

Guide to ISO 20022 migration:

Part 4



Guide to ISO 20022 migration

Part 4

In September 2020, we released the third in our series of guides to the upcoming ISO 20022 migration. That edition covered a number of changes that had taken place that year, with SWIFT's decision in March to delay its implementation of ISO 20022 by 12 months to November 2022 having sparked a wave of action from major market infrastructures around the world. It meant that 2021, the original year of the ISO 20022 migration, had become the year of delivery.

Flashforward to today, and while the delivery is firmly on route, further efforts are still required to make sure the extra time permits us to reach the ISO 20022 destination safely. In this, our *Guide to ISO 20022 migration: Part 4*, we cover how market infrastructures have used the extension to prepare, explore the developments around the SWIFT transaction manager and the in-flow translation service and explain how ISO 20022 will be used in the end-to-end payment journey. Further Guides in this series are planned as the journey continues.

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Foreword

2021 was supposed to become the year for ISO 20022. However, it was never meant to be. The Covid-19 pandemic threw a spanner in the works – causing SWIFT to delay its migration by a year and further market infrastructures (MI) to follow suit. What was originally planned to be the “go-live year” has turned out to be “the year of delivery”.

Since the release of our previous edition of the Guide just before Sibos 2020, some MIs, such as the Philippines’ RTGS system, have managed to keep to their original migration strategies and the ISO 20022 vision has become a reality this year. Elsewhere, other MIs, remain committed to their respective, revised timelines, with direct participants in Europe on track to begin industry testing in December 2021, and those in the UK deep in preparations for the fast-approaching like-for-like phase in June 2022.

In the correspondent banking space, the headline-hitting story this year has been the continued development of the Transaction Manager (TM) – SWIFT’s central orchestration platform, which will coordinate transactions end-to-end. SWIFT has now revealed plans for a “build-up period”, a phased approach in which ISO 20022 traffic will be gradually migrated onto the new platform. As part of this plan, SWIFT defined three implementation stages and decided that only pacs.008 and pacs.009 COV messages containing rich data elements are to be routed through the TM from day one, while all other ISO 20022 messages will be exchanged through the external FINplus channel, subject to inclusion in stage 2 and 3.

To accommodate the coexistence phase, SWIFT has also developed an in-flow translation service. From August 2022, ISO 20022 messages will be translated to multi-format messages (ISO 20022 + embedded MT) by default. The project took a step in the right direction in June 2021, when the in-flow translation was successfully tested by seven banks – proving its functionality and SWIFT’s readiness for the go-live.

Though progress has been strong, our message remains the same: banks should not take their foot off the pedal. The industry must remember that cross-border payments are the engine for the global economy – and disruptions caused by a minority, will have negative implications for the majority. In the months ahead it is, therefore, important that participants take preparations – and particularly industry testing – seriously. A fully integrated and well-orchestrated approach to testing – one that focuses not on the individual participants, but the ecosystem as a whole – is likely to be the key to success in this regard, and will ensure we can deliver ISO 20022 on time.

At Deutsche Bank, we remain focused on this destination – and we hope that our *Guide to ISO 20022 migration: Part 4* will provide you with all the information you need to continue moving forward on your own migration journey.

We hope you find this edition useful and informative and that reading it will help you with your ISO 20022 preparations.



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1

Market Infrastructures: Latest developments

Since the September 2020 release of our previous paper, *Guide to ISO 2022 migration: Part 3*, the implementation of ISO 2022 around the world has progressed significantly.

In July 2021, for example, the ISO 2022 vision became a reality in the Philippines, with the newly upgraded Real-Time Gross Settlement (RTGS) system – known as PhilPass+ – introducing enhanced ISO 2022 messages from day one. Ukraine was slated to be next in line to introduce ISO 2022 for its RTGS system, but has recently postponed its migration until August 2022.

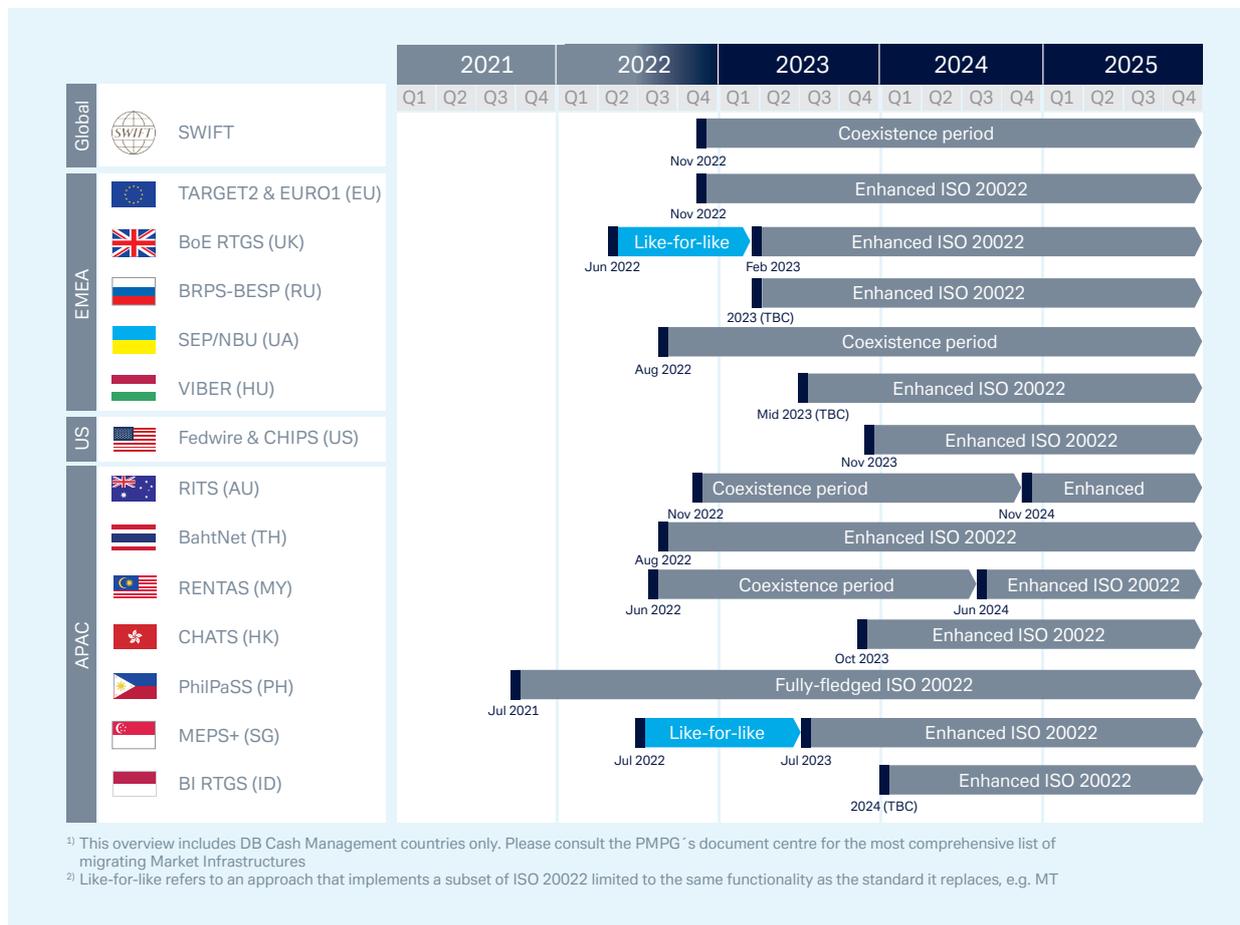
Elsewhere, other markets have been occupied with a variety of pre-migration activities. In Europe, direct participants have been working to enhance their applications to deliver the software required for industry testing, which is set to begin in December 2021. In the UK, preparation for the like-for-like phase in June 2022, as well as the enhanced phase in February 2023, is now well underway. As part of this, the Bank of England (BoE), which is responsible for the migration of the CHAPS RTGS infrastructure, has developed and published technical guidance on how direct participants can handle potential truncation issues caused by the three month period in which SWIFT will be live with enhanced ISO 2022 messages but the BoE will not be.

The data truncation challenge has also been high on the agenda in the US, where the Federal Reserve Banks and The Clearing House, which operate the Fedwire RTGS funds transfer system and Clearing House Interbank Payments System (CHIPS) respectively, have developed mapping guidance for their direct participants. This has been done to account for the fact that SWIFT will enable banks to send enhanced ISO 2022 data from November 2022 before Fedwire and CHIPS have migrated. The two systems are expected to go-live with ISO 2022 messaging in November 2023, with the official go-live date for Fedwire expected to be announced in 2022.

Figure 1 shows the migration timelines of the major market infrastructures – and in the following section we provide a deep dive on some of the most important developments.



Figure 1: Global ISO 20022 adoption overview (high-value payments)



Source: Deutsche Bank

1.1 The Philippines

The Philippines' RTGS system – known as PhilPass+ – has become one of the first payment infrastructures to introduce ISO 20022. It did so with the ISO 20022 version 2020, which is specific to the Philippines market (with SWIFT and other RTGS operators set to introduce ISO 20022 messages using version 2019). Upon the go-live in July 2021, the following major new or enhanced data requirements came into effect:

Purpose Codes

It is now mandatory to provide Purpose Codes for both domestic customer payments (pacs.008=MT103) and bank payments (pacs.009=MT202). In addition, the PhilPass+ code list has been expanded (when compared to the previous code list for PhilPass).

Identification of Debtor / Creditor

With the migration, PhilPass+ introduced a mandatory Date of Incorporation (DOI) for corporates and Date of Birth (DOB) for individuals acting as the Debtor (payer) in a domestic payment. The Debtor can be identified using the Name, Postal Address and Debtor Account elements, which are now mandatory regardless of payment amount, while the Creditor can be identified using the Name, Postal Address and Creditor Account elements (which are also mandatory regardless of payment amount).

1.2 Ukraine

The next RTGS due to go live was the System of Electronic Payments (SEP) of the National Bank of Ukraine (NBU), which will implement ISO 20022 for domestic payments made in the national currency only. The project was originally scheduled to go-live in November 2021 – though, this date has been postponed to August 2022. A “big bang” approach to the migration is being targeted – meaning that there will not be a co-existence period.

While NBU follows the High-Value Payment Systems Plus (HVPS+) usage guidelines, it has also created its own set of local requirements. Figure 2 outlines the major differences between these guidelines.

