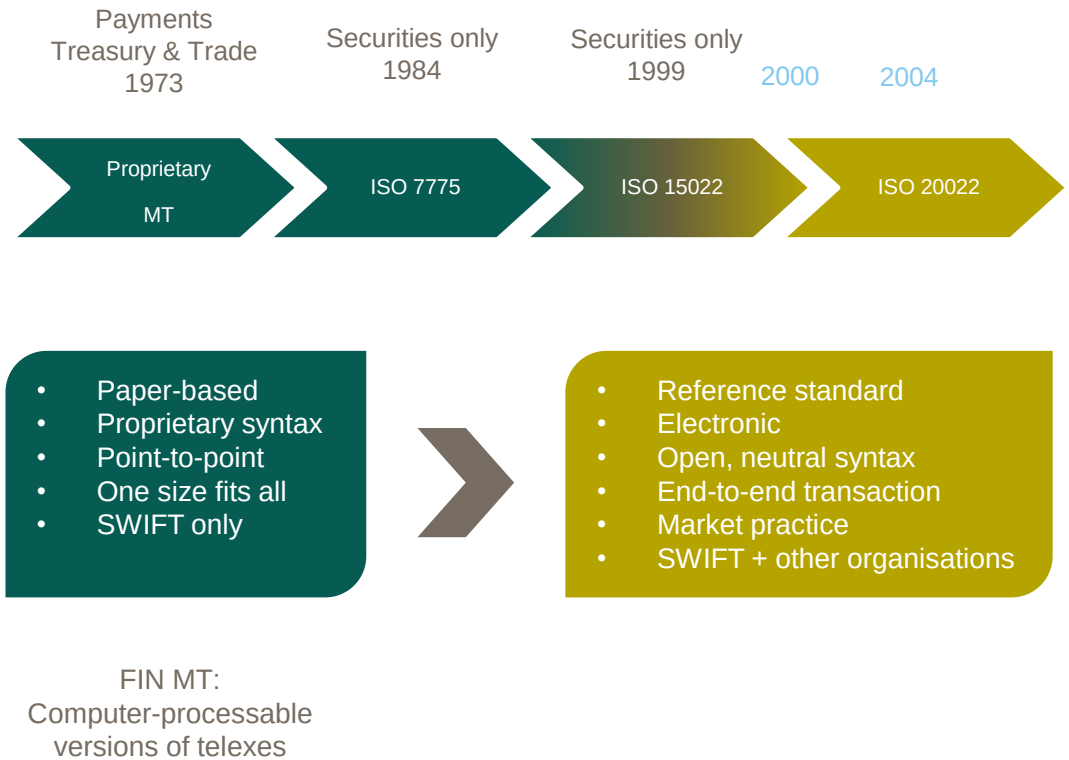
# ISO 20022 Programme

## Quality data, quality payments

## Awareness Webinar – Payments Deep Dive

# What is ISO 20022?

# What is ISO 20022?



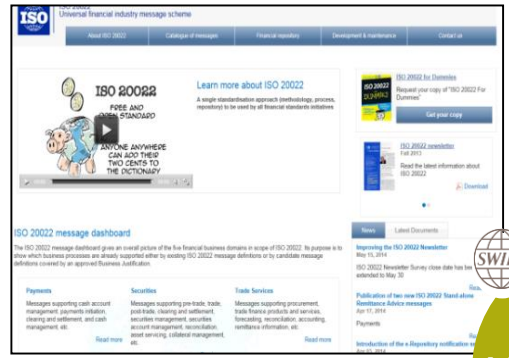

## ISO 20022 Governance Responsibility

- Approval of the international standard
- Selection of the **Registration Authority** and set-up of the http://www.iso20022.org
- Creation of **Registration Management Group** (RMG)
- Creation of **Standards Evaluation Groups** (SEG)
- Registration and publication of first 'ISO 20022 messages'
- Approval of a new edition of the international standard in 2013

# What is ISO 20022?

**Maintenance process** – built on strict business justifications and review process - leading to new ‘versions’ of the messages


Published on www.iso20022.org




More than **20 submitting organisations**, besides SWIFT

More than **320 messages**, covering payments, securities, trade services, FX, cards.

**23 Business Areas** – examples :

| | | |
|---|---|---|
| ‘PAIN’ | = Payment Initiation | = used in Corporate-to-bank |
| ‘PACS’ | = Payment Clearing and Settlement | = used in Payments |
| ‘SESE’ | = Securities settlement | = used in Securities |
| ‘SEMT’ | = Securities management | = used in Securities |
| ‘SEEV’ | = Securities events | = used in Securities |
| ‘CAMT’ | = Cash Management | + used in Payment Reporting |

# A community agreement

In 2018, the global financial community agreed to **migrate from the MT (FIN) payment message standard** to ISO 20022

The move to ISO 20022 will begin in **November 2022** and coexistence with MT (FIN) will run **until November 2025**

**All FI to FI payments and cash reporting** messages will move to ISO 20022

All players need to **start preparing** for the migration now to be ready for November 2022

# Why is the Industry Adopting ISO 20022?

## Enabling a hyper-connected payment world

**Payments revolution**

Payments are rapidly transforming, with new players world-wide, transforming to meet the customer requirements and improving the customer experience. ISO payment and report formats are a key element of this transformation

**Domestic modernization**

Real time payments are quickly becoming the consumer payment method of choice and will quickly be an international payment option 24/7. ISO systems

**Global payments innovation**

SWIFT gpi is driving unprecedented change – delivering fast, transparent and trackable cross-border payments

**A hyper-connected payment world**

***Through global harmonization of payment formats*** we are prepared for a future where complex and data rich payments move through any domestic and/or cross-border payment system, and are credited to beneficiaries – ***Instantly.***

**Regulatory requirements**

Facilitates complying with ever changing and broader regulatory requirements.

# *The changing language of payments*

# Field names

# SWIFT MT versus ISO 20022: Key Concepts

**Legend:** MT → ISO 20022

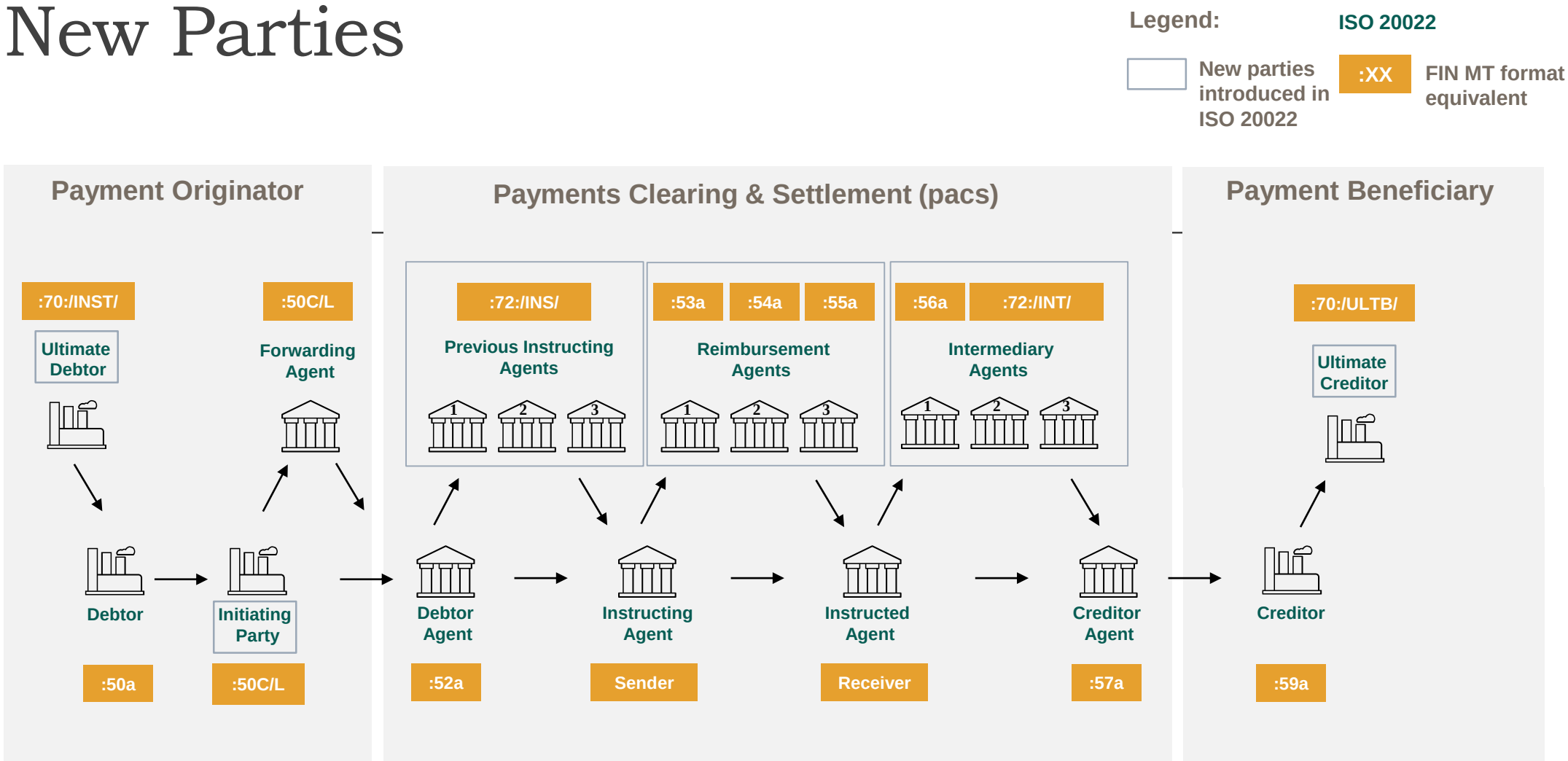
## Message specification components

| MT | ISO 20022 |
|---|---|
| Field | Element |
| Format | DataType |
| Presence | Min Max |
| Qualifiers / Codes | CodeSet |
| Usage Rule | Textual Rule |
| Network Validated Rule | CrossElementComplexRule |

## Parties in a message

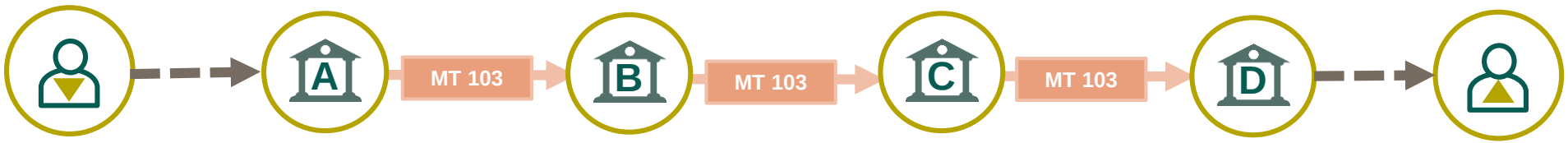
| MT | ISO 20022 |
|---|---|
| Bank | Agent |
| Ordering Customer | Debtor |
| Beneficiary Customer | Creditor |
| Message Sender | Instructing Agent |
| Message Receiver | Instructed Agent |

