

PostNord Strålfors AB

TECHNICAL SPECIFICATION

eBREV Sweden

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Document overview

Version	Date	Comments
1.0	2017-03-31	Document created
1.2	2017-10-27	Correction of various errors
1.3	2020-08-05	Update
1.4	2021-04-07	Correction of various errors
1.5	2021-11-18	Updates of envelope layout

Outline flow

The following steps are required to integrate and produce eBREV:

Agreement and integration of customer

1. Agree on service and options in Customer Service Agreement, Price Annex and Customer Assignment
2. Integrate customer
 - a. Set up communications
 - b. Mapping out the customer's file formats
 - c. Setting up templates and rules for documents
 - d. Setting up selected distribution options
3. Test the flow
4. Customer confirms Customer Assignment

Communication paths

PostNord Strålfors offers a uniform electronic interface for sharing data between different parties and systems. The production system is monitored 24 hours a day, all year long. The customer can choose from the following protocols and network standards, among others:

- SFTP
- VPN
- API
- Fixed Line

File submission

The normal submission time for a data file is before 09:00, the same working day as submission to Distribution. If a file is received later than agreed, this may mean that the file will be processed the following day. The transfer must be completed before the agreed time, i.e. if the transfer begins at 08:59 and is completed at 09:12 there is a risk that the file will be processed the following day.

Back-up and logging

Files that arrive at PostNord Strålfors are backed up on receipt and saved on disk for 30 days. Receipt and message processing performed by PostNord Strålfors for the messages that pass through the service are logged continuously. Logs are saved in the system for one month, after which they are accessible via back-up for 6 months.

File formats

The eBREV service works with many different file formats. There must always be a defined file specification that describes the file's appearance and information content.

Structured formats

Structured formats such as XML and CSV. PDF or AFP can also be used as the input format for the eBREV service. These must, however, be supplemented by some metadata so that PostNord Strålfors can process the printouts correctly.

AFP

All AFP documents require TLE records, the mandatory content of which depends on the service selected. The section entitled AFP describes how an AFP should be structured and the limitations on the layout in order to be compatible with PostNord Strålfors' production system. More information about the file format is available in the relevant chapter.

PDF

All PDF documents require meta-information, the mandatory content of which depends on the service selected. The section entitled PDF describes how a PDF should be structured and the limitations on the layout in order to be compatible with PostNord Strålfors' production system. More information about the file format is available in the relevant chapter.

Distribution methods

The following distribution methods can be selected for the service.

- eBREV First Class
- eBREV 2nd class letter
- eBREV ADR

Customer integration

The customer will be allocated a resource person who integrates the eBREV service as agreed in the customer assignment.

To make dialog easier for both the customer and PostNord Strålfors it is necessary for the customer to have a designated contact person who can be contacted in connection with questions and tests.

Integration includes:

- Setting up data communication e.g. FTP
- Mapping out the customer's file formats
- Setting up templates and rules for documents

- Setting up selected distribution options
- Testing the flow
- Putting the approved assignment into production

Mapping out the customer's file formats

The customer must provide a specification of the file format to be used for submission to PostNord Strålfors, and also provide the information required to enable PostNord Strålfors to process the content of the file and deliver the messages to the correct recipients under the customer agreement. Mapping is done in order to insert the information (data) in a presentation template. The customer is responsible for ensuring that the data file contains the required information for the service selected. The customer is responsible for ensuring that such information complies with current legislation, e.g. the Swedish Personal Data Act (PUL).

Creating presentation templates

The information mapped must then be inserted into a presentation template. The customer must provide physical or electronic sample layouts of the presentation templates. The presentation template describes a set of rules for content and design that governs what a message looks like when it reaches the recipient.

Testing the file format and presentation template

The customer provides a test file representing the presentation templates that will be used in the mailing. When the customer's file has been mapped and the presentation template has been created, this is agreed with the customer and a PDF is sent to the customer for approval.

XML or other structured data format

Descriptive material

The following pages provide an example of what a good order looks like and, in this case, are based on XML. However, a comma-separated file or some other structured format could just as easily have been used.

What is important is for the order to have the following content:

- Anonymised test file
- File specification/field description
- Special instructions
- Layout with instructions for positioning of data

Make sure that the field names match in all specifications so that a correct derivation of data can be made without any problems.