Figure 2: Key differences between HVPS+ and NBU Usage Guidelines

FIToFICustomerCreditTransfer (pacs.008)		
HVPS+	VS	NBU
ISO 20022 Usage Guidelines to be used as a base by High-Value Payments Systems		ISO 20022 Usage Guidelines to be used by the local Ukrainian RTGS (SEP)
Removed	(Group Header) Payment Type Information	Optional
Removed	(Group Header) Instructing/Instructed Agent	Mandatory
Optional	Transaction Identification	Removed
Optional	Settlement Priority	Removed
Optional	Instructed Amount	Removed
Mandatory ([DEBT], [CRED], [SHAR], [SLEV] allowed)	Charge Bearer	Mandatory (only [SLEV] code allowed)
Optional	Charges Information	Removed
Optional (up to 3 allowed)	Previous Instructing Agent	Optional (only 1 allowed)
Optional	Instructing/Instructed Agent (Payload)	Removed
Optional (up to 3 allowed)	Intermediary Agent	Optional (only 1 allowed)
Optional ([CHQB], [HOLD], [PHOB], [TELB])	Instruction for Creditor Agent (Code)	Optional (only [HOLD], [PHOB] allowed)
Optional	Remittance Information	Mandatory
Optional	Regulatory Reporting	Removed
Optional	Postal Address (All Agents)	Removed
Optional	Postal Address (All Parties)	Optional (structured only)
Optional	Identification (All Parties)	Mandatory

Source: Deutsche Bank

1.3 Sterling area

The BoE's RTGS system – known as CHAPS – is set to go-live with the like-for-like phase (limited ISO 20022 messages) in June 2022 and the enhanced phase (full ISO 20022 messages) in February 2023 (see *Guide to ISO 20022 migration: Part 3* for more details).¹

Industry preparation for the like-for-like phase is continuing at pace, with progress being regularly monitored by the BoE through engagement and reporting, as well as by external assurance providers, which review the readiness of the most systemically important direct participants. The next major milestone, which includes the completion of network connectivity testing for InterAct, must be met by the 26 November 2021.

Throughout 2021, as direct participants worked to meet the key implementation milestones set by the BoE, the industry raised several change requests to the CHAPS ISO 20022 schemas. In response, the BoE has accommodated changes to the CHAPS schemas and updated the textual rules in an effort to help minimise complexity and avoid confusion. The resulting new, updated version of the BoE's schemas was published on MyStandards in May 2021 with a further revision in July 2021. Among the included changes is an increase of the character limit for the pacs.008 End-to-End Identification element, which has more than doubled to 35 characters from 16 in order to limit truncation risk (see Figure 3 for an example).



Point of attention: xsys. notification messages

For every payment settlement message (pacs.), direct participants will receive a mandatory pacs.002 status report (positive or negative), which will be used for the processing in the back-office. In the case of a non-settlement, a negative pacs.002 status report with a status code RJCT (=rejected) and a mandatory xsys.012 message will also be provided to facilitate reconciliation with the "InterAct request" message at the level of the interface/messaging application.

Like-for-like phase (Jun 2022-Feb 2023)

The topic of potential truncation risk remains a cause of concern for the industry. SWIFT is slated to introduce ISO 20022 messages in the correspondent banking space in November 2022 (note: in August 2022 on bilateral basis only, read more in section 2.1.4.), while the BoE will only go live with enhanced messages in February 2023. In the intervening period, a situation in which an ISO 20022 message can be received by CHAPS before the system has the capability to process the richer data could cause truncation issues for "one-leg-in/one-leg-out" payments, in particular.

In order to accommodate this timing gap and reduce data truncation issues, the BoE and the industry have developed a three-part framework,² which consists of a Memorandum of Understanding (MOU), Technical Guidance and White Label communications documents. As part of this framework, Technical Guidance for pacs.008, pacs.009, pacs.009 COV messages sets out the correct mapping of rich ISO 20022 elements coming from/into the correspondent banking space (CBPR+ Usage Guidelines) into/from the CHAPS like-for-like messages. To develop these mapping principles, CBPR+ translation rules were taken as a base. These, however, could not be used one-to-one given that CHAPS will not operate on MT, but "like-for-like" messages, which contain a limited set of ISO 20022 elements. For example, the Instruction for Next Agent/Instruction for Creditor Agent elements form part of the CHAPS like-for-like messages, so that data from rich CBPR+ ISO 20022 messages can be mapped directly. Due to the size of the Technical Guidance document,³ we will not list all the mapping principles, but have applied them in the example below (see Figure 3).

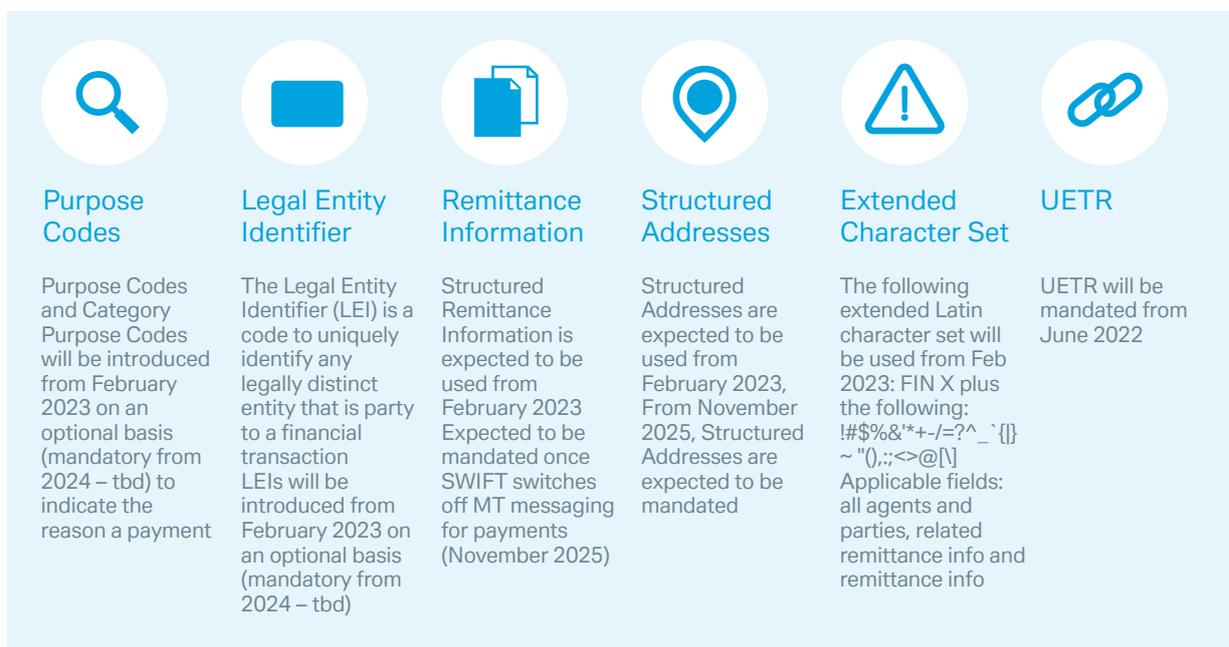
Figure 3: Applying BoE’s Technical Guidance to pacs.008

CBPR+ pacs.008 (extract)	CHAPS L4L pacs.008 (extract)
<pre>[...] <CdtTrfTxInf> <PmtId> <InstrId>1234567891234567</InstrId> <EndToEndId>111M222I333E4444o</EndToEndId> <TxId>123456789</TxId> <UETR>29c7aacb-bee7-47e3-8dbc-e9c7aacbedf </UETR> </PmtId> <IntrBkSttlmAmt Ccy="GBP">100.0</IntrBkSttlmAmt> <IntrBkSttlmDt>2021-10-01</IntrBkSttlmDt> <ChrgBr>DEBT</ChrgBr> <InstgAgt> <FinInstnId> <BICFI>DEUTGB2LXXX</BICFI> </FinInstnId> </InstgAgt> <InstdAgt> <FinInstnId> <BICFI>BANKGB2LXXX</BICFI> </FinInstnId> </InstdAgt> <Dbtr> <Nm>Debtor Ltd</Nm> <PstlAdr> <StrtNm>London street</StrtNm> <BldgNb>1</BldgNb> <PstCd>AA1A 1LD</PstCd> <TwnNm>London</TwnNm> <Ctry>GB</Ctry> </PstlAdr> </Dbtr> <DbtrAcct> <Id> <Othr> <Id>0123456789</Id> </Othr> </Id> </DbtrAcct> <Purp> <Cd>IVPT</Cd> </Purp> <RmtInf> <Ustrd>INV12345</Ustrd> </RmtInf> </CdtTrfTxInf> [...]</pre>	<pre>[...] <CdtTrfTxInf> <PmtId> <InstrId>1234567891234567</InstrId> <EndToEndId>111M222I333E4444o</EndToEndId> <UETR>29c7aacb-bee7-47e3-8dbc-e9c7aacbedf </UETR> </PmtId> <IntrBkSttlmAmt Ccy="GBP">100.0</IntrBkSttlmAmt> <IntrBkSttlmDt>2021-10-01</IntrBkSttlmDt> <ChrgBr>DEBT</ChrgBr> <InstgAgt> <FinInstnId> <BICFI>DEUTGB2LXXX</BICFI> </FinInstnId> </InstgAgt> <InstdAgt> <FinInstnId> <BICFI>BANKGB2LXXX</BICFI> </FinInstnId> </InstdAgt> <Dbtr> <Nm>Debtor Ltd</Nm> <PstlAdr> <AdrLine>2/London street,1</AdrLine> <AdrLine>3/GB/London,AA1A 1LD</AdrLine> </PstlAdr> </Dbtr> <DbtrAcct> <Id> <Othr> <Id>0123456789</Id> </Othr> </Id> </DbtrAcct> <RmtInf> <Ustrd>/PURP/IVPT///URI/INV12345</Ustrd> </RmtInf> </CdtTrfTxInf> [...]</pre>
<ol style="list-style-type: none"> 1 End-to-End-Identification of 17 characters is captured in full length (CHAPS L4L element restriction: 35 characters) 2 Transaction Identification is dropped in CHAPS L4L due to low relevance and presence of UETR 3 Debtor Name is captured in its full length in the respective element. Given that Postal Address contains <BldgNb> element, which is non-existent in CHAPS L4L¹, the whole Postal Address is translated to <AdrLine> following PMPG Guidelines 4 As CHAPS L4L do not foresee Code element for Purpose Codes, it is translated to Unstructured Remittance Information using code word /PURP/. Unstructured Remittance Information of the CBPR+ message is translated using code word /URI/, following the priority list 	
<p>¹ CHAPS L4L Usage Guidelines only allow Street Name, Town Name and Country as part of the Structured Postal Address</p>	

Enhanced phase (Feb 2023-tbd)

From February 2023 – the go-live date for enhanced ISO 20022 messages on CHAPS – the BoE will encourage the use of Purpose Codes, Category Purpose Codes and Legal Entity Identifiers (LEIs), as well as expect the use of structured addresses and remittance data for domestic payments (see Figure 4). From Spring 2024, Purpose Codes and LEIs will be mandated for payments between financial institutions. Purpose Codes will also be mandated for property payments. Once SWIFT retires MT messaging for payments (currently expected in November 2025), structured addresses and remittance information will also be mandated. It is worth noting that mandated structured remittance information is not currently planned for the correspondent banking space.

