## Smartpost API

| Version | Description of Change | Author | Date |
| :--- | :--- | :--- | :--- |
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| 0.2 | Draft 2 | Priit Joa | $03-01-2023$ |
| 1.0 | Confirmed version | Kaja Olek | $18-01-2023$ |
| 1.1 | Updated, Order and Label | Priit Joa | $20-01-2023$ |
| 1.2 | Updated Order comments and Added <br> examples | Priit Joa | $24-01-2023$ |

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## Endpoints

| Environment | Endpoint |
| :--- | :--- |
| Production | https://gateway.posti.fi/smartpost// |

## Authentication

The ESS API Key can be requested from the Self-Service environment under the Settings. The ESS API Key can be generated and seen by the owner of the company.
There can be up to two ESS API Keys (old and new) available at the same time when generating a new one and closing an old one.

## ESS API Requests

## 1 Places

## GET /api/ext/v1/places?

Parameters: country=\{country\}\&type=\{type\}\&filter=\{filter\}
Headers: Content-Type: application/json / application/xml
Authorization: example-uuid-api-key-123xyz
Input parameters

| Parameter name | Description | Possible value | Required |
| :--- | :--- | :--- | :--- |
| country | Country Code | EE, FI, LV, LT | Yes |
| type | Destination Type: <br> APT - Blue Box <br> IPB - White Box <br> PO - Post office <br> Pudo - Parcel point <br> If no type given, all those types <br> are returned | apt, ipb, po, pudo |  |
| filter | Additional filtering: Express $=$ <br> parcel terminals in Estonia with <br> Express delivery option | express |  |

## Response

| Field name | Description | Data type |
| :--- | :--- | :--- |
| item/place_id | Parcel terminal ID | String |
| item/name | Destination name | String |
| item/city | Destination city | String |
| item/address | Destination address | String |
| item/country | Destination country code | String |
| item/postalcode | Destination postal code (zip <br> code) | String |
| item/routingcode | Destination routing code | String |
| item/availability | Time frame when location is <br> open | String |
| item/description | A short description of the <br> location | String |
| item/type | Place type | String |
| item/lat | Latitude | Number |
| item/lng | Longitude | Number |

## Response example

```
{
    "places": {
    "item": [
        {
            "place_id": "01007220",
            "name": "Tallinna Lasnamäe Maksimarket",
            "city": "Tallinn",
            "address": "J.Smuuli tee 43",
            "country": "EE",
            "postalcode": "11415",
            "routingcode": "3203",
            "availability": "E-P 8:00-22:00",
            "description": "vasakpoolse sissepääsu juures",
            "type": "apt",
            "lat": "59.4280",
```

```
                "Ing": "24.8385"
            }
        ]
    }
}
```


## 2 Courier visit times

## GET lapi/ext/v1/courier-visit-times?

Parameters: place_id=\{place_id\}
Headers: Content-Type: application/json / application/xml
Authorization: example-uuid-api-key-123xyz
Input parameters

| Parameter name | Description | Possible value | Required |
| :--- | :--- | :--- | :--- |
| place_id | Parcel terminal ID |  |  |
| type | Filter parcel terminals <br> in Estonia with Express <br> delivery option | express |  |

## Response

| Field name | Description | Data type |
| :--- | :--- | :--- |
| item/place_id | Parcel terminal ID | String |
| item/day | Day number (1 = Monday) | Number |
| item/in | Time 24h format | Time |
| item/out | Time 24h format | Time |
| item/express_in | Time 24h format | Time |
| item/express_out | Time 24h format | Time |

## Response example

```
    "visit_times": {
        "item": [
            {
            "place_id": "01007174",
            "day": 1,
            "in": "12:00",
            "out": "18:00",
            "express_in": "",
            "express_out": ""
        }
    ]
    }
}
```


