



Family Office Integration with  
Wholesale Clearing & Settlement

**ISO 20022 Technical  
Implementation Guide  
XML Pain.001.001.03**

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# 1. Introduction

This document describes how different payment products can be initiated through the Cobase platform in the ISO20022 XML pain.001.001.03 format.

Applies to files that are:

- uploaded using the 'Upload Payment File' functionality in the third-party portal
- sent through the direct connect to bank host-2-host (SFTP) channel

## 2. Basic concepts

### 2.1 Multi batch

The pain.001.001.03 xml files can be structured to contain multiple batches (eg <PmtInf> elements), which HSC processor fully supports.

Multiple batches in a file will be split once they are processed at transfer agent. The term 'batches' are used loosely in this respect as a <PmtInf> element can also be used to contain a collection of singles; the alternative could be considered a 'true' batch.

### 2.2 Btchbookg

The trigger for HSC is to process a batch as a 'true' batch, eg resulting in a single debit on your accounts and multiple credits for your respective beneficiaries is the presence of the batch booking indicator <BtchBookg>. Only when the value 'True' is provided will the batch be processed as a true batch. Providing the value 'False' or the absence of the batch booking indicator will result in transactions in the <PmtInf> element to be treated as, and forwarded as, singles.

### 2.3 No mixed batches

A batch, or a <PmtInf> element containing multiple transactions may only contain one type of payment product. If batch contains multiple payment products the batch will be rejected. In that spirit we recommend you provide payment instruction details on batch level as much as possible, where those will prevail and apply to all transactions in the batch. Examples are the charge bearer, service level, (category of) purpose, etc.

### 2.4 CtrlSum/NbOfTxS

Whilst the pain.001.001.03 message standard only dictates the control sum <CtrlSum> on file <GrpHdr> level is mandatory, different banks or payment products may require us to supply the correct totals at file or batch level. In those cases HSC will calculate and provide the correct totals at file <GrpHdr> and batch <PmtInf> level.

However, when you do provide the control sum or number of transactions, either on file or batch level, we will validate the correctness of the values provided and we will reject the file/batch if those are not correct.

### 2.5 Structured address details

More and more banks and country specifications require structured input as opposed to free text. Particularly on address details this has become more and more of a requirement. Our advice is to always use structured addresses, meaning the option in which street name, building number, postcode, town name and country, etc are separate fields as opposed to the use of multiple address line instances.

Example structured address:

```
<PstlAdr>
  <Dept>
  <SubDept>
  <StrtNm>
  <BldgNb>
  <PstCd>
  <TwnNm>
  <CtrySubDvsn>
  <Ctry>
</PstlAdr>
```

Where the most common fields are the aforementioned, but depending on the country other less common sub fields are required.

Example unstructured address:

```
<PstlAdr>
  <Ctry>
  <AdrLine>
  <AdrLine>
</PstlAdr>
```

The idea behind using structured address fields in every instance would be that depending on the country or bank, HSC will be able to transform a structured address into an unstructured one. Vice versa is much more complicated.

## 2.6 Debtor details

We have seen that a number of banks will require more debtor/initiating party details than just a name and account number. Absence of this data could result in rejections at the bank for domestic payments, international payments, or both. To minimize the chances of this happening we strongly advise you to always provide your debtor details in the following tags:

```
<Dbtr> <PstlAdr>
```

### *Multi-currency accounts*

When you have multiple instances of the same account number in different currencies registered on the HSC platform, eg a so-called 'multi-currency' account, HSC Platform requires you to provide the account currency in the file in the following tag:

```
<DbtrAcct> <Ccy>
```

Otherwise the account currency is optional.

## 2.7 Creditor details

Make sure to provide a valid beneficiary name at all times and valid beneficiary address especially for International Credit Transfers to ensure you comply with any regulatory screening requirements.

The beneficiary bank details will in most cases be the BIC address of the bank, especially for International Credit Transfers, in cases where the bank is not connected to SWIFT or countries where local clearing system, a member id Legal Entity Identification LEI (also often referred to as bank, branch or sort code) is more commonly used.

In case you provide the local Clearing System Member Id, please do so in:

<CdtrAgt><FinInstnId><ClrSysMmbld><Mmbld>

we'd also advise you to provide the Clearing System Id (a list of codes can be found here) in:

<CdtrAgt><FinInstnId><ClrSysMmbld><ClrSysId><Cd>

HSC Platform requires the country code of the creditor bank(account) to be able to determine whether we're dealing with a domestic or an international payment product. When the creditor details do not include either an IBAN or a BIC to extract the country code from, the ISO country code has to be provided in:

<CdtrAgt><FinInstnId><PstlAdr><Ctry>

Without BIC or local Clearing System Member Id you would fallback to Bank Name and Postal Address, typically in conjunction with the use of an Intermediate Bank. Please rely on the remittance instructions from your suppliers to understand what data to be provided.