# New Parties


Legend:
ISO 20022
New parties introduced in ISO 20022
:XX
FIN MT format equivalent
Payment Originator
Payments Clearing & Settlement (pacs)
Payment Beneficiary
:70:/INST/
Ultimate Debtor
:50C/L
Forwarding Agent
:72:/INS/
Previous Instructing Agents
:53a
:54a
:55a
Reimbursement Agents
:56a
:72:/INT/
Intermediary Agents
:70:/ULTB/
Ultimate Creditor
Debtor
Initiating Party
Debtor Agent
Instructing Agent
Instructed Agent
Creditor Agent
Creditor
:50a
:50C/L
:52a
Sender
Receiver
:57a
:59a

# MT 103 Customer Credit Transfer serial message flow

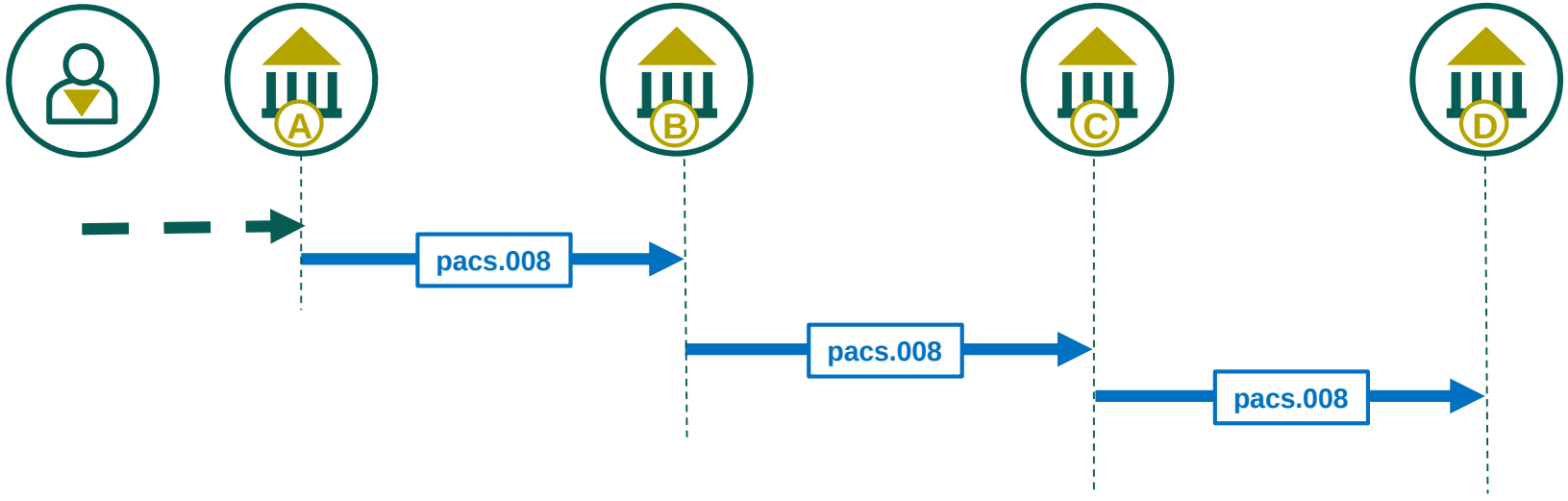





| Party | MT |
|---|---|
| | Ordering Customer |
| A | Ordering Institution |
| B | Intermediary Institution |
| C | Intermediary Institution |
| D | Account with Institution |
| | Beneficiary |

# pacs.008 FI To FI Customer Credit Transfer serial message flow






| Party | pacs.008 |
|---|---|
| Debtor | |
| Debtor's Agent | |
| Intermediary Agent 1 | |
| Intermediary Agent 2 | |
| Creditor's Agent | |
| Creditor | |

# Character sets

# Character Set

All SWIFT ISO MX message elements (fields) which are defined (by data Type) as text are restricted to FIN X Characters:

**a-z A-Z 0-9 / - ? : ( ) . , ' + .**

Special characters are additionally allowed in:

- All party (agents and non-agents) Name and Address elements
- The Related Remittance Information elements
- The Remittance Information (structured & unstructured) elements

List of special characters:
**!#&%*=^_’{|}~";@[\]**

Additionally special characters **$** and **> <** signs are enabled for the Email Address elements

Currencies in the payments should be expressed in ISO Currency Codes only (3-Characters, e.g. EUR)

Translation of any special character:

**!#&%*=^_’{|}~";@[\]$ ><**

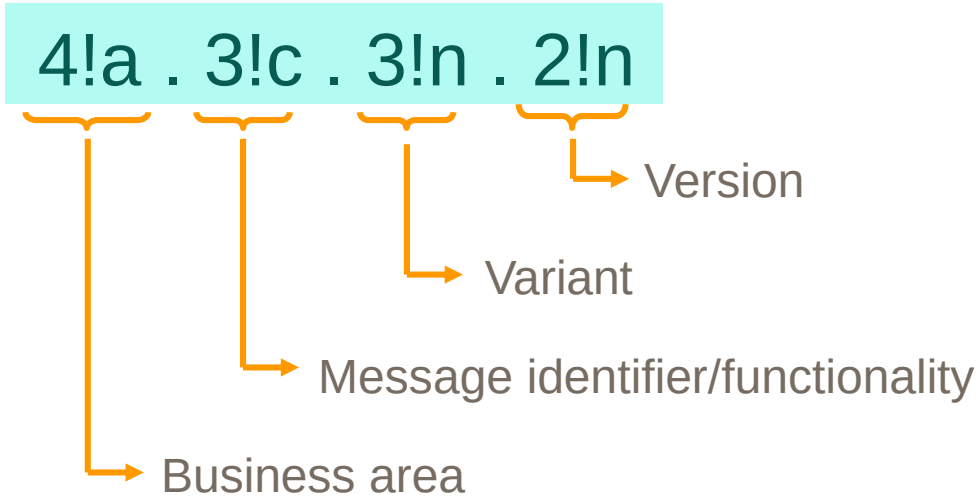
into MT messages will be represented by a **. (Full Stop)**




**Note:** While ISO 20022 base standards support non-Latin characters, CBPR+ will only support Latin characters in Phase 1 and Phase 2

# Message Structure

# ISO 20022 XML message identifier




**Example**

pacs.008.001.08

Version 8

Variant 1

FI To FI Customer Credit Transfer

Payments Clearing and Settlement

# How is an MT structure different from an MX structure?

## MT

```
{1:F01OELBATWWAXXX0975000073}
{2:I103ABNANL2AXXXXU3003}
{3:{113:URGT}{108:INTLPMTS}}
{4: (CrLf)
:20:494932/DEV (CrLf)
:23B:CRED (CrLf)
:32A:030731EUR1958,47 (CrLf)
:33B:EUR1958,47 (CrLf)
:50K:FRANZ HOLZAPFEL GMBH (CrLf)
VIENNA (CrLf)
:59:H.F. JANSSEN (CrLf)
LEDEBOERSTRAAT 27 (CrLf)
AMSTERDAM (CrLf)
:70:/INV/ 18042 910412 (CrLf)
:71A:SHA (CrLf)
-}
{5:{CHK:123456789ABC}}
```

Basic header block

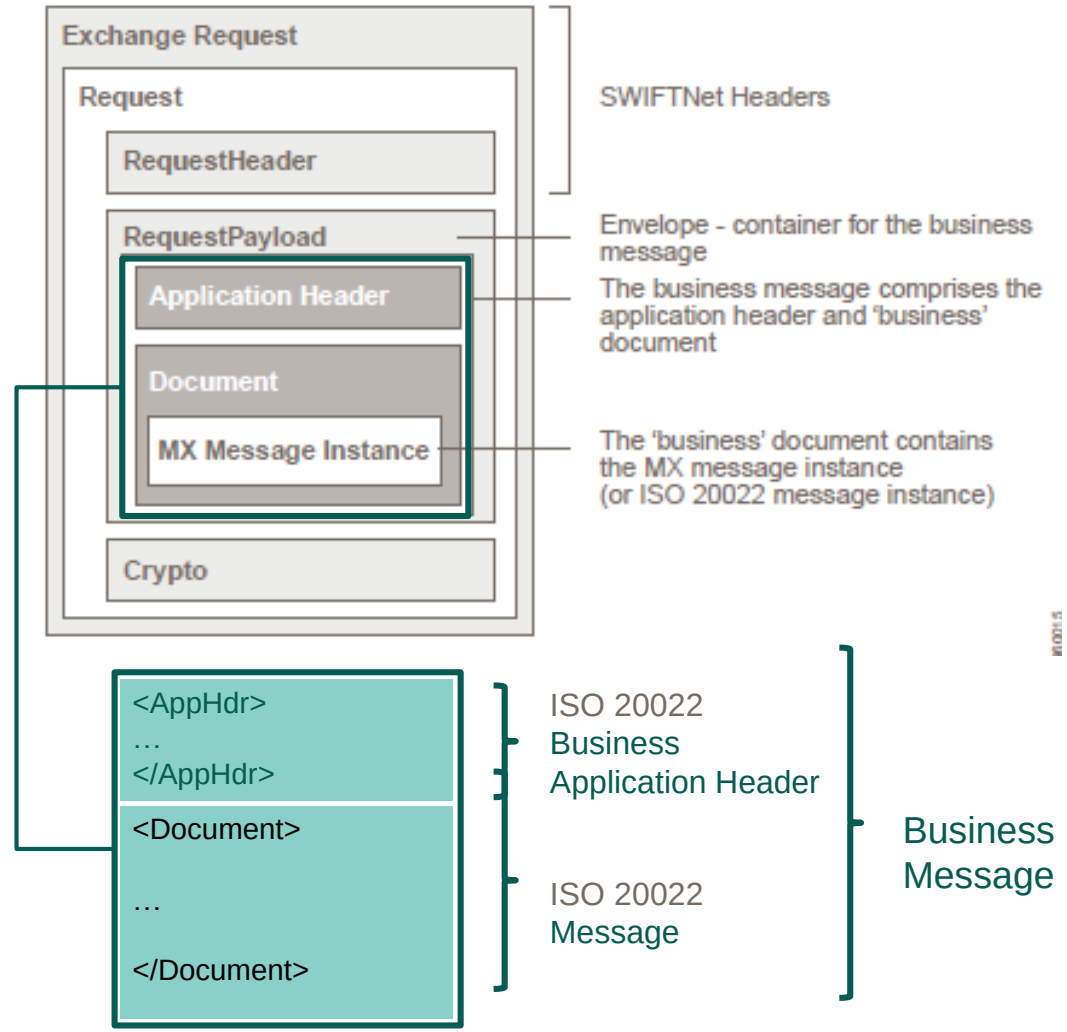
Application header block

User header block

Text block

Trailer block

## ISO 20022 (MX)



# Structured data becomes the new norm

| ISO 20022 Debtor data element example | | | Customer data record example |
|---|---|---|---|
| Debtor | Name | | JOHN HECTOR JOSEPH SMITH - MASTERSONS |
| | Postal Address | Department | |
| | | Sub Department | |
| | | Street Name | HOOGSTRAAT |
| | | Building Number | 6 |
| | | Post Code | 1000 |
| | | Town Name | BRUSSELS |
| | | Country | BE |
| | Identification | Private Identification – Other Identification | 1111111111 |
| Debtor Account | Identification | IBAN | BE3000121637141 |

Richness of ISO 20022 allows more granular data structure

**MT – free format option**

:50K:/BE3000121637141
JOHN HECTOR JOSEPH SMITH –
MASTERSONS HOOGSTRAAT 6 BRUSSELS
1000 BELGIUM ID:1111111111

**MT – structured option with risk of potential truncation & loss of info**

:50F:/BE3000121637141
1/JOHN HECTOR JOSEPH SMITH -
1/MASTERSONS
2/HOOGSTRAAT 6
3/BE/BRUSSELS 1000

Passport number is lost!

