Hamburg Commercial Bank

ISO 20022 I PAYMENT OPERATIONS

Payment transactions and message formats

Contents

Guide to payment transactions and message formats

1. HCOB and payment transactions

HCOB supports the processing of SEPA payment transactions and foreign payment transactions (Auslandszahlungsverkehr, AZV) in other currencies.
For euro payments, it offers SEPA credit transfers and SEPA direct debits. For SEPA credit transfers, the urgent transfer and instant payment options can also be used.

HCOB uses the EBICS protocol for transmitting payment transaction data.

2. Format changes as of October 2025

Some changes are required in view of the ongoing migration of MT message formats to the ISO 20022 standard and the updating of XML formats already in use. We ask that our customers make the necessary changes by October 2025 to ensure all payment transactions continue to be executed smoothly. The following changes can be expected:

SEPA payments

- Only the latest formats, versions pain.001 and pain.008, will be accepted in accordance with DK Version 3.7. Previous versions will no longer be supported.
- If you use our TRAVIC Port and enter payment orders there manually, there is no need for any changes.
- If you use our TRAVIC Port and execute payments there via file upload (use of a third-party system), you must adapt the corresponding third-party system.
- If you submit payment orders to us via your own EBICS client, you must ensure the latter uses only the latest format versions.

Account information in camt and MT

- HCOB currently offers both camtV2 and camtV8. However, camtV2 will only be supported by HCOB until October 2025 and will then be completely replaced by camtV8. This affects camt.052, camt.053 and camt.054.
- For MT, the MT940 and MT942 formats will be discontinued and replaced by the corresponding camt formats (camt.053 and camt.052, respectively).
- HCOB currently supports camt and MT formats. If you use both, you must switch to using only camt formats, Version 8, by October 2025.

AZV

- **Please note:** The replacement of DTAZV messages with pain.001.001.009 for foreign payment transactions (Auslandszahlungsverkehr, AZV) will not take place in October 2025 as planned, but in November 2026. Nevertheless, we recommend that you make the changeover as soon as possible in order to meet the final DTAZV deadline.

3. The ISO 20022 data format and XML

The ISO 20022 standard or UNIFI (Universal Financial Industry Message Scheme) for XML (Extensible Marker Language) is the basis for today's payment transactions and for all SEPA data formats. In future, these formats will also serve as the basis for SWIFT formats. All SEPA message types used for customers and banks are based on ISO 20022..

Here is a brief description of XML's technical characteristics:

- XML is a format for representing hierarchically structured data.
- XML can be read by machines, but also by humans.
- XML uses so-called elements as its primary building blocks. These elements can contain text, attributes and other data structures.

Important: ISO 20022 defines a standardised structure for all messages used in payment transactions. This is illustrated by the following example, i.e. the current version of a SEPA credit transfer.

Business Area: **Pa**yment **In**itiation	Message (001 = credit transfer)	Variant/Subformat	Version Number (here 09 =ISO 2019)
pain	**001**	**001**	**09**

More information is available here: www.iso20022.org

4. Practical application of the ISO 20022 standard for payment transactions

Three main organisations address the topic of different customer message types in XML format and their application. Below you will find a description of these organisations to help you understand the relationships between message types, their versioning and use.

4.1 European Payments Council (EPC)

- The purpose of the EPC is to create a Single European Payments Area (SEPA). The EPC acts as a decision-making and coordinating body for the harmonisation of SEPA payment schemes.
- The EPC manages and continuously updates the SEPA payment schemes, which represent the set of rules for credit transfers and direct debits and consist of rulebooks and implementation guidelines.
- A new set of SEPA rules generally comes into force every two years in November, laying the foundation for modifications that the SEPA countries must take into account.