## 3 Orders

## POST /api/ext/v1/orders

Body: Raw XML / Raw JSON
Headers: Content-Type: application/json / application/xml
Authorization: example-uuid-api-key-123xyz
Input parameters

| Parameter name | Description | Possible <br> value | Required |
| :--- | :--- | :--- | :--- |
|  | Shipments barcode <br> If the sender wants to add <br> these, the format must be set <br> up in advance to pass the <br> validation process! Please turn <br> to the Itella salesperson first. | String |  |
| item/barcode | Customer's reference number <br> (showing on the label) | String |  |
| item/reference | Shipment content (showing on <br> the label) | String |  |
| item/content | Creates so many parcels with <br> the same data as given here. <br> Enables printing out labels with <br> the same order info with <br> different barcodes (parcel is too <br> big for APT locker and is <br> divided into several orders). <br> The inserted number shows | Number |  |
|  |  |  |  |
| item/multiply |  |  |  |


|  | how many suborders are created. <br> If the parameter 'barcode' is filled then this field can't be used. <br> Possible values 1-20 if left empty then the default value is 1 |  |  |
| :---: | :---: | :---: | :---: |
| item/weight | Weight of the shipment, decimal in kg | Number |  |
| item/size | Possible values: XS, S, M, L, XL <br> Values to be translated (will be deprecated): $\begin{aligned} & 11 \rightarrow X S, \\ & 5 \rightarrow S, \\ & 6 \rightarrow M, \\ & 7 \rightarrow \mathrm{~L}, \\ & 8 \rightarrow X L, \\ & 1->5, \\ & 2->6, \\ & 3->7, \\ & 4->8, \end{aligned}$ | String | Yes, if the parcel will be sent via APT using sender pin code |
| item/source/country | Country from where the parcel is sent, possible values ee, Iv, It | String | Yes |
|  | The item/sender fields are needed only if the sender door code is required for the parcel sending <br> If the item/sender fields are not needed do not send in parameters. |  |  |
| item/sender/name | Sender's name | String | Yes, if the sender section is used |
| item/sender/phone | Sender's phone number | String | Yes, if the sender section is used |
| item/sender/email | Sender's e-mail address | String |  |
| item/sender/cash | Amount of money the sender must pay before sending the parcel | Decimal |  |
|  |  |  |  |


| item/recipient/name | Recipient's name | String | Yes |
| :---: | :---: | :---: | :---: |
| item/recipient/phone | Recipient's phone number | String | Yes |
| item/recipient/email | Recipients e-mail address | String |  |
| item/recipient/goods | Amount of money for goods (this is COD amount that will be transferred to the parcel Sender) Goods, transport - only one of these values can be filled | Decimal |  |
| item/recipient/transport | Amount of money for transport (this is Itella net sales and will not be transferred to parcel sender) <br> Goods, transport - only one of these values can be filled | Decimal |  |
| item/recipient/idcode | ID code of the recipient; needed if ID validation is required. | String |  |
|  | For the item/destination block. You can send parcels using 3 different configurations: <br> When sending a parcel to the parcel terminal, fill "place_id" as Parcel terminal ID. <br> When sending a parcel to an address, fill "place_id" = 1 <br> When sending a parcel to the post office, fill "PostalCode", "RoutingCode", and "Country or place_id" as Parcel terminal ID. |  |  |
| item/destination/place_id | Parcel terminal ID. <br> If the value is added > 1 then address values (postalcode, routingcode, street, house, apartment, city, country) can't be filled | String |  |