# Message types

# CBPR+ Phase 1 usage guidelines and planned translation rules

Updated April 2020

| Existing FIN MTs | ISO 20022 equivalent | Usage guidelines | Translation rules planned |
|---|---|---|---|
| MT 103 / 102 | pacs.008.001.0x | | Published on MyStandards |
| MT 200 / 201 / 202 / 202 COV / 203 / 205 | pacs.009.001.0x | | Published on MyStandards |
| MT 103 RETURN / MT 202 RETURN | pacs.004.001.0x | Published on MyStandards | Published on MyStandards |
| MT 103 REJECT / MT 202 REJECT | Negative pacs.002.001.0x | | MX to MT only<br>SWIFT to Investigate Field 72 option or MT 199 |
| *No Equivalent* | Positive pacs.002.001.0x | | No translation planned |
| MT 210 | camt.057.001.0x | | MX to MT - Single |
| MT 900 / 910 | camt.054.001.0x | | Published on MyStandards |
| MT 941 / 942 | camt.052.001.0x | Published on MyStandards | No translation planned |
| MT 940 / 950 | camt.053.001.0x | | Not required – Guidance in UHB |
| MT 920 | camt.060.001.0x | | No translation planned |
| | | | |
| | head.001.001.0x – v2 | Published with each request type | N/A |

# CBPR+ Phase 1 usage guidelines and planned translation rules

| Existing FIN MTs | ISO 20022 equivalent | Usage guidelines | Translation rules planned |
|---|---|---|---|
| MT 103 STP | Pacs.008 STP Guideline | Under development | No translation planned |
| MT 103 STP EU | Pacs.008 EEA Guidelines | To be planned | No translation planned |
| MT 204 | Pacs.010 | Under Development | From MX to MT only |
| MT 104 | Pacs.003 | Out of scope | Out of scope |
| | | | |
| | head.001.001.0x – v2 | Published with each request type | N/A |

# CBPR+ Phase 2 usage guidelines and planned translation rules

| Existing FIN MTs | ISO 20022 equivalent | Usage Guideline available on Mystandards & Readiness Portal | Translation rules planned |
|---|---|---|---|
| 192/292 (Cancellation Request) | camt.056.001.0x - Cancellation Request<br>Camt.026 – Unable to Apply<br>Camt.027 – Claim Non Receipt<br>Camt.087 – Request to Modify | In collaboration with gpi expert group | To be confirmed |
| 296/199/299/112 (Query/Answer) | camt.029.001.0x - Resolution of Investigation | | |
| MT 101 | Pain.001 | Wait for CGI deliverable | To be confirmed |
| MT 110/MT 111/MT 112 | New Cheques Messages | Start development during June 2020 Workshop | To be confirmed |
| MT n90 / MT n91 | New Fee Messages | Start development during June 2020 Workshop | To be confirmed |

# *Overview of usage guidelines*

# Payment, Clearing and Settlement (pacs) messages

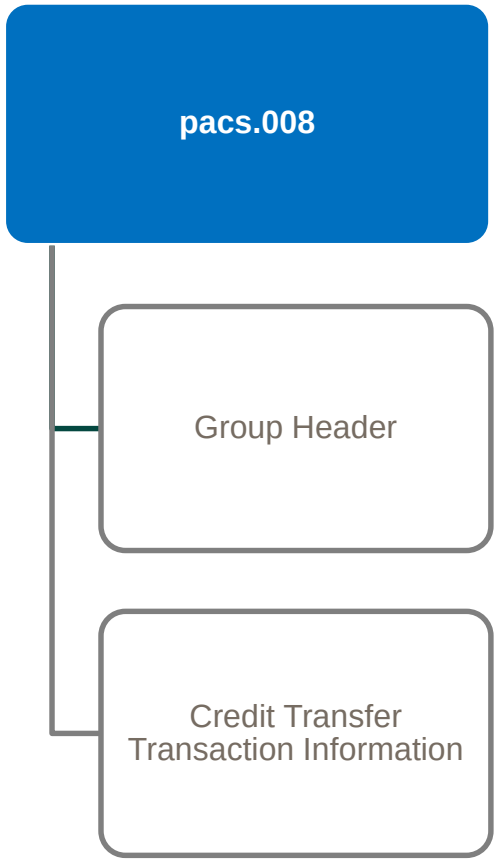
## Messages index

**pacs.008** - Financial Institution to Financial Institution Customer Credit Transfer
**pacs.009 (core)** - Financial Institution Credit Transfer
**pacs.009 (cov)** - Financial Institution ‘Cover’ Credit Transfer
**pacs.002** – FI To FI Payment Status Report
**pacs.004** – Payment Return

pacs.008

# Financial Institution to Financial Institution Customer Credit Transfer

# pacs.008 FI to FI Customer Credit Transfer



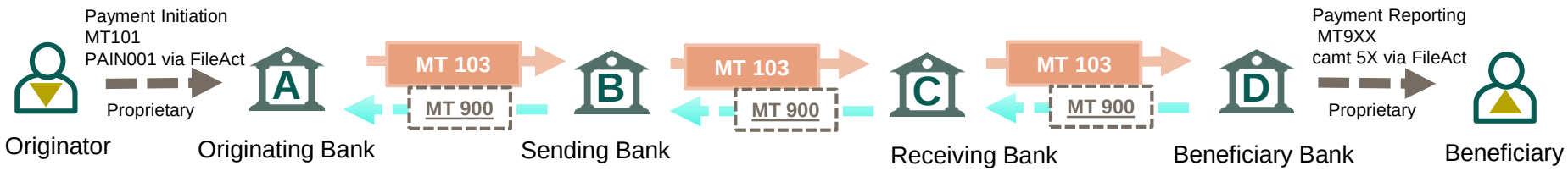

The pacs.008 has two core sets of nested element:
***Group Header*** which contain a set of characteristics that relate to all individual transactions
***Credit Transfer Transaction Information*** which contains elements providing information specific to the individual credit transfer transaction.

A typical payment message in a many-to-many payment would be considered as a single transaction.
The Industry CBPR+ committeee has decided that the pacs.008 will carry a single transaction as a best practice.
It is however possible, where bilateral agreed, to include re-occurring *Credit Transfer Transaction Information* i.e. multiple payments, perhaps more associated with an early leg in the payment lifecycle, where upon these multiple transaction would typically be split into individual payment transactions.

# MT 103 Customer Credit Transfer

*High Level Serial message flow*





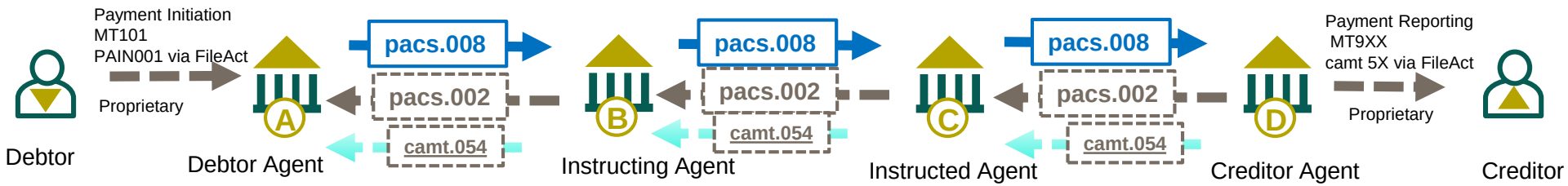

Current serial MT 103 payment flow as the payment moves across the payment bank chain.

MT 900s are generally used to confirm transaction execution to originating banks

# pacs.008 FI to FI Customer Credit Transfer

*High Level serial message flow*






The new party names are shown in this ISO pacs 008 payment message flow,

When the customer credit transfer migrates to the pacs 008, there is an option to provide payment status messages utilizing the pacs 002 message.

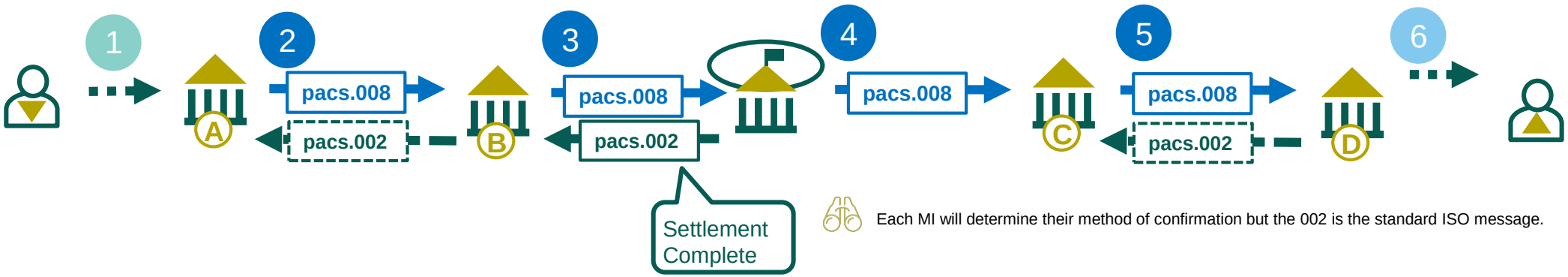
The pacs 002 is a point to point status message and does not carry full comprehensive status information like the gpi tacker service

The pacs 002 or the camt.054 can be used to confirm transaction execution to originating banks.

# pacs.008 FI to FI Customer Credit Transfer

*High Level Use Case settled over a Payment Market Infrastructure*






Each MI will determine their method of confirmation but the 002 is the standard ISO message.