Anonymised test file

The test file below is an example of an extract from an XML file. Each file commences with an `<?xml version= "1.0"encoding="ISO-8859-1"?>` **Example**

```
<?xml version="1.0" encoding="iso-8859-1" ?>
- <letter>
  <docname>INVOICE</docname>
  <invno>123456</invno>
  <duedate>2007-06-10</duedate>
  <custno>345678</custno>
  <yourref>Johan Johansson</yourref>
  <sndname>COMPANY</sndname>
  <sndadd>Hemvägen 2</sndadd>
  <sndpc>441 58</sndpc>
  <sndtn>ALINGSÅS</sndtn>
  <invrecname>Recipient</invrecname>
  <invadd>Byvägen 2</invadd>
  <invpc>441 57</invpc>
  <invtn>ALINGSÅS</invtn>
  <ourref>Anna Andersson</ourref>
  <tel>0322-669500</tel>
  <email>kund@foretag.se</email>
  <articlelines>
  <article>
  <articleno>666666</articleno>
  <quantity>777777</quantity>
  <unitprc>100.56</unitprc>
  <linesum>10000.66</linesum>
  </article>
  </articlelines>
  <total>10000.77</total>
  <rndng>0.77</rndng>
  <yourcredit>123,456.78</yourcredit>
  <message>Thank you for your order and welcome back</message>
</letter>
```

File specification/field description

A file specification is required to show what each field means in the test file. It should also describe fonts, any formatting and show examples of data.

Field name	Description	Font	Formatting	Sample data
<letter>	Starts a new letter			
<docname>	Heading for the letter	Arial N 18		INVOICE
<invno>	Invoice number	Arial N 10	NNNNNN	123456
<duedate>	Due date	Arial N 10	YY-MM-DD	2009-04-30
<custno>	Customer number	Arial N 10	NNNNNN	345678
<yourref>	Your reference	Arial N 10		Johan
<sndname>	Name of sender	Arial B 12		COMPANY
<sndadd>	Sender's address	Arial B 12		Hemvägen 2
<sndpc>	Sender's postcode	Arial B 12	NNN NN	441 58
<sndtwn>	Sender's postal town	Arial B 12		ALINGSÅS
<invrecname>	Name of invoice recipient	Arial N 10		Recipient
<invadd>	Invoicing address	Arial N 10		Byvägen 2
<invpc>	Invoice postcode	Arial N 10	NNN NN	441 57
<invtwn>	Invoice postal town	Arial N 10		ALINGSÅS
<ourref>	Our reference	Arial N 10		Anna
<tel>	Our phone number	Arial N 10		0322-669500
<fax>	Our fax number	Arial N 10		0322-669500
<email>	Our email address	Arial N 10		kund@foretag.
<articlelines>	Includes article lines			
<article>	Begins a new article			
<articleno>	Article number	Arial N 8	NNNNNN	666666
<sequence>	Sequence	Arial N 8	NN	10
<quantity>	Quantity	Arial N 8	NNNNNN	777777
<unitprc>	Unit price	Arial N 8	NNN.NN	100.55
<linesum>	Line sum	Arial N 8	NNNN.NN	1000.66
<total>	Invoice total	Arial B 12	NNNN.NN	1000.77
<rndng>	Rounding	Arial B 12	N.NN	0.77
<yourcrdt>	Your credit	Arial B 12	NNN.NN	1000.77
<message>	Message	Arial B 10		

Special instructions for templates

An example of a requirements specification in which the customer describes rules and logic to apply to the integration.

- If the number of article lines exceeds the space available on a page, the remaining pages only need to contain:
- article lines (<LINESUM>, <UNITPRC>, <SEQUENCE>, <QUANTITY> and <ARTICLENO>) and their headings, <INVNO> and the page footer □. The fields <LINESUM>, <UNITPRC>, <SEQUENCE>, <QUANTITY> and <TOTAL> must be right aligned.
- If <YOURCRDT> is empty, the text above ("Your credit:") must not be printed
- If "directdebit" is shown in a field in the file, a paying-in slip must not be included with the invoice.

Layout with instructions for positioning of data

It may sometimes be difficult to include an example of the layout but it should be attached if possible, as it shows what the end result is expected to look like. This example can then be used to check against the test printouts produced by PostNord Strålfors.

