

ISO 20022

Shaping the future of payments

JOIN THE TRANSFORMATION JOURNEY IN CROSS-BORDER PAYMENTS.

A New Language

The introduction of ISO 20022 brings about the most significant changes to the language and terminology used by payment industry professionals for the past 40 years. The standard defines a structured, common methodology to describe business activities, processes, roles and actors and all the information related to those activities and processes.

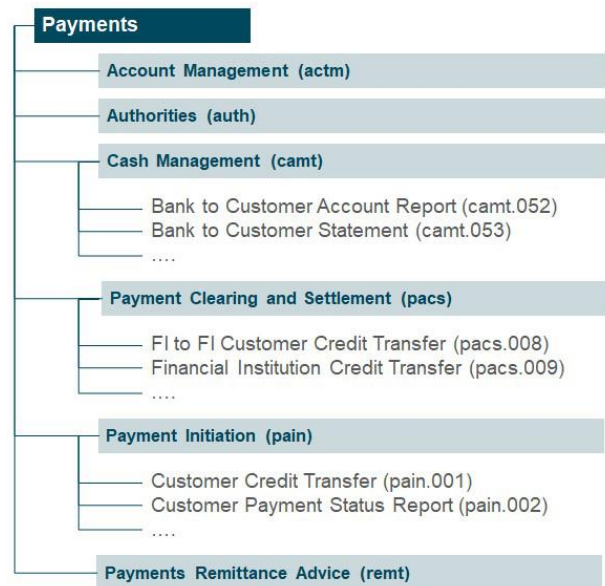
ISO 20022 covers several ostensible business domains of the banking industry: Payments Securities, Trade Services, Foreign Exchange and Cards. Here we focus on the **Payments** domain, which is at the core of the transformation over the next 5 years.

New Terminology for Messages

ISO 20022 messages are arranged in a logical hierarchy and aligned to related business processes. This diagram displays how the key message sets (expressed in 4-letter acronyms) and the messages commonly used in the Payment domain are organized.

The message sets that banks will use mostly in the context of the cross-border payment migration to ISO 20022 are:

- **pacs** messages – payment related messages exchanged between banks
- **pain** messages – payment related messages exchanged between banks and their customers
- **camt** messages – mostly relate to payment advising, statements and exception handling



Equivalencies for the Most Common SWIFT MT Messages

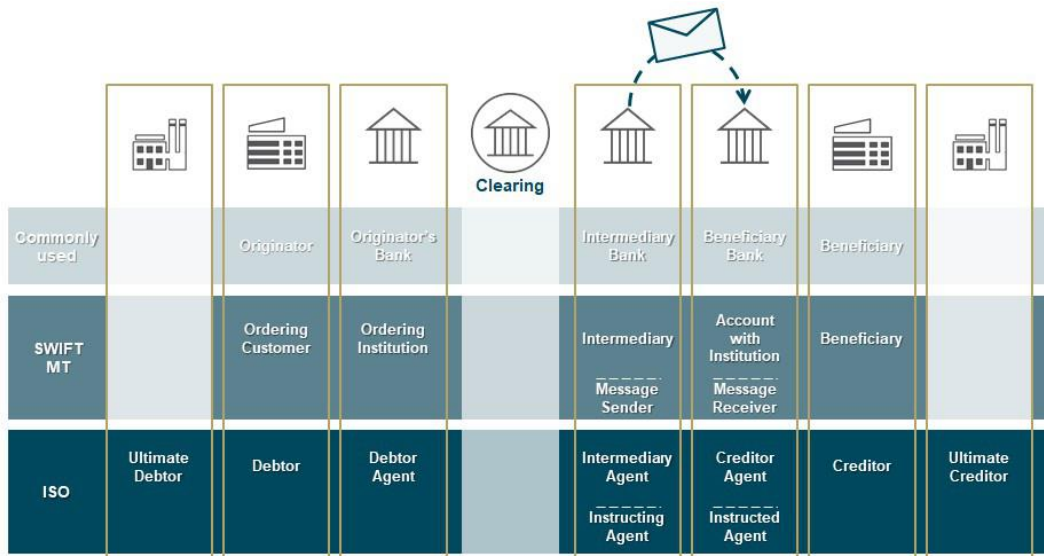
Distinctions that exist in the SWIFT MT message formats between single- and multi-payment messages (MT102 vs MT103, MT202 vs MT203) or variants of the MT20n messages for different scenarios, including MT202COV, do not exist in the ISO format.