More information can be found in the SEPA Credit Transfer (SCT) rulebook and implementation guidelines

4.2 DK and DFÜ Agreement

- Deutsche Kreditwirtschaft (DK, The German Banking Industry Committee) is the umbrella organisation that represents the interests of the leading German banking-sector associations. These are the National Association of German Cooperative Banks (BVR), the Association of German Banks (BdB), the Association of German Public Banks (VÖB), the German Savings Banks Association (DSGV), and the Association of German Pfandbrief Banks (vdp). DK develops common banking-industry positions on issues relating to banking law, banking policy and banking practice.
- Among other activities, DK develops standardised rules for payment transactions, including card payment schemes. In particular, DK monitors and initiates the adoption of all necessary modifications resulting from the continuous updates of the SEPA rulebook by the EPC.

For more information, see https://www.ebics.de/de/datenformate/gueltige-version

4.3 SWIFT

- SWIFT messages were introduced as a standardised means of exchanging information in message type (MT) format between credit institutions and corporate customers. Nevertheless, SWIFT currently allows the use of both ISO and MT. In the medium to long term, only XML formats are to be used within SWIFT.
- Some SWIFT message types currently serve as the basis in Germany of the DFÜ Agreement (on remote data transfers) as defined by DK.

Important: SWIFT's MT formats are not subject to the ISO 20022 standard and will be gradually replaced by XML formats in keeping with the ISO 20022 standard. It is currently planned that SWIFT's MT formats will no longer be supported for payment transactions from October 2025.

4.4 SEPA Card Clearing (SCC) and Berlin Group

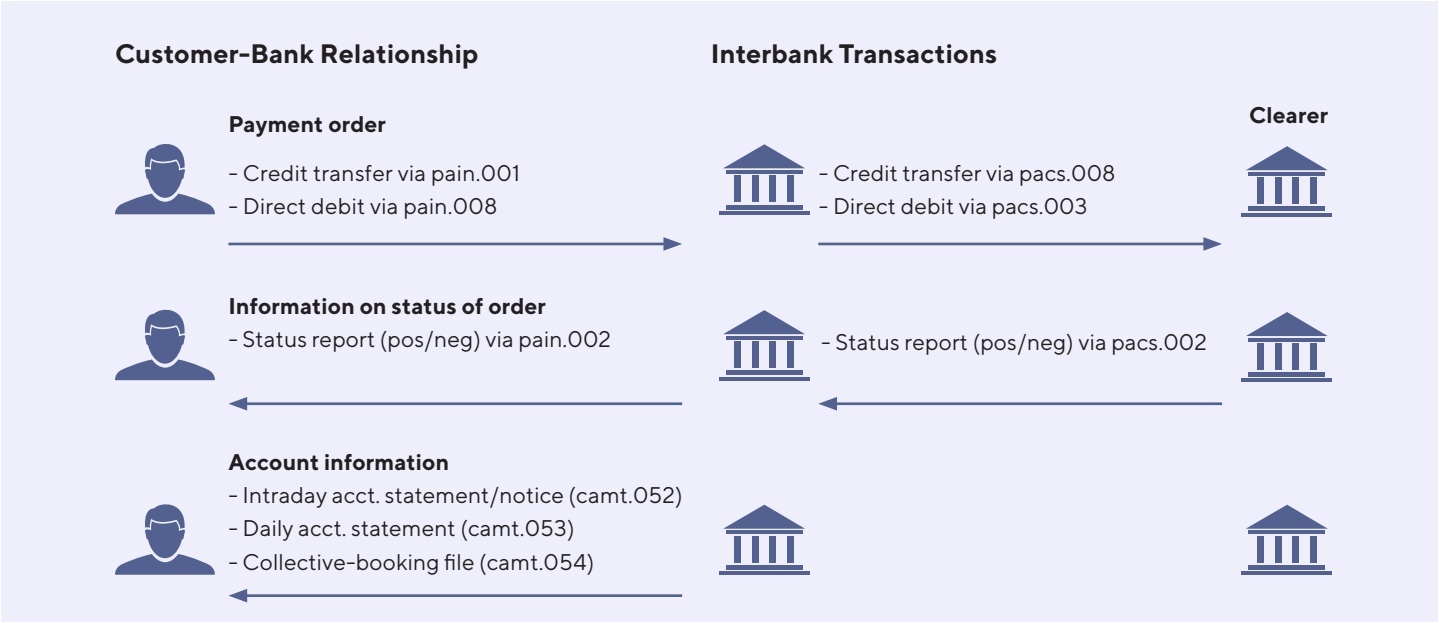
- The SCC format for clearing card transactions is also based on the ISO 20022 standard and reflects the SEPA Direct Debit format. Specific data elements have been added for the card business.
- The Berlin Group is a European initiative for the Europe-wide standardisation and harmonisation of card payments in keeping with the ISO 20022 standard. Its activities complement those of the EPC.
- The Berlin Group was established as a technical standardisation body with a focus on the detailed technical and organisational requirements of card payments according to the ISO 20022 standard.

