



POSTRA for pickup parcels and letters

Message implementation guide for Posti pickup orders for parcels and letters

Message version 1, release 1 (updated 16.6.2020)

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Version history

Document version	Schema	Date	Comments
0	1.0	30.11.2017	Document created.
1	1.0	04.12.2017	Document updated, sample messages added
2	1.0	08.12.2017	Document updated, sample messages added
3	1.1	11.10.2019	New 'LimitedQuantity' field (boolean) added to inform dangerous goods classified details in limited quantities (LQ). The element MessageRelease changed to mandatory.
4	1.1	13.2.2020	Decimal values corrected in sample messages.
5	1.1	16.6.2020	DangerousGoods Provisions added.

1 General

This document is the guide to implementing and using Posti's POSTRA message for pickup order of parcels and letters.

POSTRA is used to issue pickup instructions regarding parcel and letter pickup order services for a shipment under conditions agreed. POSTRA pickup order is used, if separate agreement of regular pickup does not exist. Only customers having contract with Posti parcel services can use pickup order message.

One pickup order is one time order for one pickup per day per pickup address. It is always separately invoiced. If pickup message is sent multiple times, that generates as many pickup actions and each generate invoice.

Pickup order always requires separate POSTRA message for parcel order, which includes parcel product codes, additional service codes, tracing numbers, etc. details.

Guidelines for other POSTRA messages (parcel, freight, manifest) are in separate documents that can be found at api.posti.fi.

2 Message implementation guidelines

2.1.1 Content guidelines

Decimal mark to be used is dot (.). Use normal rounding rules.

Encoding "ISO-8859-1" is used.

The parcel 'logistics contract number' differ from Posti SAP customer number, which is required in pickup order message. Please check that you are using the correct contract numbers.

2.1.1.1 How to use GoodsItem

Packages of the same content, size and weight should be grouped into one GoodsItem element. Measurements (weight, volume, loading meters) are the totals for all these packages.

Values for shipment total measurements are the sums of all GoodsItem values.

Example 1: 3 packages, 40.2 kg each. The total weight for the shipment is the same as the total weight for this GoodsItem element.

```
<GoodsItems>
  <GoodsItem>
    <PackageQuantity @type="CT">3</PackageQuantity>
    <ContentDescription>Spare parts</ContentDescription>
    <GrossWeight>120.600</GrossWeight>
    <Volume>0.450</Volume>
```

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```

    </GoodsItem>
  </GoodsItems>

```

Example 2: 2 packages, 40.2 kg each and 1 package 1350 kg. The total weight for the shipment is the total for these two GoodsItem elements, i.e. 1430.400 kg.

