

TECHNICAL DESCRIPTION

Matkahuolto's shipment document interface

Ismo Koskinen

Version
Date

2.19
25.8.2022

Change log

Version and date	Updated by	Description of change
1.0 / 07.07.2009	Ismo Koskinen	- First version
1.1 / 27.07.2009	Lasse Vuoti	- Added info
1.2 / 13.08.2009	Lasse Vuoti	- puserId
1.3 / 23.05.2013	Ismo Koskinen	- Added SpecialHandling
2.0 / 21.02.2014	Ismo Koskinen	- Activation code, returns handling, other payer
2.1 / 09.04.2014	Julian Iizuka	- Updated examples for version 2
2.2 / 29.12.2014	Ismo Koskinen	- Added version 2 addresses and countries
2.3 / 05.02.2015	Janne Reiman	- Added ShipmentRow examples
2.4 / 29.01.2019	Ismo Koskinen	- Added new error codes to reply message
2.5 / 20.03.2019	Ismo Koskinen	- Added service code 11 & cash payer validation
2.6 / 09.05.2019	Ismo Koskinen	- Added special handling code K06 (Delivery without signature)
2.7 / 29.01.2020	Ismo Koskinen	- Added service code 84 (XXS)
2.8 / 29.09.2020	Tuomas Määttä	- Fixed max number packages / shipment
2.9 / 1.10.2020	Tuomas Määttä	- Added new SpecialHandling code
2.10. / 23.10.2020	Ismo Koskinen	- Added new SpecialHandling code (JPL) and new fields for it
2.11. / 27.01.2021	Ismo Koskinen	- Added service code 97 (Export home delivery) - Removed unused service codes 40, 42, 43, 44
2.12. / 17.02.2021	Ismo Koskinen	- Added error codes 1020 and 1021
2.13 / 25.03.2021	Tuomas Määttä	- Added DocumentType 10X15
2.14 / 11.05.2021	Ismo Koskinen	- Added parcel measurements, service code 37 and fields for customs
2.15 / 18.06.2021	Tuomas Määttä	- Removed obsolete Special Handling code K03
2.16 / 01.07.2021	Ismo Koskinen	- Added PIN-code
2.17 / 20.05.2022	Ismo Koskinen	- Added Dangerous Goods information
2.18 / 15.06.2022	Ismo Koskinen	- Added service codes 81 and 91 (customer return domestic / abroad)
2.19 / 2.8.2022	Tuomas Määttä	- Added examples for product 91, new fields for dangerous goods

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1 GENERAL

In this document is described Matkahuolto's shipment pdf interface. Interface can be used to request shipment documents and sending shipment data to Matkahuolto.

For version 2.0, it is possible to send multiple shipments in one request. In reply message there will be all the shipment documents in one pdf-file

This interface is based on XML-messages, that are transported between the customer and Matkahuolto. This interface does not use SOAP (Simple Object Access Protocol), it is based on simple XML-messages.

For live environment, the address for sending the XML-messages is:

<https://extservices.matkahuolto.fi/mpaketti/mhshipmentxml>

For testing, the address for sending XML-messages is:

<https://extservicetest.matkahuolto.fi/mpaketti/mhshipmentxml>

In HTTP-request, Content-Type –attribute must have value “text/xml”. Otherwise server will reply with an error status.

Service is SSL secured, requests can only be made via https: -protocol.

2 MESSAGE DESCRIPTIONS

2.1 Request

XML-element	M	Description	Remarks	Version
MHShipmentRequest	X			
UserId	X	Account number in Matkahuolto	Matkahuolto gives this to the customer (account number without zeros in beginning)	
Password	X	Password for the account	Matkahuolto gives this to the customer	
Version	X	Version number		
Shipment	X	Begins new shipmentinfo		
ShipmentType	X	Shipment type	N=normal (default), A=activated shipment R=return	2.0
MessageType	X	Message type	N=New C=change D=delete	
ShipmentNumber		Shipment number	If empty, Matkahuolto will create shipment number	
ShipmentDate		Shipment date	DD.MM.YYYY	