## 2.8 Overpopulation

In line with the CGI (Common Global Implementation) standard HSC supports overpopulation of data elements in the file, sometimes referred to as 'excess data'. That means we aim to relay as much of the information you provide in the file to your bank, unless specific rules instruct us to remove or omit certain fields for specific payment products.

## 2.9 Payment Method

Two types of payment methods are supported by HSC Platform in the pain.001.001.03 format.

- Credit Transfers
- Cheque payment

The Payment Method element specifies the means of payment that will be used to move the amount of money and the following codes will be accepted:

Value	Value
CHK	Cheque. Written order to a bank to pay a certain amount of money from one person to another person.
TRF	Credit Transfer. Transfer of an amount of money in the books of a Treasury Bank account.

Consequently, the value TRA for Transfer Advice is not supported.

# 3. Domestic payment products

Domestic payment products can be characterized by the fact that these are always between two accounts within the same country and denominated in the local currency. Not all generic domestic payment products are available in every country, or at every bank for every client. Always consult your HSC implementation manager what payments can be supported in each of the countries in scope and refer to the Country Specific Documents (CSD's).

## 3.1 Domestic Credit Transfer - Single

A single domestic credit transfer is a typical payment processed via local low value clearing or ACH. Singles can be combined in a single <PmtInf> element as long as batch booking is set to false or, alternatively, omitted.

Element	Value
Batch Booking	False, absent <sup>i</sup>
Service Level	NURG
Charge Bearer	DEBT, CRED, SHAR or absent <sup>ii</sup>

## 3.2 Domestic Credit Transfer – Batch

A typical domestic low value clearing or ACH often provides a batch or bulk alternative to the domestic credit transfer that offers a single debit on a member account against multiple credits at you're the receiving bank.

Element	Value
Batch Booking	True
Service Level	NURG
Charge Bearer	DEBT, CRED, SHAR or absent <sup>ii</sup>

## 3.3 Domestic Credit Transfer – Urgent

A single domestic credit transfer often has a high value urgent equivalent that is processed through a local high value clearing with specific processing speed and costs involved.

Element	Value
Batch Booking	False, absent <sup>i</sup>
Service Level	URGP
Charge Bearer	DEBT, CRED, SHAR or absent <sup>ii</sup>

### 3.4 Domestic Credit Transfer - Salary Batch

In many countries salary payments are supported through a specific payment product; the salary batch. Typical for a salary batch is the ability for banks or a platform like HSC to shield these types of payments through special user permissions. Equally, the batch nature of this payment product ensures no beneficiary details will be visible on your account statement.

Element	Value
Batch Booking	True
Service Level	NURG
Category of Purpose	SALA
Charge Bearer	DEBT, CRED, SHAR or absent <sup>ii</sup>

### 3.5 Domestic Credit Transfer - Pension Batch

Similar to the salary batch there are countries that support a pension payment that is not necessarily part of the same SALA scheme. A specific pension code can be used to flag these payments as a pension payment.

Element	Value
Batch Booking	True
Service Level	NURG
Category of Purpose	PENS
Charge Bearer	DEBT, CRED, SHAR or absent <sup>ii</sup>

### 3.6 Domestic Credit Transfer - Tax

Some countries have specific requirements for paying (government) taxes. These often come with country specific requirements on payment details that would be outlined in the CSD's.

Element	Value
Batch Booking	False, absent <sup>i</sup>
Service Level	NURG
Category of Purpose	TAXS
Charge Bearer	DEBT, CRED, SHAR or absent <sup>ii</sup>

### 3.7 Domestic Credit Transfer - Tax Batch

Similar to the domestic credit transfer tax payment, some countries may support a batch variety.

Element	Value
Batch Booking	True
Service Level	NURG
Category of Purpose	TAXS
Charge Bearer	DEBT, CRED, SHAR or absent <sup>ii</sup>

### 3.8 Domestic Credit Transfer - Tax Urgent

Similar to the domestic credit transfer tax payment, some countries may support an urgent variety.