```

<GoodsItems>
  <GoodsItem>
    <PackageQuantity @type="CT">2</PackageQuantity>
    <ContentDescription>Spare parts</ContentDescription>
    <GrossWeight>80.400</GrossWeight>
    <Volume>0.300</Volume>
  </GoodsItem>
  <GoodsItem>
    <PackageQuantity @type="EUR">1</PackageQuantity>
    <ContentDescription>Machine</ContentDescription>
    <GrossWeight>1350.000</GrossWeight>
  </GoodsItem>
</GoodsItems>

```

2.1.2 Technical details

Message transfer is done via REST API and authentication needs to be done using Posti Authentication API. You need Posti Extranet service account username and password. For more information, please see <https://api.posti.fi/api-authentication.html>.

Other message transfer protocols must be discussed and agreed with Posti.

Recommendation is to send one shipment per message. Exceptions can be made if agreed with Posti.

2.1.3 Additional information

Some elements can only contain certain values. These are marked in the specification with "see separate Posti code list". This code list is available at api.posti.fi and contains allowed values for these elements. The values may differ depending on the use case (freight, parcel, pickup, manifest).

3 Message specification

Element/attribute name	M/O/C	Repeat	Type	Description
Postra	M	1		Root element of the message.
Header	M	1		Header element.
SenderId	M	1	string (17)	Identifier for the sender. Finnish customers should use Sender ID (FI: OVT-tunnus), which is based on company business id. Foreign customers must always agree with Posti which Sender ID is used.
ReceiverId	M	1	string (17)	Identifier for the receiver. See separate Posti code list.
DocumentDateTime	M	1	dateTime	Date and time when the document is created. Format must be ISO 8601, e.g. 2019-10-11T10:00:00+03:00
Sequence	M	1	string (40)	Unique identifier for the message. Used in message error handling, preferred to use message counter or other technical unique value (GUID), or datetime with milliseconds. Shipment waybill number should NOT be used.
MessageCode	M	1	string (10)	Allowed values: POSTRA
MessageVersion	M	1	string (4)	Allowed values: 1 When message version is upgraded, the previous versions are not compatible with new version. Version upgrade always requires also changes at customer side.
MessageRelease	M	1	string (4)	Allowed values: 1 Different releases within same MessageVersion are compatible with each other. New release doesn't necessarily require changes at customer side.
TestIndicator	O	0-1	boolean	Allowed values: true Not used in production messages. Mandatory to use "true" when the message is a test message.

	MessageAction		M	1	string (15)	Allowed values: PICKUP_ORDER
	Shipments		M	1		Collection of shipments.
	Shipment		M	1-99		Shipment details.
	MessageFunctionCode		M	1	string (10)	Allowed values: ORIGINAL
	PickupOrderType		M	1	string (12)	Allowed values: PICKUP - Request to transport goods from consignor to Posti terminal. COURIER - Direct transport from location A to location B. Not yet in usage. LOADING_UNIT - Request for empty transport units, e.g. "rullakko". Not yet in usage.
	ShipmentNumber		M	1	string (35)	Must be unique. This number is shown on invoice.
	ShipmentDateTime		M	1	dateTime	Shipment date/time, e.g. when shipment is ready for transport. Format must be ISO 8601, e.g. 2019-10-11T10:00:00+03:00
	Totals		O	0-1		Collection of shipment totals. These values are used as control information. The data on GoodsItem level is used as the primary information source.
	Total		O	1-4	decimal	See allowed decimals for each type below.
	@type		O	0-1	string (20)	WEIGHT Use 3 decimals. Always in kilograms.
	@type		O	0-1	string (20)	VOLUME Use 3 decimals. Always in cubic meters.
	@type		O	0-1	string (20)	PACKAGE_QUANTITY No decimals allowed.
	@type		O	0-1	string (20)	LOADING_METER Use max. 3 decimals.
	PickupDate		M	1	date	Date when Posti is requested to pick up the goods. Format must be ISO 8601, e.g. 2019-09-17.

		@timeEarliest	O	1	time	Earliest time when goods can be picked up. Format must be ISO 8601, e.g. 10:00:00+03:00.
		@timeLatest	O	1	time	Latest time when goods can be picked up. Format must be ISO 8601, e.g. 16:00:00+03:00.
		Instructions	O	0-1		Collection of instructions.
		Instruction	M	1	string (500)	Informational text concerning transportation (“kuljetusohjeet” printed on domestic waybill). Additional information which cannot contradict terms of service. Note that only additional service codes ensure service fulfilment.
		@type	M	1	string (8)	Allowed values: GENERAL
		References	O	0-1		
		Reference	O	0-1	string (35)	Reference value.
		@typeCode	M	1	string (15)	Allowed values: ORDER_NUMBER
		Reference	C	0-1	string (15)	Reference value.
		@typeCode	M	1	string (15)	Allowed values: INVOICING_CODE - Reference value. So-called info code, used in invoicing to group charges on invoice.
		Parties	M	1		Collection of party details.
		Party	M	1		Address details for party.
		@role	M	1	string (10)	CONSIGNOR
		Name1	M	1	string (30)	Company name. In case Consignor is private person, use first name last name.
		Location	M	1		Address location.
		Street1	M	1	string (30)	Street address.
		Postcode	M	1	string (5)	Postal code.
		City	M	1	string (35)	City name.
		Country	M	1	string (2)	Country code in ISO 3166-1 alpha-2 format.

	ContactName	O	0-1	string (24)	Contact person's name.
	ContactChannel	O	0-1	string (16)	Mobile phone number is preferred to be in the international format, e.g. +358 XX XXX XXXX.
	@channel	M	1	string(10)	PHONE