Figure 4: Key aspects of ISO 20022 in the UK



Source: Deutsche Bank

1.4 The Eurozone

1.4.1 Eurosystem (TARGET services)

The T2-T2S consolidation project of the Eurosystem is on track to meet its November 2022 deadline. As announced by the Market Infrastructure Board in July 2021, the Eurosystem will move forward with a “big-bang” approach of fully-fledged ISO 20022 message implementation in the T2-T2S consolidation project and will no longer be pursuing a “like-for-like” fallback solution.





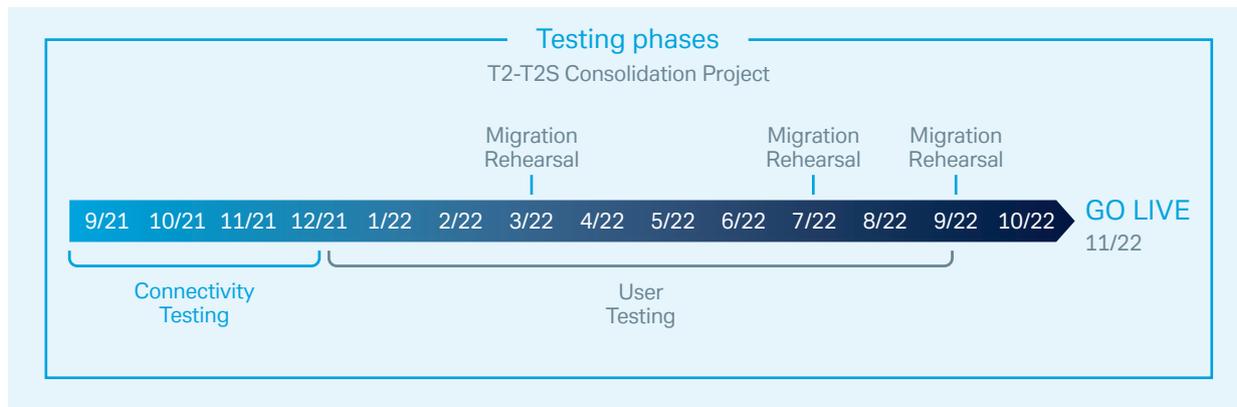
Background: Like-for-like fallback solution

The like-for-like solution was originally considered due to the postponement of the migration in correspondent banking space by one year. Its objective would have been to limit potential truncation risk resulting from the timing gap between the go-live date of the Eurosystem and SWIFT. It could have resulted in truncated “one-leg-in/one-leg-out” payments. For example, the Eurosystem’s rich ISO 20022 messages would have to be converted to SWIFT MT in the correspondent banking space. Despite subsequently moving the Eurosystem timeline to align with SWIFT, there was still a risk that SWIFT would be unable to provide in-flow translation in time – meaning that the like-for-like solution was still under consideration. Following a successful pilot with seven banks, SWIFT have proved they will be able to provide an in-flow translation solution (see 2.1.4 In-flow translation), which will allow the conversion of rich ISO 20022 messages to multi-format (MX + embedded MT) messages. As a result, the decision was taken to continue to pursue the big-bang approach for the Eurosystem.

Final preparations

The T2-T2S consolidation project is currently in the Connectivity Testing phase, which will end in November 2021. As part of the Connectivity Testing, T2 participants are asked to demonstrate successful T2 connection and communication via the Eurosystem Single Market Infrastructure Gateway (ESMIG). This phase is central to preparations for the User Testing (UT) phase, which will start in December 2021. The mandatory T2 test cases scenarios have been published on the ECB website and must be completed and verified before the end of T2 User Testing (30 September 2022) in order to allow the participants to progress to T2 production. In parallel to the UT stage, there will also be migration rehearsals in March, July and September 2022. These rehearsals – the final preparations ahead of the go-live date – will be split between the Migration Weekend Rehearsal (MWR) and the Migration Weekend Dress Rehearsal (MWDR). MWR is a test of pre-migration activities, which will take place during the week and serve as the pre-requisite to start MWDR. MWDR will take place on a weekend and aim at testing the last preparations prior to the go live.

Figure 5: T2-T2S Consolidation Project testing phases



Source: Deutsche Bank

Usage Guidelines

The latest version of the usage guidelines – the User Detailed Functional Specifications (UDFS) v2.2 – was published in April 2021 and incorporates the updates that resulted from the Change Requests submitted by the community prior to September 2020. Further Change Requests are tracked with the status published on ECB’s website and will be considered for the future version (UDFS v3.0). For example, one such request for version 3.0 is to make Original Group Information optional in pacs.004 in order to facilitate seamless processing. The UDFS v3.0 is expected to be published by end of Q3 2022.

In addition to the UDFS Usage Guidelines, the Eurosystem has also published the RTGS User Handbook v1.5, which is intended to provide more guidance on the RTGS Graphical User Interface (GUI). The next version of the User Handbook v2.0 is planned for November 2021.



Point of attention: Multi-addressee access

As part of the T2-T2S consolidation project, the future RTGS will offer four participation types: direct participation, indirect participation, addressable BIC and multi-addressee access, with the latter designed to be used by branches/institutions within the same group. Given that multi-addressee access poses a challenge in populating payment instructions, the Eurosystem has provided several examples of how to populate such payments.

As such, when instructing a payment for a multi-addressee BIC, the latter will only appear in the “To” element of the Business Application Header (BAH). In the Payload of the message, on the other hand, the Instructed Agent will be populated with a BIC of the direct participant, via which the multi-addressee participant is connected. This represents a different practice to CBPR+ or other market infrastructures given that the BAH element “To” (or “From” in the reserved scenario) usually corresponds to the Instructed Agent (Instructing Agent in the reversed scenario) element in the Payload. The examples can be found on the [ECB website](#) (Knowledge-based repository).⁴

1.4.2 EBA Clearing

In order to stay aligned with the T2-T2S consolidation project, in June 2021 EBA Clearing published updated ISO 20022 message specifications for its EURO1/STEP1 services. In preparation for the EURO1/STEP1 ISO migration test activities, EBA CLEARING has also set up a website that allows participants to declare each week their readiness for testing. Participants can use this to gauge the readiness of other participants in order to facilitate the search for test partners.

1.5 US dollar area

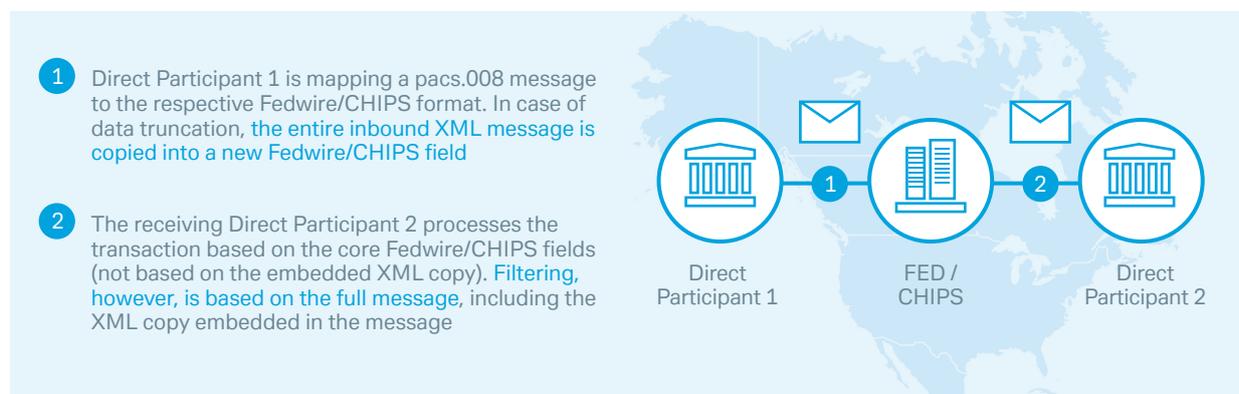
While not yet confirmed officially, the current assumption is that the Federal Reserve Banks (FED) will migrate the Fedwire infrastructure to the ISO 20022 standard in a “big bang” approach in November 2023. The FED is currently undergoing a public survey and is expected to finalise the approach in early 2022.

Like the FED, The Clearing House (TCH) also plans to implement ISO 20022 for CHIPS using a “big bang” approach in November 2023. The CHIPS Usage Guidelines are based on the HVPS+ Usage Guidelines and are currently undergoing the validation process.

With the go-live date for both systems set for November 2023, data truncation is a possibility as other Market Infrastructures, such as T2 and CHAPS, will introduce ISO 20022 before the US. In an

effort to limit data truncation risk during the coexistence period (November 2022 to November 2023), FED/CHIPS will enhance their legacy message formats in November 2022 to enable participants to include the full ISO 20022 message received (up to 9,000 characters minus the Business Application Header) in a new {900} field (CHIPS) and {8200} field (FED). Information in this new field will be for informational purposes only and will support embargo filtering and anti-financial crime compliance programmes (see an example in Figure 6). Market practice guidelines have been developed to educate direct participants on how to populate FED/CHIPS message with extended information from the ISO 20022-originated messages.

Figure 6: US market practice



Source: Deutsche Bank



2

Correspondent banking space (SWIFT) requirements

Having explored the ISO 20022 migration projects in various markets worldwide, the following section aims to shed some light on the migration in the correspondent banking space. This includes details of the migration approach in the context of the Transaction Manager (TM) and an update on the progress of the ISO 20022 message specifications (i.e. CBPR+ Usage Guidelines).