Element	Value
Batch Booking	False, absent <sup>i</sup>
Service Level	URGP
Category of Purpose	TAXS
Charge Bearer	DEBT, CRED, SHAR or absent <sup>ii</sup>

# 4. SEPA payment products

SEPA payments are the pan-European payment product that facilitates Euro payments amongst SEPA member states. SEPA payments are characterized by the fact that these are denominated in Euro's, between two accounts held in SEPA member country and in that the use of IBAN is mandatory for both the ordering and beneficiary account.

Special rules apply to SEPA payments that allow omitting the beneficiary bank details as the IBAN-Only rule prescribes that an IBAN is sufficient to route payments amongst the SEPA participating banks.

## 4.1 SEPA Credit Transfer – Single

A single Euro payment between two SEPA member countries.

Element	Value
Batch Booking	False, absent <sup>i</sup>
Service Level	SEPA, or absent <sup>iii</sup>
Charge Bearer	SLEV, or absent <sup>iv</sup>

## 4.2 SEPA Credit Transfer – Batch

The SEPA credit transfer offers a batch variety that results in a single debit on your account against multiple credits at the different beneficiaries.

Element	Value
Batch Booking	True
Service Level	SEPA, or absent <sup>iii</sup>
Charge Bearer	SLEV, or absent <sup>iv</sup>

### 4.3 SEPA Credit Transfer – Salary Batch

Similar to the definition of a generic domestic salary batch, the SEPA salary batch offers the ability for banks or a platform like HSC to shield these types of payments through special user permissions. Equally, the batch nature of this payment product ensures no beneficiary details will be visible on your account statement.

Element	Value
Batch Booking	True
Service Level	SEPA, or absent <sup>iii</sup>
Category of Purpose	SALA
Charge Bearer	SLEV, or absent <sup>iv</sup>

### 4.4 SEPA Credit Transfer – Urgent

A payment type that is not widely adopted amongst banks as it's not truly a SEPA product. The SEPA credit transfer urgent is offered by some banks at specific cost to execute an urgent Euro payment within the Euro zone, routed through Target2. A more typical approach of banks is to regard this as an International urgent credit transfer that happens to be denominated in Euro's.

Element	Value
Batch Booking	False, absent <sup>i</sup>
Service Level	SEPA, or absent <sup>iii</sup>
Category of Purpose	TREA
Charge Bearer	SLEV, or absent <sup>iv</sup>

# 5. International payment products

International payment products are payments that are either cross-border payments (without qualifying as a SEPA payment) or any payment within a country not denominated in the local currency. For example, a USD payment between two UK banks would be regarded as an International payment, as would a payment from a UK bank to another country in GBP (or any other currency for that matter).

International credit transfers are typically not cleared through a clearing or ACH, but through correspondent banking. The preferred and advised method by most banks as well as HSC is to use a BIC for the beneficiary bank as much as possible when available.

## 5.1 International Credit Transfer – Single

International credit transfers are typically single in their nature.

Element	Value
Batch Booking	False, absent <sup>i</sup>
Service Level	NURG
Charge Bearer	DEBT, CRED, SHAR or absent <sup>ii</sup>

## 5.2 International Credit Transfer – Urgent

Often referred to as 'Wires' international payments are often requested with an urgent execution, even though in previous payment product that a non-urgent version is available.

Element	Value
Batch Booking	False, absent <sup>i</sup>
Service Level	URGP
Charge Bearer	DEBT, CRED, SHAR or absent <sup>ii</sup>

# 6 Cheque initiation

A written instruction to a bank or financial institution to pay a given amount from the cheque holder's account to the bearer is known as a cheque. Cheque payments are not common in every country, but are for instance quite extensively used in the USA. There is a high level of differentiation in the information that is required to be accompanied in a cheque payment as option and default settings may differ by bank, but cheque details that are to be required can be delivered in a uniform way in HSC as described ahead. Always consult your HSC implementation manager what payments can be supported in each of the countries in scope and refer to the Country Specific Documents (CSD's).

## 6.1 Cheque payment

The main differences between a cheque payment compared to a credit transfer are:

- Beneficiary account and Beneficiary Bank data is not applicable
- Full address (in structured layout) of the beneficiary is mandatory, as the check would be printed and mailed either by the bank or the issuing company.

Most cheque related parameters should be required in the Cheque Instruction element <ChqInstr> under <CdtTrfTxInf>.

