Ensuring Quality Data Population in pacs Messages

PMPG
Payments Market Practice Group

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Payments Market Practice Group

The Payments Market Practice Group (PMPG) is an independent body of payments subject matter experts from Asia Pacific, EMEA and North America.

The mission of the PMPG is to:

- Take stock of payments market practices across regions.
- Discuss, explain, and document market practice issues, including possible commercial impact.
- Recommend market practices, covering end-to-end transactions.
- Propose best practice, business responsibilities and rules, message flows, consistent implementation of ISO messaging standards and exception definitions.
- Ensure publication of recommended best practices.
- Recommend payments market practices in response to changing compliance requirements.

The PMPG provides a truly global forum to drive better market practices, which, together with correct use of standards, will help in achieving full straight-through-processing and improved customer service.

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Introduction

This document has been created to help improve the quality of data population within ISO 20022 messaging across the Industry.

There are some bad practices or incorrect interpretations of how data should be populated within ISO 20022 message formats, the PMPG have gathered feedback globally on the type of mis-use or incorrect usage of data elements and this document has been created to show how the data should correctly be populated within the relevant ISO 20022 messages to try and help educate and alleviate the issues that this can cause the receiving banks / MI's.

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Population of IBAN

In jurisdictions where an account identified is by an IBAN, the dedicated ISO 20022 data element must be used.
An IBAN (International Bank Account Number), as defined by ISO 13616, consists of country code, two check digits, and a structured Basic Bank Account Number (BBAN). To ensure accurate and efficient payments, only valid IBAN – not just an IBAN-like format – should be used. This enables automated validation of both its presence and structure, reducing errors and enhancing the reliability of payment processing

Incorrect Population of Data

```
<CdtrAcct>
   <Id>
      <Othr>
         <Id>GB14ABCD12345678910234</Id>
      </Othr>
   </Id>
</CdtrAcct>
```

Correct Population of Data

```
<CdtrAcct>
   <Id>
      <IBAN>GB14ABCD12345678910234</IBAN>
   </Id>
</CdtrAcct>
```

Population of IBAN

There are some account numbers which may resemble an IBAN but are account numbers and therefore it is important to ensure that these are not incorrectly mapped into the IBAN element, as this will cause Validation failures and cause non-stp. For example a Moroccan Account number: Branch Code (3 digits) - This is unique for each branch of a specific bank. Bank Account Number- This needs to be 18 digits long, including a 2-digit RIB Key >> 16-digit account # + 2-digit RIB #)

Incorrect Population of Data

```
<CdtrAcct>
   <Id>
      <IBAN>MA15 052 021 14055603190003 19</IBAN>
   </Id>
</CdtrAcct>
```

Correct Population of Data

```
<CdtrAcct>
   <Id>
      <Othr>
         <Id>MA15 052 021 14055603190003 19</Id>
      </Othr>
   </Id>
</CdtrAcct>
```

Population of Account Number

Within the ISO message there is no need to prefix an account number with a slash “/” and this can actually cause issues and prevent stp which will delay the processing of the payment

Incorrect Population of Data

```
<CdtrAcct>
   <Id>
      <Othr>
         <Id>/20456783645287</Id>
      </Othr>
   </Id>
</CdtrAcct>
```

Correct Population of Data

```
<CdtrAcct>
   <Id>
      <Othr>
         <Id>20456783645287</Id>
      </Othr>
   </Id>
</CdtrAcct>
```

Service Level Information

Historically FI's have placed Service level information within the element 70 or 72 of a FIN MT message. There is a dedicated Service Level agreement section within the ISO 20022 message which should be utilised correctly. The below is an example where there is a Proprietary agreed service level between two Counterparties. Please note that the Service level value and usage is a point to point Bilaterally agreed piece of data and should therefore not be sent outbound to the next bank in chain, unless there is an agreement in place.

Incorrect Population of Data

```
<RmtInf>
   <Ustrd>Agreed Bilateral SLA Info</Ustrd>
<RmtInf>

                    OR

<InstrForCdtrAgt>
   <InstrInf>Agreed Bilateral SLA Info</InstrInf>
</InstrForCdtrAgt>
```

Correct Population of Data

```
<PmtTpInf>
   <SvcLvl>
      <Prtry>Agreed Bilateral SLA Info</Prty>
   </SvcLvl>
</PmtTpInf>
```

Service Level Information

Historically FI's have place Service level information within the element 70 or 72 of a FIN MT message. There is a dedicated Service Level agreement section within the ISO 20022 message which should be utilised correctly. The below is an example where there is a Globally accepted Code that can be used. Please note that the Service level is a point to point Bilaterally agreed piece of data and should therefore not be sent outbound to the next bank in chain, unless there is an agreement in place.