1 Debtor initiates a payment instruction to the Debtor Agent

2 Debtor Agent (A) initiates a serial payment towards the Creditor Agent (D) using Agents B & C as intermediaries, who are direct participant of the Payment Market Infrastructure

3 Agent B processes the payment on Agent C, via the Payment Market Infrastructure.

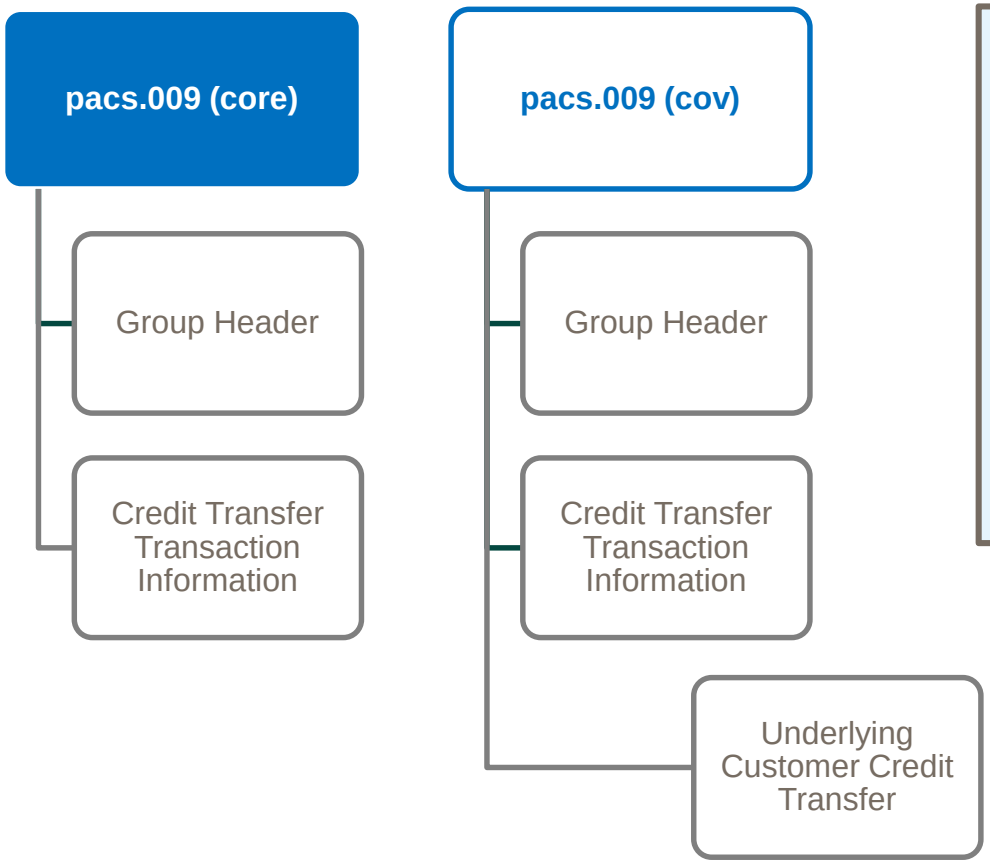
4 Payment Market Infrastructure, settles the payment between Agent B and Agent C as direct participants of the Market Infrastructure, and provides a settlement confirmation to Agent B

5 Agent C processes the payment on Agent D

6 Agent D credits the account of the Creditor, and may optionally provide a notification e.g. notification of credit in addition to an account statement (camt.053)

# Financial Institution Credit Transfer

# pacs.009 core versus cov




The pacs.009 has two main use cases:

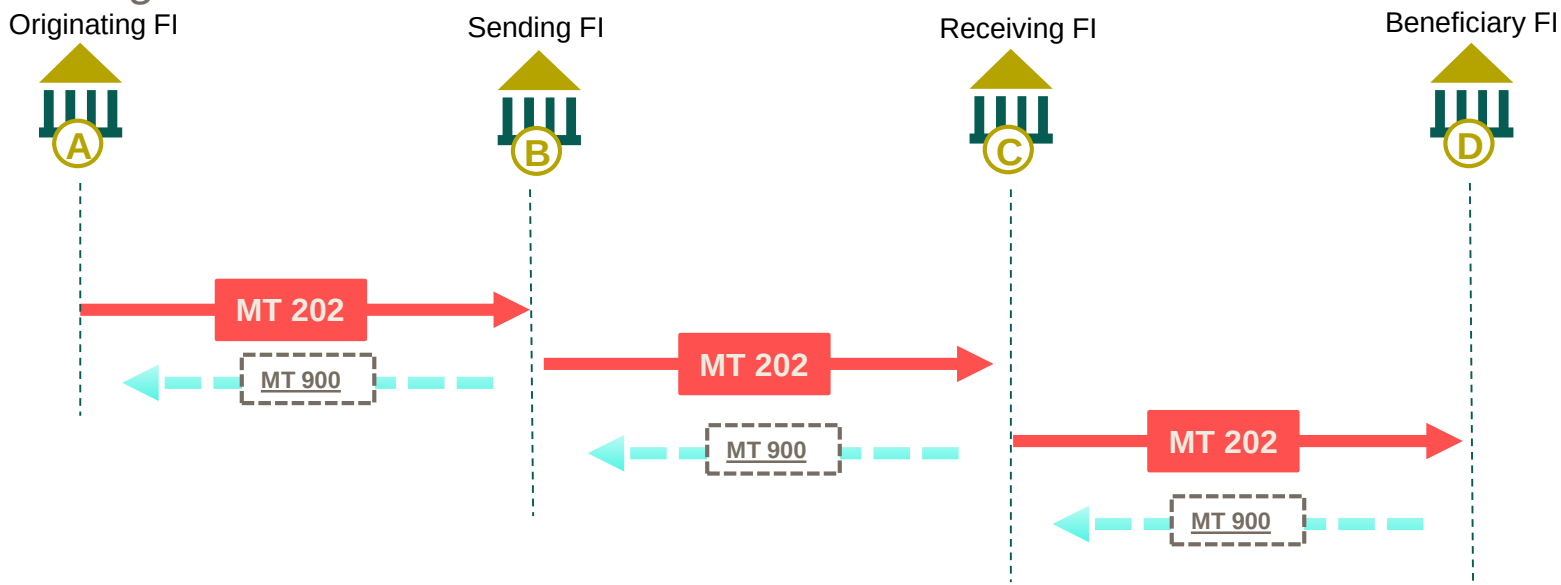
- as a core Financial Institution to Financial Institution Credit Transfer message, and
- As a cov where it is used as cover of (to settle) a pacs.008.

The pacs.009 therefore contain information of the underlying Customer Credit Transfer (pacs.008) for use in the cover scenario, which is the key attribute to differentiate between these two use cases.

# MT 202 FI to FI Credit Transfer

*High Level message flow*



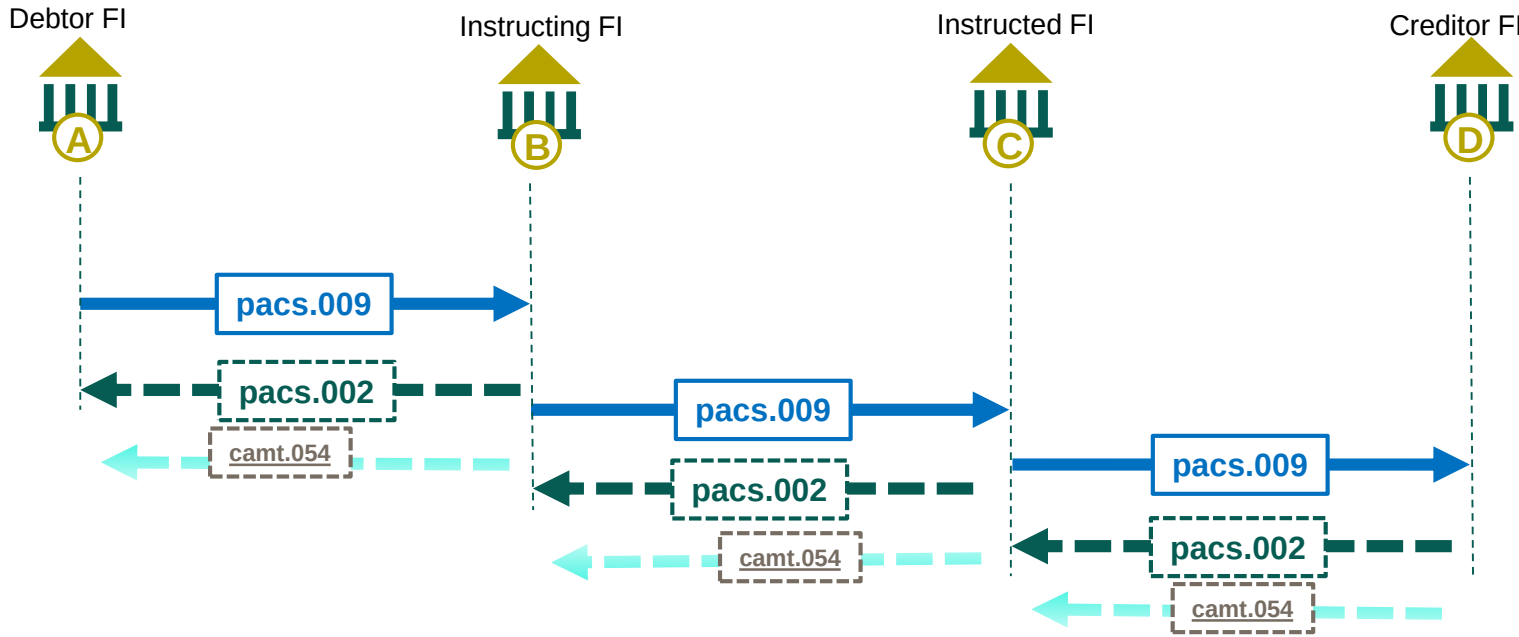



The *Financial Institution Credit Transfer* message is sent by a Debtor Financial Institution to a Creditor Financial Institution, directly or through other agents and/or a payment clearing and settlement system. It is used to move funds from a debtor account to a creditor, where both *Debtor* and *Creditor* are **Financial Institutions**.

# pacs.009 FI to FI Credit Transfer

*High Level message flow*

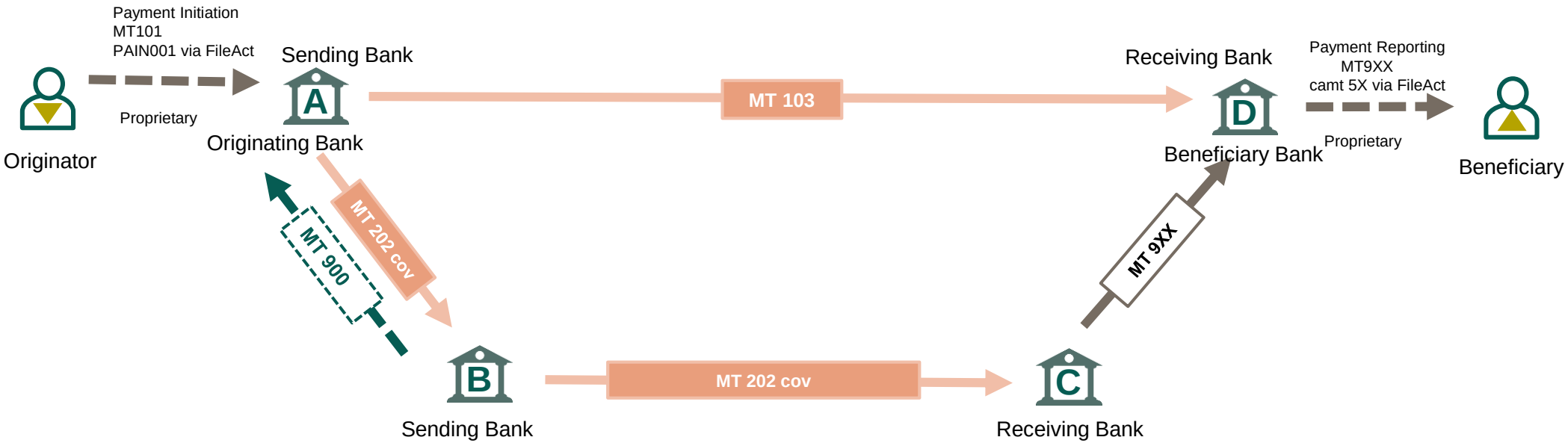





The *Financial Institution Credit Transfer* message is sent by a Debtor Financial Institution to a Creditor Financial Institution, directly or through other agents and/or a payment clearing and settlement system. It is used to move funds from a debtor account to a creditor, where both *Debtor* and *Creditor* are **Financial Institutions**.