2.1 SWIFT Transaction Manager (TM)

A change in approach

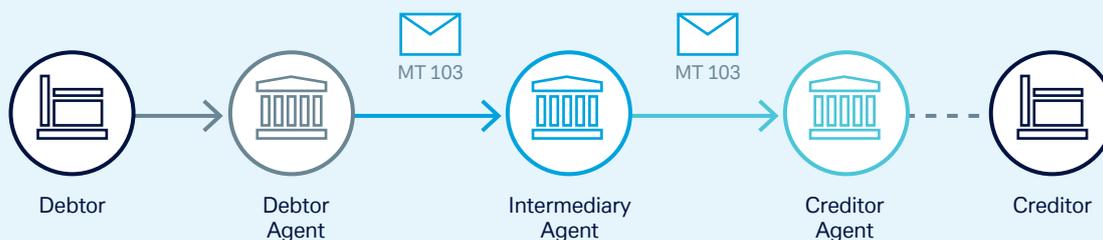
Since the September 2020 publication of the previous version of this Guide, much of the information surrounding SWIFT's TM – a central orchestration platform that will coordinate transactions end-to-end and connect banks via various channels and formats – has evolved. Last year, following the announcement of the TM, an industry working group – known as the Platform User Group (PUG) – was created to define the details of the scope of the first release, channels and formats, as well as the approach. The final decisions were approved by the SWIFT Board in September and will be published in the upgraded Connectivity Guide due for issue in October 2021. ⁵



Point of attention: Current vs. future transactions

Today: Under the current system, financial institutions must transmit all messaging data between one another and can modify that data along the transaction lifecycle. SWIFT only transports messages but does not orchestrate transactions between counterparties. This means that the least rich message format in the chain – the so-called “weakest link” – determines what data is received by the end beneficiary.

TODAY

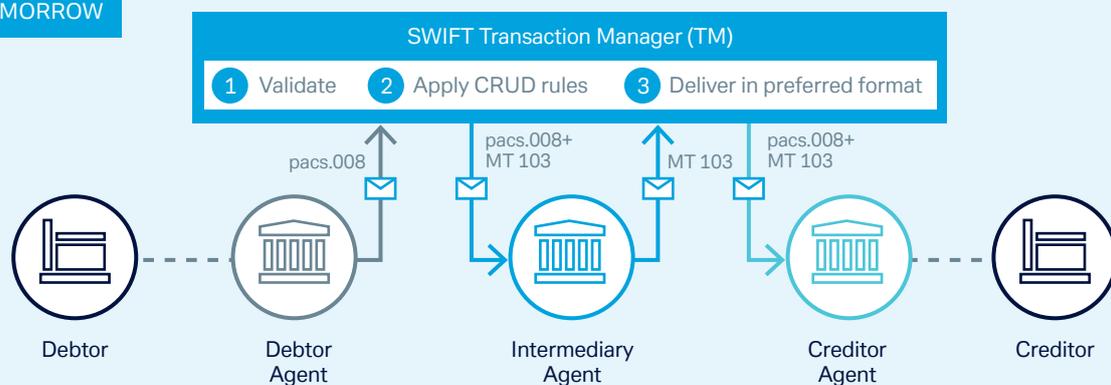




Tomorrow: Once a message is sent, it will follow the flow outlined below, which ensures data integrity is maintained end-to-end:

1. Network validated (ACK/NAK)
2. Routed via the TM, which will convert it to the internal processing format (based on ISO 20022 standard), as well as make updates to the central transaction copy by applying CRUD (Create, Read, Update, Delete) rules
3. The message is then converted and delivered to the next bank in the chain in their preferred format, which, due to the above rules and message configuration applied by the receiver, might not necessarily be the same as the message sent.

TOMORROW



2.1.1 Central transaction copy

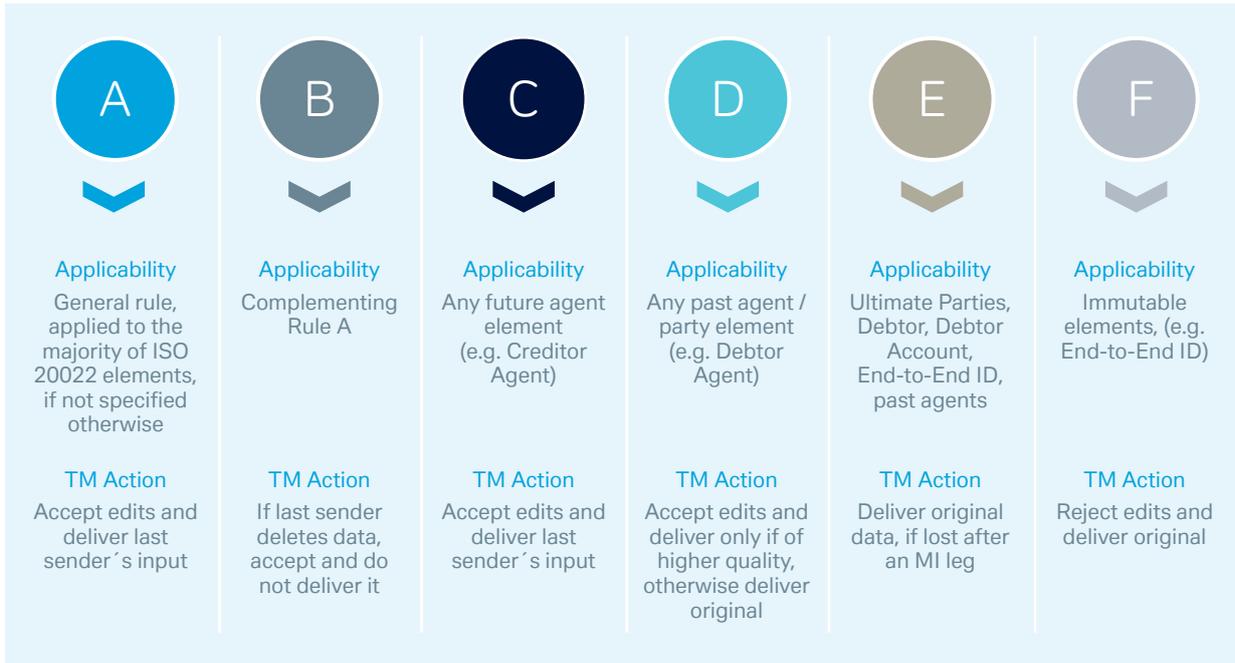
Currently, the messages sent by a sender and messages received by a receiver do not differ – what has been sent, will be delivered. With the introduction of the Transaction Manager (TM), the processing of payments will shift from this point-to-point logic and towards an orchestration of the end-to-end transaction. All messages in the payment chain routed via the TM will be converted to the internal processing format of the TM, which will update the central record of this transaction – the so called transaction copy. The TM will apply specific rules to the central transaction copy and validate the agent in the chain that is eligible to create, read, update or delete data (CRUD rules) and will deliver the messages to the receiver based on this logic. These rules are being developed with an expert group and shared with the community in the form of a Rulebook. The central transaction copy records all edits performed on the data throughout the payment chain in the transaction update logs and audit trails, which will be accessible via Graphic User Interface (GUI). The “R-Read” part of the rules – i.e. the agents that will be authorised to access the transaction copy – is still to be defined.

Given that all messages routed via the TM will be converted to the internal processing format that is based on ISO 20022 data model, these rules have been developed for each of the ISO 20022 elements. While today’s logic will be valid for the majority of elements in the message – “deliver last sender’s input” – there are some critical data elements classified immutable, which therefore must stay unchanged throughout the entire payment chain, for example, the Unique End-to-End Transaction Reference (UETR), End-to-End Identification, etc.

The rules (named A through F) have been developed for pacs.008 by an expert sub-group of the PUG. They apply to ISO 20022 elements, which have been categorised into three groups (priority from 1 to 3). With the introduction of TM, updates will be applied to elements in the priority 1 group, according

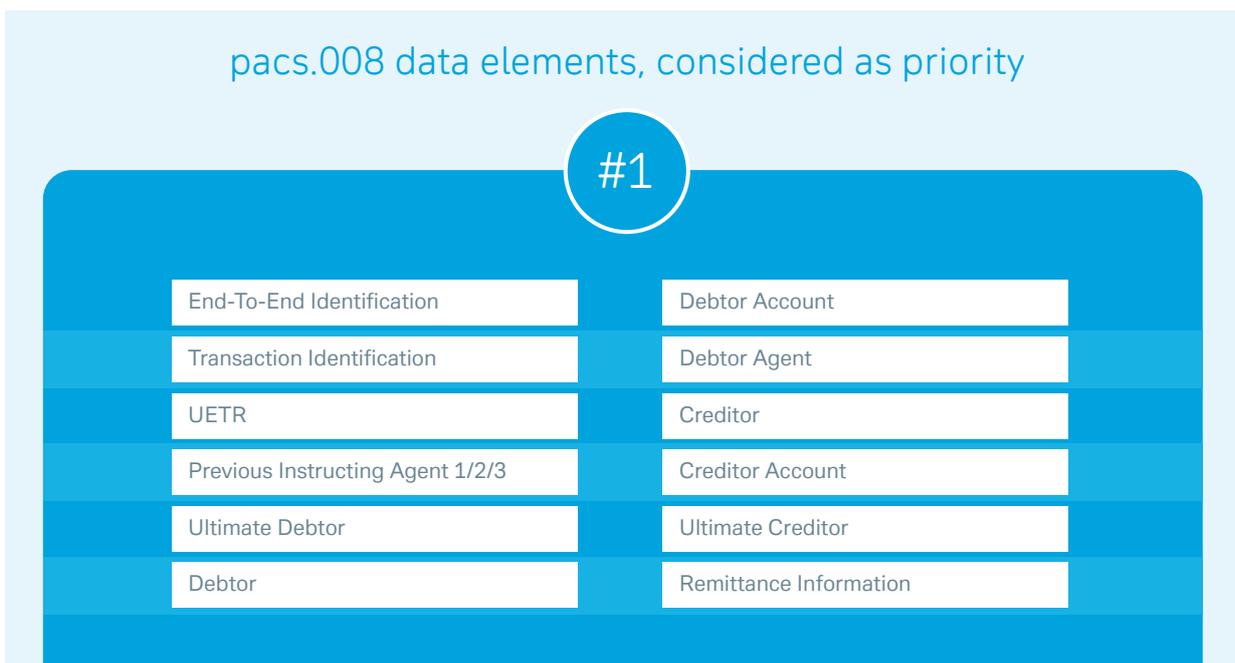
to the rules. Other elements will be updated directly based on data received. Figure 7 shows validation rules, their applicability to ISO 20022 elements (Figure 8) and the respective Transaction Manager’s behaviour. The rules for all other messages will be based on pacs.008, however, they are likely to be complemented with additional rules based on specific use cases and market practice.