	Party	O	1		Consignee is not required as final destination must be informed by separate PARCEL_ORDER. Destination for PICKUP_ORDER is always Posti sorting center or terminal and decided by Posti.
	CONSIGNEE				
	Party	M	1		Address details for party.
	@role	M	1	string (10)	PAYER
	Account	M	1	string (10)	SAP customer number by Posti. Customer should have only one SAP number per company VAT-number.
	@type	M	1	string (15)	SAP_CUSTOMER
	Account	M	1	string (10)	Posti SAP invoicing address number. Customer can have multiple invoicing address numbers.
	@type	M	1	string (15)	SAP_INVOICE
	Name1	C	1	string (30)	Name. Mandatory when payer is not consignor.
	Location	C	1		
	Street1	C	1	string (30)	Street address. Recommended when payer not consignor.
	Postcode	C	1	string (5)	Postal code. Recommended when payer not consignor.
	City	C	1	string (35)	City name. Recommended when payer not consignor.
	Country	C	1	string (2)	Country code in ISO 3166-1 alpha-2 format. Recommended when payer not consignor.

			ContactName	O	0-1	string (24)	Contact person's name.
			ContactChannel	O	0-1	string (16)	Mobile phone number is preferred to be in the international format, e.g. +358 XX XXX XXXX.
			@channel	M	1	string(10)	PHONE
			GoodsItems	M	1		Collection of goods item lines.
			GoodsItem	M	1-999		Goods item line details.
			PackageQuantity	M	1	integer	Number of packages.
			@type	M	1	string (3)	See separate Posti codelist for allowed values.
			ContentDescription	O	0-1	string (30)	Goods content description.
			GrossWeight	O	0-1	decimal	Gross weight in kilograms. Use 3 decimals.
			Volume	O	0-1	decimal	Volume in cubic meters (m3). Use 3 decimals.
			LoadingMeter	O	0-1	decimal	Volume in loading meters (ldm). Use 1 decimal.
			DangerousGoodsItems	O	0-1		Collection of dangerous goods details. Following mandatory and conditional fields are minimum requirements by ADR regulations and law. Consignor is always responsible of correct DG details.
			DangerousGoodItem	M	1-99		Dangerous goods details.
			RegulationsCode	M	1	string (3)	Allowed values: ADR (= by road)
			UnNo	M	1	string (4)	UN number, always four digits, e.g. 0016.
			MainDanger	M	1	string (4)	Main danger label number (for explosives classification codes), e.g. 1.4S
			SubsidiaryRisk	C	0-3	string (4)	Subsidiary/secondary risk, e.g. 4.2. Mandatory when applicable.

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								PackingGroup	C	0-1	string (3)	Mandatory when applicable. Allowed values: I II III
								NoDgPackages	O	0-1	integer	Number of dangerous goods packages.
								PackingDescription	O	0-1	string (30)	Description of the dangerous goods package (material, type), e.g. steel drum.
								TotalQuantity	M	1	decimal	Total amount of dangerous goods. In case boolean 'LimitedQuantity' is used, the total quantity of dangerous goods should be gross weight and @unit KGM. Use 3 decimals.
							@unit	M	1	string (3)	Unit for the dangerous goods quantity. Allowed values: KGM (= weight/mass) LTR (= liters)	
								ProperShippingName	M	1	string (200)	Proper shipping name, e.g. ALCOHOLS, N.O.S.
								TechnicalDescription	C	0-1	string (200)	Technical description, e.g. Methanoldioxide. Mandatory when applicable. The technical name supplements the proper shipping name (ADR 3.1.2); mainly substances "N.O.S."
								MarinePollutant	C	0-1	boolean	True if the dangerous goods are marine pollutant and/or environmentally hazardous. Mandatory when applicable. Allowed values: true false
								Provisions	O	0-1	string(50)	Provisions or Additional Special Requirements. Text field to define special information related to the shipment/transport for example: "Carriage in accordance with 1.1.4.2.1".

						Waste	O	0-1	boolean	True if dangerous goods are classified as waste. Allowed values: true false
						TunnelCode	C	0-1	string(10)	Tunnel restriction code, e.g. C500D or B or D/E. Mandatory when applicable.
						Empty	O	0-1	boolean	True if empty dangerous goods packaging. Allowed values: true false
						LimitedQuantity	O	0-1	boolean	In case there are full Dangerous Goods details available, but there is a need to “override” the regulations and inform dangerous goods in limited quantities (LQ), this field is used. Such use case can be valid, for example, when transport mode and regulations changes from Sea (IMDG) or Air (IATA/ICAO) to Road (ADR), e.g. Sea and Air require full DG details with a mention of LQ packing, but Road transport requires only LQ gross mass information. Note, that all classified substances mandatory fields are still required within one DangerousGoodsItem loop. Don’t send empty element! If LimitedQuantity = true, inform LQ gross weight in DangerousGoodsItem/TotalQuantity element with unit attribute KGM. Don’t inform the same LQ weight in GoodsItem/LimitedQuantityWeight element. LimitedQuantity Boolean and LimitedQuantityWeight elements are exclusionary for each other. Allowed value: true false
						LimitedQuantityWeight	C	0-1	decimal	Used when dangerous goods are packed in limited quantities and full DG details are not required by ADR regulations. Sum all LQ packed DG gross weights included to one GoodsItem (e.g. one colli, or pallet) and inform the total LQ gross weight here.



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														Amount is always gross weight in kg. Mandatory when applicable. Use 3 decimals.

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4 Sample message(s)

4.1 Sample 1: 2 goods item lines, total of 3 packages. Contains dangerous goods.