Weight	X	Shipment weight	e.g. 1.23, use dot to separate	
Volume		Shipment volume	e.g. 0.123, use dot to separate	
Packages	X	Packages in shipment	Integer	
SenderId	X	Account number in Matkahuolto	same as pUserid	
SenderName1		Sender name 1		
SenderName2		Sender name 2		
SenderAddress		Sender address		
SenderAddress2		Sender address 2	Address line 2, floor, door number etc.	2.14
SenderPostal		Sender postal code		
SenderCity		Sender city		
SenderCountry		Sender country	Country code (FI = Finland)	2.0
SenderContactName		Contact person for sender		
SenderContactNumber		Contact number for sender		
SenderEmail		Email for sender		
SenderBusinessCode		Sender business code		2.14
SenderCustomsCode		Sender customs code		2.14
SenderReference		Sender reference		
DeparturePlaceCode				
DeparturePlaceName				
ReceiverId		Receivers account number	Account number in Matkahuolto	
ReceiverName1	X	Receiver name 1		
ReceiverName2		Receiver name 2		
ReceiverAddress		Receiver address		
ReceiverAddress2		Receiver address 2	Address line 2, floor, door number etc.	2.14
ReceiverPostal	X	Receiver postal		
ReceiverCity	X	Receiver city		
ReceiverCountry		Receiver country	Country code (FI = Finland)	2.0
ReceiverContactName		Contact person for receiver		
ReceiverContactNumber		Receiver phonenumber		
ReceiverEmail		Receiver email		
ReceiverBusinessCode		Receiver business code		2.14
ReceiverCustomsCode		Receiver customs code		2.14
ReceiverReference		Receiver reference		
ReceiverLanguage		Receiver language code	FI=Finnish, SV=Swedish, EN=English	2.3
DestinationPlaceCode		Comes from office selection-interface	Needed when product is "Near parcel, 80"	
DestinationPlaceName		Comes from office selection-interface		
PayerCode		Payer for the shipment	S=sender	2.0
			R=receiver	
			O=other (when "O", payers account code given in PayerId)	



PayerId		Account code for payer	Mandatory when PayerCode "O"	2.0
PayerName1		Payer name		2.0
PayerName2		Payer name 2		2.0
PayerAddress		Payer address		2.0
PayerPostal		Payer postal code		2.0
PayerCity		Payer city		2.0
PayerCountry		Payer country	Country code (FI = Finland)	2.0
PayerContactName		Payer contact person		2.0
PayerContactNumber		Payer contact number		2.0
PayerEmail		Payer email		2.0
PayerReference		Payer reference		2.0
Remarks		Remarks		
ProductCode	X	Code for Matkahuoltos product	See list below	
ProductName		Name for Matkahuoltos product	See list below	
Pickup		Pickup	Y=yes, N=no, default="N"	
PickupPayer		Payer for the pickup	S=sender R=receiver default=S	
PickupRemarks		Remarks for pickup		
Delivery		Delivery	Y=yes, N=no, default=N	
DeliveryPayer		Payer for the delivery	S=sender R=receiver default=S	
DeliveryRemarks		Remarks for delivery		
CODSum		Sum for COD	2 decimals, use dot to separate	
CODCurrency		Currency for COD	Default=EUR	
CODAccount		Account for COD		
CODBic		BIC code for COD		2.0
CODReference		Reference for COD		
Goods		Goods		
SpecialHandling		Special handling	Code for special handling, see list below. If several per shipment then values separated by comma.	
VAKCode		Possible ADR-code for the product		
VAKDescription		Description for possible ADR-product		
DocumentType		Document type	NO = no label is returned in response message 10X15 = returns 100x150mm label By default returns A5 label	
SpecialHandover		Special Handover	Y=yes, N=no, default N	2.3
HandoverRemark1		HandoverRemark1		2.3
HandoverRemark2		HandoverRemark2		2.3
HandoverRemark3		HandoverRemark3		2.3
Terminal		Terminal code (post box delivery)		2.10
RouteNumber		Route number (post box delivery)		2.10
RouteName		Route name (post box delivery)		2.10
DeliveryPointId		Delivery point (post box delivery)		2.10
Transport		Transport (post box delivery)		2.10



Location		Location (post box delivery)		2.10
AddressSequence		Address sequence (post box delivery)		2.10
CurrencyCode		Currency code	Currency code for customs value	2.14
CustomsType		Goods type for customs	See list below	2.14
CustomsStatus		Customs status	See list below	2.14
DeliveryPinCode		PIN-code for delivery		2.16
ShipmentRow		Starts parcel level	Max 5 parcels per shipment	
Packageld		Parcel id		
Weight		Parcel weight		
Volume		Parcel volume		
Length		Parcel length (cm)		2.14
Width		Parcel width (cm)		2.14
Height		Parcel height (cm)		2.14
Goods		Parcel goods		
GoodsRow		Starts goods level, max. 5 goods per ShipmentRow	For customs	2.14
GoodsDescription		Goods description		2.14
Quantity		Quantity of goods		2.14
CustomsValue		Customs value	2 decimals	2.14
NetWeight		Net weight	2 decimals	2.14
CountryOfOrigin		Country of origin	Country code	2.14
CommodityCode		Commodity code		2.14
DangerousGoodsRow		Starts dangerous goods level, max 3 goods per ShipmentRow	Used with shipments containing dangerous goods	2.17
UNCode		UN-code		2.17
AdrDescription		Dangerous goods name		2.17
AdrTechnicalName		Technical name		2.17
AdrClass		Adr class code		2.17
AdrType		Adr type code		2.17
AdrPackageGroup		Package group		2.17
AdrNetWeight		Net weight	2 decimals	2.17
AdrNetWeightExplosive		Net weight, explosives	2 decimals	2.19
AdrAdditionalClass1		Subsidiary Risks		2.19
AdrAdditionalClass2		Subsidiary Risks		2.19