# MT 103 Customer Credit Transfer

*High Level message flow settled using the MT 202 cover method*



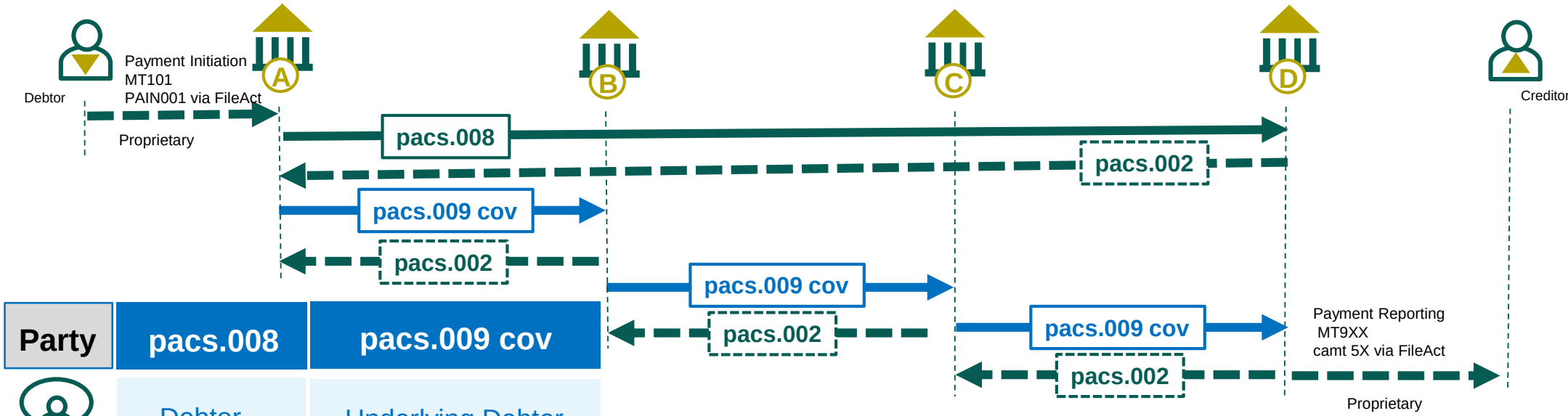



**Note:** For example purposes, this slide shows V-shape payment market infrastructure flows. Y-shape flows will be different.

# pacs.009 cov FI to FI Credit Transfer

*High Level message flow demonstrating the change in party roles between messages*





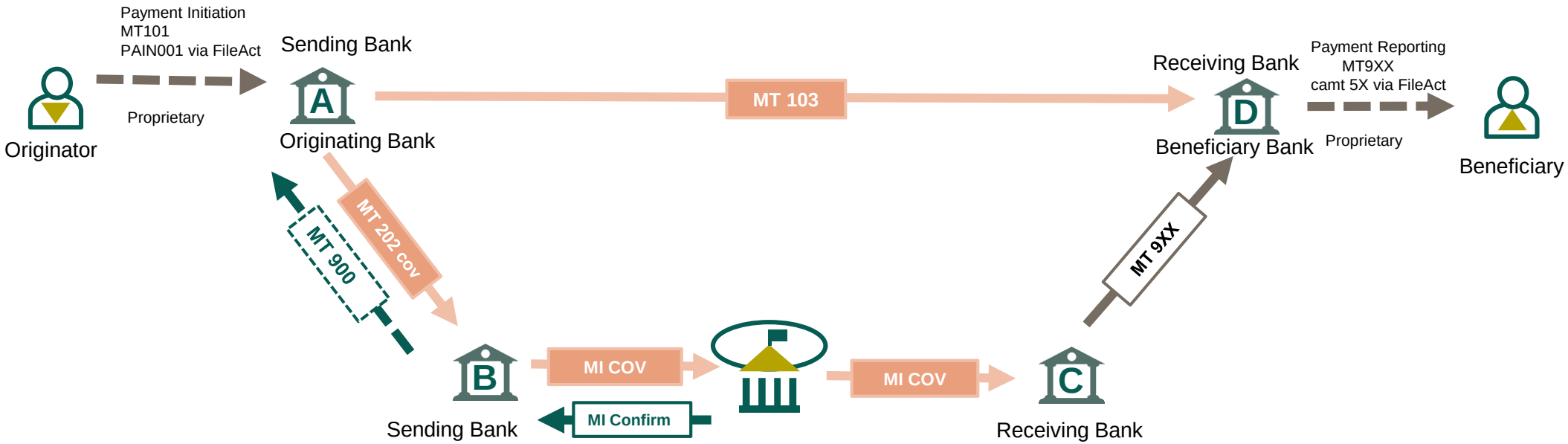

| Party | pacs.008 | pacs.009 cov |
|---|---|---|
| | Debtor | Underlying Debtor |
| | Debtor Agent | Debtor |
| | Creditor Agent | Creditor |
| | Creditor | Underlying Creditor |

The Financial Institution Credit Transfer cover message is sent by a *Debtor Financial Institution* to a *Creditor Financial Institution*, directly or through other agents and/or a payment clearing and settlement system. It is important to recognize that some **roles change** between these parallel messages.

The correspondent banking cover payment method utilises both the pacs.008 and pacs.009 cov. The *UETR* element within these messages contain the **same UETR** which effectively interlink the messages.
As an interlinked message it is important to understand the way certain parties change their role in the pacs.009 cov This is demonstrated in the example

# MT 103 Customer Credit Transfer

*High Level message flow settled using the MT 202 cover method Via MI*

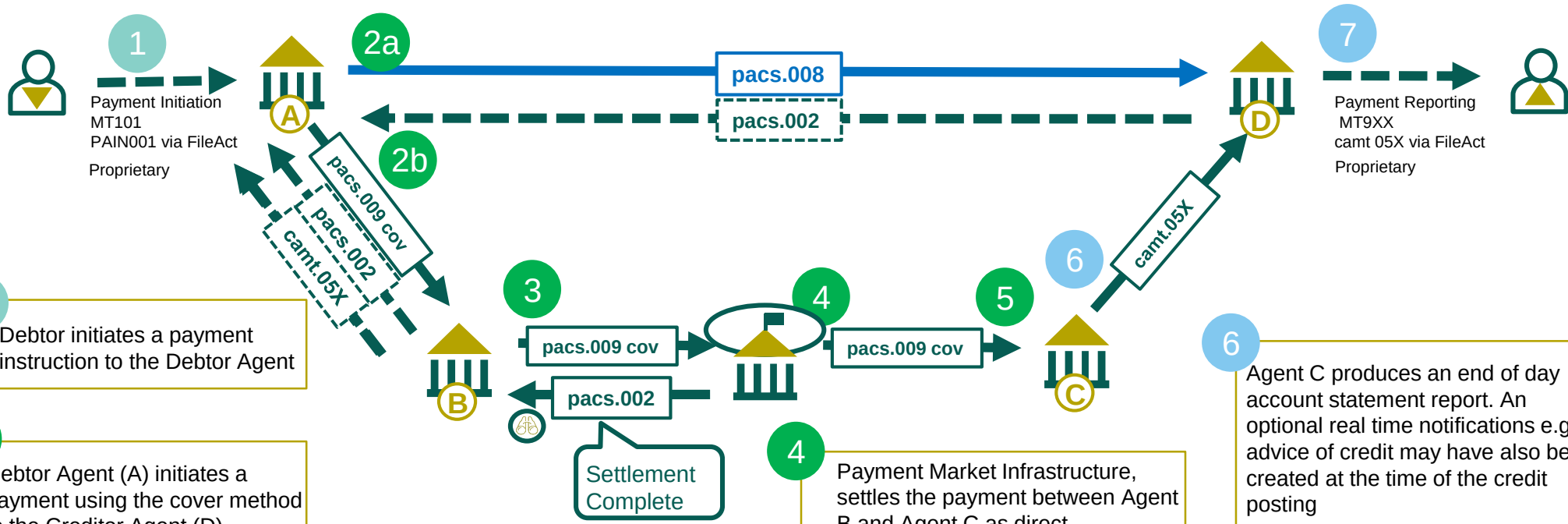





**Note:** For example purposes, this slide shows V-shape payment market infrastructure flows. Y-shape flows will be different.

# pacs.008 FI to FI Customer Credit Transfer

*High Level Use Case settled using pacs.009 COV over a Payment Market Infrastructure*




1 Debtor initiates a payment instruction to the Debtor Agent

2a Debtor Agent (A) initiates a payment using the cover method to the Creditor Agent (D)

2b In parallel the Debtor Agent (A) initiates a covering payment to credit the account of Agent (D) with their correspondent (Agent C)

3 Agent B processes the payment on Agent C, via the Payment Market Infrastructure.

4 Payment Market Infrastructure, settles the payment between Agent B and Agent C as direct participants of the Market Infrastructure, and provides a settlement confirmation to Agent B

5 Agent C receives the payment and credits the account of Agent D

6 Agent C produces an end of day account statement report. An optional real time notifications e.g. advice of credit may have also been created at the time of the credit posting

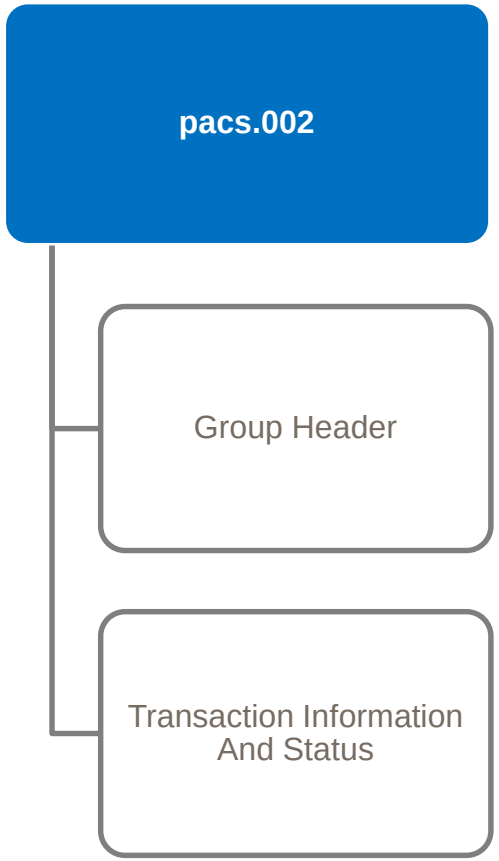
7 Agent D reconciles the covering funds and credits the account of the Creditor, and may optionally provide a notification e.g. notification of credit.



