

Omniva data exchange documentation

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Introduction

This document describes the structure and rules about parcel delivery data exchange format (JSON).

The topics covered are:

- Sender/receiver information of the deliveries – requirements for the contact data and the destination;
- Address card and barcodes – the JSON SOAP channel returns proper barcode and address cards;
- Status and events data of deliveries

The primary contact person for discussing the subjects treated in this document is the Omniva Account manager, who, if necessary, will involve IT application and/or project management experts in the discussion.

Customer's system will perform HTTP/SOAP request to web service.

JSON data files are created with a universal structure, taking into account the future developments of the Omniva's information system, i.e. some of the data in the file structure is not currently in use in the

Omniva's information system and cannot be forwarded. On the other hand, some of the data in the file is mandatory, i.e. if such data is missing the file is considered to be faulty and is not processed.

Customer can choose between two data import types:

- Business to customer (b2c), is used for fully automatic data exchange. No manual work or confirming is needed or possible in business customer e-service. Parcel data, statuses, parcel labels can be requested via web service. Currently no manifest printing is possible; it should be generated by the Customer's system.
- Customer to customer (c2c), structure is the same as BusinessToClientMsgRequest. Only difference is that the Customer will never be subject for billing. The transportation fee is always paid by the receiver. Required to use with parcel label printing. Label (PDF) can be sent into email or into the Customer's system for download. Name printed as Sender on the parcel label is described in "returnAddressee" fields. If the parcel is returned in some reason, same data will be used and the transportation fee will be collected from the Sender.

Authentication

The web service works through SSL using HTTP protocols. The means of authentication is HTTP BASIC AUTHENTICATION

Username and password with web service URL will be provided by your Account manager.

Developer specific identification

To identify platforms that offer integration solutions for other customers header attribute is used

Header : X-Integration-Agent-Id

Value: Developer_XXXXXX_YYYYYY where Developer is fixed value, XXXXXX is value provided by Omniva and YYYYYY can be used by developer to distinguish different versions of their solution.

Header attribute should be used in all requests.

Create shipment data

Web service url-s are as follows:

Creating shipments (B2C)

TEST: <https://test-omx.omniva.eu/api/v01/omx/shipments/business-to-client>

LIVE: <https://omx.omniva.eu/api/v01/omx/shipments/business-to-client>

Creating shipments (C2C)

TEST: <https://test-omx.omniva.eu/api/v01/omx/shipments/client-to-client>

LIVE: <https://omx.omniva.eu/api/v01/omx/shipments/client-to-client>

The content and data formats of JSON data file fields and information on whether they are mandatory. In case attribute does not have a value, attribute should not exist in the message. If the attribute exists the value will be checked against validation rules.

