
DataTransfer – Appendix 5

Description of the DataTransfer interface

EAD (Electronic Advance Data) submission for
international letter mail containing goods

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1 Introduction

1.1 Change log

DT A1 Vers.	Brief description of change	Section	Type*
1.0	Various additions with new customer interface V2.2 and new "Letter ID" provider		I

* I = Insert, U = Update

1.2 Who is this guide written for?

This Appendix contains the technical information relating to the electronic submission of EAD (Electronic Advance Data) to Swiss Post.

1.3 What information will you receive about DataTransfer?

DataTransfer Manual

Overview and functional descriptions for DataTransfer

Brief description of DataTransfer services, letters with barcode (BMB) via DataTransfer, Letter ID, "Create a Dispatch List" via DataTransfer and Parcel Post easy via SFTP, an explanation of how DataTransfer works and an illustration of the registration and test procedure. This is aimed primarily at DataTransfer decision-makers.

DataTransfer – Appendix 1

Description of DataTransfer customer interface:

Parcels, Express, Solutions, letters with barcode (BMB) and Letter ID:

Description of the notification structure and data to be submitted for Parcels, Express, Solutions, BMB and Letter ID plus technical specifications such as input file formats and naming conventions.

DataTransfer – Appendix 2

Description of the "Create a Dispatch List" customer interface:

Description of the data to be submitted for "Create a Dispatch List" reports

DataTransfer – Appendix 3

Description of DataTransfer reports

Description of the contents of reports for BMB, Parcels and Swiss-Express, but excluding "Create a Dispatch List".

1.4 Validity

For each new version of the DataTransfer application, a new version of the DataTransfer manual and/or the relevant appendices will be issued and made available to customers in electronic form.

When these new instructions are issued, the previous version will cease to be valid.

The Manual and DataTransfer Appendices 1 to 3 can be obtained from your Swiss Post customer advisor or from www.swisspost.ch/datatransfer ⇒ Technical DataTransfer Support

This version of the manual (V1.0, August 2019) is based on the customer interface version.

1.5 Abbreviations used

Abbreviation	Description
BMB	Letters with barcode
DataTransfer	Name of service for electronically transmitting data to Swiss Post
KDP number	Swiss Post customer identification number
Letter ID	Addressed and uniquely identified letters (with DMC) are delivered using the Letter ID provider
LSO	Delivery note for letters with barcode are used by the BMB provider when dispatching mailings
Parcel Post easy	Parcel post without dispatch list
PKZIP 2.0	Compression standard for reducing file size. Nowadays, almost all files with the extension .zip are in PKZIP 2.0 format
XSD	XML-diagram definition: for generating and verifying the XML file

1.6 Support

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2 Technical specification

2.1 Data submission

Data can be transmitted in the following ways:

- As an e-mail attachment
- Via a Swiss Post SFTP account
- Via the Confederation's sedex platform (XML only)

Guidelines for preparing files can be found in Section 2.3.

2.1.1 E-mail

To submit data via e-mail, you will need an e-mail account with which you can send e-mails of up to 2 MB. The e-mail attachment must be sent in base64 or unencoded format.

Procedure for submitting data by e-mail

Prepare the data in XML format and add the file to an e-mail as an attachment. The maximum file size for submitting data via e-mail is 2 MB per submission.

So that the attached files can be uniquely identified when you submit data via e-mail, you must also specify a keyword in the body of the e-mail. If this keyword is incorrect, the e-mail (plus attachment) will be deleted. The keyword to be specified in e-mails is:

- In the test phase: T-770809dfu01input
- In the productive phase: 770809dfu01input

Note: the e-mail must only contain the keyword and the file. Any additional wording, such as automatic signatures, is not permitted.

Send the e-mail to paketversand.dfu@swisspost.ch.

2.1.2 SFTP

To submit data via SFTP, you'll need a Swiss Post SFTP account. If you don't have a Swiss Post SFTP account yet, one will be opened once you have registered.

Instructions on importing data via SFTP can be found at www.swisspost.ch/datatransfer → Technical DataTransfer Support or obtained from DataTransfer Support.

2.1.3 sedex

sedex subscribers of the eSchKG domain can exchange consignment data electronically using the Confederation's sedex platform. The existing DataTransfer services were extended with an adapter. Registrations at the Swiss Federal Statistical Office are carried out by DataTransfer Support.