The pacs.008 and pacs.009 formats embed those distinctions in the message definition itself.

SWIFT MT	ISO20022 equivalent
MT101	pain.001 – Customer Credit Transfer
MT102	pacs.008 – FI to FI Customer Credit Transfer
MT103	pacs.008 – FI to FI Customer Credit Transfer
MT103 - 72:/RETN/	pacs.004 – Return of Funds
MT104	pacs.003 – Direct Debit and Request for Debit Transfer Message
MT200	pacs.009 – Financial Institution Credit Transfer
MT202	pacs.009 – Financial Institution Credit Transfer
MT202COV	pacs.009 – Financial Institution Credit Transfer
MT203	pacs.009 – Financial Institution Credit Transfer
MT204	pacs.010 – Financial Markets Direct Debit Message
MT205	pacs.009 – Financial Institution Credit Transfer
MT900	camt.054 – Bank to Customer Debit Credit Notification
MT910	camt.054 – Bank to Customer Debit Credit Notification
MT940	camt.053 – Bank to Customer Statement
MT941	camt.052 – Bank to Customer Account Report
MT942	camt.052 – Bank to Customer Account Report
MT950	camt.053 – Bank to Customer Statement
MTn92	camt.056 – FI to FI Payment Cancellation Request

The New Terminology for Parties in a Message

The switch from SWIFT MT messages to ISO 20022 will also bring about new designations for the parties to a payment. The example below illustrates the most common parties of a Customer Credit Transfer.



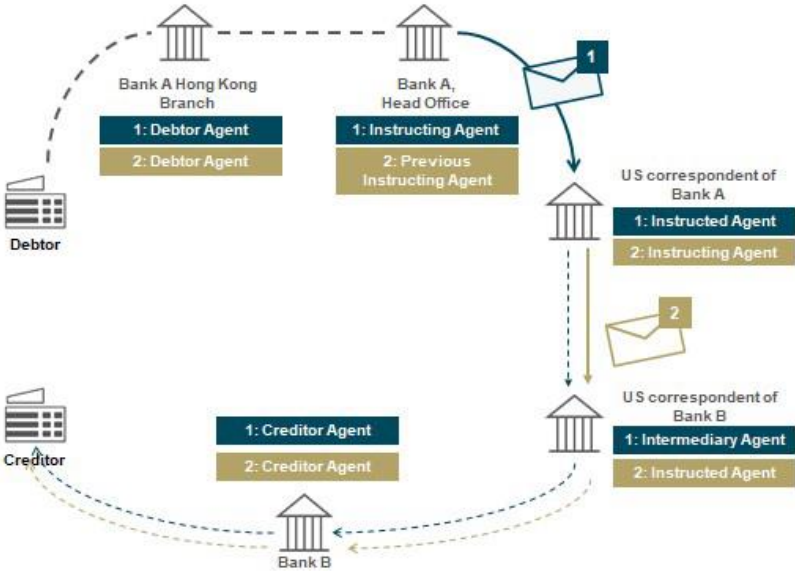
Note that there are two new parties who do not currently exist in the SWIFT MT message framework: the ultimate debtor and ultimate creditor. These are the ultimate parties who owe money or to whom the money is due, but they transact through the debtor and creditor who own the account through which the transaction is settled. For example, consider a common scenario where companies centralize their payment activity through a single entity. The entity will be the debtor, but the companies on whose behalf the payments are being made will be the ultimate debtors.

Dynamic Bank Party Roles

The roles of the banks involved in the payment chain do not remain static as a payment moves through the settlement chain. Each message exchanged in the lifecycle reflects the role of the parties as it relates to this particular message as shown in this example:

ISO 20022 formats allow up to three occurrences of the Previous Instructing Agent and Intermediary Agent elements, thereby eliminating the current practice of mapping parties to Field 72.