Field name in new (json) request full	Is it mandatory?	Field type and length	Additional info
customerCode	yes	String (30)	PARTNER_CODE (AXA Code) of the Customer, agreed upon previously.
fileId	no	String (14)	When the file is created, a unique identifier must be assigned to it. Partner generates itself.
shipments			shipment list
shipments/barcode	no	Varchar (100)	Unique barcode for the parcel (accepted by Omniva). If the barcode is not sent, PartnerShipmentId is required to match the barcode generated by web service to parcel in the Customer's system.
shipments/partnerShipmentId	conditional	String (30)	Parcel ID registered in the Customer's system. Required to use if barcode is not filled. Response gives barcode with id for matching.
shipments/mainService	yes	String (10)	One of following main service codes: (PARCEL, LETTER, PALLET), Consult with the Account manager about the range of services.
shipments/deliveryChannel	conditional	String (30)	One of following delivery channel codes: (COURIER, POST_OFFICE, PARCEL_MACHINE) deliveryChannel in mandatory if mainService=PARCEL and delivery country is EE, LT, LV or mainService=LETTER and delivery country is EE Check here for country specific parcel service availability.
shipments/servicePackage	conditional		mandatory if mainService=LETTER or if destination is not EE, LV, LT
shipments/servicePackage/code	conditional	String (30)	Possible service package codes if main service is PARCEL: ECONOMY, STANDARD, PREMIUM, Possible service package codes if main service is LETTER: PROCEDURAL_DOCUMENT, REGISTERED_LETTER, REGISTERED_MAXILETTER Package availability info for parcels can be found here and for letters here
shipments/servicePackage/allowedStoringPeriod	conditional	integer	Can be used and is mandatory only if servicePackage=PROCEDURAL_DOCUMENT if delivery deliveryChannel = COURIER, allowed values: 0, 15, 30 (days) if delivery deliveryChannel = POST_OFFICE, allowed values: 15, 30 (days)
shipments/shipmentComment	no	String (128)	Commentary about the delivery
shipments/returnAllowed	no	true/false	Boolean, whether the customer return is allowed and return code shown in receiver notifications or not. If element does not exist then preference in customer settings is used. General value can be changed in self service. Value always considered as FALSE if mainService=LETTER
shipments/customerReturn	no	true/false	Set true if you are registering a return shipment
shipments/paidByReceiver	no	true/false	Boolean whether shipment is paid by sender or receiver can be true only if mainService=PARCEL or PALLET, see here for availability details. If element does not exist, default value=false
shipments/consolidatedShipments	no		Can be used only with additional services COD and/or DOCUMENT_RETURN, in case additional service must apply to multiple parcels Main service must be either PARCEL or PALLET and delivery channel must be COURIER
shipments/consolidatedShipments/barcode	conditional	Varchar (100)	Unique barcode for the parcel (accepted by Omniva). Required to use if partnerShipmentId is not filled. NB! These are parcels in addition to main parcel, so for example if you have shipment that consists of 3 parcels, then this section should be used twice.

shipments/consolidatedShipments/partnerShipmentsId	conditional	String (30)	Parcel ID registered in the Customer's system. Required to use if barcode is not filled. Response gives barcode with id for matching. Must be unique values within one request
shipments/consolidatedShipments/addServices	no	String (50)	Only FRAGILE is allowed as addService value in consolidated shipments section. Please look for example JSON in Omniva homepage.
shipments/notifications	no		Specification, if the notification to the sender must be sent when shipment is registered or delivered.
shipments/notifications/type	no	String (30)	"REGISTERED" or "DELIVERED"
shipments/notifications/channel	no	String (30)	"sms" or "email". If notification chosen, senderAddressee/contactMobile and/or contactEmail field must be filled
shipments/addServices	no		please see additional service availability in service codes list
shipments/addServices/code	no	String (50)	Additional service code, see service availability lists for more details
shipments/addServices/code/params	conditional		if any addService has parameters they must be filled, see how to use params in example requests at https://www.omniva.ee/support/data_exchange
shipments/addServices/code/params/COD_RECEIVER	conditional	String (50)	only if addService=COD, COD receiver name
shipments/addServices/code/params/COD_AMOUNT	conditional	Number (6.2)	only if addService is COD The separator for the fraction is a decimal point. Required with COD additional service.
shipments/addServices/code/params/COD_BANK_ACCOUNT_NO	conditional	String (30)	only if addService is COD bank account to which COD sum must be transferred to. Must be IBAN
shipments/addServices/code/params/COD_REF_NUMBER	no	String (30)	only if addService is COD reference number, validated if bank account country is EE
shipments/addServices/code/params/INSURANCE_VALUE	conditional	Number (6.2)	The separator for the fraction is a decimal point. Required with addService INSURANCE
shipments/addServices/code/params/DELIVERY_TO_SPECIFIC_PERSON_PERSONAL_CODE	conditional	String (11)	Mandatory if addService=DELIVERY_TO_A_SPECIFIC_PERSON and delivery channel is PARCEL_MACHINE
shipments/measurement			shipment weight and measures
shipments/measurement/weight	no	Number (9.3)	Gross weight in kilograms; the separator for the fraction is a decimal point (not necessary in the case weight is in full kilograms).
shipments/measurement/length	no	Number (5.3)	shipment length in m, the separator for the fraction is a decimal point
shipments/measurement/width	no	Number (5.3)	shipment width in m, the separator for the fraction is a decimal point
shipments/measurement/height	no	Number (5.3)	shipment height in m, the separator for the fraction is a decimal point
shipments/receiverAddressee			Receiver contact data
shipments/receiverAddressee/useCustomerCode	conditional	true/false	If receiver = partner, then customerCode given by Omniva can be used better identify receiver
shipments/receiverAddressee/companyName	conditional	String (50)	Can be used if receiver is company. If cannot distinct, use "personName" field. Either personName or companyName must be filled (but not both) or useCustomerCode must be set to true.