Incorrect Population of Data

```
<RmtInf>
   <Ustrd>ABSI</Ustrd>
<RmtInf>
```

OR

```
<InstrForCdtrAgt>
   <InstrInf>ABSI</InstrInf>
</InstrForCdtrAgt>
```

Correct Population of Data

```
<PmtTpInf>
   <SvcLvl>
      <Cd>ABSI</Cd>
   </SvcLvl>
</PmtTpInf>
```

Correct population of “Name”

Due to a limitation of translating a free format name and address from an MT (for example F50K) into an ISO message, it is sometimes not possible for an Institution to identify whether a second line of a name and address unstructured element is a continuation of the name or the first line of the address.

Incorrect Population of Data

```
<Dbtr>
  <Nm>The Name of a Company that exceeds</Nm>
  <PstlAdr>
     <AdrLine>35 Characters, 54 Lombard Street</AdrLine>
     <AdrLine>London, E11 2PQ, GB</AdrLine>
  </PstlAdr>
</Dbtr>
```

Correct Population of Data

```
<Dbtr>
  <Nm>The Name of a Company that exceeds 35 Characters</Nm>
  <PstlAdr>
     <AdrLine>54 Lombard Street</AdrLine>
     <AdrLine>London, E11 2PQ, GB</AdrLine>
  </PstlAdr>
</Dbtr>
```

OR

If Hybrid is used (post Nov 25)

```
<Dbtr>
  <Nm>The Name of a Company that exceeds 35 Characters</Nm>
  <PstlAdr>
     <PstCd>E11 2PQ</PstCd>
     <TwnNm>London</TwnNm>
     <Ctry>GB</Ctry>
     <AdrLine>54 Lombard Street</AdrLine>
   </PstlAdr>
</Dbtr>
```

Ultimate Parties

Mis-use of the Ultimate Parties has been identified. The PMPG have published a paper which provides very clear best practice guidance – It can be found here - https://www.swift.com/swift-resource/251596/download. The duplication or repetition of the Debtor or Creditor information in the Ultimate Parties element is incorrect and should be avoided

Incorrect Population of Data

```
<Dbtr>
   <Nm>National Company X</Nm>
   <PstlAdr>
      <StrtNm>Brightside Street</StrtNm>
      <BldgNb>101a</BldgNb>
      <PstCd>E11 3SQ</PstCd>
      <TwnNm>London</TwnNm>
      <Ctry>GB</Ctry>
   </PstlAdr>
</Dbtr>

<UltmtDbtr>
   <Nm>National Company X</Nm>
   <PstlAdr>
      <TwnNm>London</TwnNm>
      <Ctry>GB</Ctry>
   </PstlAdr>
</UltmtDbtr >
```

Correct Population of Data

```
<Dbtr>
   <Nm>National Company X</Nm>
   <PstlAdr>
      <StrtNm>Brightside Street</StrtNm>
      <BldgNb>101a</BldgNb>
      <PstCd>E11 3SQ</PstCd>
      <TwnNm>London</TwnNm>
      <Ctry>GB</Ctry>
   </PstlAdr>
</Dbtr>
```

Ultimate Parties

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Mis-use of the Ultimate Parties has been identified. The PMPG have published a paper which provides very clear best practice guidance – It can be found here - https://www.swift.com/swift-resource/251596/download. The population of product names/services should not be held within the ultimate party information

Incorrect Population of Data

```
<Dbtr>
   <Nm>National Company X</Nm>
   <PstlAdr>
      <StrtNm>Brightside Street</StrtNm>
      <BldgNb>101a</BldgNb>
      <PstCd>E11 3SQ</PstCd>
      <TwnNm>London</TwnNm>
      <Ctry>GB</Ctry>
   </PstlAdr>
</Dbtr>

<UltmtDbtr>
   <Nm>Goldlife pension plan plus</Nm>
   <PstlAdr>
      <TwnNm>London</TwnNm>
      <Ctry>GB</Ctry>
   </PstlAdr>
</UltmtDbtr >
```

Correct Population of Data

```
<RmtInf>
   <Ustrd>Goldlife pension plan plus</Ustrd>
<RmtInf>
```

Returning a Payment via a pacs.008/009 rather than a pacs.004

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When Returning a payment there is a dedicated message that should be used in ISO – the pacs.004. Unfortunately there is still a lot of misuse within the industry where a pacs.008/009 is being used to initiate a Return of funds incorrectly.