<DOKNAMN>														
	Fakturanummer <FAKTR>	Fakturedatum <FAKDAT>	Förslösdatum <FORFDT>											
	Kundnummer <KUNDR>	Betalningsvillkor 10 dagar	Er referens <ERREF>											
<AVSNAMN>	Fakturaadress													
<AVSADR>	<FAKADRVALN>													
<AVSPNR>	<AVSPORT>	<FAKADR>												
		<FAKTRID>	<FAKPORT>											
Vid fakturafrågor kontakta:		Telefon: <TEL>												
<VARREF>		Fax: <FAX>												
		e-Post: <EMAIL>												
<table border="1"> <thead> <tr> <th>Artikel / Beskrivning</th> <th>Omgång</th> <th>Antal</th> <th>Enhetlig pris</th> <th>Summa</th> </tr> </thead> <tbody> <tr> <td><ARTIKLID></td> <td><OMGANG></td> <td><ANTAL></td> <td><ENHETLIG PRIS></td> <td><ARTIKLSUMMA></td> </tr> </tbody> </table>					Artikel / Beskrivning	Omgång	Antal	Enhetlig pris	Summa	<ARTIKLID>	<OMGANG>	<ANTAL>	<ENHETLIG PRIS>	<ARTIKLSUMMA>
Artikel / Beskrivning	Omgång	Antal	Enhetlig pris	Summa										
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			Totalt: <TOTALT>	Oresouämning: <ORESUT>										
				Er Bilagoda: <ERTILLGODD>										
<VEDOBLAND>														
Webbsida: www.ft.se Innehåll: F-skattbevis		Bankkonto: 11111-111 Plusgiro: 11111-1	Org.nummer: 00000-0000											

AFP

General

For a customer to be able to use AFP files for the eBREV service, the customer's data must be structured according to certain guidelines.

File structure

The file can be regarded as being made up of different components. The content of the various components is described below. See below for a schematic description of the file structure.

NOP (start record)

The input data must start with an NOP record with the following structure so that the system can identify the input data and make sure it is correct.

Field name	Length	Meaning, value
020	3	Must always contain the value "020". Defines the start of a logical file.
Production type:	5	The literal EPS if the assignment is to be run in the live (production) environment. EPS-T if the assignment is to be run in the test environment. Left-aligned and left blanked
Assignment ID	8	Assignment name, left-aligned and padded with zeros. The assignment name indicates which unique procedures are to be used for this particular file.
Customer reference	50	Any text string.
Delivery date	8	There is an option to add the date when letters are to be passed on to Distribution. This value then takes precedence over the date calculated by the system. The date must be in the format yyyyymmdd.

BRG-ERG

AFP resources must be contained in BRG-ERG records. The AFP resources appear first in the input data, after NOP.

Fonts

All fonts must be "raster fonts", i.e. NOT outline fonts.

OMR

PostNord Strålfors adds an OMR code to the file created from the TLE record. This means that the customer must remove any of their own OMR codes in the file. The OMR code generates small lines on the printed material. These lines indicate how each sheet should be handled by the envelope insertion machine. The customer must also ensure that nothing is printed for 10 mm on the far left and in the main margin to leave room for the OMR code.

BNG-TLE

One BNG record and one TLE record are required so that the system can distinguish between letters and also for OMR marking (adding an enveloping mark) and for sorting (by postcode). In other words, documents must be defined with a "Page Group". TLE record containing postcode and ID immediately after all BNG.

BPG-EPG, IMM

The actual print page must be between the BPG and EPG records. In files to be printed in duplex (double-sided print pages) all "front page" BPGs (Begin page)

must be preceded by an IMM (Invoke Medium Map).

Field name	Length	Meaning, value
Index	11	POSTENEBREV
Country code	2	Alphanumerical, for example SE. If there is no country code, these records must be padded with spaces.
Postcode (postal)	5	Numerical. (Foreign postcodes with alphanumerical characters must be padded with zeros)
Insert mark	8	Numerical. The insert marks consist of 4*NN. 01000000 -> insert station 1 00010000 -> insert station 2 00000100 -> insert station 3 00000001 -> insert station 4
LETTER ID	15	Alphanumerical, left-aligned and padded with spaces.

The LETTER ID must be unique within the various TLEs.

TLE for sorting a large consignment from PostNord

Two extra TLEs are required in parallel with the normal one.

Field name	Length	Meaning, value (attribute value)
Index	6	STREET
Street address	32	Street name and number on street

Field name	Length	Meaning, value (attribute value)
Index	10	POSTOFFICE
Distribution office	5	The postcode of the distribution office as stated in PostNord's translation table. Standard postcode -> Distribution office's postcode. The translation table must be used to obtain the large consignment discount.