shipments/receiverAddressee/personName	yes	String (50)	Either personName or companyName must be filled (but not both) or useCustomerCode must be set to true.
shipments/receiverAddressee/contactPhone	conditional	String (12)	mandatory if: mainService = PARCEL or PALLET and deliveryChannel=COURIER and contactMobile is missing
shipments/ReceiverAddressee/contactMobile	conditional	String(12)	mandatory if: mainService = PARCEL or PALLET and <ul style="list-style-type: none"> • deliveryChannel=COURIER and contactPhone is missing • Delivery channel is COURIER, additional service DELIVERY_TO_PRIVATE_PERSON is added and contactEmail is missing • Delivery channel is POST_OFFICE, offloadPostcode is provided and contactEmail is missing • Delivery channel is PARCEL_MACHINE and contactEmail is missing • Service package is PREMIUM or STANDARD mainService = LETTER and <ul style="list-style-type: none"> • Delivery channel is POST_OFFICE, offloadPostcode is provided and contactEmail is missing Needs to have country prefix (ex: 372), allowed symbols besides numbers are +, - and space See validation rules here: https://github.com/googlei18n/libphonenumber
shipments/receiverAddressee/contactEmail	conditional	String(50)	mandatory if: mainService = PARCEL or PALLET and <ul style="list-style-type: none"> • Delivery channel is COURIER, additional service DELIVERY_TO_PRIVATE_PERSON is added and contactMobile is missing • Delivery channel is POST_OFFICE, offloadPostcode is provided and contactMobile is missing • Delivery channel is PARCEL_MACHINE and contactMobile is missing mainService = LETTER and <ul style="list-style-type: none"> • Delivery channel is POST_OFFICE, offloadPostcode is provided and contactMobile is missing See validation rules here: https://github.com/apache/commons-validator/blob/master/src/main/java/org/apache/commons/validator/routines/EmailValidator.java
shipments/receiverAddressee/address			
shipments/receiverAddressee/address/street	conditional	String(80)	Street name, (+house number/letter and apartment number if cannot be separated), not needed if offloadPostcode is filled
shipments/receiverAddressee/address/houseNo	no	String (20)	House number
shipments/receiverAddressee/address/apartmentNo	no	String (20)	Apartment number
shipments/receiverAddressee/address/deliverypoint	conditional	String(80)	City, small town, village, rural municipality, county. mandatory if offloadPostcode is not present
shipments/receiverAddressee/address/postcode	yes	String (10)	Postal code; mandatory if offloadPostcode is not present
shipments/receiverAddressee/address/country	yes	String(2)	2-letter country code (ISO 3166-1 alpha-2), example: EE - Estonia. Mandatory
shipments/receiverAddressee/address/offloadPostcode	conditional	String (10)	Post office/parcel machine/pickup point postcode for describing the delivery office – customer will get it from this location. Can be used if main service is PARCEL and delivery channel is PARCEL_MACHINE (offloadPostcode is mandatory), POST_OFFICE main service is LETTER, service package is PROCEDURAL_DOCUMENT (offloadPostcode is mandatory) or REGISTERED_LETTER and delivery channel is POST_OFFICE
shipments/senderAddressee			