5. Interaction of customer and bank formats in payment transactions

There are three types of XML-based messages in the ISO 20022 standard that are relevant for payment transactions:

- pain format (**pa**yment **in**itiation): for initiating credit transfers or direct debits
- pacs format (**pa**yments **c**learing and **s**ettlement): for the exchange of payments between banks
- camt format (**ca**sh **m**anagement**t**): for reporting account information between participants in payment transactions based on, for example, account statements and intraday account activity. For more details on camt messages, see 6.3.

Important: pain and camt messages are relevant for you as a customer.



In addition, MT messages are currently still used to receive account information.

6. Customer messages – definition and versioning

This section explains the main customer messages pain and camt, including a detailed look at versions and validity.

6.1 Initiation of payment orders and direct debits

Customers use the pain format (with the exception of the proprietary legacy format DTAZV) to submit payment details to HCOB to initiate credit transfers or direct debits. Any errors or rejections of a payment order that have occurred can also be made available to customers in pain format (pain.002).

The version numbers for a specific year are not necessarily identical for the different message types (pain.001, pain.008), which can lead to confusion.

The following should be kept in mind regarding the version assignment for SEPA credit transfers (SCT), SEPA instant payments (SCT Inst) and SEPA direct debits (SDD):

- For SCT, SCT Inst and urgent payments (credit transfers):
  → pain.001.001.**03** stands for the ISO version from **2009**
  → pain.001.001.**09** stands for the ISO version from **2019**

- For SDD (direct debits):
  → pain.008.003.**02** stands for the ISO version from **2009**
  → pain.008.001.**08** stands for the ISO version from **2019**

Versions

Product	EBICS order type	Message	Valid acc. to DK/DFÜ	DK/DFÜ Appendix 3	Support by HCOB
for SCT	CCT	pain.001.001.09	from 17 March 2024	ab Version 3.7	from March 2024
		pain.001.001.03	until October 2025	Version 3.0 - 3.6	**until October 2025**
		pain.001.003.03	until October 2025	Version 2.7 -3.1	**until October 2025**
SCT Inst	CIP	pain.001.001.09	from 17 March 2024	ab Version 3.7	from March 2024
		pain.001.001.03	until October 2025	Version 3.0 - 3.6	**until October 2025**
		pain.001.003.03	until October 2025	Version 2.7 -3.1	**until October 2025**
SDD	CDB (SEPA B2B direct debit) & CDC (SEPA core direct debit)	pain.008.001.08	from 17 March 2024	Version 3.7	from March 2024
		pain.008.001.02	until October 2025	Version 3.0 - 3.6	**until October 2025**
		pain.008.003.02	until October 2025	Version 2.7	**until October 2025**
foreign payments	AXZ	pain.001.001.09	from November 2024	Version 3.5	from November 2024
	AZV	DTAZV	until November 2026	Version 1.0	**until November 2026**
urgent payments	CCU	pain.001.001.09	from 17 March 2024	ab Version 3.7	from March 2024
		pain.001.001.03	until October 2025	Version 3.0 - 3.6	**until October 2025**
		pain.001.003.03	until October 2025	Version 2.7 -3.1	**until October 2025**