Figure 7: Business validation rules



Source: Deutsche Bank

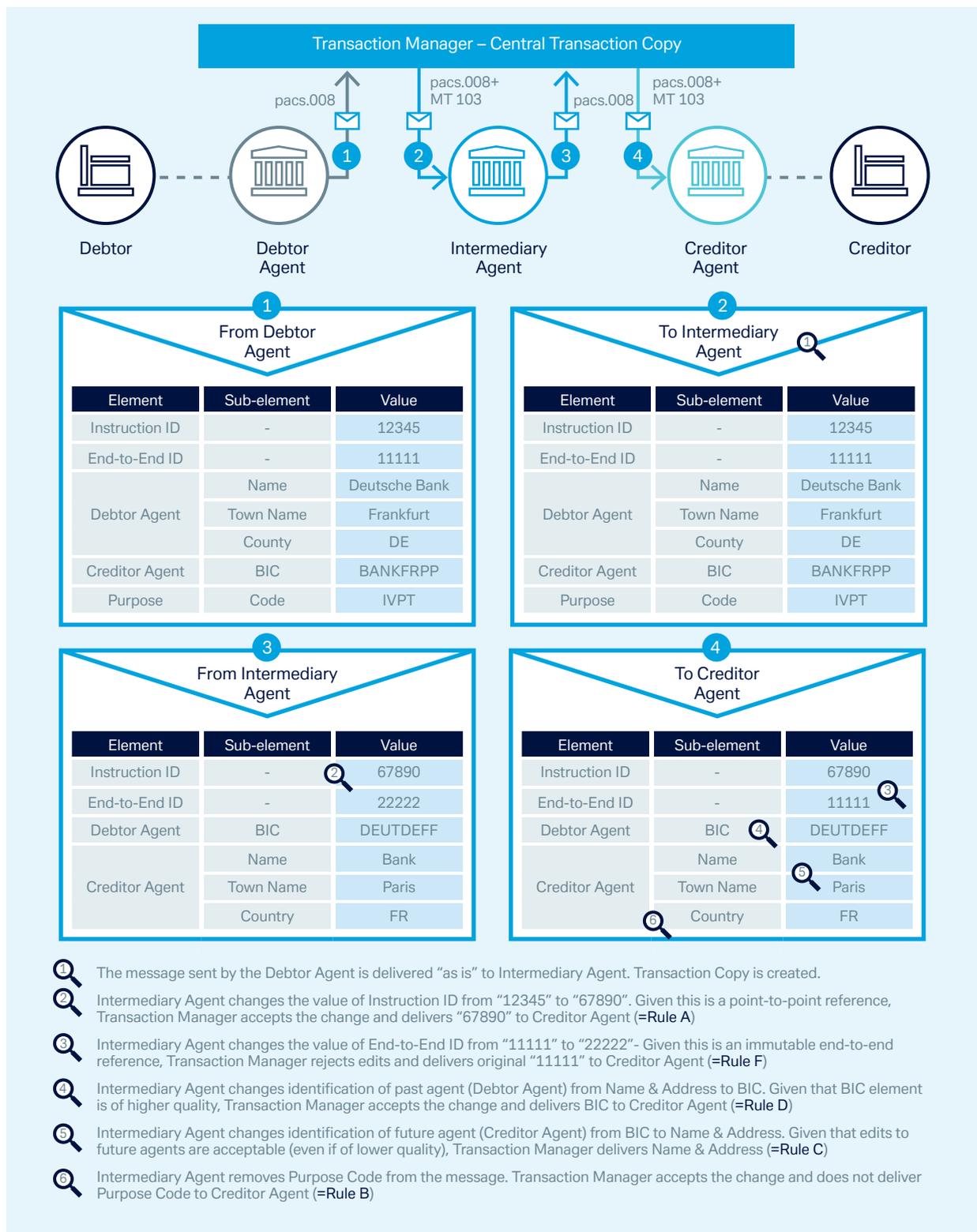
Figure 8: List of #1 priority ISO 20022 data elements



Source: Deutsche Bank

Figure 9 shows an example of how these rules will be applied by the Transaction Manager to messages in the payment chain.

Figure 9: Applying validation rules to a TM transaction (illustrative)



2.1.2 Channels and formats

The TM will mediate between banks using APIs and the FINplus or FIN messaging channels:

- **FINplus:** this channel, which is provided by the SWIFTNet InterAct Store and Forward service, will be used by banks to send and receive ISO 20022 CBPR+ formats. Where receivers are not ready to process ISO 20022 in the back office, an MT translation of the ISO 20022 format will be provided in the same message (see box-out below, “Background: Multi-format messages”). MT users therefore need to be ready to receive messages sent to them using FINplus, even if they plan to process the MT format.
- **API channel:** this channel will rely on industry standard API best practices to provide a fully functional channel for the exchange of cross-border payments and reporting data. API channel will allow users to exchange payments using the CBPR+ ISO 20022 data set in the JSON format (a standard for communication, which expresses how requests to the server should be formatted, and then what the response should be formatted as).
- **FIN:** this channel is used by banks to send MT format messages. Where a FIN/MT message is a continuation of a transaction already managed by the TM, the platform will process the message and make the transaction data available to the next bank via FINplus or API. FIN/MT messages that are not part of a transaction already managed by the TM will be delivered directly to the receiver via FIN. Banks will therefore need to maintain their FIN connection, even if they plan to send ISO 20022 only.

In its role as the central transaction orchestrator, the TM will provide senders and receivers with several connection options:

- Senders will be given an option to connect to TM via all three channels: FIN/MT, API/JSON or FINplus/ISO 20022
- For receivers, the preferred channel used will be selected through a configuration service based on various criteria, such as BIC and message type. The messages can be received in the following formats: API/JSON, FINplus/ISO 20022 or FINplus/ISO 20022 + embedded MT (the multi-format message)

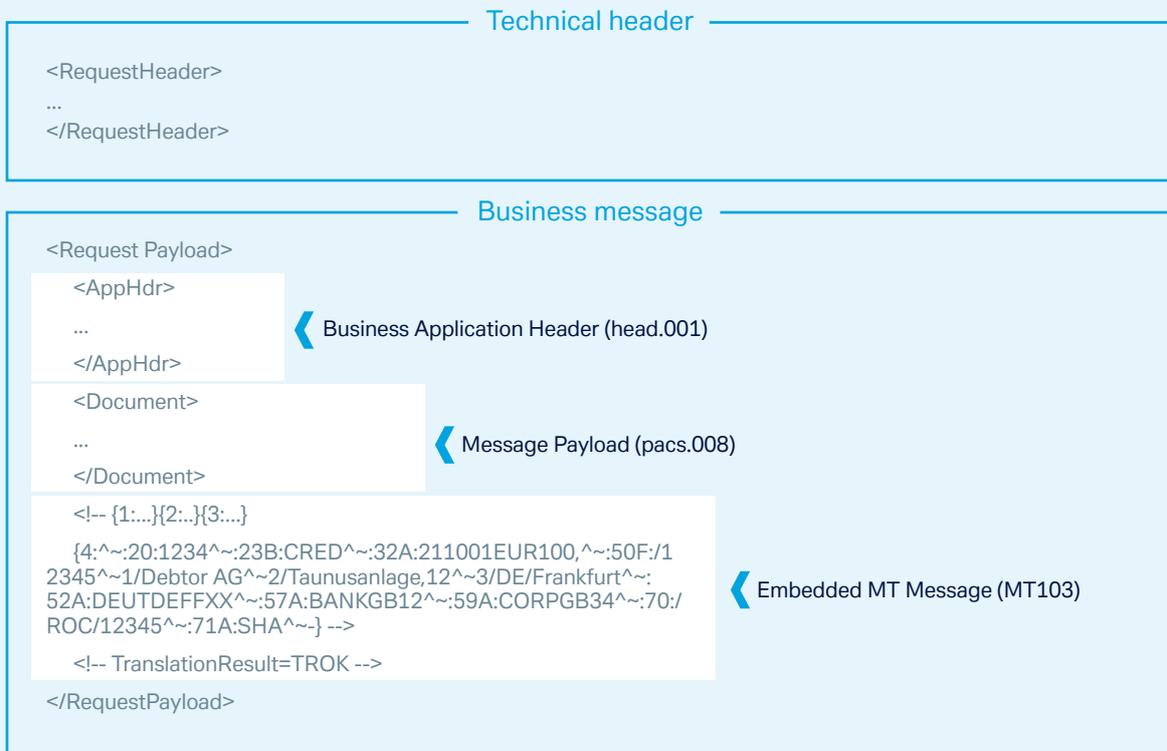




Background: Multi-format messages

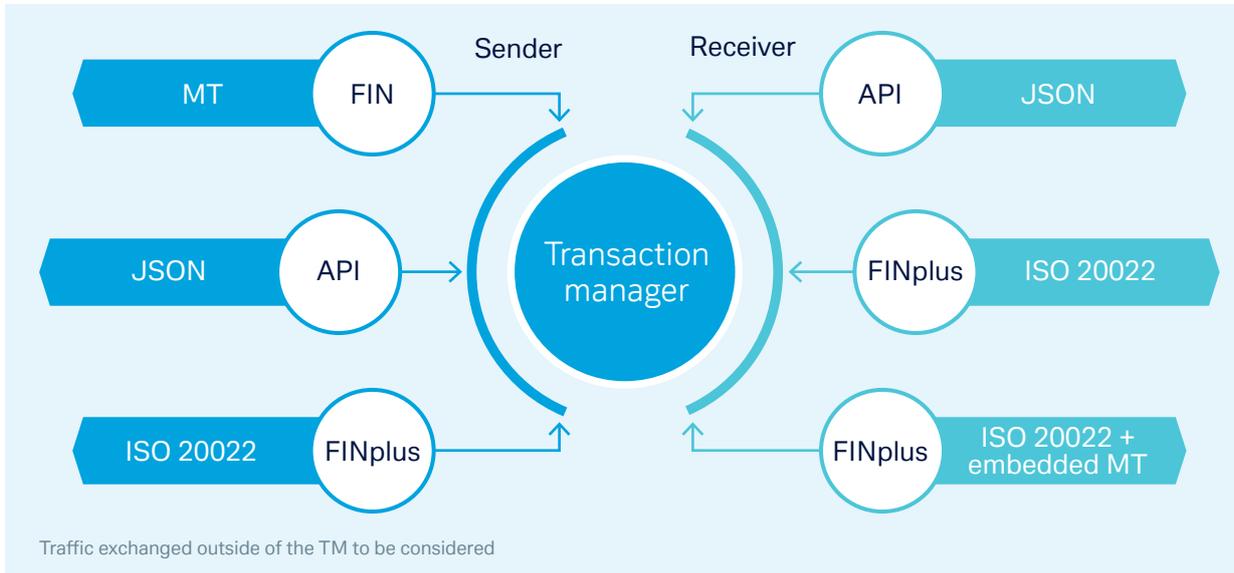
A multi-format MX is a FINplus message that provides both the ISO 20022 as well as the MT representation. Technical view: the MT message will be located in the comment section of the RequestPayload (placed after Business Application Header and ISO 20022 message instance) identified by <!--.