Incorrect Population of Data

pacs.008/009 message

```
<RmtInf>
   <Ustrd>/RETN/ Invalid Creditor Account Number</Ustrd>
<RmtInf>
```

Correct Population of Data

Pacs.004 message

```
<RtrRsnInf>
   <Rsn>
      <Cd>AC03</Cd>
   </Rsn>
</RtrRsnInf>
```

Regulatory Reporting Purpose of Payment placed into Purpose element

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Within an ISO message there is a dedicated Purpose element <Purp> which is there to provide information (between Debtor and Creditor) regarding the underlying reason for the payment transaction, this is not regulatory reporting related Purpose of Payment information. The Regulatory reporting Purpose of Payment must be identified in the structured Regulatory reporting elements as this way there can be an indication as to whether the Purpose of payment is related to the Creditor, Debit side or for both.

Incorrect Population of Data

This example shows how when the <Purp> code is mis-used for Regulatory reporting information it means that the ability to provide the required information from both a Credit and Debit perspective is lost due to the fact that the multiplicity of <Purp> is limited to one occurrence only..

```
<Purp>
   <Prtry>CGODDR</Ptry>
</Purp>
```

Correct Population of Data

This example shows a payment going from Bahrain to China. They both have Regulatory Reporting purpose of payment requirements.

```
<RgltryRptg>
   <DbtCdtRptgInd>CRED</DbtCdtRptgInd>
   <Dtls>
      <Tp>PURP</Tp>
      <Cd>CGODDR</Cd>
      </Dtls>
</RgltryRptg>
<RgltryRptg>
   <DbtCdtRptgInd>DEBT</DbtCdtRptgInd>
   <Dtls>
      <Tp>PURP</Tp>
      <Cd>GDE</Cd>
      </Dtls>
</RgltryRptg>
```

Incomplete Address information

Information within a structured address has been mandated to ensure that the minimum required information is populated. There has been some bad practice identified where the use of NOTPROVIDED has been utilised to populate some of the mandatory or optional elements of a structured address.

It is crucial to avoid using placeholders like NOTPROVIDED or junk data like 'X X X' for address elements.

Incorrect Population of Data

```
<Cdtr>
   <Nm>Enterprize Rockets ltd</Nm>
   <PstlAdr>
      <StrtNm>NOTPROVIDED</StrtNm>
      <TwnNm>NOTPROVIDED</TwnNm>
      <Ctry>GB</Ctry>
   </PstlAdr>
</Cdtr>

    <Cdtr>
       <Nm>X</Nm>
       <PstlAdr>
          <AdrLine>X X X X US</AdrLine>
       </PstlAdr>
    </Cdtr>
```

Correct Population of Data

```
<Cdtr>
   <Nm>Enterprize Rockets ltd</Nm>
   <PstlAdr>
      <StrtNm>Wizzard Street</StrtNm>
      <TwnNm>London</TwnNm>
      <Ctry>GB</Ctry>
   </PstlAdr>
</Cdtr>
```

Incorrect population of Structured Postal Address

The Structured Postal Address has dedicated elements to capture the full address, however there are some bad practices identified where a combination of data is provided within one element and not split out and placed into the dedicated elements. An example of this is providing a building number or name within the Street name element

Incorrect Population of Data

```
<Dbtr>
   <Nm>Enterprize Water ltd</Nm>
   <PstlAdr>
      <StrtNm>101 Chatham house Brightside Street</StrtNm>
      <PstCd>E11 3SQ</PstCd>
      <TwnNm>London</TwnNm>
      <Ctry>GB</Ctry>
   </PstlAdr>
</Dbtr>
```

Correct Population of Data

```
<Dbtr>
   <Nm>Enterprize Water ltd</Nm>
   <PstlAdr>
      <StrtNm>Brightside Street</StrtNm>
      <BldgNb>101</BldgNb>
      <BldgNm>Chatham house</BldgNm
      <PstCd>E11 3SQ</PstCd>
      <TwnNm>London</TwnNm>
      <Ctry>GB</Ctry>
   </PstlAdr>
</Dbtr>
```