Important changes:

- One new feature is support for the use of the pain.001 message for foreign payment transactions (Auslandszahlungsverkehr, AZV) in parallel to the conventional DTAZV format from November 2024.
- The use of structured addresses will be mandatory from November 2025. The old pain.001 and pain.008 versions will therefore reach the end of their lifecycle, as it will not be possible to specify structured addresses when using them, and messages can therefore not be accepted for clearing. If they continue to be used, they will be rejected during clearing.

6.2 pain formats for status reporting

A pain.002 is used to query the status of credit transfers or direct debits and can result in a positive or negative response about the execution of the payment. You must therefore ensure that your customer systems have the technical capacity to process pain.002.001.10 messages. For SEPA, HCOB only provides a negative pain.002 response. For SEPA Inst, both negative and positive pain.002 responses are provided.

Versions

Product	EBICS order type	Message	Valid/Lifecycle	DK/DFÜ Appendix 3	Support by HCOB
SCT	CRZ	pain.002.001.10 (for pain.**001.**001.09)	from 17 March 2024	Version 3.7	from March 2024
		pain.002.001.03 (for pain.**001.**003.03 bzw. pain.**001.**001.03)	until October 2025	Version 3.0 – 3.6	**until October 2025**
SCT Inst	CIZ	pain.002.001.10 (for pain.**001.**001.09)	from 17 March 2024	Version 3.7	from March 2024
		pain.002.001.03 (for pain.**001.**001.03)	until October 2025	Version 3.0 – 3.6	**until October 2025**
SDD	CDZ	pain.002.001.10 (for pain.**008.**001.08)	from 17 March 2024	Version 3.7	from March 2024
		pain.002.001.03 (for pain.**008.**001.02)	until October 2025	Version 3.0 – 3.6	**until October 2025**
urgent payments (CCU)	CRZ	pain.002.001.10 (for pain.**001.**001.09)	from 17 March 2024	Version 3.7	from March 2024
		pain.002.001.03 (for pain.**001.**003.03 or pain.**001.**001.03)	until October 2025	Version 3.0 – 3.6	**until October 2025**
foreign payments	AXS	pain.002.001.10	from October 2025	Version 3.7	**from October 2025**

6.3 camt – messages for account information

The camt (cash management) format is used, among other things, to provide account information on completed bookings. The following account information variants are relevant here:

- camt.052 is used for querying intraday account transactions (prebooked items) and replaces MT942
- camt.053 is used for account statements and replaces the previous MT940 and MT950 messages.
- camt.054 is used for the resolution of transactions in collective bookings.

Folgendes sollte bei der Versionsvergabe für camt-Formate beachtet werden:

- For camt.052
  → camt.052.001.02 (old format)
  → camt.052.001.08 (new format)

- For camt.053
  → camt.053.001.02 (old format)
  → camt.053.001.08 (new format)

- For camt.054
  → camt.053.001.02 (old format)
  → camt.053.001.08 (new format)

Important: The above-mentioned camt formats must be converted to Version 8 by October 2025. HCOB does not currently offer camt.055. If you would like to cancel a credit transfer, you must contact the Gateway ZV team.

Versions

Product	EBICS order type	Message	Valid/Lifecycle	DK/DFÜ Appendix 3	Support by HCOB
Account report	C52	camt.052.001.08	from November 2021	Version 3.5– 3.7 **V8**	from November 2021
		camt.052.001.02	until October 2025	Version 2.4-3.4 **V2**	**until October 2025**
	VMK	MT942	until October 2025	N/A	**until October 2025**
End of Period Statement	C53	camt.053.001.08	from November 2021	Version 3.5– 3.7 **V8**	from November 2021
	STA	camt.053.001.02	until October 2025	Version 2.4-3.4 **V2**	**until October 2025**
		MT940	until October 2025	N/A	**until October 2025**
Debit Credit Notification	C54	camt.054.001.08	from November 2021	Version 3.5– 3.7 **V8**	from November 2021
		camt.054.001.02	until October 2025	Version 2.4-3.4 **V2**	**until October 2025**
Credit Advice	C5N	camt.054.001.08	from November 2021	Version 3.5– 3.7 **V8**	from November 2021
		camt.054.001.02	until w 2025	Version 2.4-3.4 **V2**	**until October 2025**