Note that the embedded MT message does not look the same as the common MT, for example, all Payload fields (Block 4) are written in one text string, separated by ^~.



The final state of the platform – the period after the completion of the build-up period (H2 2023, see 2.1.3 The build-up period) until the end of the coexistence phase (November 2025) – is outlined in Figure 10.

Figure 10: Transaction Manager channels variety in the final state



Source: Deutsche Bank

Not all CBPR+ messages will be in scope of TM in the first release. Messages that will not form part of TM release but are part of CBPR+ will be delivered via FINplus service outside of TM and translated via in-flow translation, e.g. the receiver will get multi-format messages. Note that a selection of ISO 20022 messages will not be translated at all (see Figure 11).

Figure 11: Transaction Manager message portfolio

Processed via Transaction Manager (update to Transaction Copy)		Processed via In-flow Translation (no update to Transaction Copy)		No translation available	
Translation MT to MX, MX to MT		Translation MX to MT only (multi-format)		No Translation	
pacs.008	MT 103	pacs.002 (negative)	MT 199 or 299	pain.001 'relay'	
pacs.008	MT 103 STP ¹⁾	pacs.004	MT 103/202/205 RETN	pain.002 'relay'	
pacs.008 STP ²⁾	MT 103	camt.057	MT 210	pacs.010	
pacs.004	MT 103/202/205 RETN (UETR)	camt.054	MT 900 or 910	camt.060	
pacs.002 (positive)	Based on bilateral agreement	camt.053	MT 940	MT 102/102 STP/103 REMIT	
pacs.002 (negative)	MT 103/202/205 REJT	camt.052	MT 941/942	MT 200/201/203	
pacs.002 (negative)	MT 199/299 (UETR)	camt.056	MT 192/292	MT 192 or 292 (no UETR)	
camt.056	MT 192/292 (S&R)	camt.029	MT 196/296	MT 196 or 296 (no UETR)	
camt.029	MT 196/296 (S&R)			MT 950	
pacs.009	MT 202			Proprietary messages and others	
pacs.009 ADV	MT 202 (with Field 53, 54)				
pacs.009 COV	MT 202 COV				
pacs.009	MT 205				
pacs.009 COV	MT 205 COV				

1) MT to MX only: MT 103 STP is not comparable with pacs.008 STP
 2) MX to MT only: pacs.008 STP is not comparable with MT 103 STP

Source: Deutsche Bank

Likewise, not all messages in scope of the TM's first release will be routed via the TM from day one. Instead, in order to help de-risk the migration, there will be a six-month build-up period starting from November 2022 – allowing ISO 20022 messages to be gradually moved onto the platform.

2.1.3 The build-up period

The build-up period, defined in three stages, is part of the TM's activation approach, during which ISO 20022 traffic will be gradually migrated to the platform. The migration will start with the first stage focusing on pacs.008 and pacs.009 COV messages, which contain rich data in order to address any potential data truncation. In this instance, rich data is defined by the presence of the following ISO 20022 data elements: long party name (more than 70 characters), ultimate parties, structured party addresses and remittance information, purpose codes and regulatory reporting. All other message types (e.g. pacs.004), as well as pacs.008/pacs.009 COV without rich data, will not be routed via the TM initially – and will instead be exchanged through the FINplus channel outside of the TM. By default, these messages will be subject to in-flow translation (see section 2.1.4 In-flow translation) and delivered as multi-format messages (ISO 20022 + embedded MT). There will also be an option for participants to opt-out of receiving multi-format messages – by configuring their preferred receiving method for ISO 20022 messages via a dedicated GUI. The user preference will apply to FINplus and the TM.

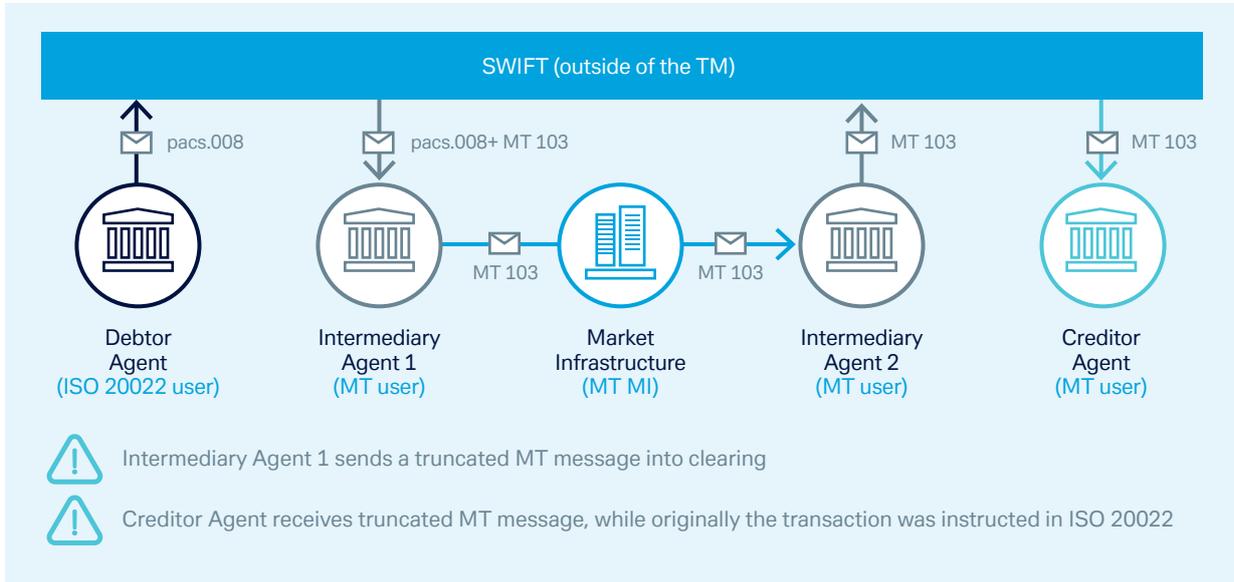
MT originated payments will only be moved to the platform at a later stage (exact date TBC) and in the meantime will continue to be exchanged on the FIN MT channel. The only exception is FIN MT messages in a transaction where previous legs contained rich ISO 20022 messages that have been routed via the TM.

While the period of build-up is necessary to help de-risk the migration, it also introduces several challenges for the industry for a limited period of time. One is the potential for data truncation. If an ISO 20022 message, which is not yet in scope of the TM, is sent to an MT user, the latter, based on its capability, is likely to send an MT message to the next agent in the chain. As a result, the next agent will receive a truncated MT via the FIN channel – and will, therefore, not have direct access to the additional data contained in the original ISO 20022 message. A similar issue arises where one leg of a transaction is cleared via a market infrastructure that is yet to migrate to ISO 20022. Unlike with the TM, the truncated message in the post-clearing leg will not be enriched (see Figure 12).

Moreover, MT users will not be able to avoid receiving ISO 20022 messages. As Figure 12 shows, where there is an ISO 20022 leg in a transaction (in this instance, the Debtor Agents is sending a pacs.008), the message will be in-flow translated to a multi-format message. This means that, from November 2022, every SWIFT user should be ready to receive multi-format messages via FINplus and apply the respective processes to it, including AML due diligence and archiving.



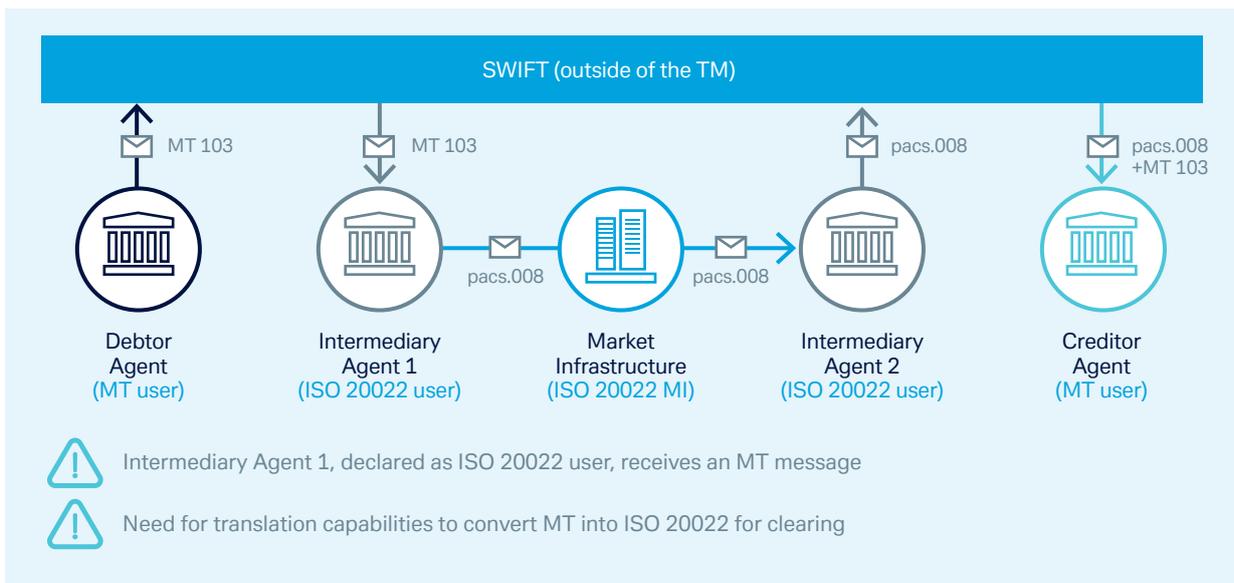
Figure 12: Data truncation issue during the build-up period



Source: Deutsche Bank

Several banks had planned to switch off their MT capabilities once they had made their internal systems ISO 20022 capable. Under the new approach, however, banks will need to maintain their MT capabilities, as they may still receive these messages not included in the initial scope of the TM (see Figure 13). Note that in-flow translation only functions in direction of an ISO 20022 message to an MT message, not the other way around.

