1
62	^	^	62	0094	4 3 1 1 1 1
63	_	_	63	0095	1 1 1 2 2 4
64	NUL	'	64	0096	1 1 1 4 2 2
65	SOH	a	65	0097	1 2 1 1 2 4
66	STX	b	66	0098	1 2 1 4 2 1
67	ETX	c	67	0099	1 4 1 1 2 2
68	EOT	d	68	0100	1 4 1 2 2 1
69	ENQ	e	69	0101	1 1 2 2 1 4
70	ACK	f	70	0102	1 1 2 4 1 2
71	BEL	g	61	0103	1 2 2 1 1 4
72	BS	h	72	0104	1 2 2 4 1 1
73	HT	i	73	0105	1 4 2 1 1 2
74	LF	j	74	0106	1 4 2 2 1 1
75	VT	k	75	0107	2 4 1 2 1 1
76	FF	l	76	0108	2 2 1 1 1 4
77	CR	m	77	0109	4 1 3 1 1 1
78	SO	n	78	0110	2 4 1 1 1 2
79	SI	o	79	0111	1 3 4 1 1 1
80	DLE	p	80	0112	1 1 1 2 4 2
81	DC1	q	81	0113	1 2 1 1 4 2
82	DC2	r	82	0114	1 2 1 2 4 1
83	DC3	s	83	0115	1 1 4 2 1 2
84	DC4	t	84	0116	1 2 4 1 1 2
85	NAK	u	85	0117	1 2 4 2 1 1
86	SYN	v	86	0118	4 1 1 2 1 2
87	ETB	w	87	0119	4 2 1 1 1 2
88	CAN	x	88	0120	4 2 1 2 1 1
89	EM	y	89	0121	2 1 2 1 4 1
90	SUB	z	90	0122	2 1 4 1 2 1
91	ESC	{	91	0123	4 1 2 1 2 1
92	FS	|	92	0124	1 1 1 1 4 3
93	GS	}	93	0125	1 1 1 3 4 1
94	RS	~	94	0126	1 3 1 1 4 1
95	US	DEL	95	0195	1 1 4 1 1 3
96	FNC 3	FNC 3	96	0196	1 1 4 3 1 1
97	FNC 2	FNC 2	97	0197	4 1 1 1 1 3
98	SHIFT	SHIFT	98	0198	4 1 1 3 1 1

99	CODE C	CODE C	99	0199	1 1 3 1 4 1
100	CODE B	FNC 4	CODE B	0200	1 1 4 1 3 1
101	FNC 4	CODE A	CODE A	0201	3 1 1 1 4 1
102	FNC 1	FNC 1	FNC 1	0202	4 1 1 1 3 1
103	START A	START A	START A	0203	2 1 1 4 1 2
104	START B	START B	START B	0204	2 1 1 2 1 4
105	START C	START C	START C	0205	2 1 1 2 3 2
106	STOP	STOP	STOP	0206	2 3 3 1 1 1 2

F.3.2 Calculating barcode characters

F.3.2.1 Algorithm

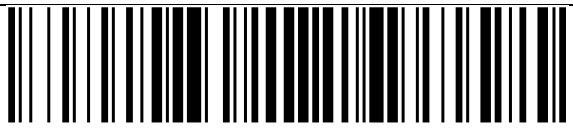
1. Weight the digits in the serial number using the weighting factors 8 6 4 2 3 5 9 7.
2. Calculate the sum of the weighted values.
3. Divide this sum by 11 to obtain the remainder.
4. Subtract the remainder from 11.
5. Result:
    a. If the result falls within the range 1 to 9, use the result as the check digit.
    b. If the result is 10, use 0 as the check digit.
    c. If the result is 11, use 5 as the check digit.

F.3.2.2 Example

Serial number	**4**	**7**	**3**	**1**	**2**	**4**	**8**	**2**
Weighting factors	*8*	*6*	*4*	*2*	*3*	*5*	*9*	*7*
Weighted values	32	42	12	2	6	20	72	14
Sum of weighted values	200							
Remainder of division by 11	2							
Check digit	**9**							

Product type	**EE**
Country code	**BE**

Barcode



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F.3.2.3 Macro

The VBA Macro below automatically calculates the check digit for S10 barcodes. Afterwards, the entire barcode (including Start & Stop character, service indicator, check digit and country code) needs to be converted to barcode symbols. The latter part is not mentioned VBA code below.

```
Private Function computeCheckDigit(serial) As Integer
    'Declarations
     Dim i As Integer
     Dim weights(1 To 9) As Integer
     Dim totalWeight As Integer
```

```
    Dim finalValue As Integer

    'Initializations
    weights(1) = 8
    weights(2) = 6
    weights(3) = 4
    weights(4) = 2
    weights(5) = 3
    weights(6) = 5
    weights(7) = 9
    weights(8) = 7
    totalWeight = 0

    'Logic
       For i = 1 To Len(serial)
         totalWeight = totalWeight + (weights(i) * CInt(Mid(serial, i,
         1)))
       Next i
       finalValue = totalWeight Mod 11
       finalValue = 11 - finalValue

    'Return paths
       Select Case finalValue
         Case 1 To 9
              computeCheckDigit = finalValue
         Case 10
              computeCheckDigit = 0
         Case 11
              computeCheckDigit = 5
       End Select
End Function
```

F.3.3 Calculating barcode width

To ensure optimal readability, the bars of a barcode must always be made up of a whole number of dots. The tables below show the optimal widths based on the optimal X-dimensions. The X- dimension is the width of the thinnest bar.