Extra TLE dynamic perforation

You normally decide in advance whether an entire file is to be printed on paper with a paying-in slip or on paper without a paying-in slip.

But if you add an extra TLE called PERFORATION, you can combine documents with and without a perforation in the file, i.e. with and without paying-in slips, for example.

If you want to use this function, a TLE **must** be defined for each BPG in (Begin Page) in the AFP file. This TLE must be called PERFORATION.

Field name	Length	Meaning, value
Index	11	PERFORATION
Perforation	2	35 (means call-off for perforation of paying-in slip) 99 (means that there is no perforation). It should be noted that these must also be inserted on one duplex side, i.e. for each BPG in the file.

Example

Schematic description of how PostNord Strålfors would like the AFP to be structured.

NOP, No Operation
 BRG, Begin Resource Group
 BR, Begin Resource
 ER, End Resource
 ERG, End Resource Group
 BDT, Begin Document
 BNG, Begin Name Page Group
 TLE, Tagged Logical Element (TLEname
 POSTENEBREV)
 IMM, Invoke Medium Map
 BPG, Begin Page
 Tagged Logical Element (TLEname
 PERFORATATION)
 EPG, End Page
 BPG, Begin Page
 Tagged Logical Element (TLEname
 PERFORATATION)
 EPG, End Page
 ENG, End Name Page Group
 BNG, Begin Name Page Group
 TLE, Tagged Logical Element (TLEname
 POSTENEBREV)
 IMM, Invoke Medium Map
 BPG, Begin Page
 Tagged Logical Element (TLEname
 PERFORATION)
 EPG, End Page
 ENG, End Name Page Group
 EDT, End Document (Closure to BDT)

PDF

Technical specifications

In order for PostNord Strålfors to accept PDF files as an input format for the eBREV service, certain technical requirements must be met.

Metadata

Certain metadata must be included in each PDF and on an exact x/y coordinate calculated from the upper left corner of the A4 sheet. When the file is processed, the metadata is removed from the PDF file and will not be included in the printed letter.

File sorting information

Information must be written using the Arial font, size 8 points.

- Post code, format: NNNNN, x-pos: 2 mm y-pos: 2 mm (a space can also be included in the postcode, PostNord Strålfors will remove it). Foreign postcodes with alphanumerical characters must be padded with zeros.
- Country code, format: XX (ISO standard 3166), x-pos: 22 mm y-pos: 2 mm
- First page trigger, format: "Page 1" (a one, to denote the first page in a letter), x-pos: 42 mm y-pos: 2 mm. The trigger must be included on any subsequent pages. Insert processing, format 1, 2, 3, insert station 1, 2 etc, x-pos: 62 mm y-pos 2 mm:

Fonts

Fonts used in a PDF must be in TrueType format. All fonts that occur in the PDF files must be included in the test file for checking. PostNord Strålfors has a standard set of fonts. If other fonts are used, a customer-specific implementation of the PDF is required, in which the customer provides the font. Make sure you send the entire font.

When creating a PDF document, please bear in mind the following regarding fonts:

- Use embedded fonts in the document. If the PDF contains a large number of fonts, processing of the file may be resource intensive at PostNord Strålfors, resulting in a longer processing time.

Tip!

If you look at the properties of the PDF files (File/Properties) the fonts in the document are listed under the Fonts tab. If the fonts do not have

precisely the same name as in Windows e.g. "TTE48620t00", the document will not have the intended appearance, even if it is basically Arial. For the best results, use the original names of the fonts used.

Metadata in a separate file

An alternative to printing the metadata in the PDF is to send the metadata in a separate data file. The format of the separate file can be XML or another structured data format. The technology is also based on the PDFs to be printed being divided up so that each letter represents a PDF. The PDFs are then zipped together with the metadata file before being sent over to PostNord Strålfors.

The file names of the PDFs must be included in the metadata file so that the system can see which document belongs to which metadata.