Also new are Initiating Party and Forwarding Agent. Both of these roles are involved in the initiation and transmission of the payment instruction, but not in the settlement of the funds.



Reading ISO 20022 Message Definitions

Reading ISO 20022 message definitions requires learning a few new concepts as well.

SWIFT MT	ISO20022
Fields	→ Elements
Format	→ Data Type
Presence	→ Element multiplicity Min Max
Usage Rule	→ Textual Rule
Network	→ Cross Element
Validated Rule	→ Rule

Many elements in an ISO 20022 message consist of other nested elements. For example, the identifier(s) used to define a bank (Agent) are conveyed in the element Financial Institution Identification. However, this element itself includes other nested elements to clearly define different forms of identification, such as a BIC or a clearing system identifier, an LEI or a name and an address. A nested element, in turn, can again consist of multiple nested elements.

The hierarchy created by this concept is referred to as Levels in the Usage Guidelines published by the CBPR+.

Deciphering Elements

Element names are typically derived from the type of information they describe and always start with a capital letter. When an element name consists of multiple words, each word starts with a capital letter and the words are not separated by spaces. In an ISO 20022 message an element always starts with the name of the element between the < and > signs. The end of the element is indicated by placing the name of the element between the signs </ and >:

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Example:
240 Greenwich Street <PstlAdr>
New York, USA <StrtNm>Greenwich Street</StrtNm>
<BldgNb>240</BldgNb>
<TwnNm>New York</TwnNm>
<Ctry>USA</Ctry>
</PstlAdr>
    
```

The example above illustrates the Postal Address element with nested elements for Street Name, Building Number, Town Name and Country.

Overview of pacs.008

The pacs.008 message consists of two core sets of nested elements:

Group Header: Contains characteristics applicable to all transactions within the message.

Credit Transfer Transaction Information: Includes the elements that provide information specific to the individual credit transfer.

The pacs.008 message definition permits the inclusion of multiple credit transfers in a single message. However, the exchange of such messages must be bilaterally agreed upon.

This table displays the nested elements that make up the Credit Transfer Transaction Information element. The multiplicity indicates whether an element is mandatory (starts with [1..]) or optional (starts with [0..]). How often an element can be repeated is indicated by the number before the end bracket (]). An asterisk (*) in this position indicates that an unlimited number of repetitions is permitted.

Credit Transfer Transaction Information	[1.. *]
Payment Identification	[1.. 1]
Payment Type Information	[0.. 1]
Interbank Settlement Date	[0.. 1]
Settlement Priority	[0.. 1]
Settlement Time Indication	[0.. 1]
Exchange Rate	[0.. 1]
Charge Bearer	[1.. 1]
Charges Information	[0.. *]
Previous Instructing Agent 1	[0.. 1]
Previous Instructing Agent 1 Account	[0.. 1]
Previous Instructing Agent 2	[0.. 1]
Previous Instructing Agent 2 Account	[0.. 1]
Previous Instructing Agent 3	[0.. 1]
Previous Instructing Agent 3 Account	[0.. 1]
Instructing Agent	[0.. 1]
Instructed Agent	[0.. 1]
Intermediary Agent 1	[0.. 1]
Intermediary Agent 1 Account	[0.. 1]
Intermediary Agent 2	[0.. 1]
Intermediary Agent 2 Account	[0.. 1]
Intermediary Agent 3	[0.. 1]
Intermediary Agent 3 Account	[0.. 1]
Ultimate Debtor	[0.. 1]
Initiating Party	[0.. 1]
Debtor	[1.. 1]
Debtor Account	[0.. 1]
Debtor Agent	[1.. 1]
Debtor Agent Account	[0.. 1]
Creditor Agent	[1.. 1]
Creditor Agent Account	[0.. 1]
Creditor	[1.. 1]
Creditor Account	[0.. 1]
Ultimate Creditor	[0.. 1]
Purpose	[0.. 1]
Regulatory Reporting	[0.. 10]
Remittance Information	[0.. 1]

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