| item/destination/postalcode | Destination postal code | String | if place_id is 1 or empty then required. |
| :---: | :---: | :---: | :---: |
| item/destination/routingcode | Destination routing code <br> The rountingcode can only be filled if country is 'fi' then the values postalcode, routingcode, country are required and place_id has to be empty. | String | if place_id is empty then required |
| item/destination/street | Destination street | String | if place_id is 1 then required |
| item/destination/house | Destination house number | String |  |
| item/destination/apartment | Destination apartment | String |  |
| item/destination/city | Destination city | String | if place_id is 1 then required |
| item/destination/country | Destination country | String | Yes, if place_id is NOT > 1 |
| item/destination/details | Extra details about the destination (e.g. third floor) | String |  |
| item/destination/timewindow | When will the recipient be available for a courier to pick up: $\begin{aligned} & 1=\text { Any time } \\ & 2=09: 00-17: 00 \\ & 3=17: 00-21: 00 \end{aligned}$ <br> Default:1 | Number | if place_id is 1 then required |
|  | The item/return/ fields is not available fully on this version. If the item/return/ fields are not needed don't send the empty block |  |  |
| item/return/customer_return _days | Value how many days the customer is able to return order. If customer return is not allowed, insert 0. Possible values: 0-90 | Number |  |
| item/return/place_id | Parcel terminal ID. <br> If return to address instead of parcel terminal, then insert 1. <br> If the value is added $>1$ then address values (postalcode, routingcode, street, house, apartment, city, country) can't be filled | String |  |


| item/return/postalcode | Postal code | String | if place_id is 1 on empty then required. |
| :---: | :---: | :---: | :---: |
| item/return/routingcode | Routing code | String | if place_id is empty then required |
| item/return/street | Street | String | if place_id is 1 then required |
| item/return/house | House Number | String |  |
| item/return/apartment | Apartment | String |  |
| item/return/city | City | String | if place_id is 1 then required |
| item/return/country | Country | String | Required |
| item/return/return_hour_fro m | Hour from when return values 0 $-23$ | Number | required if return_hour_until is filled |
| item/return/return_hour_until | Hour to when return values 0 23 | Number | required if return_hour_from is filled |
| item/return/return_weekday s/day | Example [1,2], possible values 1 to 7 | Number |  |
| item/return/returninfo | Extra Return info for courier | String |  |
| item/return/name | Return name | String |  |
| item/return/phone | Return Phone number | String |  |
| item/return/email | Return email | String |  |
|  |  |  |  |
| item/additionalservices/expr ess | Express service <br> smartexpress additional service must be activated can be used only if destination_place.is _express is allowed | Boolean |  |
| item/additionalservices/idch eck | Recipient identity check recipient_id_check additional service must be activated "IdCode" in recipient data must be filled | Boolean |  |
| item/additionalservices/agec heck | Recipient age check recipient_age_check additional service must be activated | Boolean |  |


| item/additionalservices/notif yemail | Delivery notification (sent to sender) e-mail Address <br> NotifyEmail == recipient.email then raise exception (If NotifyEmail is same as recipient.email raise exception) sender_email_notification additional service must be activated | String |  |
| :---: | :---: | :---: | :---: |
| item/additionalservices/notif yphone | Delivery notification (sent to sender) phone (gsm) number <br> NotifyPhone == recipient.phone then raise exception (If NotifyPhone is same as recipient.phone raise exception) sender_sms_notification additional service must be activated | String |  |
| item/additionalservices/label printed | For values true or 1 moves an order under active orders (label can be printed later). Does not need activation in E-service. | Boolean |  |

## Request example

```
<?xml version="1.0" encoding="utf-8"?>
<orders>
    <report>
        <email>name@gamil.com</email>
        <email>name2@gamil.com</email>
    </report>
    <item>
        <barcode></barcode>
        <reference></reference>
        <content></content>
        <multiply></multiply>
        <weight></weight>
        <size></size>
        <source>
            <country>EE</country>
            </source>
            <sender>
```

```
    <name></name>
    <phone></phone>
    <email></email>
    <cash></cash>
    <account></account>
</sender>
<recipient>
    <name></name>
    <phone></phone>
    <email></email>
    <goods></goods>
    <transport></transport>
    <idcode></idcode>
</recipient>
<destination>
    <place_id></place_id>
    <postalcode></postalcode>
    <routingcode></routingcode>
    <street></street>
    <house></house>
    <apartment></apartment>
    <city></city>
    <country></country>
    <details></details>
    <timewindow></timewindow>
</destination>
<!--<return>
    <cutomer_return_days>12</customer_return_days>
    <place_id>1</place_id>
    <name><name>
    <phone><phone>
    <email><email>
    <street></street>
    <house></house>
    <apartment></apartment>
    <city></city>
    <postalcode></postalcode>
    <country></country>
    <returninfo></returninfo>
    <timeframefrom></timeframefrom>
    <timeframeto></timeframeto>
</return> -->
```