7. Structured addresses required

7.1 Definition of structured addresses

Structured addresses consist of clearly defined and formatted information. Each component of a postal address has a dedicated sub-element (e.g. street, house number and postal code). In comparison, unstructured address data is less clearly defined and uses the unstructured XML element "address line" (<AdrLine>), in which various components of an address are entered.

In contrast to the old ISO version, new formats require the transmission of address data in a structured form. When entering addresses, the address data must be entered in the 14 pre-defined fields of ISO 20022. The data may not be interchanged. The use of the unstructured XML element "address line" is not permitted for structured addresses.

For structured addresses, "city" and "country" are also mandatory fields.

Example: structured address

```
<Nm> Max Mustermann AG </Nm>
<PstlAdr>
        <Dept>Warenlieferung</Dept>
        <StrtNm> Musterstraße</StrtNm>
        <BldgNb>1</BldgNb>
        <PstCd>22610</PstCd>
        <TwnNm>Hamburg</TwnNm>
        <TwnLctnNm>Altona</TwnLctnNm>
        <Ctry>DE</Ctry>
</PstlAdr>
```

```
<Nm> ACME Products Ltd </Nm>
<PstlAdr>
        <Dept>Deliveries</Dept>
        <StrtNm> Sample Street</StrtNm>
        <BldgNb>1</BldgNb>
        <PstCd>22610</PstCd>
        <TwnNm>Hamburg</TwnNm>
        <TwnLctnNm>Altona</TwnLctnNm>
        <Ctry>GY</Ctry>
</PstlAdr>
```

Example: unstructured address

```
<Nm> Max Mustermann AG </Nm>
<PstlAdr>
        <Ctry>DE</Ctry>
        <AdrLine>Musterstraße 1 </AdrLine>
        <AdrLine> 22610 Hamburg / Altona</AdrLine>
</PstlAdr>
```

```
        <Nm> ACME Products Ltd </Nm>
        <PstlAdr>
                <Ctry>GY</Ctry>
                <AdrLine>Sample Street 1 </AdrLine>
                <AdrLine> 22610 Hamburg / Altona</AdrLine>
        </PstlAdr>
```

7.2 Definition of hybrid or semi-structured addresses

The hybrid address display (or semi-structured address display) contains both structured and unstructured data.

This means that in addition to the mandatory information "city" and "country," additional information may be entered in the open text lines (<AdrLine>).

It is possible to use structured ISO 20022 address elements in combination with an unstructured "address line" consisting of up to two lines of up to 70 characters each.

Elements present in the structured format must be entered in the respective structured ISO 20022 element. It is important here that at least "city" and "country" are entered in the respective structured element. The predefined fields (structured elements) must be completed for hybrid addresses. Information that has already been entered as a structured element may not be entered again in the "address line."

Example: hybrid / semi-structured address

```
<Nm> Max Mustermann AG </Nm>
<PstlAdr>
        <Ctry>DE</Ctry>
        <TwnNm>Hamburg</TwnNm>
        <AdrLine>Musterstraße 1</AdrLine>
        <AdrLine> 22610 Altona</AdrLine>
</PstlAdr>
```