shipments/senderAddressee/personName	yes	String (50)	
shipments/senderAddressee/altName	no	String (50)	Value is used on label as sender name in case this needs to be different to the partner name. This value is also used in notification messages to sender.
shipments/senderAddressee/contactPhone	no	String (12)	Sender phone
shipments/senderAddressee/contactMobile	conditional	String (12)	Sender mobile, used also for notifications
shipments/senderAddressee/contactEmail	conditional	String (50)	Sender e-mail, used also for notifications
shipments/senderAddressee/useSenderAddressForReturn	no	true/false	If True, sender address will be used for return address for both customer return and automatic return. Default value false (in this case shipments are returned to handover location or to address pre-defined in customer account settings)
shipments/senderAddressee/address			
shipments/senderAddressee/address/street	no	String (80)	Street name, (+house number/letter and apartment number if cannot be separated)
shipments/senderAddressee/address/houseNo	no	String (20)	House number
shipments/senderAddressee/address/apartmentNo	no	String (20)	Apartment number
shipments/senderAddressee/address/deliverypoint	conditional	String (80)	City, small town, village, rural municipality, county. Mandatory
shipments/senderAddressee/address/postcode	yes	String (10)	Postal code; mandatory
shipments/senderAddressee/address/country	yes	String (2)	2-letter country code (ISO 3166-1 alpha-2), example: EE - Estonia. Mandatory
shipments/customs	conditional		customs block must be filled if destination country is outside EU
shipments/customs/goodsCategoryCode	yes, if block exists	String (10)	Possible values: SALE_OF_GOODS, GIFT, COMMERCIAL_SAMPLE, DOCUMENTS, RETURNED_GOODS, OTHER
shipments/customs/categoryExplanation	conditional	String (40)	Must be filled if goodsCategoryCode is „OTHER“
shipments/customs/licenceNumber	no	String (21)	
shipments/customs/certificateNumber	no	String (21)	
shipments/customs/invoiceNumber	no	string (21)	
shipments/customs/senderCustomsReference	no	string (12)	
shipments/customs/importersReference	no	string (21)	
shipments/customs/shipmentItems	conditional		Customs data about item. Max 8 items per shipment can be registered (note that one item can have many pieces of same kind described in quantity field)
shipments/customs/shipmentItems /description	yes, if block exists	String (250)	
shipments/customs/shipmentItems/numberOfPieces	yes, if block exists	integer	

shipments/customs/shipmentItems/weight	yes, if block exists	Number (9.3)	
shipments/customs/shipmentItems/financialValue	yes, if block exists	Number (6.2)	The value of each individual item in the shipment. If total value is > 300 SDR, CN23 requirements applies
shipments/customs/shipmentItems/tariffNumber	Yes, if block exists	String (10)	HS code, https://en.wikipedia.org/wiki/Harmonized_System
shipments/customs/shipmentItems/originCountry	no	String (2)	

Service availability list can be found [here](#).

Service availability list for international services can be found [here](#)

Response fields

response if success/business error

OMX response field	Fixed value	Data type	Mandatory?	Comments
resultCode	"OK"/"ERROR"	string	yes	"OK" - all shipments in the registration request were successfully registered. "ERROR" - registration failed for at least one shipment in the registration request.
provider	"EEPOST"	string	yes	Indicates that the response came from Omniva. May be ignored.
savedShipments[]		array	no	Contains an object for each shipment that was successfully registered.
savedShipments/barcode		string	yes	The barcode of the registered returning shipment.
savedShipments/clientItemId	== partnerShipmentId value from the request	string	yes, if present in request	
failedShipments[]		array	no	Contains an object for each shipment for which registration failed.
failedShipments/barcode		string	yes	Barcode is returned in response if it was already present in request
failedShipments/clientItemId	== partnerShipmentId value from the request	string	yes	
failedShipments/messageCode		string	yes	Contains the code of the error encountered during shipment registration.
failedShipments/message		string	yes	Contains the description of the error encountered during shipment registration.

response if there are issues with JSON structure, data type, field validations etc...