Mandatory info marked with "X" in column "M".

Notice 1.: Payer's id (account number in Matkahuolto) is always mandatory (senderId, receiverId or payerId).

Notice 2: When ShipmentNumber given by customer, ShipmentRow must be added for each Packageld in one shipment

Example: If shipment id is MA018308594000000001 and shipment includes parcels MA0183085940000000001 and MA0183085940000000002, then:

```
<ShipmentRow>  
  <PackageId>MA0183085940000000001</PackageId>  
</ShipmentRow>  
<ShipmentRow>  
  <PackageId>MA0183085940000000002</PackageId>  
</ShipmentRow>
```

In shipments where customs clearance is needed sender should send additional information for customs by using GoodsRow -elements (max. 5 goods rows per parcel). For example

```
<ShipmentRow>
  <GoodsRow>
    <GoodsDescription>Goods 1</GoodsDescription>
    <Quantity>5</Quantity>
    <CustomsValue>185</CustomsValue>
    <NetWeight>2.65</NetWeight>
    <CountryOfOrigin>CN</CountryOfOrigin>
    <CommodityCode>1122334455</CommodityCode>
  <GoodsRow>
  <GoodsRow>
    <GoodsDescription>Goods 2</GoodsDescription>
    <Quantity>1</Quantity>
    <CustomsValue>15</CustomsValue>
    <NetWeight>8</NetWeight>
    <CountryOfOrigin>JP</CountryOfOrigin>
    <CommodityCode>1122334466</CommodityCode>
  <GoodsRow>
</ShipmentRow>
```

Shipments containing dangerous goods require special information to be sent for each parcel containing those (max. 3 different goods per parcel). For example:

```
<ShipmentRow>
  <DangerousGoodsRow>
    <UNCode>1263</UNCode>
    <AdrDescription>Maali</AdrDescription>
    <AdrTechnicalName>Liuotin</AdrTechnicalName>
    <AdrClass>3</AdrClass>
    <AdrType>FI</AdrType>
    <AdrPackageGroup>I</AdrPackageGroup>
    <AdrNetWeight>0.85</AdrNetWeight>
    <AdrNetWeightExplosive></AdrNetWeightExplosive>
    <AdrAdditionalClass1></AdrAdditionalClass1>
    <AdrAdditionalClass2></AdrAdditionalClass2>
  </DangerousGoodsRow>
</ShipmentRow>
```

Product codes

ProductCode	ProductName
10	Bus parcel
11	Bus parcel (cash)
30	Delivery parcel
34	Home delivery
37	XXS to post box
57	Pallets
70	Export document by flight
71	Export parcel by flight
80	Near Parcel
81	Customer return
84	XXS
91	Customer return from abroad
95	Export Near Parcel

96 Export Delivery Parcel
97 Export Home Delivery

Special handling codes

SpecialHandling	Description
E01	ADR (old version, VA / LQ should be used)
K02	Large shipment
K04	Handle with care
K05	Temperature
K06	Delivery without signature
HL	Handing over in person
SP1	Postpone timeout return for 7 days
VA	Dangerous goods (specified in group DangerousGoodsRow)
LQ	Dangerous goods - Limited Quantity

If there are several special handlings for shipment their codes are separated by comma.

CustomsType	Description
COMMODITY	Normal goods
DOCUMENT	Document
SAMPLE	Sample
GIFT	Gift

CustomsStatus	Description
UNCLEARED	Uncleared
TRANSIT	In transit
CLEARANCE	In customs clearance
CLEARED	Cleared

2.2 Reply

XML-element	Description	Remarks	Version
MHShipmentReply	Message id		
Version	Version number		
Shipment	Begins shipmentlevel		
ShipmentNumber	Number of the shipment		
SenderReference	Sender reference		
ActivationCode	Activation code		2.0
ShipmentPdf	Shipping document	Binary-pdf	
pdfName	Original name of the document	xxxxx.pdf	

In response there is the shipment pdf and also the shipment number and the shipment reference. These can be saved to tracking and other purposes.