Market Infrastructure will either conform to HVPS+ guidelines or establish their own usage guidelines based on the ISO 20022 standard.

# Status Information

# pacs.002 Status Information

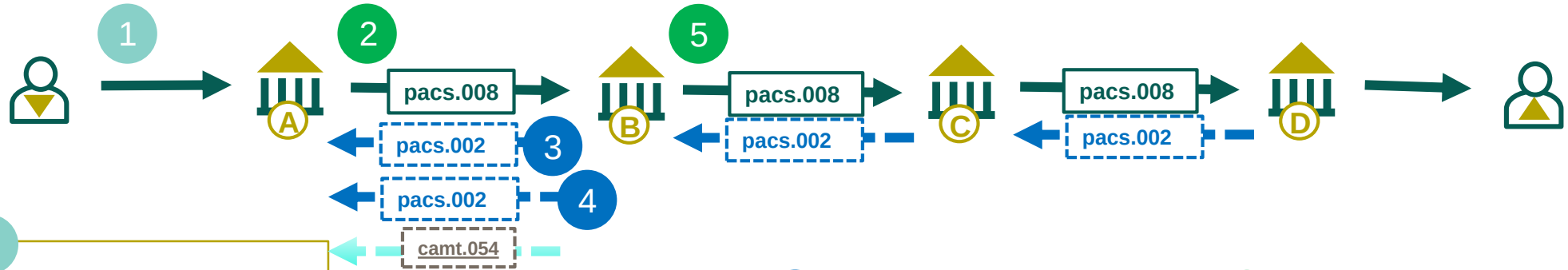



The Financial Institution To Financial Institution Payment Status Report message is sent by an instructed agent to the previous party in the payment chain. It is used to inform this party about the positive or negative status of an instruction (either single or file). It is also used to report on a pending instruction

# pacs.002 Payment Status Information

*High Level Use Case of multiple Payment Transaction Status updates*

An agent may provide multiple Payment Status Information updates (with different Transaction Status codes), where bilaterally agreed, throughout the payment processing lifecycle i.e. from receipt through to onward processing.




1 Debtor initiates a payment instruction to the Debtor Agent

2 Debtor Agent (A) initiates a serial payment towards the Creditor Agent (D) using Agents B & C as intermediaries

3 Agent B provides a status update ACTC (accepted technical validations are successful) to Agent A, based upon a bilateral agreement.

4 Agent B provides a further status update ACSP (accepted settlement in progress) to Agent A, based upon a bilateral agreement. pacs 002 or camt.054 for final confirmation.

5 Agent B processes the payment on Agent C. Status Messages can follow

The code list representing the *Payment Transaction Status* is part of the ISO 20022 external code list

CBPR+ restricted the pacs.002 to a single transaction

# Payment Transaction Status

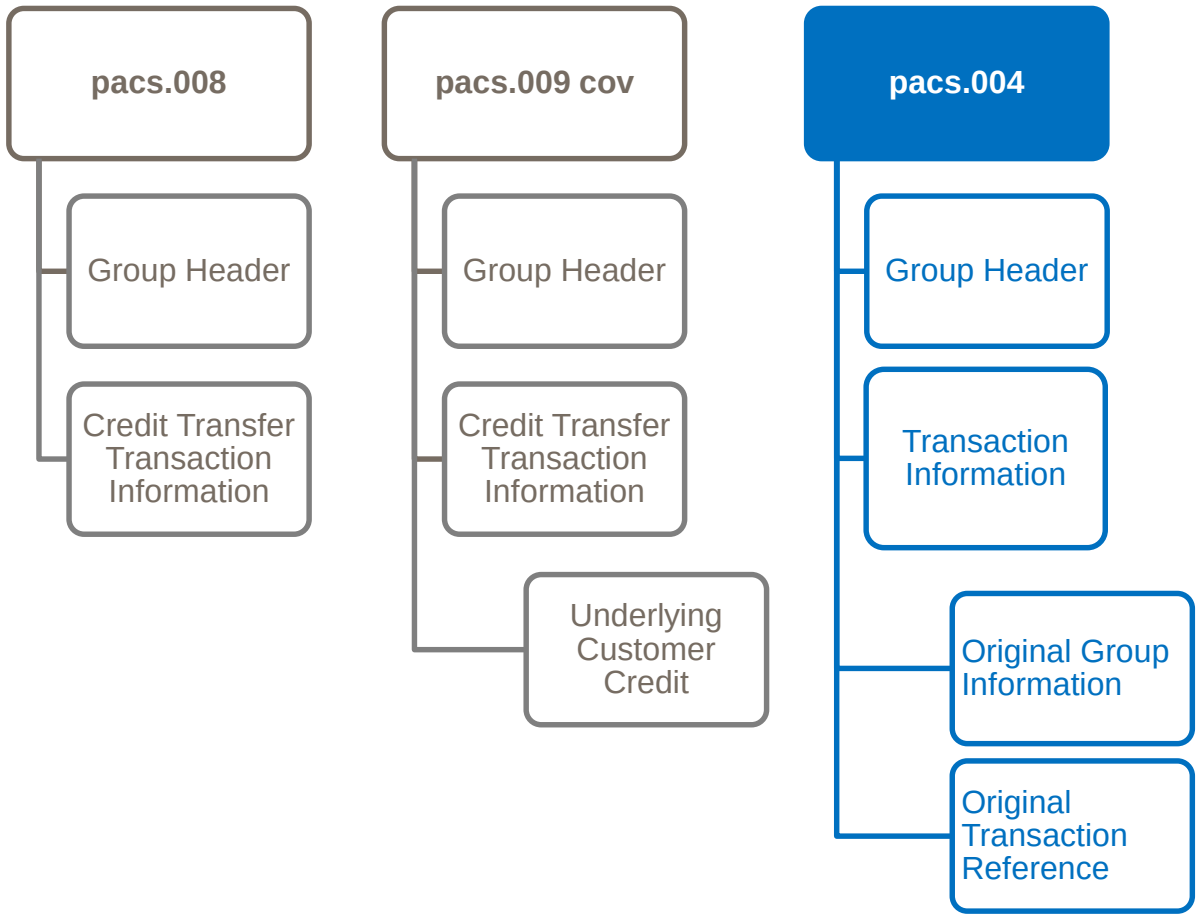
*Code definitions*

| Code | Name | ISO Definition | pacs High Level Use Case |
|---|---|---|---|
| ACCC | AcceptedSettlementCompleted | Settlement on the creditor's account has been completed. | Sent by Credit Agent to confirm the settlement on the creditor's account |
| ACCP | AcceptedCustomerProfile | Preceding check of technical validation was successful. Customer profile check was also successful. | Sent by **any Agent** in the payment chain to confirm acceptance prior to technical validation. |
| ACSC | AcceptedSettlementCompleted | Settlement on the debtor's account has been completed. | Sent by the **Debtor Agent** to confirm settlement on the debtor account prior to payment execution. |
| ACSP | AcceptedSettlementInProcess | All preceding checks such as technical validation and customer profile were successful and therefore the payment initiation has been accepted for execution. | Sent by **any Agent** to the to confirm the payment is accepted following technical validations being successfully completed. |
| ACTC | AcceptedTechnicalValidation | Authentication and syntactical and semantical validation are successful | Sent by **any Agent** in the payment chain to the previous Agent to confirm the payment is accepted following technical validations being successfully completed. |
| ACWC | AcceptedWithChange | Instruction is accepted but a change will be made, such as date or remittance not sent. | Sent by **any Agent** in the payment chain to the previous Agent to confirm the payment is accepted following amendments being made. |
| ACWP | AcceptedWithoutPosting | Payment instruction included in the credit transfer is accepted without being posted to the creditor customer's account. | Sent by **Credit Agent** to the previous Agent to confirm the acceptance of payment without settlement on the creditor's account, |
| PDNG | Pending | Payment initiation or individual transaction included in the payment initiation is pending. Further checks and status update will be performed. | Sent by **any Agent** in the payment chain to the previous Agent as an interim status whilst other validations are performed. |
| RCVD | Received | Payment initiation has been received by the receiving agent. | Sent by **Any Agent** to the previous Agent as confirmation that their Customer Credit Transfer initiation request has been received by the payment engine. |
| RJCT | Rejected | Payment initiation or individual transaction included in the payment initiation has been rejected. | Sent by **Any Agent** to inform the previous Agent that their Customer Credit Transfer has been rejected. |

pacs.004

# Payment Return

# pacs.004 Payment Return

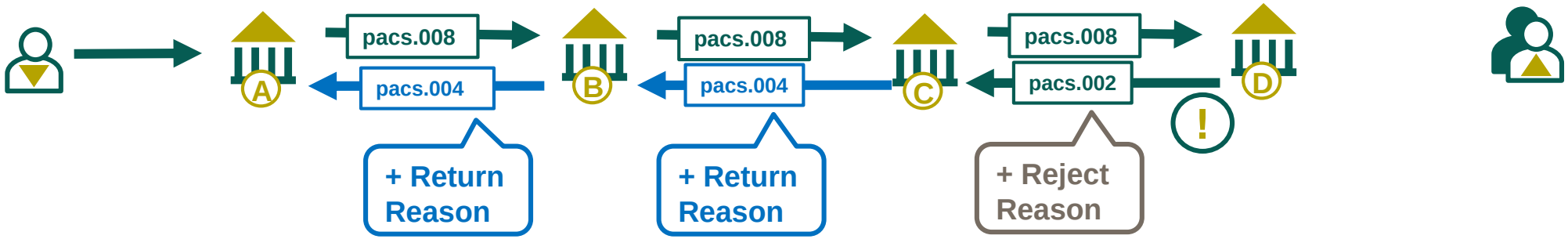



In a similar structure to the pacs.009 (cov) underlying Customer Credit Transfer, the pacs.004 Return Payment message has amongst other elements Original Group Information which captures original information such as the Original UETR and Original Interbank Settlement Amount etc. and an Original Transaction Reference which contain the key elements of the original payment e.g. Debtor, Creditor etc.

# pacs.002 Payment Reject and pacs.004 Return Flow

*High Level Use Case and key considerations.*

The Payment Return message is sent by an agent to the previous agent in the payment chain to undo a payment **previously settled**.