F.3.3.1 Barcode

X dim (mm)	Barcode width (mm)
0.338667	56.56
0.381000	63.63
0.423333	70.70
0.465667	77.77
0.508000	84.84
0.550333	91.91
0.592667	98.98
0.635000	106.05
0.677333	113.11
0.719667	120.18

X dim (inches)	Barcode width (inches)
0.013333	2.23
0.015000	2.51
0.016667	2.78
0.018333	3.06
0.020000	3.34
0.021667	3.62
0.023333	3.90
0.025000	4.18
0.026667	4.45
0.028333	4.73

F.4 List of web service headers

Shipping Manager API	**Create order (POST)**
Headers	Authorization: Basic AccountID:passphrase (base64)
	Content-Type: application/vnd.bpost.shm-order-v5+XML
https://shm-rest.bpost.cloud/services/shm/{accountID}/orders/	
Shipping Manager API	**Create Label for Order (GET)**
Headers	Authorization: Basic AccountID:passphrase (base64)
	Content-Type: application/vnd.bpost.shm-labelRequest-v5+XML
	Accept: application/vnd.bpost.shm-label-pdf-v3.4+XML
or	Accept: application/vnd.bpost.shm-label-image-v3.4+XML
https://shm-rest.bpost.cloud/services/shm/{accountID}/orders/{reference}/labels/{size}	
Shipping Manager API	**Update/Modify Order Status (POST)**
Headers	Authorization: Basic AccountID:passphrase (base64)
	Content-type: application/vnd.bpost.shm-orderUpdate-v3+XML
https://shm-rest.bpost.cloud/services/shm/{accountID}/orders/{reference}	
Shipping Manager API	**Retrieve Order Information (GET)**
Headers	Authorization: Basic AccountID:passphrase (base64)
	Accept: application/vnd.bpost.shm-order-v3.3+XML
https://shm-rest.bpost.cloud/services/shm/{accountID}/orders/{reference}	
Shipping Manager API	**Get Product Configuration (GET)**
Headers	Authorization: Basic AccountID:passphrase (base64)
	Accept: application/vnd.bpost.shm-productConfiguration-v3.1+XML
https://shm-rest.bpost.cloud/services/shm/{accountID}/productconfig	

Announcement API	**Create order (POST)**
Headers	Authorization: Basic login:password (base64)
	Content-Type: application/vnd.bpost.announcement-v1+XML
https://api.parcel.bpost.cloud/services/trackedmail/announcement	
Tracking API	**Track (GET)**
Headers	Authorization: Basic login:password (base64)
https://api.parcel.bpost.cloud/services/trackedmail/announcement	

GEO6	**Get Nearest Servicepoints (GET)**
http://pudo.bpost.cloud/Locator?Function=search	
GEO6	**Get Servicepoint Details (GET)**
http://pudo.bpost.cloud/Locator?Function=info	
GEO6	**Get Servicepoint Page (GET)**
http://pudo.bpost.cloud/Locator?Function=page	

F.5 Logo

All official bpost logo's can be found on the links below:

NL:
http://www.bpost.be/site/nl/postgroup/press/logo/index_old.html

FR:
http://www.bpost.be/site/fr/postgroup/press/logo/index_old.html

F.6 XSD schemes

The shipping manager API xsd schemes can be downloaded from
http://bpost.freshdesk.com/support/solutions/articles/4000037653

In the table below you can find the link to the XSD shemes for

- LCI announcement API
- LCI announcement via XML
- T&T API
- T&T via XML

XSD TYPE	XSD SCHEME
announcement-bulk *(only for XML announcement files and not for Announcement API*)	https://api-parcel.bpost.be/services/trackedmail/xsd/announcement-bulk-v1.xsd
announcement-common	https://api-parcel.bpost.be/services/trackedmail/xsd/announcement-common-v1.xsd
announcement-result	https://api-parcel.bpost.be/services/trackedmail/xsd/announcement-result-v1.xsd
announcement	https://api-parcel.bpost.be/services/trackedmail/xsd/announcement-v1.xsd
pickupRequest	https://api-parcel.bpost.be/services/trackedmail/xsd/pickupRequest-v1.xsd
trackingInfo-list	https://api-parcel.bpost.be/services/trackedmail/xsd/trackingInfo-list-v1.xsd
trackingInfo	https://api-parcel.bpost.be/services/trackedmail/xsd/trackingInfo-v1.xsd

The other XSD shemes can be downloaded from
http://bpost.freshdesk.com/support/solutions/articles/4000037653