```

<?xml version="1.0" encoding="ISO-8859-1"?>
<Postra xmlns="http://api.posti.fi/xml/POSTRA/1">
  <Header>
    <SenderId>COMPANYXYZ</SenderId>
    <ReceiverId>003715318644</ReceiverId>
    <DocumentDateTime>2019-10-14T10:00:00+03:00</DocumentDateTime>
    <Sequence>000000001</Sequence>
    <MessageCode>POSTRA</MessageCode>
    <MessageVersion>1</MessageVersion>
    <MessageRelease>1</MessageRelease>
    <MessageAction>PICKUP_ORDER</MessageAction>
  </Header>
  <Shipments>
    <Shipment>
      <MessageFunctionCode>ORIGINAL</MessageFunctionCode>
      <PickupOrderType>PICKUP</PickupOrderType>
      <ShipmentNumber>123456789012</ShipmentNumber>
      <ShipmentDateTime>2019-10-14T09:55:00+03:00</ShipmentDateTime>
      <Totals>
        <Total type="WEIGHT">1520.000</Total>
        <Total type="VOLUME">2.303</Total>
        <Total type="PACKAGE_QUANTITY">3</Total>
        <Total type="LOADING_METER">0.4</Total>
      </Totals>
      <PickupDate timeEarliest="08:00:00+03:00" timeLatest="15:00:00+03:00">2019-10-15</PickupDate>
      <Instructions>
        <Instruction type="GENERAL">Be aware of slippery loading platform.</Instruction>
      </Instructions>
      <References>
        <Reference typeCode="ORDER_NUMBER">ON123456789</Reference>
        <Reference typeCode="INVOICING_CODE">00100A200</Reference>
      </References>
      <Parties>
        <Party role="CONSIGNOR">
          <Name1>Oy Yritys Ab</Name1>
          <Location>
            <Street1>Teollisuustie 3</Street1>
            <Postcode>00230</Postcode>
            <City>Helsinki</City>
            <Country>FI</Country>
          </Location>
          <ContactName>Matti Meikäläinen</ContactName>
          <ContactChannel channel="PHONE">+358 40 123 1234</ContactChannel>
        </Party>
        <Party role="PAYER">
          <Account type="SAP_CUSTOMER">999999</Account>
          <Account type="SAP_INVOICE">444444</Account>
          <Name1>Import Kauppa Ltd.</Name1>
          <Location>
            <Street1>Satamakatu 8</Street1>
            <Postcode>48100</Postcode>
            <City>Kotka</City>
            <Country>FI</Country>
          </Location>
          <ContactName>Matti Maksaja</ContactName>
          <ContactChannel channel="PHONE">+358 40 999 9999</ContactChannel>
        </Party>
      </Parties>
      <GoodsItems>
        <GoodsItem>
          <PackageQuantity type="EUR">1</PackageQuantity>
          <ContentDescription>Parcels on pallet</ContentDescription>
          <GrossWeight>1496.000</GrossWeight>
          <Volume>2.250</Volume>
          <LoadingMeter>0.4</LoadingMeter>
        </GoodsItem>
      </GoodsItems>
    </Shipment>
  </Shipments>
</Postra>
  
```

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```

<DangerousGoodsItems>
  <DangerousGoodsItem>
    <RegulationsCode>ADR</RegulationsCode>
    <UnNo>0016</UnNo>
    <MainDanger>2.1</MainDanger>
    <SubsidiaryRisk>4.2</SubsidiaryRisk>
    <PackingGroup>II</PackingGroup>
    <NoDgPackages>1</NoDgPackages>
    <PackingDescription>steel drum</PackingDescription>
    <TotalQuantity unit="LTR">5.000</TotalQuantity>
    <ProperShippingName>Alcohol, N.O.S.</ProperShippingName>
    <TechnicalDescription>Methanol dioxide</TechnicalDescription>
    <MarinePollutant>false</MarinePollutant>
    <TunnelCode>C5000D</TunnelCode>
  </DangerousGoodsItem>
  <DangerousGoodsItem>
    <RegulationsCode>ADR</RegulationsCode>
    <UnNo>1956</UnNo>
    <MainDanger>2.2</MainDanger>
    <NoDgPackages>4</NoDgPackages>
    <TotalQuantity unit="KGM">104.000</TotalQuantity>
    <ProperShippingName>Puristettu kaasu, N.O.S.</ProperShippingName>
    <TechnicalDescription>Typpi ja hiilidioksidi</TechnicalDescription>
    <TunnelCode>E</TunnelCode>
  </DangerousGoodsItem>
</DangerousGoodsItems>
</GoodsItem>
<GoodsItem>
  <PackageQuantity type="PC">2</PackageQuantity>
  <ContentDescription>Dangerous Things</ContentDescription>
  <GrossWeight>24.000</GrossWeight>
  <Volume>0.053</Volume>
  <LimitedQuantityWeight>12.456</LimitedQuantityWeight>
</GoodsItem>
</GoodsItems>
</Shipment>
</Shipments>
</Postra>

