



Reference Data

SEPA Plus

Frequently Asked Questions

This document describes the most Frequently Asked Questions (FAQs) about the SEPA Plus product. This includes information about the SEPA Plus files and data, BICs, adherence and reachability, and SEPA payments. This document is for operations staff and software developers.

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Preface

Purpose of the document

This document describes the most Frequently Asked Questions (FAQs) about the SEPA Plus product. This includes information about the SEPA Plus files and data, BICs, adherence and reachability, and SEPA payments.

Audience

This document is for the following audience:

- operations staff
- software developers

Significant changes

The following table lists all significant changes to the content of the SEPA Plus Frequently Asked Questions. This table does not include editorial changes that SWIFT makes to improve the usability and comprehension of the document.

Deleted information since the 8 November 2013 edition	Location
SEPA Routing Directory	Information about the SEPA Routing Directory has been removed from the SEPA Plus Frequently Asked Questions.

Terminology

This document uses the following abbreviations:

Abbreviation	Definition
ACH	Automated Clearing House, here a synonym for CSM
CSM	Clearing and Settlement Mechanism, also called ACH or PEACH
EPC	European Payments Council
PEACH	Pan-European ACH, a CSM reaching most or all financial institutions in the SEPA area

Related documentation

- [Frequently Asked Questions for SWIFTRef Users](#)
- [Publication Schedule and Distribution Information](#)
- [SEPA Plus Technical Specifications](#)
- [SWIFTRef Release Letter](#)

FAQs about the SEPA Plus Product

Which files does the SEPA Plus product contain?

The SEPA Plus product contains four files. For some files, multiple versions exist.

- IBANPLUS
- IBANSTRUCTURE
- EXCLUSIONLIST
- SEPAROUTING

The SEPA Plus product therefore contains the IBAN Plus product (the first three files mentioned previously) along with the SEPAROUTING file.

Which versions of the files should I use?

Use the latest version wherever possible. Previous versions will be discontinued over time. You can find the validity dates for previous versions in the appropriate technical specifications.

How does the SEPA Plus product relate to the IBAN Plus product?

SEPA Plus contains the IBAN Plus files:

- IBANPLUS
- IBANSTRUCTURE
- EXCLUSIONLIST

How does the SEPA Plus product relate to the Payments Plus product?

Payments Plus contains the four SEPA Plus files plus many other files.

FAQs about the SEPA Plus Files

What is the purpose of the IBANPLUS file?

The IBANPLUS file is used to look up the BIC corresponding to the IBAN (that is, to the bank ID included in the IBAN). For more information, see the [IBAN Plus Frequently Asked Questions](#).

What is the purpose of the IBANSTRUCTURE file?

The IBANSTRUCTURE file is used to de-construct the IBAN and to validate it. For more information, see the [IBAN Plus Frequently Asked Questions](#).

What is the purpose of the EXCLUSIONLIST file?

The EXCLUSIONLIST file is used to detect invalid bank IDs in the IBANs. For more information, see the [IBAN Plus Frequently Asked Questions](#).

What is the purpose of the SEPAROUTING file?

Financial institutions that need to send SEPA payments use the SEPAROUTING file.

They use the file to:

- Validate a financial institution's adherence to the SEPA scheme (that is, confirm that the financial institution signed an adherence contract with the EPC). See also "What is SEPA scheme adherence?" on page 8.
- Look up the available reachability channels through which to send a SEPA payment.

Reachability channels are the beneficiary financial institution's direct or indirect memberships in SEPA CSMs.

How can I use the four files included in SEPA Plus?

The four files included in the SEPA Plus package offer a complete validation and routing capability for SEPA payments.

These are the actions that you can apply to outgoing SEPA payments:

1. Validate the IBAN.
 - De-construct the IBAN using the IBANSTRUCTURE file. Extract the country code, check digits, bank ID, and determine the IBAN length. The length of the extracted bank ID should correspond to the length specified in the column IBAN NATIONAL ID LENGTH.
 - Validate the extracted country code against the ISO IBAN COUNTRY CODE listed in the IBANSTRUCTURE file.

- Recalculate the two check digits by applying the MOD 97/10 functions (ISO 7064) and compare these to the extracted check digits.
- Validate the IBAN length against the expected length specified in the IBANSTRUCTURE file.
- Check that the extracted bank ID is not listed in the EXCLUSIONLIST file, column NATIONAL ID. If it is, then the IBAN is invalid. If the IBAN is valid, then go to the next step.