If the request is made for shipment with activation code, the code will be in response

If the request is for deleting (MessageType = D) and deleting is done correctly, the reply will be error message with an ErrorNbr 0.

2.3 Reply when error

XML-elementti	Kuvaus	Huomautukset	Versio
MHShipmentReply	Sanoman tunnus		
Version	Version number		
ErrorNbr	Error number		
ErrorMsg	Error description		
Shipment	Begins shipment level		
ShipmentNumber	Shipment number		2.3
SenderReference	Sender reference		2.3
ErrorNbr	Error number		2.3
ErrorMsg	Error description		2.3

Possible error numbers and descriptions are:

- 0 Shipment deleted
- 1001 Login failed
- 1002 Wrong Userid
- 1003 Mandatory information missing
- 1004 Other error in request message
- 1005 System error
- 1006 Weight is greater than allowed
- 1007 Parcel count is greater than allowed
- 1008 Error in shipment number
- 1009 Error in parcel number
- 1010 Error in shipment type
- 1011 Error in messagetype
- 1012 Error in product code
- 1013 Error in destination place
- 1014 Volume is greater than allowed
- 1015 COD-sum is greater than allowed
- 1016 Parcel count is greater than allowed
- 1017 COD not allowed for product
- 1018 Error in decimal field (point should be used as decimal separator)
- 1019 Selected product is not allowed for cash payer
- 1020 COD is not allowed for pickup point
- 1021 Additional service is not allowed for product
- 1022 Customs clearance is already defined for shipment
- 1023 Invalid UNCode for dangerous goods defined
- 1024 Too many dangerous goods rows for shipment row

3 EXAMPLES

3.1 Request

```
<?xml version='1.0' encoding='UTF-8'?>
<MHShipmentRequest>
  <UserId>9430023</UserId>
  <Password>456</Password>
  <Version>2.0</Version>
  <Shipment>
    <ShipmentType>N</ShipmentType>
    <MessageType>N</MessageType>
    <ShipmentNumber></ShipmentNumber>
    <ShipmentDate>21.02.2014</ShipmentDate>
    <Weight>3.25</Weight>
    <Volume>0.025</Volume>
    <Packages>2</Packages>
    <SenderId>9430023</SenderId>
    <SenderName1>TESTIASIAKAS OY</SenderName1>
    <SenderName2></SenderName2>
    <SenderAddress>Kaivokatu 1</SenderAddress>
    <SenderAddress2>3. floor, door 2</SenderAddress2>
    <SenderPostal>00100</SenderPostal>
    <SenderCity>HELSINKI</SenderCity>
    <SenderCountry>FI</SenderCountry>
    <SenderContactName>Liisa Lähetäjä</SenderContactName>
    <SenderContactNumber>050-1234567</SenderContactNumber>
    <SenderEmail>liisa.lahettaja@testiasiakas.fi</SenderEmail>
    <SenderBusinessCode>1234567-8</SenderBusinessCode>
    <SenderCustomsCode>1234-5</SenderCustomsCode>
    <SenderReference>L12345678</SenderReference>
    <DeparturePlaceCode></DeparturePlaceCode>
    <DeparturePlaceName>HELSINKI</DeparturePlaceName>
    <ReceiverId></ReceiverId>
    <ReceiverName1>MALLIASIAKAS OY</ReceiverName1>
    <ReceiverName2></ReceiverName2>
    <ReceiverAddress>HÄMEENKATU 1</ReceiverAddress>
    <ReceiverAddress2>Backyard</ReceiverAddress2>
    <ReceiverPostal>33100</ReceiverPostal>
    <ReceiverCity>TAMPERE</ReceiverCity>
    <ReceiverCountry>FI</ReceiverCountry>
    <ReceiverContactName>Ville Varastomies</ReceiverContactName>
    <ReceiverContactNumber>03-1234567</ReceiverContactNumber>
    <ReceiverEmail>info@malliasiakas.fi</ReceiverEmail>
    <ReceiverBusinessCode>1234567-8</ReceiverBusinessCode>
    <ReceiverCustomsCode>1234-5</ReceiverCustomsCode>
    <ReceiverReference>V112233</ReceiverReference>
    <ReceiverLanguage>FI</ReceiverLanguage>
    <DestinationPlaceCode></DestinationPlaceCode>
    <DestinationPlaceName>TAMPERE</DestinationPlaceName>
    <PayerCode>0</PayerCode>
    <PayerId>9430878</PayerId>
    <PayerName1>MAKSAJA OY</PayerName1>
    <PayerName2></PayerName2>
    <PayerAddress>Asematie 1</PayerAddress>
    <PayerPostal>01300</PayerPostal>
```

```

<PayerCity>VANTAA</PayerCity>
<PayerCountry>FI</PayerCountry>
<PayerContactName>Matti Maksaja</PayerContactName>
<PayerContactNumber>050-8834567</PayerContactNumber>
<PayerEmail>liisa.lahettaja@testiasiakas.fi</PayerEmail>
<PayerReference>M2233</PayerReference>
<Remarks></Remarks>
<ProductCode>30</ProductCode>
<ProductName>JAKOPAKETTI</ProductName>
<Pickup>Y</Pickup>
<PickupPayer>S</PickupPayer>
<PickupRemarks>Pickup earlier than 16:00</PickupRemarks>
<Delivery>Y</Delivery>
<DeliveryPayer>R</DeliveryPayer>
<DeliveryRemarks>Call beforehand</DeliveryRemarks>
<CODSum>105.55</CODSum>
<CODCurrency>EUR</CODCurrency>
<CODAccount>FI1715963000011512</CODAccount>
<COdBic>NDEAFIHH</COdBic>
<CODReference>13</CODReference>
<Goods>Spare parts</Goods>
<SpecialHandling>K04,K06</SpecialHandling>
<VAKCode></VAKCode>
<VAKDescription></VAKDescription>
<DocumentType></DocumentType>
<SpecialHandover>Y</SpecialHandover>
<HandoverRemark1>Remark 1</HandoverRemark1>
<HandoverRemark2>Remark 2</HandoverRemark2>
<HandoverRemark3>Remark 3</HandoverRemark3>
<RouteNumber>9272024</RouteNumber>
<RouteName>NUMMELA 24</RouteName>
<DeliveryPointId>10466571</DeliveryPointId>
<Transport>NUMMI-P & NUMMELA</Transport>
<Location>OJAKKALANTIE 1</Location>
<AddressSequence>858</AddressSequence>
<CurrencyCode>USD</CurrencyCode>
<CustomsType>COMMODITY</CustomsType>
<CustomsStatus>CLEARED</CustomsStatus>
<DeliveryPinCode>12345678</DeliveryPinCode>
</Shipment>
</MHShipmentRequest>