You will find instructions for transferring data via sedex at www.swisspost.ch/datatransfer → Technical DataTransfer Support → Letters with barcode.

2.2 File formats

Files are accepted in XML (UTF-8) and ZIP (PKZIP 2.0) format. See Section 3.1.1 for the file structure.

2.2.1 Special characters in XML format

XML files must conform to XML standards in order for DataTransfer to process them. When submitting files, this means that the attribute values in XML files must not contain any unencoded special characters, such as pointed brackets (<>) or speech marks (" "). In order to send these special characters, you need to encode them using special characters that HTML will recognize. These take the following format: &[Last name];

The following example shows you how to encode the commercial "and" sign ("&"): REC_Name1="Moser & Cie."

Here is a list of special characters and the corresponding format in which they must be submitted:

Special characters	Coding
&	&
<	<
>	>
"	"
'	'

Normal umlauts may not be encoded as HTML.

There's an easy way to check whether your XML is well-formed and can be processed by DataTransfer: open the file in a browser (e.g. Internet Explorer or Mozilla Firefox). If the files are not well-formed, a corresponding error message appears.

2.3 Naming conventions

2.3.1 Input file names

If you send files that do not conform to the naming convention shown below, these files will not be collected and will be automatically deleted after a specified period of time. For security reasons, you will not be notified of this. The following naming convention should therefore be strictly adhered to.

Naming convention

SenderID_EAD_INPUT_YYYYMMDD_HHMMSS_FileID.xml
SenderID_EAD_RcptMsg_YYYYMMDD_HHMMSS_FileID.xml
SenderID_EAD_ConfMsg_YYYYMMDD_HHMMSS_FileID.xml

The **FileID** of the EAD INPUT message and the corresponding BMB input file must be identical. This is the only way to easily verify the completeness of your submissions.

Tip

And if you also add the FileID to the SendingID element in the BMB input file, the corresponding information will be included in all reports for all consignments on this LSO.

```
<SendingID>1</SendingID>
```

Example

```
829_EAD_RcptMsg_20190708_101305_447204.xml
```

Maximum file size for files to be sent

The delivery file must be a maximum of 6 MB. If the file exceeds this size it will not be processed and you will receive an error message (max. filesize exceeded).

3 Data content of customer interface

3.1 Data submission for international letter mail containing goods

You will receive a receipt confirmation and a processing log for each file submitted. These will both be sent to you by SFTP.

The receipt confirmation states whether the file has been successfully transmitted and could be recognized by DataTransfer. This involves validating the fields "FileID", "SenderID" and "KDPNumber". The file is tested for parsing capability and exact conformity with the interface schema (elements and attributes). Any errors are individually listed in the processing protocol. You can suppress receipt confirmation by specifying "SendOKMail = 1" in the file being submitted; however, if errors are identified in the file, the receipt confirmation will always be sent.

The processing log indicates whether DataTransfer could process the data contained within the file. Any invalid records will be given an error code and an error description to help you identify the error. However, the processing log does not tell you anything about the quality of the address that has been submitted. By specifying "SendOKMail = 1" in the file, you can choose whether you want to receive the processing log if the data is OK; however, if errors are identified in the file, the log will always be sent.

The overview table containing all error codes and their explanations can be found here www.swisspost.ch/datatransfer → Technical DataTransfer Support → Letters with barcode.