2. Look up the beneficiary's BIC.

- Look up the extracted country code and bank ID in the IBANPLUS files, column ISO COUNTRY CODE and column IBAN NATIONAL ID. If found, then look up the corresponding BIC in the column IBAN BIC.
- If the SEPA payment contains a beneficiary BIC, then validate it against the retrieved IBAN BIC.

If they do not match, then the BIC in the IBANPLUS file is probably the correct BIC.

Note The IBANPLUS file contains BICs of a higher quality than BICs in live SEPA payments.

- If the SEPA payment does not contain a beneficiary BIC, then add the retrieved IBAN BIC to the payment.
3. Validate the beneficiary BIC's scheme adherence (see "How can I validate a financial institution's scheme adherence?" on page 9).
4. Look up the beneficiary BIC's reachability (see "How can I look up a financial institution's reachability?" on page 9).

FAQs about SEPAROUTING File Data

Which countries are represented in the SEPAROUTING file?

The SEPAROUTING file includes financial institutions' data related to the 33 SEPA countries.

What is the source of the SEPAROUTING file data?

SWIFT collects the data from various sources:

- **Financial institutions**

SWIFT's data team contacts all financial institutions listed in the EPC's adherence register to obtain their data. Currently approximately 99 percent of the institutions have provided their data.

- **EPC**

The entire adherence register and its updates are loaded into the SEPAROUTING file. However, this does not provide the complete list of reachable BICs as some financial institutions only specify their main BIC in the adherence register. They do not list all their operational BICs used in SEPA payments. SWIFT tries to collect these unlisted BICs through direct data collection as explained previously.

- **SEPA CSMs**

Some CSMs provide SWIFT with the list of financial institutions reachable through their clearing and settlement system. SWIFT is in negotiation with a number of CSMs from which it is not yet receiving such data.

The data received from the individual financial institutions and from the SEPA CSMs may overlap. SWIFT uses the two sources to increase the quality and completeness of the data.

FAQs about using BICs, Validating Adherence, and Reachability

What is the difference between a BIC8 and a BIC ending with XXX?

The BIC with 8 characters and a BIC with 11 characters that ends with XXX are the same. For example, in all files, the BICs GEBABEBB and GEBABEBBXXX are the same.

What is SEPA scheme adherence?

Each financial institution operating in SEPA that wants to receive SEPA payments must sign an adherence agreement with the EPC. A separate agreement for the three SEPA schemes is required. The EPC publishes the BICs of the adherent financial institutions in the adherence register.

The three SEPA schemes are as follows:

- SEPA Credit Transfer Scheme (SCT)
- SEPA Direct Debit Core Scheme (SDD Core)
- SEPA Direct Debit Business to Business Scheme (SDD B2B)

What is an adherent BIC?

An *adherent* BIC is the BIC listed in the EPC adherence register. This BIC is also listed in the SEPAROUTING file, column ADHERENCE BIC. Some financial institutions only list their main BIC in the EPC's adherence register, implicitly covering their branch BICs and other BICs that are not explicitly listed.

What is the difference between the BIC and the ADHERENCE BIC?

In the SEPAROUTING file, column BIC, all financial institutions' BICs are listed that are covered directly or indirectly by the ADHERENCE BIC.

How can I validate a financial institution's scheme adherence?

If you have the BIC of the beneficiary financial institution (that is, the BIC associated to the IBAN account), then do the following:

1. Look it up in SEPAROUTING file, column ADHERENCE BIC.
2. If not present, then look it up in column BIC.
3. If not present, then either the financial institution is not adherent, or maybe you do not have the correct BIC of the financial institution. This is often the case in SEPA payments as the senders tend to determine the BIC themselves and are not aware which particular BIC must be used in SEPA payments.

To find the BIC to be used in SEPA payments in case you have the beneficiary's IBAN, do the following:

- extract from the IBAN the country code and the bank ID, and look these up in the IBANPLUS file, column ISO IBAN COUNTRY CODE and column IBAN NATIONAL ID.
- Take the BIC from the column IBAN BIC and repeat steps 1 and 2 mentioned previously.