```

3.2 Reply

```

<?xml version='1.0' encoding='ISO-8859-1'?>
<MHShipmentReply>
  <Version>2.0</Version>
  <Shipment>
    <ShipmentNumber>MH833844050FI</ShipmentNumber>
    <SenderReference>L12345678</SenderReference>
  </Shipment>
  <ShipmentPdf>
    ... Document in pdf-form... BASE64-ENCODED
  </ShipmentPdf>
  <PdfName>
    MH833844050FI.pdf
  </PdfName>
</MHShipmentReply>

```

3.3 Reply (Shipment with activation code)

```
<?xml version='1.0' encoding='ISO-8859-1'?>
<MHShipmentReply>
  <Version>2.0</Version>
  <Shipment>
    <ShipmentNumber>MH833844050FI</ShipmentNumber>
    <SenderReference>L12345678</SenderReference>
    <ActivationCode>1000019</ActivationCode>
  </Shipment>
  <ShipmentPdf>
    ...Document in pdf-form... BASE64-ENCODED
  </ShipmentPdf>
  <PdfName>
    MH833844050FI.pdf
  </PdfName>
</MHShipmentReply>
```

3.4 Reply when error

```
<?xml version='1.0' encoding='ISO-8859-1'?>
<MHShipmentReply>
  <Version>2.0</Version>
  <ErrorNbr>1001</ErrorNbr>
  <ErrorMsg>Ei käyttöoikeutta</ErrorMsg>
</MHShipmentReply>

<?xml version='1.0' encoding='ISO-8859-1'?>
<MHShipmentReply>
  <Version>2.0</Version>
  <ErrorNbr>1002</ErrorNbr>
  <ErrorMsg>Virheellinen lähettäjän asiakasnumero</ErrorMsg>
  <Shipment>
    <ShipmentNumber>MA0183085940000000001</ShipmentNumber>
    <SenderReference>SR1</SenderReference>
    <ErrorNbr>1002</ErrorNbr>
    <ErrorMsg>Virheellinen lähettäjän asiakasnumero</ErrorMsg>
  </Shipment>
</MHShipmentReply>
```