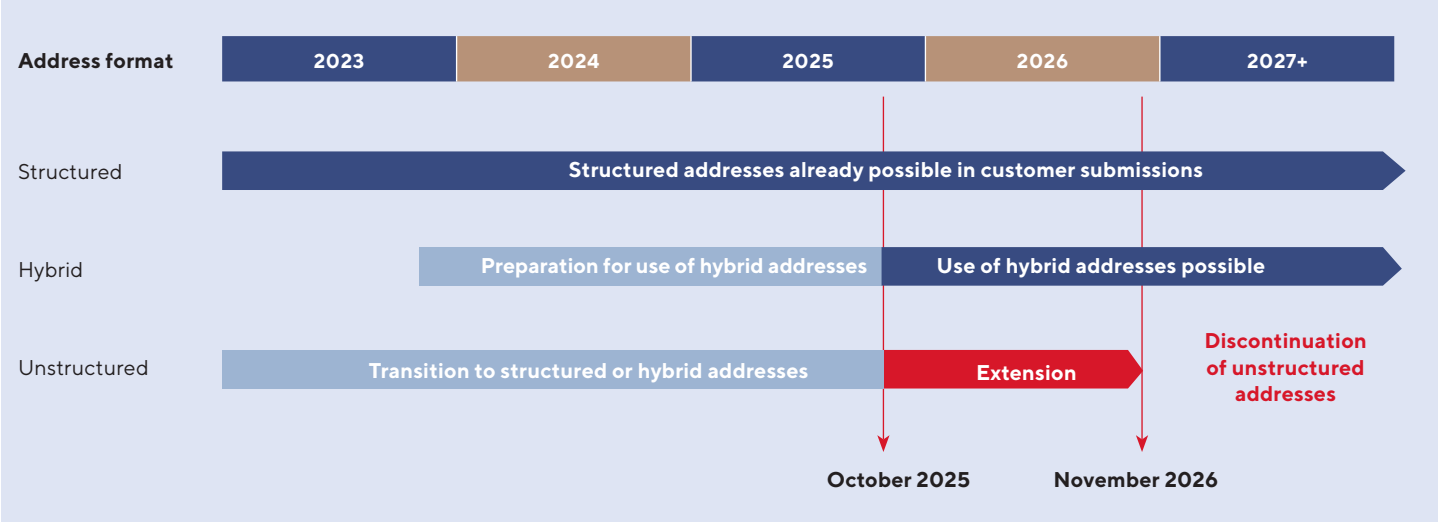
```
<Nm> ACME Products Ltd. </Nm>
<PstlAdr>
        <Ctry>GY</Ctry>
        <TwnNm>Hamburg</TwnNm>
        <AdrLine>Sample Street 1</AdrLine>
        <AdrLine> 22610 Altona</AdrLine>
</PstlAdr>
```

This type of formatting makes it possible to provide address information more flexibly. Due to the predefined structure, however, automated processing is still possible. Hybrid addresses make it possible to supply information in a format that can be read both by humans and in part by machines.

7.3 Use of the three address options in foreign payments transactions (AZV)

- Since 2023, payment service providers and payment service users have been able to use structured addresses in their payment transaction messages.
- Hybrid or semi-structured address assignment will be permitted in foreign payment transactions (AZV/AZX) from November 2025.
- The use of unstructured addresses will be possible during the transition period from November 2025 to November 2026.
- Unstructured addresses will no longer be supported from November 2026. If an unstructured address is used, the payment order will be rejected.
- The EPC has submitted a change request for the use of hybrid addresses in SEPA. As of July 2024, it has not yet received final approval.

8. Timeline for structured addresses



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About the bank:

Hamburg Commercial Bank AG (HCOB) is a private commercial bank headquartered in Hamburg, Germany, that provides customized financing solutions for German and international companies. HCOB has a strong position in structured real estate and project finance and is a reliable financing partner for the global shipping and aviation sector. Efficient and secure payment transaction services as well as innovative products for foreign trade complete the range of services. The bank is guided by established ESG criteria and operates from several locations in Germany as well as in London, Amsterdam and Piraeus.

For more information, please visit www.hcob-bank.com