Element	Value
Cheque Type	BCHQ, CCHQ, DRFT, ELDR, CCCH
Cheque Number	Numeric (1-35), or absent
Delivery Method - Proprietary	Bank proprietary code, AN 1-35
Forms Code	Bank proprietary code, AN 1-35
Memo field	Free text, AN 1-35

### *Cheque Type*

Specifies the type of cheque and consists of 4 uppercase characters. There are five different cheque types:

- BCHQ (Bank cheque or Cashier cheque)
- CCHQ (Customer or Corporate cheque)
- DRFT (Draft cheque)
- ELDR (Electronic Draft)
- CCCH (Certified customer cheque)

It's an optional field, not used by all banks nor are all options supported. The most typical check type would either be a Customer or Bank cheque.

### *Cheque number*

Unique and unambiguous identifier for a cheque as assigned by the agent. The bank might have an option to automatically assign the cheque number, which could be beneficial if you only plan to manually initiate cheques from the Cobase platform.

### *Delivery Method*

Specifies the delivery method type of the cheque by the debtor's agent. Optional field, not used by all executing banks. Typically used to make a distinction between standard mail, overnight, fedex, etc.

### **Forms Code**

Identifies in a coded form the cheque layout that is to be used by the debtor's agent. Optional field, not used by all executing banks.

### **Memo Field**

Additional information to be printed on a cheque. Optional field, not used by all executing banks.

Additionally information about the check is included in structured remittance information <RmtInf> <Strd> under <CdtTrfTxInf>.

Element	Value
Referred Document Info - Number	Invoice Number, AN 1-35
Referred Document Info - Related Date	Invoice Date
Referred Document Amount - Discount Applied Amount	Discounted Amount
Creditor Reference	Invoice Description, AN 1-35

### *Document Number / Invoice Number*

Document Number or Invoice Number regarding the cheque payment. Optional field, not used by all executing banks.

### *Document Date / Invoice Date*

Document Date or Invoice Date regarding the cheque payment. Optional field, not used by all executing banks.

### *Document Discount Applied Amount / Invoice Discount Applied Amount*

Document or Invoice Discount Amount that results from the application of an agreed discount to the amount due and payable to the creditor. Other amount fields are not supported / ignored as we only support one invoice to be paid out at each instance these are derived from the instructed amount and will be enriched in the outbound file if so required by bank.

### *Document Description / Invoice Description*

Document Number or Invoice Number regarding the cheque payment. Optional field, not used by all executing banks.

Example Remittance Information Cheque payment:

```
<RmtInf>
  <Ustrd>Free Text</Ustrd>
  <Strd>
    <RfrdDocInf>
      <Nb>Invoice Number</Nb>
      <RltdDt>2023-06-01</RltdDt>
    </RfrdDocInf>
    <RfrdDocAmt>
      <DscntApldAmt Ccy="USD">0.0</DscntApldAmt>
    </RfrdDocAmt>
    <CdtrRefInf>
      <Tp>
        <CdOrPrtry>
          <Cd>SCOR</Cd>
        </CdOrPrtry>
      </Tp>
      <Ref>Invoice Description</Ref>
    </CdtrRefInf>
  </Strd>
</RmtInf>
```

Please note:

- Multiple invoices (or credit notes) and associated references in one cheque payment are not supported; each cheque payment should correspond to a maximum of one invoice.
- Beneficiary address must be in a structured form (address should be provided as 'Street name', 'Building number', Postal code', 'Town', 'Country subdivision' and 'Country'). If a Country subdivision is missing for a US or Canadian beneficiary, the 2-character State abbreviation (USA) or 2-character Province abbreviation (Canada) will be added automatically -based on postal code- during payment creation by HSC.
- Only a basic cheque payment (instructed amount) is supported. Deviations or specifications like 'Due Payable Amount', 'Discount Applied Amount', 'Credit Note Amount' or 'Remitted Amount' are not supported.
- On the 'Initiate cheque payment' / 'Modify cheque payment' screens: none of the cheque related screen fields in the sections 'Cheque details' or 'Document/Invoice details' are marked mandatory, since not all executing banks use the content of those screen fields. However, please note that some executing banks do use the content of these fields and even require correct use of them.