3.1.1 Data catalogue V1.0

<Element> Element/Attribute	Description	Features	Char Set	Format (min./ max. Length)	Default Value	Remarks
<Envelope>		Min. 1 / Max. 1				
OriginVersion	Declaration of the Origin-Version	Mandatory	Alphanumeric	2		N° of the Msg Version
xmlns	XSD Versionsnumber; serves as Identification for DataTransfer	Mandatory	Alphanumeric			
<FileInfos>	General Fileinformations	Min. 1 / Max. 1				
<FileID/>	Unique FileID	Mandatory	Numeric	14		
<FileDate/>	File Delivery Date YYYYMMDD	Mandatory	Alphanumeric	8		
<FileTime/>	File Delivery Time HHMMSS	Mandatory	Alphanumeric	6		
</FileInfo>						
<ItemInfo>		Min. 1 / Max. 7000				
<InfoEvent>		Min. 1 / Max. 1				
<Date/>	Date of posting	Mandatory	DateTime			ISO 8601 (yyyy-mm-ddThh:mm:ss)
<PostcodeUPU/>	ETOE postcode	Mandatory	Alphanumeric	6	CHZ- RHB	
<Source/>	Identification of the source system	Mandatory	Alphanumeric	1 ... 12	EXT	
</InfoEvent>						
<ItemInfoData>	Detailed information about Shipment Decla- ration	Min. 1 / Max. 1				
<Barcode/>	Unique barcode number	Mandatory	Alphanumeric	1 ... 30		
<TotalValue/>	Total value of the item	Mandatory	Decimal			
<TotalCurrency/>	Currency of Element „Total Value“ CHF, EUR, USD or GBP	Mandatory	Alphanumeric	3		
<MailSourceExport/>	Examples: for Interconnect items Code E02, E12, E13 etc.	Optional	Alphanumeric	1 ... 4		
<PostagePrice/>		Mandatory	Decimal			(> 0 ... <= 9'999'999.99 or 999'999'999), max. 2 after comma numbers, max. 9 numbers in total (incl. after comma numbers)
<PostageCurrency/>	Currency of PostagePrice	Mandatory	String	3	CHF	
<DeclaredGrossWeight/>	Declared gross weight	Mandatory	Decimal			in Kg Decimal (> 0 ... <= 999.000), max. 3 after comma numbers
<NatureOfTransactionCode/>	N° of According content	Mandatory	Numeric	1		The following values are allowed: - 1 (Documents) - 2 (Goods) - 3 (Gift) - 4 (Sample) - 5 (Returned goods) - 6 (Others)

<AssociatedDocumentType/>	Nature of a document associated with the Item.	Optional	Numeric	3		Nature of a document associated with the Item. The following values are allowed: commercial invoice = 380; proforma invoice = 325; certificate of origin = 861; export licence = 811;
<AssociatedDocumentIdentifier/>	N° or reference of a document which accompanies the item	Optional	Alphanumeric	1 ... 20		
<DestinationCountryIso/>	Isocode destination country	Optional	Alphanumeric	2		
</InfoEvent>						
<ItemInfoData>	Detailed information about Recipient	Min. 1 / Max. 1				
<Name1/>	Addressee Name 1	Mandatory	Numeric	1 ... 30		
<Name2/>	Addressee Name 2	Optional	Alphanumeric	1 ... 30		
<Name3/>	Addressee Name 3	Optional	Alphanumeric	1 ... 30		
<Address1/>	Addressee Street 1	Mandatory	Alphanumeric	1 ... 30		
<Address2/>	Addressee Street 2	Optional	Alphanumeric	1 ... 30		
<Address3/>	Addressee Street 3	Optional	Alphanumeric	1 ... 30		
<ZipCode/>	Addressee Zip-Code	Optional	Alphanumeric	1 ... 17		
<City/>	Addressee City	Mandatory	Alphanumeric	1 ... 30		
<Region/>	Addressee Region	Optional	Alphanumeric	1 ... 50		
<CountryIso/>	ISO Code of Destination Country	Mandatory	Alphanumeric	2		
<Language/>	Language	Mandatory	Alphanumeric	3	ENG	
<Tel/>	Addressee phone number - specific format expected	Optional	Alphanumeric	1 ... 20		+ upfront; only numbers except /.- p or x and „space“
<Email/>	Addressee Email	Mandatory	Alphanumeric	1 ... 50		
<Vat/>	Addressee VAT	Optional	Alphanumeric	1 ... 20		
<Taxnumber/>	Addressee tax code	Optional	Alphanumeric	1 ... 30		
<Contact/>		Optional	Alphanumeric	1 ... 30		
</Addressee>						
<Sender>	Detailed information about Sender					
<Name1/>	Sender Name 1	Mandatory	Alphanumeric	1 ... 35		
<Name2/>	Sender Name 2	Optional	Alphanumeric	1 ... 30		
<Name3/>	Sender Name 3	Optional	Alphanumeric	1 ... 30		
<Address1/>	Sender Street 1	Mandatory	Alphanumeric	1 ... 35		
<Address2/>	Sender Street 2	Optional	Alphanumeric	1 ... 30		
<Address3/>	Sender Street 3	Optional	Alphanumeric	1 ... 30		
<ZipCode/>	Sender Zip-Code	Mandatory	Alphanumeric	1 ... 17		
<City/>	Sender City	Mandatory	Alphanumeric	1 ... 30		