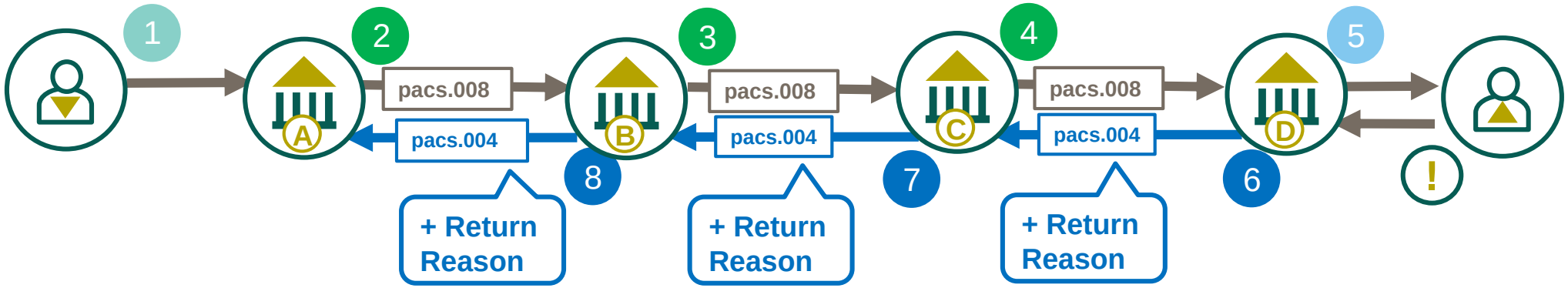

Within the pacs.004 Return Payment

- the *Original Group Information element is used to* refers to original message for which the return relates to. e.g. based upon the above example pacs.008 as the original message would be included in the pacs.004
- the *Transaction Information > Original UETR* element would include UETR of the message received. i.e. the same UETR is used on the Return Payment.
- the *Original Transaction Reference* element includes detail from the original message. e.g. the *Debtor* of the original pacs.008.
- the *Return Chain* element includes the parties in return payment chain, noting the parties reverse (i.e. change role) from the original payment whereby the *Debtor* of the original payment becomes the *Creditor* in the Return Chain.
- A reason code is added to the Return message to inform the agent of the reason for the return (e.g. AC04 Account closed)

The code list representing the *Return Reason* is part of the ISO 20022 external code list

# Payment Return (pacs.004) of a complete Customer Credit Transfer (pacs.008)

Use Case p.4.1.2




1 Debtor initiates a payment instruction to the Debtor Agent

2 Debtor Agent (A) initiates a serial payment towards the Creditor Agent (D) using Agents B & C as intermediaries

3 Agent B processes the payment on Agent C

4 Agent C processes the payment on Agent D

5 Agent D credits the account of the Creditor, and may optionally provide a notification e.g. notification of credit in addition to an account statement (camt.054)

! Creditor determines that they wish to return the payment e.g. they are unable to apply, and instructs their bank (Agent D) to return the payment together with the reason.

6 Agent D returns the payment to Agent C using a Payment Return message (pacs.004) also including the return reason code.

7 Agent C return funds to Agent B, together with the reason code for return.

8 Agent B return funds to Agent A, together with the reason code for return.

The code list representing the *Return Reason* is part of the ISO 20022 external code list

# Payment Transaction Return Reason

*Code definitions examples (74 total)*

| Code | Name | Definition |
|---|---|---|
| AC01 | IncorrectAccountNumber | Format of the account number specified is not correct |
| AC03 | InvalidCreditorAccountNumber | Wrong IBAN in SCT |
| AC04 | ClosedAccountNumber | Account number specified has been closed on the bank of account's books |
| AC06 | BlockedAccount | Account specified is blocked, prohibiting posting of transactions against it. |
| AC13 | InvalidDebtorAccountType | Debtor account type is missing or invalid |
| AC14 | InvalidAgent | An agent in the payment chain is invalid. |
| AC15 | AccountDetailsChanged | Account details have changed. |
| AC16 | AccountInSequestration | Account is in sequestration. |
| AC17 | AccountInLiquidation | Account is in liquidation. |
| AG01 | TransactionForbidden | Transaction forbidden on this type of account (formerly NoAgreement) |
| AG02 | InvalidBankOperationCode | Bank Operation code specified in the message is not valid for receiver |
| AM01 | ZeroAmount | Specified message amount is equal to zero Rejected by Network |
| AM02 | NotAllowedAmount | Specific transaction/message amount is greater than allowed maximum |
| AM03 | NotAllowedCurrency | Specified message amount is an non processable currency outside of existing agreement |
| AM04 | InsufficientFunds | Amount of funds available to cover specified message amount is insufficient. |
| AM05 | Duplication | Duplication |

# Cross Border Payments & Reporting (CBPR+) Working Group

# CBPR+ : A group of your peer banks advising SWIFT on how ISO 20022 should be used

## Objective

Create **global ISO 20022 Market Practice and Usage Guidelines** for selected messages from the **SWIFT MT Category 1, 2 & 9** set of messages, which will be validated on the SWIFT network in the many to many space.

**With the approach of**

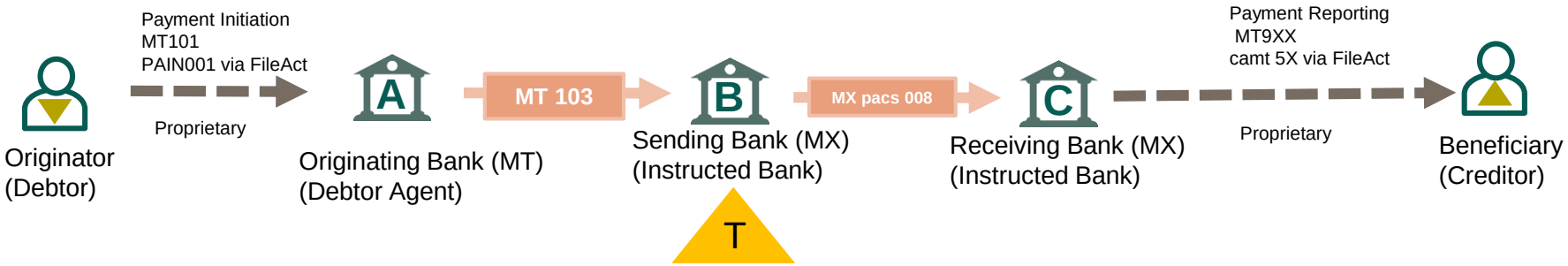
- **Benefiting from ISO 20022 features,** and not alike for like adoption from SWIFT MT
- **Interoperable with high value payment system (HVPS+) guidelines***, while differences should be justified and documented
- **Incorporating gpi requirements**, such as UETR
- **Incorporating securities requirements**, for the cash-leg of a securities transactions
- **Including new messages & functionalities where required**, e.g. Return & Status messages
- **Validated on the SWIFT network**
- **Maintained on a yearly basis**
- **Develop Translation Rules**

**HVPS+:** A working group of payment marketing infrastructure operators advising SWIFT on how ISO 20022 should be used for high value payment systems. HVPS+ has established usage guidelines for this purpose

# MT 103/MX pacs 008 Customer Credit Transfer – Correspondent Bank

*High Level Serial message flow*

**Translation Flow**



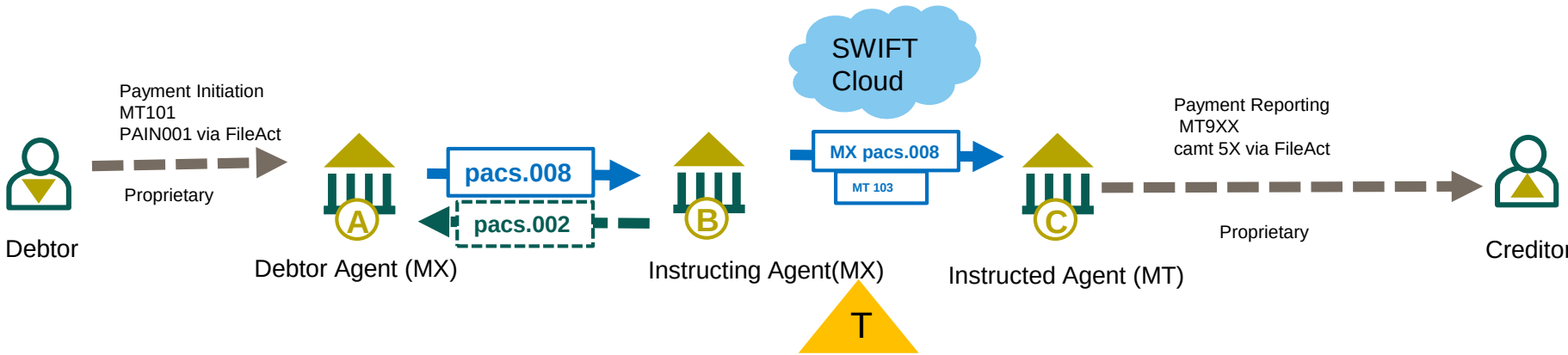

In the early days of the ISO migration Coexistence Period there will be payment scenarios where translation will be required for a payment to be completed to the Beneficiary/Creditor

When the originating Bank sends an MT format, the process will be very straight forward as there will be no excess data due to new fields or field length mismatches.

# MX pacs 008/MT 103 FI to FI Customer Credit Transfer-Correspondent Bank

*High Level serial message flow*

**Embedded MT in MX Flow**




During the Coexistence Period when the Debtor Agent initiates an MX and a translation to MTs required there can be payment scenarios where additional fields, and, additional data in those fields, may result in an excess data condition.

# Example MX/MT Agent Field Tag (e.g. 56) Type A Format

**MX**

```
<IntrmyAgt1>
        <FinInstnId>
                <BICFI>BDLIITGGXXX</BICFI>
                        <ClrSysMmbId>
                                        <ClrSysId>

                <Cd>ITNCC</Cd>
                                        </ClrSysId>

                <MmbId>0123401600</MmbId>
                        </ClrSysMmbId>
                        <Nm>Banca dei Lavoratori Italiani</Nm>
                </FinInstnId>
</IntrmyAgt1>
<IntrmyAgt1Acct>
                <Id>
                <IBAN>IT27Z0123401600000000148292</IBAN>
                </Id>
</IntrmyAgt1Acct>
```

**MT**

:56A:/**IT27Z0123401600000000148292**

**BDLIITGGXXX**

# Example MX/MT Agent Field Tag (e.g.56) Type D Format

**MX**

```
<IntrmyAgt1>
<FinInstnId>
        <ClrSysMmbId>
                <ClrSysId>
                        <Cd>ITNCC</Cd>
                </ClrSysId>
        <MmbId>0123401600</MmbId>
        </ClrSysMmbId>
<Nm>Banca dei Lavoratori Italiani</Nm>
<PstlAdr>
        <StrtNm>Via dei Gigli</StrtNm>
        <BldgNb>1</BldgNb>
        <BldgNm>Palazzo Viola</BldgNm>
        <Flr>7 Piano</Flr>
        <PstCd>20100</PstCd>
        <TwnNm>Milano</TwnNm>
        <TwnLctnNm>Quartiere Isola</TwnLctnNm>
        <DstrctNm>Provincia di Milano</DstrctNm>
        <CtrySubDvsn>Lombardia</CtrySubDvsn>
        <Ctry>IT</Ctry>
</PstlAdr>
</FinInstnId>
</IntrmyAgt1>
```