<sup>i</sup> BatchBooking: When absent will default to False <sup>ii</sup> ChargeBearer: When absent will default to SHAR <sup>iii</sup> ServiceLevel SEPA: When absent other payment details will determine payment product SEPA <sup>iv</sup> ChargeBearer SEPA: When absent will default to SLEV

## ISO 20022 International Credit Transfer Template XML pain.001.001.03" OR pacs.08

<Document xmlns="urn:iso:std:iso:20022:tech:xsd:pain.001.001.03" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">

### Customer Credit Transfer Information (Open)

<CstmrCdtTrflnItm> Customer Credit Transfer Information  
<GrpHdr> Group Header Open  
<MsgId>**YourUniqueFileRef**</MsgId> Message Identification  
<CreDtTm>**2020-09-01T12:00:00**</CreDtTm> Creation Date and Time  
<NbOfTx>**2**</NbOfTx> Number of Transactions  
<InitgPty> Initiating Party  
<Nm>**Cobase**</Nm> Name (Chief Administrator)  
</InitgPty>  
</GrpHdr>  
<PmtInf> Payment Information  
<PmtInfId>**YourUniqueBatchRef**</PmtInfId> Payment Information ID  
<PmtMtd>**TRF**</PmtMtd> Payment Method  
<BtchBookg>**false**</BtchBookg> Batch Booking  
<!-- International payments will always be processed as singles; Batch Booking should be false -->  
<NbOfTx>**2**</NbOfTx> Number of Transactions  
<CtrlSum>**1400.00**</CtrlSum> Control Sum  
<PmtTpInf> Payment Type Information  
<SvcLvl> Service Level Agreement  
<Cd>**NURG**</Cd>  
<!-- International payments can typically by non-urgent (NURG), or urgent (URGP) -->  
</SvcLvl>  
</PmtTpInf>

### Credit Transfer Request

<ReqdExctnDt>**2020-09-01**</ReqdExctnDt> Request Executed Date  
**Debtor**  
<Dbtr> Debtor Transaction  
<Nm>**Cobase**</Nm> Debtor account holder  
<PstlAdr> Postal Address or Country Subdivision Code  
<StrtNm>**Haaksbergweg 75**</StrtNm> Street Number  
<PstCd>**1101 BR**</PstCd> Postal Code  
<TwnNm>**Amsterdam**</TwnNm> Town Name  
<Ctry>**NL**</Ctry> Country Code  
</PstlAdr>  
  
</Dbtr> Debtor  
<DbtrAcct> (Grantee Account Information)

<Id>  
<IBAN>**NL00INGB0001234567**</IBAN> IBAN  
</Id>  
<Ccy>**USD**</Ccy> **Currency Type**  
</DbtrAcct>

**Grantor Agent** - Financial Institution (HSC - Treasury Bank)

<DbtrAgt>  
<FinInstnId> Financial Institution Identifier  
<BIC>**INGBNL2A**</BIC> HSC BIC  
</FinInstnId>  
</DbtrAgt>

**Charge Bearer**

<ChrgBr>**SHAR**</ChrgBr>

<!-- International payments might also have the Charge Bearer set to DEBT or CRED, except within Europe where PSD regulation requires all payment to be shared (SHAR) -->

<CdtTrfTxInf>  
<PmtId>  
<EndToEndId>**YourUniqueE2ETrxRef**</EndToEndId>  
</PmtId>  
<Amt>  
<InstdAmt Ccy="USD">**900.0**</InstdAmt>  
</Amt>

**Debtor Agent** - Financial Institution

<CdtrAgt>  
<FinInstnId> Financial Institution Identifier  
<BIC>**INGBNL2A**</BIC>  
</FinInstnId>  
</CdtrAgt>

**Creditor (Receiver)**

<Cdtr> Creditor Transaction  
<Nm>**Cobase**</Nm> Name (Beneficiary Name)  
<PstlAdr>  
<StrtNm>**Haaksbergweg 75**</StrtNm> (Beneficiary Address)  
<PstCd> **1101 BR**</PstCd> Postal Code (Beneficiary Postal Code)  
<TwnNm>**Amsterdam**</TwnNm> Town Name (Beneficiary Town or City)  
<Ctry>**NL**</Ctry> Country (Beneficiary Country)  
</PstlAdr>  
</Cdtr>

**Creditor Account** (Settlement Account)

<CdtrAcct>  
<Id>  
<IBAN>**NL99INGB0007654321**</IBAN>

```
</ld>
</CdtrAcct>
<RmtInf>
<Ustrd>Remittance Information</Ustrd>
</RmtInf>
</CdtTrfTxInf>
```

### **Compliance Data**

```
<SupplementaryData>
  <PlcAndNm>OptionalPlaceAndName</PlcAndNm>
  <Envlp>
    <YourCustomExtension>
      <!-- Custom fields go here -->
    </YourCustomExtension>
  </Envlp>
</SupplementaryData>
</Document>
```