<additionalservices>
<express></express>
<idcheck></idcheck>
<agecheck></agecheck>
<notifyemail></notifyemail>
<notifyphone></notifyphone>
<paidbyrecipient></paidbyrecipient>
<labelprinted></labelprinted>
</additionalservices>
</item>
</orders>

## Response

| Field name | Description | Data type |
| :--- | :--- | :--- |
| item/barcode | Shipments barcode | String |
| item/reference | Customer's reference number | String |
| item/sender/doorcode | Sender door code | String |

## Example response

```
{
    "orders": {
        "item": [
            {
                "barcode": "TESTPP00364300487133986485",
            "reference": "1234"
        }
        ]
    }
}
```


## SUCCESS RESPONSE

If the request is successfully processed, you will be returned the items bar code, reference number associated and sender door code (if sending with door code service is activated). In order to receive the door code, the sender data needs to be supplied.

Response status code: 200

## ERROR RESPONSE

Failing to fill the mandatory fields (or filling some fields with the wrong type of data) will result in an error. If the problematic shipment is part of a larger batch, none of the shipments are processed. Returned XML will contain info about the errors.

Response status code: 400

## 4 Labels

## GET /api/ext/v1/labels?

Parameters: barcode=\{barcode\}\&format=\{format\}
Headers: Content-Type: application/json / application/xml
Authorization: example-uuid-api-key-123xyz

Input parameters

| Parameter name | Description | Possible value | Required |
| :--- | :--- | :--- | :--- |
| barcode | Shipments barcode |  | Yes |
| format | Label size options | 'A4/4','A4-4', 'A4-8', <br> 'A4/8', 'A5', 'A6', 'A7' |  |

## Response

PDF file URL to get a Label

## 5 Tracking

## GET /api/ext/v1/tracking?

Parameters: barcode=\{barcode\}\&reference=\{reference\}
Headers: Content-Type: application/json / application/xml
Authorization: example-uuid-api-key-123xyz

## Input parameters

| Parameter name | Description | Possible value | Required |
| :--- | :--- | :--- | :--- |
| barcode | Shipments barcode <br> (can be added multiple <br> times to get multiple <br> barcodes) | String | One is required, <br> barcode OR reference |
| reference | Shipment references <br> (can be added multiple <br> times to get various <br> reference) | String | One is required, <br> barcode OR reference |

## Response

| Field name | Description | Data type |
| :--- | :--- | :--- |
| item/barcode | Barcode | String |
| item/reference | Customer's reference number | String |
| item/generated | Timestamp | Timestamp |
| item/doorsize | Door Size (will be deprecated) | Number |
| item/size | Parcel size (XS,S,M,L,XL,XXL) | String |
| item/sourcein | Timestamp when parcel is inserted <br> to the parcel terminal | Timestamp |
| item/sourceout | Timestamp when parcel is taken out <br> from the parcel terminal | Timestamp |
| item/termin | Timestamp when parcel has been <br> registered in sorting terminal | Timestamp |
| item/termout | Timestamp when parcel has been <br> sorted in sorting terminal and is <br> ready to be delivered to destination | Timestamp |
| item/destinationin | Timestamp when parcel has been <br> delivered to destination parcel <br> terminal | Timestamp |
| item/destinationout | Timestamp when parcel is taken out <br> from destination parcel terminal or <br> delivered to destination | Timestamp |


| item/returnin | Timestamp when parcel is inserted <br> to the parcel terminal for return | Timestamp |
| :--- | :--- | :--- |
| item/returnout | Timestamp when return parcel is <br> taken out from the parcel terminal | Timestamp |
| item/returntermin | Timestamp when returning parcel <br> has been registered in sorting <br> terminal | Timestamp |
| item/returntermout | Timestamp when return parcel has <br> been sorted in sorting terminal and is <br> ready to be sent to sender | Timestamp |