Example of a metadata file:

```
<file>
  <filename>Faktura_1117576_to_1840.pdf</filename>
  <Kund_postnummer>517 92</Kund_postnummer>
  <Kund_landskod/>
</file>
<file>
  <filename>Faktura_1117577_to_1853.pdf</filename>
  <Kund_postnummer/>
  <Kund_landskod>DK</Kund_landskod>
</file>
<file>
  <filename>Faktura_1117578_to_1886.pdf</filename>
  <Kund_postnummer>517 91</Kund_postnummer>
  <Kund_landskod/>
</file>
<file>
  <filename>Faktura_1117579_to_1916.pdf</filename>
  <Kund_postnummer/>
  <Kund_landskod>FI</Kund_landskod>
</file>
<file>
  <filename>Faktura_1117580_to_1919.pdf</filename>
  <Kund_postnummer>517 91</Kund_postnummer>
  <Kund_landskod/>
</file>
```


Examples of other metadata that may be used, especially for e-invoices and deliveries to digital mailboxes:

Field	O/F	Description
filename	O	Name of invoice.pdf
Reminder	O	0=invoice 1=reminder
CustomerNumber	F	Internal customer no in Raindance
SocSec	F	Personal ID number. To be used for online banking register: 12-digit personal ID no in the form yyyyymmddnnnn. 14-VAT no in the form SENnnnnnnnnn01. May contain other information that will not be used.
InvoiceType	O	00 = Invoice or reminder, 01 = Credit note
InvoiceNo	F	Invoice number for invoices
invoiceDate	F	Date invoiced for invoices
DueDate	F	Due date of invoices
AGF	F	00 = not paid by direct debit 01 = paid by direct debit
PaymentRefererence	F	OCR no
TotalAmount	F	Total amount to be paid, in the format 0.00
Postage	F	A=A post, B=B post, R=returns
BuyerParty_Name	F	Customer name 1
BuyerParty_CareOf	F	Customer name 2
BuyerParty_Street	F	Invoice: Customer_postal address Reminder: Customer_address
BuyerParty_ZipCode	F	Postcode
BuyerParty_City	F	Postal town
BuyerParty_Country	F	Country name, blank is interpreted as Sweden
FUI_name	F	Company name according to banking agreement. (Only where online banking is agreed).
PaymentType	F	BG=Bankgiro, PG=Plusgiro. (Only for online banking).
PaymentNo	F	Bankgiro/plusgiro, hyphens and spaces are permitted.
Currency	F	Currency code according to ISO standard. Where left blank, interpreted as SEK. (Only for online banking).

Images and logos

All images and logos that occur in the PDF files must be included in the test file (see Test file) in order for PostNord Strålfors to guarantee the printout quality.

The image resolution should be 300 dpi and in .bmp, .tif, .gif or .jpg format. To ensure optimum black and white printout quality, 1-bit indexed Black and White images should be used with a maximum resolution of 300 dpi. This means that the image is in black and white, without shading or grayscale.

Place the image in the desired position and make sure that it is saved with the document, not linked in. There is a "reserved" space for the logo to the left of the sender's address. If it is placed there, it will be seen in the envelope window. For the best results, use a black and white logo (not grayscale) for letters to be printed in black and white and a color logo for letters to be printed in color.

- Do not write the text in white on a black background if the letter is to be printed in black and white.
- Images are printed on the sheet in the order in which they have been added to the PDF. This means that if images have been added one after the other and one of them is "on top of" another one, they will be printed out after each other in the order in which they were added.
- Images must not be transparent (applies to both entire images and parts of images).
- Avoid placing images on top of each other.
- Do not add text to the images.
- PDF documents that use the following functions for color and images cannot be processed by the service:
 - CIE-based color spaces
 - Special color spaces
 - Overprint control (printing several different colors to produce one color)
 - Antialias (blurs the edges of images)
 - Patterns
 - Transformations

Text that must be interpreted from right to left, e.g. Arabic and Hebrew, does not work. Create an image of the text and include that instead.

Bankgiro and Plusgiro

If the customer wishes to use Bankgiro (BG) or Plusgiro (PG) in letters, PostNord Strålfors' paying-in slip templates must be used. This means that the area for the paying-in slip is left blank and additional metadata is included, which PostNord Strålfors places in the designated place.

The metadata for paying-in slips must be arranged in three strands, in which the metadata is separated by semicolons (;). Please note the spelling on, for example, PGB slips.