OMX response field	Fixed value	Data type	Comments
title	"Validation Failed"	string	
path		string	endpoint URL
details	"Input validation failed"	string	Contains an object for each shipment that was successfully registered.
code		string	The barcode of the registered returning shipment.
timestamp		timestamp	
developerMessage		string	Block is filled only in case of datatype errors.
errors{}		string	"n" shows shipment order number (counting starts from 0), field name with a failed value
shipments[n].fieldName		string	
code		string	specific datatype error code
message		string	Extended message, might give hints on why value was invalid

Examples:

Some examples of common errors can be found [here](#)

Request label

Web service url-s are as follows:

TEST: <https://test-omx.omniva.eu/api/v01/omx/shipments/package-labels>

LIVE: <https://omx.omniva.eu/api/v01/omx/shipments/package-labels>

Labels can be requested either to customer e-mail or in base64. Labels will be returned in PDF format. Labels can be requested only for parcels created by the same customer that makes request.

Input fields

customerCode	Mandatory	Customer Axa code
barcodes	Mandatory	Package barcodes
sendAddressCardTo	Mandatory	"EMAIL" - labels are returned to e-mail address. "RESPONSE" - labels are returned in API response
cardReceiverEmail	Conditional	Mandatory if sendAddressCardTo =EMAIL

Output fields

failedAddressCards	barcodes that failed validation process
successAddressCards	barcodes that where validated
barcode	Parcel barcode
filedata	in case of successful validation and destination=RESPONSE then this will contain generated label file.
messageCode	Error message code in case label request failed

[Request example to API](#)

[Request example to e-mail](#)

[Response example to API](#)

[Response example to e-mail](#)

[Response example to e-mail \(one success, one fail\)](#)

Create courier pickup

Web service url-s are as follows:

TEST: <https://test-omx.omniva.eu/api/v01/omx/courierorders/create-pickup-order>

LIVE: <https://omx.omniva.eu/api/v01/omx/courierorders/create-pickup-order>

Input fields: [\(Example response\)](#)

Code	Mandatory/optional?	Field type	Description
customerCode	M	String (20)	Customer Axa code.
contactPersonName	M	String (50)	Contact person/company name
contactPhone	M	String (12)	Contact phone number, with area code (for ex: 372543210)
pickupAddress			
pickupAddress /street	M	String (120)	Streetname
pickupAddress /houseNo	O	String (6)	House number
pickupAddress /apartmentNo	O	String (6)	Apartment nr
pickupAddress /deliverypoint	M	String (50)	City
pickupAddress /postcode	M	String (8)	postcode
pickupAddress /country	M	String (2)	Country code (2-letter ISO code)
pickupComment	O	String (120)	Free text to give short instructions for courier
startTime	M		Ex: 2023-01-31T12:00:00.000, all times are in UTC
endTime	M		Ex: 2023-01-31T12:00:00.000, all times are in UTC
isHeavyPackage	O	TRUE/FALSE	FALSE (default) or TRUE (If any of the packages are >30kg).
isTwoManPickup	O	TRUE/FALSE	Default value is false
packageCount	O	Number (3)	Number of packages
palletCount	O	Number (2)	Number of pallets

Response fields: ([Example response](#))

Code	Description
courierOrderNumber	order number, can be used later on for cancellation
startTime	
endTime	

Cancel courier pickup

Web service url-s are as follows:

TEST: <https://test-omx.omniva.eu/api/v01/omx/courierorders/cancel-pickup-order>

LIVE: <https://omx.omniva.eu/api/v01/omx/courierorders/cancel-pickup-order>

Input fields: ([Example request by order number](#))

Code	Is it mandatory?	Field type	Description
customerCode	yes		PARTNER_CODE (AXA Code) of the Customer, agreed upon previously.
courierOrderNumber	yes		Courier order number to be cancelled

Response fields: ([Example response](#))

Code	Description
cancelledPickups	

courierOrderNumber	number of and order that was cancelled
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Request events

Suggestions for partners using TRT services.

6.1 EventID-based method

The easiest and best-performing solution. Highly recommended for partners with higher volumes, when volumes vary a lot or if you just want to have very clean and easy solution. You will not get duplicate events, you will not miss any events.