## 6 COD Payment

## GET /api/ext/v1/cod-payments?

Parameters: bank_transaction_date=\{date_time\}\&get_one_day=\{getoneday\}
Headers: Content-Type: application/json / application/xml
Authorization: example-uuid-api-key-123xyz

COD Payment is available if COD service in use.

## Input parameters

| Parameter name | Description | Possible value | Required |
| :--- | :--- | :--- | :--- |
| bank_transackton_date | Date time as String | $2021-12-14 \% 20$ <br> $00: 00: 00$ | Yes |
| get_one_day | 1- Only Day requested, <br> 0 - From Day requested to Today <br> Default 0 | 0 |  |

## Response

| Field name | Description | Data type |
| :--- | :--- | :--- |
| item/amount | Payment amount | Decimal |
| item/barcode | Shipments barcode | String |
| item/name | Recipient Name | String |


| item/payment_date | Paid at date | Date Time |
| :--- | :--- | :--- |
| item/ref | Reference Number | String |
| item/t_cbanktrans | Payment Transfer Date | Date Time |

## Response example

```
{
    "payments": {
        "item": [
            {
                "barcode": "TESTPP00364300487133828117",
            "name": "Priit",
            "ref": "0001301232161583",
            "amount": "0.10",
            "payment_date": "2023-01-23 13:33:49.000000",
            "t_cbanktrans": "2023-01-24 13:33:49.000000"
        }
        ]
    }
}
```


## Error Codes

$000=$ destination info missing,
001 = required input missing,
002 = barcode already exists,
003 = not a phone number,
$004=$ not an e-mail address,
$005=$ not numeric,
006 = unknown destination (place_id),
007 = express checked but destination is not an express APT,
008 = multiple destinations set,
009 = courier service timeframe missing,
$010=$ courier service city missing,
011 = courier service postal code missing,
012 = Courier address missing,
013 = COD used but service not available,
014 = Invalid door size,
015 = String too long (LQ items),
016 = Integer out of bounds (LQ items),
017 = Value not in enum list (LQ items),

018 = Sending with door code service not activated,
019 = FI destination incorrect,
$020=$ Extra service $=$ notify by sms is not activated,
$021=$ Extra service $=$ notify by email is not activated,
$022=$ Extra service $=$ express is not activated,
023 = Extra service $=$ Age check is not activated,
$024=$ Extra service $=$ ID-card check is not activated,
025 = Extra service = idcode is missing (orders->item->recipient->idcode), but idcheck is checked,
$026=$ Extra service $=$ idcheck is missing, but idcode is filled,
$027=$ Extra service $=$ ID-card and age check cannot be used at the same time,
028 = Extra service $=$ idcode length cannot be more than 11 characters,
029 = Please check delivery notification additional service (notify sms cannot be same as phone),
$030=$ Please check delivery notification additional service (notify email cannot be same as email),
031 = Barcode not valid,
032 = Only domestic parcels can have barcode given,
033 = Invalid label format,
$034=$ No additional services allowed,
035 = recipient and sender cannot both pay,
036 = Cannot create parcel from posted data,
037 = API account not found,
038 = User name and password mismatch,
$039=$ Given account is not allowed to create shipment,
040 = Cannot have goods and transport both set, use one of them,
041 = Invalid input given,
$042=$ Maximum value is \%s,
$043=$ Minimum difference between \%s is \%s,