Using the Correct Settlement Method

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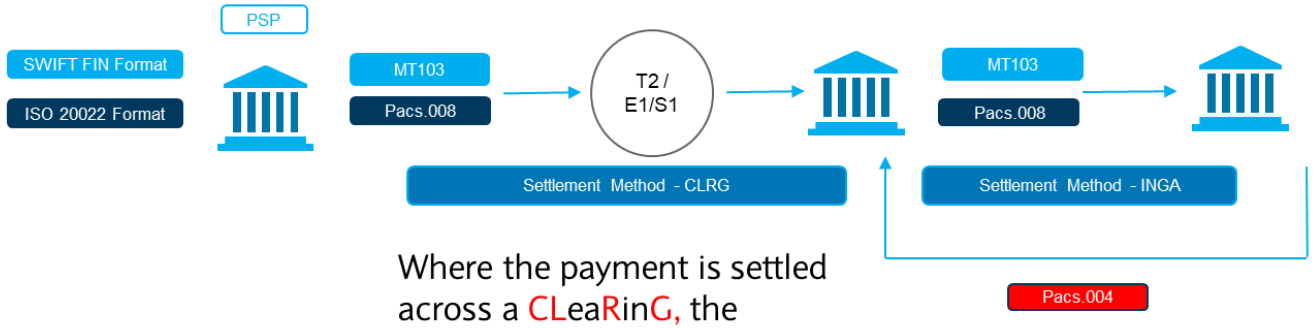
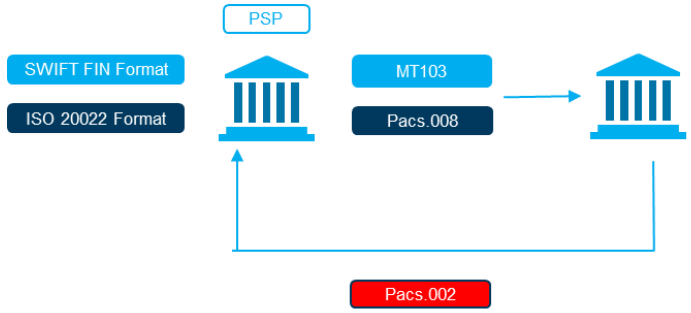
The ISO 200 22 payment messages has settlement method information which must be placed into the message. It is important to ensure that the correct Settlement method is used when making a payment and also to ensure that upon receipt that the payment is either rejected or returned based on the settlement method of the underlying payment even if the sending bank has populated the code incorrectly.



Where the payment is settled across a CLeaRinG, the settlement method must be set to CLRG.

Where the INstructinG Agent services the account and is responsible for settling the payment leg, the settlement method code is INGA. A pacs.004 will therefore be required to return the funds.



Where the INstructeD Agent services the account and is responsible for settling the payment leg, the settlement method code is INDA. A pacs.002 will therefore be required to reject the payment.

Incorrect Information Regarding the Underlying Payment

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Some of the ISO messages are dedicated messages that make reference to an underlying payment such as the Return of Funds pacs.004 message or the camt.106 Request for Charges message. It is very important to ensure that when making reference to an underlying payment, the correct information is supplied – otherwise this can have a negative impact for the receiver of the message.

Incorrect Population of Data

A pacs.004 Return of Funds message linked to a completed Underlying Direct and Cover where the FI initiating the pacs.004 is returning the funds received from a completed Pacs.009COV settling the funds.

```
<TxInf>
   <OrgnlGrpInf>
      <OrgnlMsgNmId>pacs.008.001.08</OrgnlMsgNmId>
    <OrgnlGrpInf>
</TxInf>
```

A camt.106 which has been sent to claim back charges associated to the processing of an underlying pacs.008 Payment message

```
<UndrlygTx>
   <MsgNmId>Unknown</MsgNmId>
<InstrId>REFERENCE1234567</InstrId>
<UETR>54b2852b-bfaa-4c89-980e-8ad806388f44</UETR>
</UndrlygTx>
```

Correct Population of Data

A pacs.004 Return of Funds message linked to a completed Underlying Direct and Cover where the FI initiating the pacs.004 is returning the funds received from a completed Pacs.009COV settling the funds.

```
<TxInf>
   <OrgnlGrpInf>
      <OrgnlMsgNmId>pacs.009.001.08</OrgnlMsgNmId>
    <OrgnlGrpInf>
</TxInf>
```

A camt.106 which has been sent to claim back charges associated to the processing of an underlying pacs.008 Payment message

```
<UndrlygTx>
   <MsgNmId>pacs.008.001.08</MsgNmId>
<InstrId>REFERENCE1234567</InstrId>
<UETR>54b2852b-bfaa-4c89-980e-8ad806388f44</UETR>
</UndrlygTx>
```

Population of Clearing System Member ID

Behaviour has been observed with the incorrect population of Clearing System Identification and Member Identification elements, which are required by certain market infrastructures to identify routing or reachability of creditor account (e.g. as in the case of instant payment systems supporting one leg transactions). The Clearing System Identification code can be obtained from External Code List *ExternalClearingSystemIdentification1Code*. Member Identification should not be populated in Instruction for Next Agent.