<CountryIso/>	ISO Code of Origin Country	Mandatory	Alphanumeric	2		
<Contact/>	Sender Contact Person	Optional	Alphanumeric	1 ... 30		
<Email/>	Sender Email	Mandatory	Alphanumeric	1 ... 50		
<Tel/>	Sender phone number - specific format expected	Mandatory	Alphanumeric	1 ... 20		+ upfront; only numbers except /- p or x and „space“
<Reference/>	Additional sender's reference as displayed on CN23 form	Optional	Alphanumeric	1 ... 25		
<Vat/>	Sender VAT number	Optional	Alphanumeric	1 ... 20		
<Taxnumber/>	Sender Taxnumber (e.g. IOSS, ABS, EORI, etc.)	Optional (Mandatory for certain countries)	Alphanumeric	1 ... 30		
</Sender>						
<ItemPosition>	Details about Items					
<Position/>	Each position-number (1-5) can be used only once. Must be set if any of the following elements are used.	Mandatory	Numeric	1		
<OriginLocation/>	Origin of content (Iso country-code)	Mandatory	Alphanumeric	2		
<ProductDescription/>	Detailed product description	Mandatory	Alphanumeric	1 ... 30		
<TariffHeading/>	HS code	Optional (Mandatory for merchants)	Alphanumeric	1 ... 9		
<NetWeight/>	Weight nett for article	Mandatory	Decimal			(> 0..<= 999.999), max. 3 after comma numbers
<Amount/>	N° of identical articles	Mandatory	Numeric	1 ... 5		max. 99'999
<Value/>	Value of article	Mandatory	Decimal			(> 0..<= 999'999'999.99), max. 2 after comma numbers,
<ValueCurrency/>	Currency of „Value“ CHF, EUR, USD or GBP	Mandatory	Alphanumeric	3		
</ItemPosition>						
</ItemInfo>						
</SendItemInfo>						

3.1.2 XML schema / XSD

A schema is provided for creating and validating the XML interface. The schema is stored as an XSD (XML-Schema-Definition) and can be invoked from the following address, or directly incorporated into the XML: www.swisspost.ch/datatransfer → Technical Support DataTransfer

3.1.3 Sample XML format for international letters containing goods

You can find a sample XML for an input file for international letters containing goods at www.swisspost.ch/datatransfer- Technical DataTransfer Support.

3.1.4 Example of an EAD DataTransfer file for EAD

```
<?xml version="1.0"?>
- <SendItemInfo OriginVersion="11" xmlns="http://www.post.ch/datatransfer/schemas/2019/02/ead">
  - <FileInfo>
    <FileID>448642</FileID>
    <FileDate>20190711</FileDate>
    <FileTime>081405</FileTime>
  </FileInfo>
  - <ItemInfo>
    - <InfoEvent>
      <Date>2019-07-11T08:14:05</Date>
      <PostcodeUPU>CHZRHB</PostcodeUPU>
      <Source>EXT</Source>
    </InfoEvent>
    - <ItemInfoData>
      <Barcode>LA010800059CH</Barcode>
      <TotalValue>401</TotalValue>
      <TotalCurrency>CHF</TotalCurrency>
      <PostagePrice>7</PostagePrice>
      <PostageCurrency>CHF</PostageCurrency>
      <DeclaredGrossWeight>1</DeclaredGrossWeight>
      <NatureOfTransactionCode>3</NatureOfTransactionCode>
      <DestinationCountryIso>US</DestinationCountryIso>
    </ItemInfoData>
    - <Addressee>
      <Name1>Mr. Max</Name1>
      <Name2>Musterman</Name2>
      <Address1>Time Square 1</Address1>
      <ZipCode>11111</ZipCode>
      <City>New York</City>
      <CountryIso>US</CountryIso>
      <Language>ENG</Language>
      <Tel>00123456789</Tel>
      <Email>testinger@life-test.ch</Email>
      <Contact>Hans</Contact>
    </Addressee>
    - <Sender>
      <Name1>Patrick</Name1>
      <Name2>Thies</Name2>
      <Name3>Post CH AG</Name3>
      <Address1>Wankdorffallee 4</Address1>
      <ZipCode>3030</ZipCode>
      <City>Bern</City>
      <CountryIso>CH</CountryIso>
      <Contact>Patrick Muster</Contact>
      <Email>testauftragpost@postmail.ch</Email>
      <Tel>0799992906</Tel>
    </Sender>
    - <ItemPosition>
      <Position>1</Position>
      <OriginLocation>AU</OriginLocation>
      <ProductDescription>Item_1</ProductDescription>
      <NetWeight>1</NetWeight>
      <Amount>1</Amount>
      <Value>401</Value>
      <ValueCurrency>CHF</ValueCurrency>
    </ItemPosition>
  </ItemInfo>
</SendItemInfo>
```