What to keep in mind:

- you have to keep/save latest eventId you got from response and use that for the next query input;
- if you have more than one account at Omniva you need to keep/save latest eventId separately for every account as services will respond with the events for the requested account only;
- use size=100 parameter to get more events in one response before increasing frequency of queries;
- check Response - if Response contains "last":false" then Omniva has more events to query and You can query more events right away.
- Suggested frequencies by shipment volumes (daily):
 - upto 50 shipments - no more than once every hour;
 - 50-100 shipments - 30min;
 - 100 - 300 shipments - 15min, size=100 might be useful;
 - 300-1000 shipments - 10 min, use size=100;
 - 1000-3000 shipments - 5min, use size=100;
 - more than 3000 shipments - please consult Omniva support.

TEST: <https://test-omx.omniva.eu/api/v01/omx/shipments?size=100&fromTrackEventId=232551>

LIVE: <https://omx.omniva.eu/api/v01/omx/shipments?size=100&fromTrackEventId=232551>

Response gives back events for shipments sent by authenticated customer where eventId is larger than eventId defined in request. NB!! Max 100 results per response. Recommended frequency max 1 request per minute

6.2 Time-based method

Useful for low volumes or in cases where you have lost data for relatively short period of time. You might get duplicate events (if queries have overlapping periods or in a very rare case when we might have several events for the same time) and you might miss events (specially if you create queries with fixed input values).

What to keep in mind:

- it's MUCH better to keep/save latest eventTime you got from response and use that for the next query fromTimestamp value than just create queries with fixed time inputs (like now()-2hours);
- fromTimestamp and toTimestamp should be given as UTC time!
- if you are using this method as main TRT method and use previous response max value for fromTimestamp - no need to give toTimestamp value. You get events upto "now" or upto amount of events allowed (default 20 or if size=100 used then the amount given by this) depending on which limit comes first.
- if you have more than one account at Omniva you need to keep/save latest timestamp separately for every account as services will respond with the events for the requested account only;
- check Response - if Response contains "last":false" then Omniva has more events to query and You can query more events right away.
- Suggested frequencies by shipment volumes (daily):
 - upto 50 shipments - once every hour;
 - 50 - 100 shipments - 30min, size=100;
 - more than 100 - see eventId based method.

TEST: <https://test-omx.omniva.eu/api/v01/omx/shipments?size=100&fromTimestamp=2022-11-09T01:34:55&toTimestamp=2022-11-09T22:34:55>

LIVE: <https://omx.omniva.eu/api/v01/omx/shipments?size=100&fromTimestamp=2022-11-09T01:34:55&toTimestamp=2022-11-09T22:34:55>

Response gives back events for shipments sent by authenticated customer where eventDate is between times defined in request. Recommended frequency max 1 request per minute

Rules:

- if toTimestamp is filled then fromTimestamp must be filled
- toTimestamp must be later than fromTimestamp
- toTimestamp must not be more than 30 days later than fromTimestamp
- Size can't be bigger than 100 (configured number).
- If size is not determined, then 20 results per response are given by default

6.3 Barcode-based method

Should be used only for debugging specific shipment or in case of very low volumes where upto date tracking data is not critical.

What to keep in mind:

- if you have more than one account at Omniva you need to run the request from the account that "owns" specific shipment, otherwise you will get "unknown shipment" response;
- in case of very low volumes (less than 10 shipments day) and timewise non-critical tracking - usually running query upto 3 times will suffice:
 - day after shipments was picked up by Omniva;
 - If first query did not return DELIVERED event: day after shipment was expected to be delivered;
 - If previous queries did not return DELIVERED event: 3 days after shipment was expected to be delivered;

TEST: <https://test-omx.omniva.eu/api/v01/omx/shipments/CC401881072EE>

LIVE: <https://omx.omniva.eu/api/v01/omx/shipments/CC401881072EE>

Response gives back all events for specific parcel.

NB!!! If there is a need to periodically check updates for multiple parcels, it is recommended to use timestamp or eventId option

6.4 Rate limiter

Our API TRT endpoint is protected against too frequent queries by "rate limiter". Logic is basically follows: every account has 5 query limit for every 5 minutes. So in rare cases where you may have a lot of events to query you can either query 5 queries in rapid succession and then wait for 5 minutes or just run queries no more often than once a minute. NB! For extra large customers (more than 3000 shipments day) we can raise this limit.