Figure 13: Translation issue during the build-up period



Source: Deutsche Bank

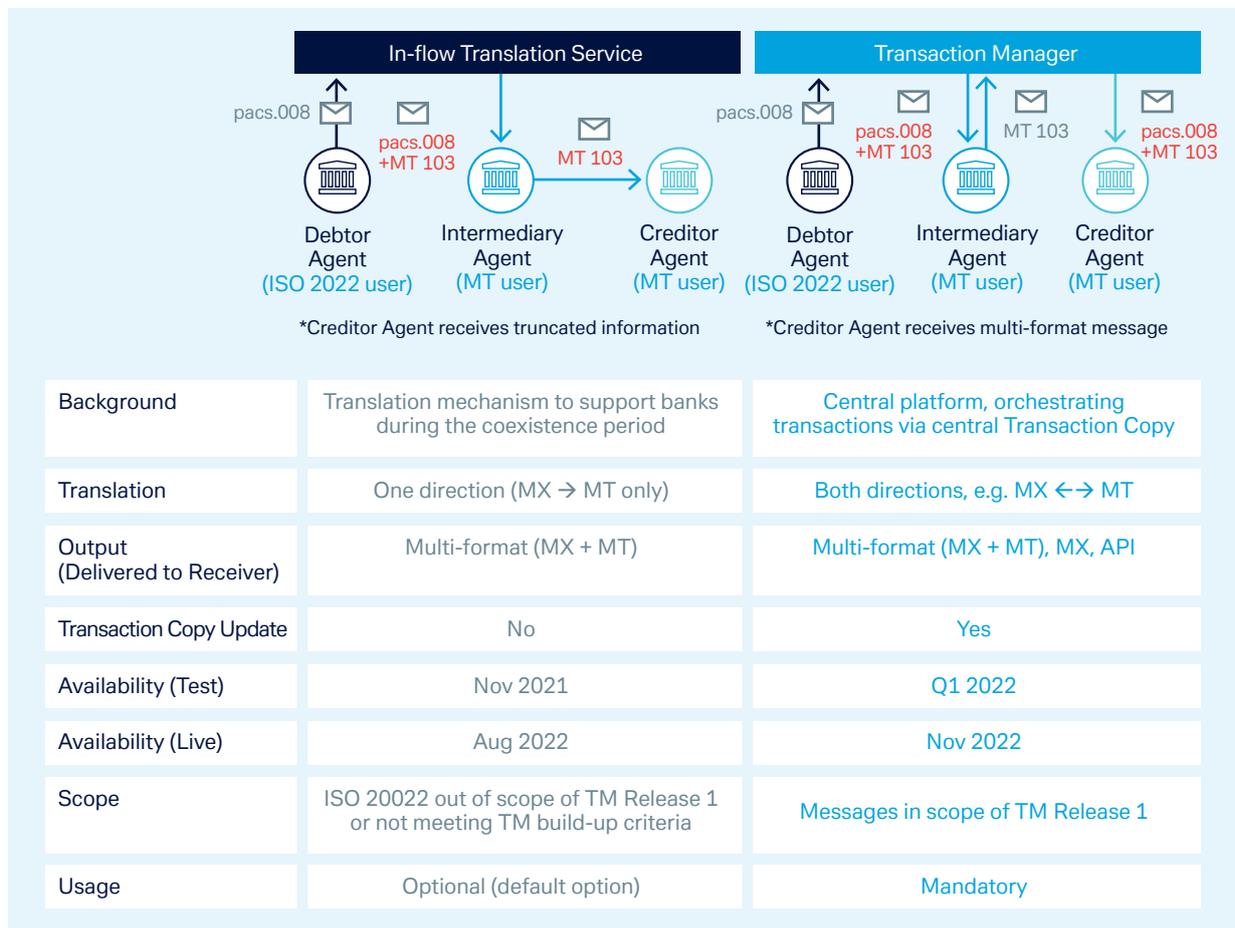
2.1.4 In-flow translation

As outlined in the previous section, all ISO 2022 messages that are not routed via the Transaction Manager – either as a result of the build-up period or not being part of the first release of messages – will be translated to multi-format messages (ISO 2022 + embedded MT) and delivered via the FINplus channel. While this will be the default set-up, there will be a configuration option available from November 2022 onwards – and banks will be able to opt out thereafter.

Unlike the TM, which is set to go-live in November 2022, the in-flow translation will be enabled from August 2022 – meaning that banks can start exchanging ISO 2022 messages prior to the launch of the TM. The in-flow translation service has already been tested in a pilot, which took place in June 2021 and was accommodated by seven banks. This test proved the functionality of the in-flow translation service and SWIFT’s readiness for the go-live. A full report on the pilot is available [here](#).

Understanding the relationship between the TM and the in-flow translation is advised. While ISO 2022 transactions routed via the TM will be translated to multi-format messages by default, the TM will also apply business validation rules (see section 2.1.1 Central transaction copy). This means it will validate messages in addition to the translation, which will happen in both directions: for messages that were sent in MT format as well as for messages that were sent in ISO 2022 format. The in-flow translation, however, is a stand-alone translation service that exists outside of the scope of the TM. The in-flow translation will only translate an ISO 2022 message to an MT message (not another way around) and will not enrich transactions or apply business validation rules to it. These differences are outlined below (see Figure 14).

Figure 14: Transaction Manager vs. in-flow translation

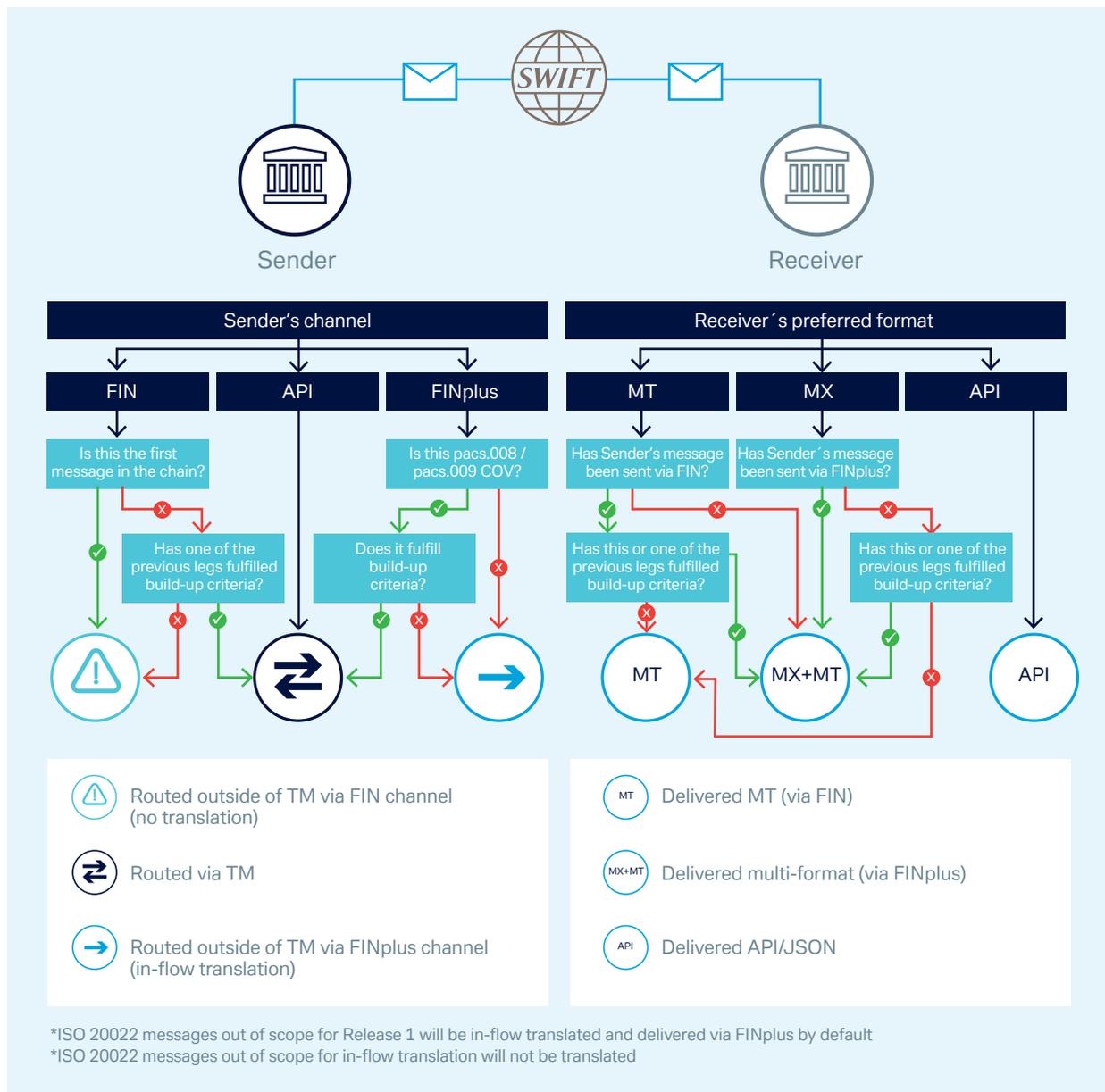


Source: Deutsche Bank

Since not all messages are in the scope of the TM's first release, there will be a variety of options for handling messages during the build-up period – and these will depend on the channel and format chosen by senders and receivers (see Figure 15).

The decision tree below shows that at the start of the migration even if your preferred receiving format is MX (ISO 20022), there might be cases where you will still receive MT messages. On the other hand, if your preferred receiving format is MT, you are likely to receive multi-format messages (ISO 20022 + MT) via FINplus.

Figure 15: Variety of routing options on day one



Source: Deutsche Bank

2.1.5 Implementation requirements

Ahead of the go-live in November 2022, there are several requirements that banks will have to fulfil.