If you still have not found the BIC in SEPAROUTING file, then either the BIC is not adherent or it is missing in the SEPAROUTING file. See also "What is the source of the SEPAROUTING file data?" on page 7.

What is SEPA reachability?

Reachability is different from adherence. A financial institution's reachability is the operational ability to receive SEPA payments through one or multiple CSMs, called PAYMENT CHANNEL IDs in the SEPAROUTING file. Reachability means that the financial institution is a direct or indirect member of one or more CSMs.

How can I look up a financial institution's reachability?

If you have the BIC of the beneficiary, then do the following:

1. Look up the BIC in the SEPAROUTING file, column BIC. You may find multiple rows, each one for a particular SEPA scheme and a SEPA CSM. Select those with the SEPA scheme (column SCHEME) corresponding to the type of SEPA payment.
2. If you find multiple rows for the scheme, then you have a choice of CSMs to send the payment through. Select the CSMs that you are capable of using.
3. If still you find multiple rows, and one of them contains the PREFERRED CHANNEL FLAG, then you may want to use that CSM as it is the receiver's preferred channel.

Why do some BICs have PAYMENT CHANNEL ID "Unknown"?

For approximately 0.3 percent of the BICs (column BIC) that have been retrieved from the EPC's adherence register, the financial institutions have not yet provided SWIFT with their CSM membership data. These BICs have the PAYMENT CHANNEL ID specified as "Unknown".

Why do some BICs have an empty REACHABILITY field?

For some financial institutions, SWIFT knows that they are member of a CSM but does not yet know whether they are a direct or indirect participant and who the intermediary is. However, this partial data allows you to validate the BIC's adherence and to look up its reachability.

FAQs about SEPA Payments

Where are the lists of IBAN, SEPA, and EURO Area countries?

- **IBAN countries**

http://www.swift.com/products_services/by_type/reference_data/iban_registry_iso13616

- **SEPA countries**

http://www.europeanpaymentscouncil.eu/knowledge_bank_detail.cfm?documents_id=328

- **EURO countries**

<http://www.ecb.int/euro/intro/html/map.en.html>

In which format are SEPA payments sent?

If SEPA payments are defined as credit transfers and direct debits to and for IBAN accounts within SEPA, then two major international formats apply:

- **MT format**

These are ISO 15022 payment messages. If the payment is sent cross-border, then it is usually sent over the FIN network.

Examples of the SEPA-relevant ISO 15022 payment instructions:

- MT103+ (customer credit transfer), typically sent bank to bank
- payment initiation messages, typically sent by corporates to their financial institutions, such as the MT101 (credit transfer initiation) and MT104 (direct debit initiation)

- **MX format**

These are ISO 20022 payment messages in XML format. These messages can be sent over proprietary networks or over FileAct. The sending financial institutions package many such payments into files and send them, for example over the SWIFT network to the SEPA CSM for clearing and settlement.

The most commonly used messages are:

- pacs.0008 (customer credit transfer)
- pacs.0003 (customer direct debit)
- related payment initiation messages (for example, from a corporate client to its bank):
pain.0001 customer credit transfer initiation and pain.0008 customer direct debit initiation

For more information, see www.iso20022.org > Catalogue of Messages > [Payments](#).

The SEPA regulation requires financial institutions within SEPA to send SEPA payments in the MX format (ISO 20022). This has resulted in a decrease in the number of MT103+ payments within SEPA and an increase in the number of MX messages. However, customer credit transfers from outside SEPA into SEPA may remain in the MT format.

How are SEPA payments routed?

- **MT103+ payments (ISO 15022)**

In the near future, these payments will originate mostly from outside of SEPA. They are sent either directly to the beneficiary financial institution or through its correspondent. Since these payments are correspondent banking payments, they are not cleared through a SEPA CSM. To find the correspondent of the beneficiary financial institution, standard settlement instructions are used. These instructions are available in SWIFT's SSIPLUS file (SSI Plus product). Alternatively, the ROUTING BIC in the IBANPLUS can be useful. However, this information is less accurate as it ignores the currency.

- **MX payments (ISO 20022)**

These payments are packaged into files and are sent to the SEPA CSM that will clear and settle them. The file is therefore addressed to the CSM. The beneficiary financial institution's BICs specified in the MX payments must be reachable through the CSM. The reachability information for the BIC can be found in the SEPAROUTING file.

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