Metadata 1

Font: Arial Size 8 x-pos:2 mm y-pos: 284 mm

Example:

PGB slip;12345-6;12345,00;Mats Mottagare AB

- Giro type, values: PGB slip, PGC slip, BGB slip, BGC slip.
- Giro number (max. 15 characters)
- Total, format: NNN.NN
- Payee (name only) (max. 20 characters)

Metadata 2

Font: Arial Size 8 x-pos: 2 mm y-pos: 288 mm

Example:

Astrid Avsändare;c/o Ansändarsson;Avsändaregatan 3;123 45 Avsändarstaden

- Sender's name (max. 30 characters)
- Sender's address 1 (max. 25 characters)
- Sender's address 2 (max. 25 characters)
- Sender's postal address (max. 25 characters)

Metadata 3

Font: Arial Size 8 x-pos: 2 mm y-pos: 292 mm

Example:

123456789;Reference text 1;Reference text 2;reference text 3

- OCR number (for PGC and BGC slips) (max. 25 characters, with padding using blanks controlled by zeros, if necessary).
- Reference text 1 (max. 25 characters)
- Reference text 2 (max. 25 characters)
- Reference text 3 (max. 25 characters)

Test file

There are a large number of variations in PDF files and software for their production on the market. To avoid problems in the production flow, these must be sent to PostNord Strålfors as test files before commissioning.

Without an approved test file, PostNord Strålfors cannot promise any implementation of the customer's PDF.

Layout

For PDFs as an input format for the eBREV service, the same margins must be complied with as for other input formats for the eBREV service. It is important that areas for OMR (enveloping code) are left empty, that positions for the recipient and

sender addresses are complied with, and that A4 portrait size is used in the PDF file layout.

Size and structure of the PDF file

PDF is the most suitable input format for fairly small volumes. There is no exact maximum number. This must be tested on a case-by-case basis, although a rough guide would be a maximum of 10,000 pages per PDF file.

The size of the PDF file in kb should also be minimized as far as possible so as not to affect the ability to process the files. If the files prove to be extremely large, PostNord Strålfors may need to have the files submitted earlier than would otherwise have been the case. Inserted images have a significant effect on the size (kb) of the file, and in this respect, it is important to follow the recommendations in the "Images and logos" section.

The standard procedure is for one PDF containing all letters to be submitted. The PDFs should ideally be saved in PDF version 1.3 or max. 1.4. Even though later PDF versions are supported, these are not optimized for print production, only for screen display.

PDF documents that use the following functions cannot be processed by the service:

- Encrypted files, or files requiring a certificate
- Password protected files
- PDF Form
- Linearized (Optimized file for quick web viewing)
- Embedded font that no longer has its ordinary font name

Paper and envelope

There is one standard paper and one standard envelope for eBREV.

Standard paper: A4, 90 gsm, white, non-punched.

Standard envelope: C5, white, two windows.

Envelopes with customer-specific appearance can be used in the service.

The minimum order limit for customer-specific envelopes is 500,000 mailings per year.

Limitations for envelopes

Specification	Envelope	Maximum
Maximum number of sheets in each envelope	S65-envelope	4
	C5-envelope	6
	C4-envelope	40
	Manuel	Unlimited

Perforation

The option to have the paper sheets perforated is available as standard in the eBREV service. There is either a setting to ensure that all sheets in the assignment are perforated, or PostNord Strålfors can apply dynamic perforation, i.e. only the sheets the customer specifies are perforated.

This is done by ensuring that the information about which sheets are to be perforated is included with the data file.

The necessary instructions for this are available for AFP files. For other file formats the feature is set up in consultation with PostNord Strålfors.

Envelope layout

Standard eBREV envelope

The envelopes used have a window through which the recipient's data can be seen and a window in which the sender's data is visible.

Envelopes with a customer-specific appearance, e.g. logos or other information on the envelope, can be provided.

Example of standard eBREV envelope



Sender and return address

There must be a clear and complete Swedish sender designation, ie. name and postal address. It should be placed on the left side, in the sender surface. For detailed information, see picture on page 22.