**MT**

```
:56D://IT0123401600
Banca dei Lavoratori Italiani
Via dei Gigli,1,Palazzo Viola,7 Pi+
IT/Milano,20100,Quartiere Isola,Lom
bardia,Provincia di Milano
```

# Example MX/MT Debtor/Creditor (50,59) Unstructured Name and Address

**MX**

```
<Dbtr>
        <Nm>Hamburgische Hochwertige Landesbank eG</Nm>
        <PstlAdr>
                <AdrLine>Gebaude 5</AdrLine>
                <AdrLine>Hafenstrasse 7</AdrLine>
                <AdrLine>22767 Hamburg, DE</AdrLine>
                </PstlAdr>
                <CtryOfRes>DE</CtryOfRes>
</Dbtr>
<DbtrAcct>
        <Id>
                <Othr>
                        <Id>123</Id>
                </Othr>
        </Id>
</DbtrAcct>
```

**MT**

```
:50K:/123
Hamburgische Hochwertige Landesban+
Gebaude 5
Hafenstrasse 7
22767 Hamburg, DE
```

# Example MX/MT Debtor/Creditor (50,59) Structured Name and Address

**MX**

```
<Dbtr>
        <Nm>Mueller Weltweit Handels GmbH</Nm>
        <PstlAdr>
                <StrtNm>Hafenstrasse</StrtNm>
                <BldgNb>7</BldgNb>
                <BldgNm>Willy-Brandt Gebaude</BldgNm>
                <Flr>3 OG</Flr>
                <PstBx>1203</PstBx>
                <Room>C3B</Room>
                <PstCd>22767</PstCd>
                <TwnNm>Hamburg</TwnNm>
                <TwnLctnNm>St. Pauli</TwnLctnNm>
                <Ctry>DE</Ctry>
                </PstlAdr>
                <Id>
                –    <OrgId>
                        –    <LEI>TX1DBTRORGIDLEI67890</LEI>
                –    </OrgId>
                </Id>
                <CtryOfRes>DE</CtryOfRes>
</Dbtr>
<DbtrAcct>
        <Id>
                <IBAN>DE25390200000004711001</IBAN>
        </Id>
</DbtrAcct>
```

**MT**

```
:50F:/DE25390200000004711001
1/Mueller Weltweit Handels GmbH
2/Hafenstrasse,7,Willy-Brandt Geba+
3/DE/Hamburg,22767,St. Pauli
6/DE/LEIC/TX1CDTRORGIDLEI67890
```

# Remittance Information Mapping - Definition

## Logic

The MT Remittance Information is translated applying prioritizing the information.

Information is likely to be truncated and identified in most cases with the sign “+” at the end of the translated information. If a full element is not copied an Error Handling mechanism will be defined to report the missing information.

In all cases, *UltimateDebtor* and *UltimateCreditor* will have the highest translation priority in the MT Field 70.

**When the originating message is MX, the MT remittance information is translated with the following identifiers:**

- **/ULTB/** - UltimateCreditor information prioritized as Name/Country [/TownName]. TownName is optional or (Name/OtherId) or Name alone or OtherId alone.
- **/ULTD/** - UltimateDebtor information prioritized as Name/Country/TownName. TownName is mandatory or (Name/OtherId) or Name alone or OtherId alone.
- **/PURP/** - purpose of the payment
- **/ROC/** - EndToEndIdentification when /ROC/ is not present in UnstructuredRemittanceInformation and value different from “NOTPROVIDED”.
- **/URI/** - the MX unstructured remittance information
- **/RELID/** - 1 or 2 identifications of the RelatedRemittanceInformation stored outside the message
- **/SRI/+** - means that structured remittance information is present in the original message but is not translated.

**Note:** /URI/, /RELID/ and /SRI/+ are mutually exclusive meaning cannot be present together (even not by pair).

# Example MX/MT Remittance Information (70)

**MX**

```
<CdtTrfTxInf>
<PmtId>
        <InstrId>INSTRID-TMP001</InstrId>
        <EndToEndId>END2ENDID-TMP001</EndToEndId>
        <UETR>4f334519-092f-49fa-acf9-ce93c267ac8c</UETR>
</PmtId>
[…]
<UltmtDbtr>
        <Nm>Tower and Town Inc.</Nm>
</UltmtDbtr>
[…]
<UltmtCdtr>
                <Nm>Sivesh S</Nm>
</UltmtCdtr>
<RmtInf>
        <Ustrd>BELEG 1301 2019 RG.OPTIK/03/19-20
        V.312589RG.OPTIK/ 02/19-20 V.200619</Ustrd>
</RmtInf>
</CdtTrfTxInf>
```

**MT**

:70:/ULTB/Sivesh S///ULTD/Tower and Tow
n Inc.///ROC/END2ENDID-TMP001///URI
/BELEG 1301 2019 RG.OPTIK/03/19-20
V.312589RG.OPTIK/ 02/19-20 V.200619

# Bank to Bank Information Mapping - Definition

## Logic

Depending on the space available and the presence of the elements in the MX message, the following priorities and order are applied to field 72 Bank to Bank Information:

- **/INTA/** - IntermediaryAgent 2 & 3*
- **/SVCLVL/** - PaymentTypeInformation/ServiceLevel *(excluding 23E code – SDVA and G00n gpi codes)
- **/LOCINS/** - PaymentTypeInformation/LocalInstrument *(excluding 23B codes)
- **/CATPURP/** - PaymentTypeInformation/CategoryPurpose *(excluding 23E codes)
- **/ACC/** - InstructionForCreditorAgent (excluding 23E codes)
- **/REC/** - InstructionForNextAgent (excluding /FIN54/**)
- **/INS/** - PreviousInstructingAgent1,2,3

Note:
Possible missing (Error Handling mechanism will be defined to report the missing information) or truncated information can apply.

*means new code words to be used in Field72
**/FIN54/ with BIC is used in a specific scenario in MT to indicate where the receiver will claim the money. This code word will be present only if a previous MT to MX translation already occurred.

# Example MX/MT Bank to Bank Information (72)

**MX**

```
<PmtTpInf>
<SvcLvl>
        <Prtry>Single Euro Payments Area</Prtry>
</SvcLvl>
<LclInstrm>
        <Prtry>Cash Concentration Intragroup</Prtry>
</LclInstrm>
</PmtTpInf>
<IntrmyAgt2>
        <FinInstnId>
                <BICFI>BCITITMMXXX</BICFI>
        </FinInstnId>
</IntrmyAgt2>
<IntrmyAgt3>
        <FinInstnId>
                <BICFI>BARCIE22XXX</BICFI>
        </FinInstnId>
</IntrmyAgt3>
<InstrForNxtAgt>
        <InstrInf>Instruction number 1</InstrInf>
</InstrForNxtAgt>
<InstrForNxtAgt>
        <InstrInf>Instruction number 2</InstrInf>
</InstrForNxtAgt>
</CdtTrfTxInf>
```

**MT**

```
:72:/INTA/BCITITMMXXX
/INTA/BARCIE22XXX
/SVCLVL/Single Euro Payments Area
/LOCINS/Cash Concentration Intragro
//up
/REC/Instruction number 1Instructi+
```

# Example of Regulatory Reporting Information

**MX**

```
<Cdtr>
        <Nm>ABC IMPORTS AND EXPORTS (INDIA) </Nm>
        <PstlAdr>
        […]
        </PstlAdr>
        <Id>
                <OrgId>
                        <LEI>335800HMLW2U4UHRBW65</LEI>
                </OrgId>
        </Id>
          <CtryOfRes>DE</CtryOfRes>
</Cdtr>
[…]
<RgltryRptg>
        <DbtCdtRptgInd>CRED</DbtCdtRptgInd>
        <Authrty>
                <Nm>Reserve Bank of India</Nm>
                <Ctry>IN</Ctry>
        </Authrty>
        <Dtls>
                <Tp>Export Reporting<</Tp>
                <Dt>2019-01-13</Dt>
                <Ctry>IN</Ctry>
                <Cd>P0102</Cd>
                <Amt Ccy="USD">123456891234567.50</Amt>
                <Inf>AAASDASAD</Inf>
        </Dtls>
<RgltryRptg>
```

**MT**

```
:77B:AAASDASAD/BENEFRES/DE
```

# Example of Settlement Time

**MX**

```
<CdtTrfTxInf>
…
<SttlmTmIndctn>
        <DbtDtTm>2018-01-04T15:12:09+09:59</DbtDtTm>
        <CdtDtTm>2018-01-04T15:12:09+09:59</CdtDtTm>
</SttlmTmIndctn>
<SttlmTmReq>
        <CLSTm>09:30:47+05:00</CLSTm>
        <TillTm>09:30:47+05:00</TillTm>
        <FrTm>09:30:47+05:00</FrTm>
        <RjctTm>09:30:47+05:00</RjctTm>
</SttlmTmReq>
…
</CdtTrfTxInf>
```

**MT**

```
:13C:/SNDTIME/1512+0959
:13C:/RNCTIME/1512+0959
:13C:/CLSTIME/0930+0500
:13C:/TILTIME/0930+0500
:13C:/FROTIME/0930+0500
:13C:/REJTIME/0930+0500
```

Illustration included multiple settlement times. It is unlikely all of the examples used would be included in a transaction at the same time.

# Where can I find more information?

# MT/ISO 20022 Translation rules – Where to find out more

Q1 2020 **User Handbook** iteration will include a full section describing the Translation mapping principals.

**MT/ISO 20022 Translation** section of the CBPR+ landing page


https://www2.swift.com/mystandards/#/c/cbpr/landing

# Where can I get more help?

*New resources are available for **vendors***

### Further webinars & work sessions

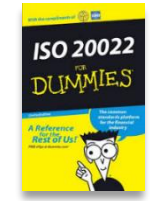
Join a webinar or work session near you to learn why ISO 20022 adoption is necessary, how to make the change and what support SWIFT will provide

### SWIFTSmart

The SWIFTSmart e-learning training platform includes an introduction to ISO 20022. A formal curriculum will be published by end of the year

### Documentation

The Updated ISO 20022 for Dummies e-book is available to understand the basics of ISO 20022 and implications for financial messaging




### ISO 20022 vendor landing page

The ISO 20022 vendor landing page provides more information on the programme, timeline, transition period and resources

### MyStandards

The CBPR+ MyStandards page hosts all usage guidelines, a readiness portal for testing your back office applications and coming soon a mapping sandbox to publish translation rules

### Knowledge Centre

The Knowledge Centre hosts detailed documentation on SWIFT products services, including the SWIFTNet messaging service that will be the basis for the new InterAct service to support CBPR+ compliant flows

### Partner Programme

Join the Partner Programme to gain access to further support. The Programme also helps SWIFT customers to make well-informed purchasing and implementation decisions, and providers to differentiate their offerings in a crowded market place.

### Vendor support

Partner Programme member support is available to help you through ISO 20022 migration, get trained, and support your implementation.


www.swift.com