```

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4.2 Sample 2: Simply pickup order, minimum required information.

Two roller cage (FI 'rullakko') of mixed parcels including different products and destinations, informed by separate POSTRA, message action PARCEL_ORDER.

```

<?xml version="1.0" encoding="ISO-8859-1"?>
<Postra xmlns="http://api.posti.fi/xml/POSTRA/1">
  <Header>
    <SenderId>COMPANYXYZ</SenderId>
    <ReceiverId>003715318644</ReceiverId>
    <DocumentDateTime>2019-10-14T10:00:00+03:00</DocumentDateTime>
    <Sequence>000000001</Sequence>
    <MessageCode>POSTRA</MessageCode>
    <MessageVersion>1</MessageVersion>
    <MessageRelease>1</MessageRelease>
    <MessageAction>PICKUP_ORDER</MessageAction>
  </Header>
  <Shipments>
    <Shipment>
      <MessageFunctionCode>ORIGINAL</MessageFunctionCode>
      <PickupOrderType>PICKUP</PickupOrderType>
      <ShipmentNumber>123456789012</ShipmentNumber>
      <ShipmentDateTime>2019-10-14T09:55:00+03:00</ShipmentDateTime>
      <PickupDate timeEarliest="08:00:00+03:00" timeLatest="15:00:00+03:00">2019-10-14</PickupDate>
      <Parties>
        <Party role="CONSIGNOR">
          <Name1>Oy Yritys Ab</Name1>
          <Location>
            <Street1>Teollisuustie 3</Street1>
            <Postcode>00230</Postcode>
            <City>Helsinki</City>
            <Country>FI</Country>
          </Location>
        </Party>
        <Party role="PAYER">
          <Account type="SAP_CUSTOMER">999999</Account>
          <Account type="SAP_INVOICE">999999</Account>
          <Name1>Oy Yritys Ab</Name1>
        </Party>
      </Parties>
      <GoodsItems>
        <GoodsItem>
          <PackageQuantity type="CW">2</PackageQuantity>
        </GoodsItem>
      </GoodsItems>
    </Shipment>
  </Shipments>
</Postra>
  
```