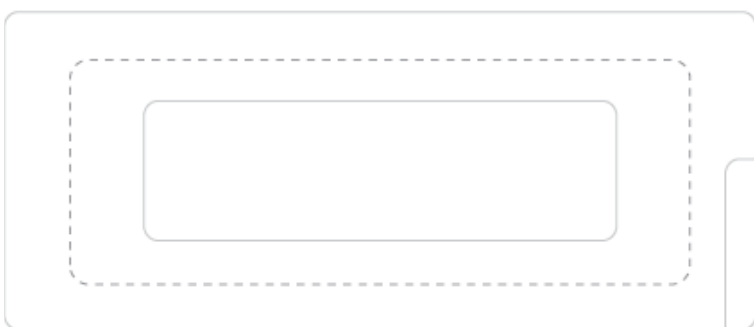
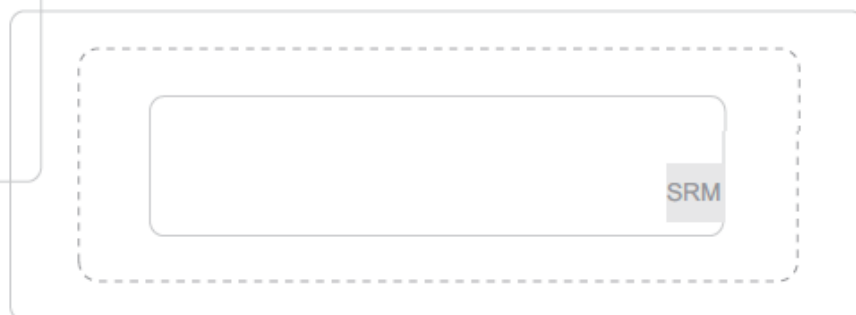
In the event that the customer wishes a return address that differs from the sender address, a clear and complete Swedish return address must be stated, which must be preceded by the word "Return address".

PostNord is not obliged to transport items without a complete Swedish return address and, where applicable, a complete Swedish return address.

Foreign sender or return address may not occur.

The return and return address must appear in the PDF template or in the file depending on the format used.

Placement of address

Sender box**Receiver box**

	MEASURE MENT				PLACEMENT			
Outer window sender	Height	41mm	Width	97mm	From TC	9mm	From LC	0mm
Sender box (dots)	Height	29mm	Width	79.5mm	From TC	15.5mm	From LC	8.2mm
Inner box sender	Height	18mm	Width	61mm	From TC	20.7mm	From LC	17.8mm
Outer box receiver	Height	40mm	Width	110mm	From TC	28mm	From RC	7.3mm
Receiver box (dots)	Height	30mm	Width	93mm	From TC	33mm	From RC	15.5mm
Inner box receiver (SRM code included)	Height	18mm	Width	66.5mm	From TC	39mm	From RC	25mm
SRM code (Set by Strålfors)	Height	8mm	Width	10mm	From TC	45mm	From RC	25mm

TC = Top Corner, LC = Left Corner, RC = Right Corner

- The outer window corresponds to the surface of the printout that may be visible through the window on the envelope, sensitive information such as account numbers, etc. should not be placed there
- The sender box corresponds to the size of the envelope window
- The inner box corresponds to the size of the envelope
- The SRM code is used by PostNord Strålfors to ensure that the letter is produced correctly
- In addition to this, there must be a margin of 12 mm in the upper edge and left edge that PostNord Strålfors must have for its envelope characters.

If deviations are made from this template, it must be tested to ensure the correct quality.

Postage optimization

PostNord Strålfors offers two types of postage optimization. One is consolidated dispatch and the other is joint enveloping.

Consolidated dispatch

PostNord Strålfors combines the customer's letter volumes when printing and enveloping letters to create larger consignments, provided that the letters have the same dimensions, the difference in weight between consignments does not exceed 30 g and the consignment complies in other respects with PostNord Strålfors' submission conditions for physical items for the type of distribution concerned.

Where the consolidated dispatch logistics are more sophisticated than requiring volumes arriving on the same day to be consolidated, the logic is specified in the customer assignment. The volume and day of the week can determine the consolidation of dispatches beyond a 24-hour period.

Joint enveloping

Several documents to the same addressee are placed in the same envelope when the letters are printed and enveloped. Joint enveloping is only possible for assignments that have the same type of paper, envelope, delivery mode and joint enveloping key. In addition, the production files must be received on the same day or over the time period specified for consolidated dispatch.

The selected customer-specific identifier is used as standard for the joint enveloping key. This is either the personal/corporate ID no or customer number. If there are several customer numbers for the same recipient, joint enveloping does not work. The customer does, however, have the option of creating their own joint enveloping key, which is inserted in the specified field. Note that joint-enveloped consignments are charged within the framework of the joint enveloping assignment, regardless of the consignments' original assignments. Only inserts from the joint enveloping assignment can be included with the consignment.

Poly wrapping

eBREVs' items can also be poly wrapped. The customer should have a volume of at least 30,000 shipments per production opportunity for the wrapping to be a cost-effective solution. The wrapping is done with pre-printed customer-unique plastic, which must be ordered and included in the assignment. The order must be made at least six weeks before the assignment is to be produced.