3.2 Confirmations

The content of these confirmations is always in English. The overview table containing all error codes and their explanations can be found here www.swisspost.ch/datatransfer → Technical DataTransfer Support .

3.2.1 Confirmation message

The confirmation message contains feedback on the content of the message.

Sample confirmation message

```
<?xml version="1.0" encoding="UTF-8"?>
- <ns0:ConfMsg xmlns:ns0="http://www.post.ch/datatransfer/schemas/2019/02/ead">
  <ns0:FileID>447204</ns0:FileID>
  <ns0:FileDate>20190708</ns0:FileDate>
  <ns0:FileTime>101305</ns0:FileTime>
  <ns0:SenderID>829</ns0:SenderID>
  <ns0:ResponseStatus>OK</ns0:ResponseStatus>
- <ns0:ItemInfoStatus>
  <ns0:Barcode>UA002300192CH</ns0:Barcode>
  <ns0:Status>OK</ns0:Status>
  - <ns0:ErrorMessage>
    <ns0:Type/>
    <ns0:Code/>
  </ns0:ErrorMessage>
</ns0:ItemInfoStatus>
- <ns0:ItemInfoStatus>
  <ns0:Barcode>UA002300201CH</ns0:Barcode>
  <ns0:Status>OK</ns0:Status>
  - <ns0:ErrorMessage>
    <ns0:Type/>
    <ns0:Code/>
  </ns0:ErrorMessage>
</ns0:ItemInfoStatus>
+ <ns0:ItemInfoStatus>
+ <ns0:ItemInfoStatus>
+ <ns0:ItemInfoStatus>
+ <ns0:ItemInfoStatus>
+ <ns0:ItemInfoStatus>
+ <ns0:ItemInfoStatus>
+ <ns0:ItemInfoStatus>
+ <ns0:ItemInfoStatus>
+ <ns0:ItemInfoStatus>
+ <ns0:ItemInfoStatus>
+ <ns0:ItemInfoStatus>
+ <ns0:ItemInfoStatus>
+ <ns0:ItemInfoStatus>
+ <ns0:ItemInfoStatus>
+ <ns0:ItemInfoStatus>
</ns0:ConfMsg>
```

3.2.2 Receipt message

The receipt message is the confirmation of receipt. DT sends this in the event of a successful acceptance. If acceptance has been unsuccessful, no response to the sender will be generated. The receipt message contains no content information.

Sample receipt message

```
<?xml version="1.0" encoding="UTF-8"?>
- <ns0:RcptMsg xmlns:ns0="http://www.post.ch/datatransfer/schemas/2019/02/ead">
  <ns0:FileID>444570</ns0:FileID>
  <ns0:FileDate>20190628</ns0:FileDate>
  <ns0:FileTime>060911</ns0:FileTime>
  <ns0:SenderID>829</ns0:SenderID>
</ns0:RcptMsg>
```

3.2.3 Error codes in the event of faulty data delivery

An Excel list with all error codes, which may be listed in the processing protocol or in recipient confirmations, can be found on www.swisspost.ch/datatransfer->- Technical DataTransfer Support.

4 Additional publications

The following documents and more information are available at www.swisspost.ch/datatransfer → Technical DataTransfer Support:

- DataTransfer manual
 - “Overview and functional descriptions for DataTransfer”
- DataTransfer – Appendix 1
- “Description of DataTransfer customer interface: Parcels, Express, Solutions, letters with barcode (BMB) and Letter ID”
- DataTransfer – Appendix 2
 - Description of the “Create a Dispatch List” customer interface:
- DataTransfer – Appendix 3
 - “Description of the DataTransfer reports”