Incorrect Population of Data

```
<ClrSysMmbId>
    <ClrSysId>
        <Cd>OTHER</Cd>
    </ClrSysId>
    <MmbId>052000</MmbId>
</ClrSysMmbId>

                Or

<InstrForNxtAgt>
    <InstrInf>/ACC/BSB: 052000</InstrInf>
</InstrForNxtAgt>
```

Correct Population of Data

```
<ClrSysMmbId>
    <ClrSysId>
        <Cd>AUBSB</Cd>
    </ClrSysId>
    <MmbId>052000</MmbId>
</ClrSysMmbId>
```

Use of Debtor Agent

Within a pacs.008 message, a Bank or a Payment Service Provider acting for its own account and wishing to pay a non-banking entity should be identified clearly in each role it plays : Instructing Agent, Debtor and Debtor Agent.

Incorrect Population of Data

This example shows how an investment bank acting for its own account sends a pacs.008 to an Intermediary Agent.

```
<InstgAgt>
    <FinInstnId>
      <BICFI> DEBTCCLL</BICFI>
    </FinInstnId>
</InstgAgt>

<Dbtr>
   <Id>
      <OrgId>
         <AnyBIC>DEBTCCLL</AnyBIC>
      </OrgId>
    </Id>
</Dbtr>

<DbtrAgt>
   <FinInstnId>
      <BICFI>INTBCXLX</BICFI>
    </FinInstnId>
</DbtrAgt>
```

Correct Population of Data

This example shows how an investment bank acting for its own account sends a pacs.008 to an Intermediary Agent.

```
<InstgAgt>
    <FinInstnId>
      <BICFI> DEBTCCLL</BICFI>
    </FinInstnId>
</InstgAgt >

<Dbtr>
   <Id>
      <OrgId>
         <AnyBIC>DEBTCCLL</AnyBIC>
      </OrgId>
    </Id>
</Dbtr>

<DbtrAgt>
   <FinInstnId>
      <BICFI>DEBTCCLL</BICFI>
    </FinInstnId>
</DbtrAgt>

<IntrmyAgt1>
   <FinInstnId>
      <BICFI>INTBCXLX</BICFI>
    </FinInstnId>
</IntrmyAgt1>
```

Settlement Account

When a pacs.008 is sent with a settlement method of INDA, the settlement account should be placed within the Settlement account element in order for the receiver of the message to understand which account they should debit. This is especially important where the Counterparties may have a multi-account relationship and therefore account derivation is not possible.

The account number that is held on the books of the receiver should quoted and not the Mirror Nostro account held by the Sender of the payment.

Incorrect Population of Data

In this example the sender of the pacs.008 has placed the account number of the mirror nostro account which is held on their books.

```
<SttlmInf>
   <SttlmMtd>INDA<SttlmMtd>
      <SttlmAcct>
         <Id>
            <IBAN>GB14ABCD534253647586988</IBAN>
         </Id>
      </SttlmAcct>
</SttlmInf>
```

Correct Population of Data

The Nostro account number on the receivers books must be placed into the settlement account element.

```
<SttlmInf>
   <SttlmMtd>INDA<SttlmMtd>
      <SttlmAcct>
         <Id>
            <IBAN>GB14ABCD123456789101234</IBAN>
         </Id>
      </SttlmAcct>
</SttlmInf>
```

Utilization of UK Sort Codes

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When making payments to CHAPS, it is common practice to utilize the Sort code and Account number or IBAN within the Creditor data, which allows the correct Branch for the Direct Participant (Creditor Agent) to be derived. One of the biggest causes for Repairs or Returns for CHAPS payments is where the Branch information is not provided against the creditor.

Incorrect Population of Data

In this example the sender may or may not have populated the Sort code at Creditor Agent level, however this should be held at the Creditor Level

```
<CdtrAcct>
   <Id>
      <Othr>
         <Id>33732231</Id>
      </Othr>
   </Id>
</CdtrAcct>
```

Correct Population of Data

Option 1 – IBAN – Best Practice where possible

```
<CdtrAcct>
   <Id>
      <IBAN>GB47BARC20325366664445</IBAN>
   </Id>
</CdtrAcct>
```

Option 2 – Include Sort code and Account within the Other Id element

.

```
<CdtrAcct>
   <Id>
      <Othr>
         <Id>2032536666444</Id>
      </Othr>
   </Id>
<CdtrAcct>
```

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