Inserts

PostNord Strålfors can produce and handle two different types of inserts.

- **Physical Inserts** - A physical supplement that is charged based on weight and number.
- **Electronic Inserts** - Inserts that are called when creating a print file, also called Static Page. The static page is invoiced as another page in the envelope.

Which inserts that should be chosen for each item is controlled by an insert call. The call decide which insert is to be inserted in the envelope.

The customer can enter the insert calls directly in the incoming file or choose to let PostNord Strålfors create the attachment calls based on an agreed logic. If the customer enters the attachment calls themselves, the fields in the file that are intended for this are used.

If PostNord Strålfors places the attachment calls for the customer, a logic will be agreed. An example of logic is that the customer wants the attachment to be general, another example is that everyone with a male social security number should have attachment 1 and everyone with a female should have attachment 2.

Even if all recipients in the print file must have attachments, for quality reasons it is still practical to provide all recipients with an attachment call, this to minimize the risk that the attachment is not included in the letter.

Note that only two attachments are standard. Additional attachments can only be handled in certain cases and decided in consultation with the customer.

More information regarding physical attachments can be found in the document *Intstruktioner för bilaga* on <https://www.stralfors.se/om-oss/Villkor-och-Material/>.

Print production

PostNord Strålfors checks that the file complies with the agreed structure.

The documents are then divided according to size, with documents containing up to 6 sheets being inserted in C5 envelopes. Print production takes place at a resolution of up to 600 dpi. PostNord Strålfors is responsible for adding the insertion mark to the print-ready file.

Late submission

In eBREV, it is possible by agreement to submit a production file later than 09.00. In each customer assignment, the exact time for submission of production file is agreed upon.

Confidentiality

All information transferred in data files to PostNord Strålfors is treated as confidential. Only authorized personnel have access to the premises where the

physical letters are produced. All concerned are bound by confidentiality agreements.

Color

PostNord Strålfors always prints in color using Business Color, which is produced on high-speed printers.

The appendix entitled Instructions Color describes which resources are required to enable color production. The document is updated on an ongoing basis. The latest version can be downloaded as a PDF from PostNord Strålfors' website at stralfors.se/villkor.

Reports

Production monitoring

Monitoring of what is produced takes place at several different stages.

The first verification takes place when the file is transferred. After production files have been transferred via the communication method chosen by the Stockholm Housing Agency a confirmation is produced. This means that the Stockholm Housing Agency receives a file identification for the file which is logged and can be retrieved.

When the production file which Stockholm Housing Agency has transferred to PostNord Strålfors is ready for printing, a verification message is sent via email to Stockholm Housing Agency informing them that the job is ready to go into production.

Its appearance is as follows:

```
Sender: icjmlby01 <icjm@Stralfors.com>
Subject: eBREV Print verification for 000111722201 SSBAVC5A 130211 15:47
***** V E R I F I C A T I O N *****
Customer reference    = 130211 15:47
Customer              = Stockholm Housing Agency
Assignment            = SSBAVC5A
Job number            = 000111722201
Date                  = 2013-02-11 16:02:01
Number of Pages       = 33762
Number of Letters     = 33762
***** E N D *****
```

After that there is an option to have another verification email when PostNord Strålfors passes the material on to the mail service for distribution. This looks similar but the subject lines differ. See example below.

```
Sender: icjmlby01 <icjm@Stralfors.com>
Subject: eBREV sent for 000111722201 SSBAVC5A 130211 15:47
***** V E R I F I C A T I O N *****
Customer reference    = 130211 15:47
Customer              = Stockholm Housing Agency
Assignment            = SSBAVC5A
Job number            = 000111722201
Date                  = 2013-02-11 20:12:34
Number of Pages       = 33762
Number of Letters     = 33762
***** E N D *****
```

After the print assignment is completed, PostNord Strålfors may send out a delivery slip in PDF or XML format which describes the job in detail.

Track & Trace

Track & Trace is a web interface that shows the actual status of customer order files and documents handled by PostNord Strålfors. The service also provides a delivery confirmation on all output channels. All files that go via our omnichannel platform are visible in Track & Trace. Track & Trace can be used to search for customer files or individual documents to see details of processing time stamps and deliveries.

Contact channels

Questions about the service are handled via customer.service@stralfors.se

Telephone: +46 10 331 25 25