- Banks must upgrade their messaging interface in order to be able to receive ISO 20022 messages via FINplus or the Transaction Manager.
- If banks wish to change the default channel/format, they must configure their preferred format for receiving messages. It is also important they are able to receive multi-format MX messages given that even if bank's preference is to stay on MT, they will by default receive ISO 20022 messages with embedded translation, which they will then have to be able to process. This entails (among other things) the ability to archive the full information and perform Anti-Financial Crime (AFC) due diligence on the ISO 20022 messages.

2.2 CBPR+ Usage Guidelines

The future ISO 20022 messages to be used in the correspondent banking (“many-to-many”) space have been defined by the Cross-Border Payments & Reporting Plus (CBPR+) group in close alignment with the High Value Payments Plus (HVPS+) Usage Guidelines for RTGS operators (in the “one-to-many” space). CBPR+ ISO 20022 messages are set to go-live in August 2022 and can be exchanged as of this date on an optional basis (see section 2.1.4 In-flow translation). The latest version of the CBPR+ Usage Guidelines can be found on [MyStandards](#).⁷

Since the creation of the CBPR+ working group in 2019, Usage Guidelines for various messages have been defined. In April 2021, a finalised set of Usage Guidelines for ISO 20022 messages, which go live in 2022, was published. The remaining messages, subject to implementation in 2023, are currently being defined by the CBPR+.

In addition to the definition of the Usage Guidelines for ISO 20022 messages, CBPR+ has worked on the User Handbook, which sets out use cases for ISO 20022 messages, as well as translation rules for the coexistence period.

2.2.1 Landscape of CBPR+ messages

Before going into the specifics of the individual messages, the reader should become familiar with the use cases to understand how ISO 20022 messages will be used in the correspondent banking space. Figure 16 provides an overview of ISO 20022 messages that form the CBPR+ message landscape, and Figure 17 shows how this would apply to a typical commercial transaction.

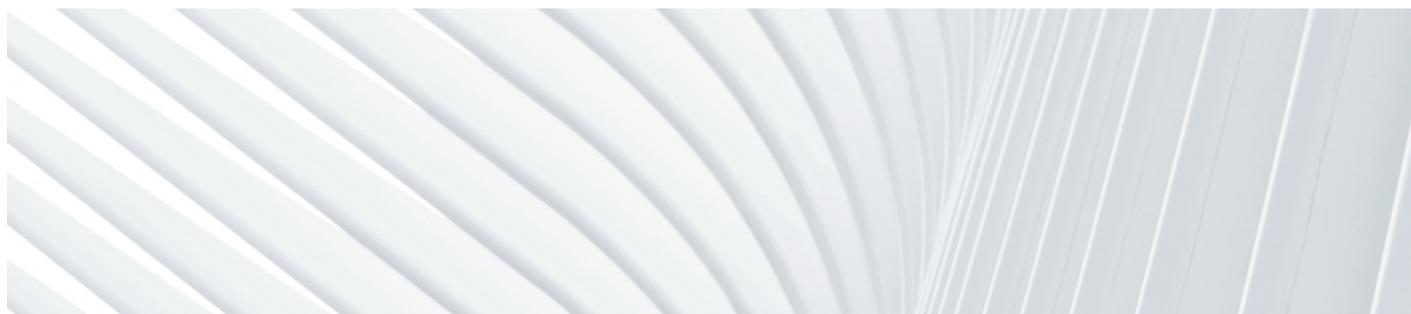


Figure 16: CBPR+ message landscape

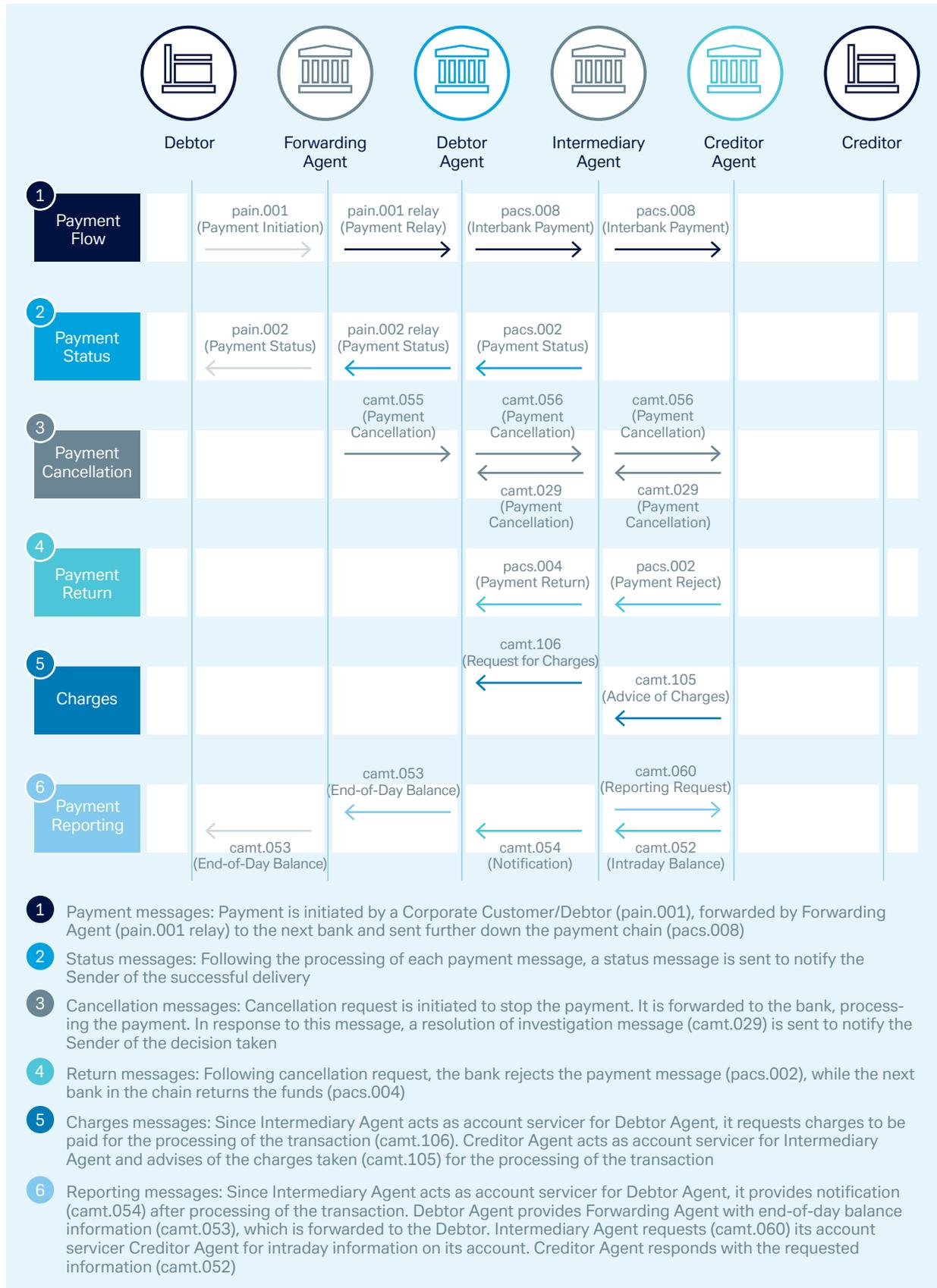
Usage Category	Message Type	Usage Description
Payment Flow Messages	pain.001 relay	Used by a concentrating financial institution (FI) to forward payment initiation messages on behalf of Corporates
	pacs.008	Used for the exchange of customer credit transfers
	pacs.008 STP	Contains more restrictions to data elements than pacs.008 to ensure straight-through processing
	pacs.009	Used for the exchange of FI credit transfers
	pacs.009 COV	Used for the settlement of the cover related to the underlying customer credit transfer (pacs.008)
	pacs.009 ADV	Used to advise FI on the funds to be received via pacs.009
	pacs.010	Used for the exchange of direct debits between FIs
Payment Status Messages	pain.002 relay	Used to provide notification on the status of a transaction to/by the Forwarding Agent
	pacs.002	Used to provide notification on the status of a transaction in the interbank space
Payment Cancellation Messages	camt.055 relay	Used by a concentrating financial institution (FI) to cancel payment initiation
	camt.056	Used for cancellation of interbank messages
	camt.029	Used to inform on the status of the cancellation request
Payment Return Messages	pacs.004	Used to return funds in the interbank space
	pacs.002	Used to reject payment messages in the interbank space
Charges Messages	camt.105	Used to advise charges debited/credited on an account
	camt.106	Used to request payment of charges
Payment Reporting Messages	camt.052	Used to provide intraday information on an account
	camt.053	Used to provide end-of-day information on an account
	camt.054	Used to provide debit/credit notifications
	camt.057	Used to provide notification on funds to receive
	camt.058	Used to cancel notification-to-receive messages (camt.057)
	camt.060	Used to request account reporting information
Cheques Messages	camt.107	Used to advise the details on the issued cheque
	camt.108	Used to request stop payment of the cheque
	camt.109	Used to notify on the status of request-stop-a-payment

Note that pacs.010, camt.055, camt.105, camt.106, camt.058, camt.107, camt.108, camt.109 are not expected to go live before November 2023. The overview does not include Exceptions & Investigations (other than camt.056/camt.029) messages

Source: Deutsche Bank

The below diagram shows how the CBPR+ messages will be applied in a typical commercial transaction – from initiating the payment to the moment it is reported on.

Figure 17: Using CBPR+ messages in a commercial transaction



2.2.2 Core messages

In April 2021, the CBPR+ Usage Guidelines for ISO 20022 messages – set to be introduced in August 2022 – were finalised. The respective Usage Guidelines, as well as translation rules and an updated ISO 20022 message sample library, can be found on [MyStandards](#).⁹

The new collection of ISO 20022 Usage Guidelines accommodates change requests submitted by the community. One such request, for example, concerns identification rules for parties. In response to this change request, the updated CBPR+ Usage Guidelines have added a textual rule that recommends not using BIC and Name & Address at the same time in order to avoid the potential for conflicting data. Textual rules are not network validated – meaning that non-compliance with the rule will not lead to a rejection by the network, however, is likely to lead to delays and investigations. The same rules have been implemented by the HVPS+ group in order to stay aligned with the CBPR+.

If required by the community, formal rules (i.e. network validated) can be added in a future maintenance cycle to avoid conflicting data in instances where the textual rule is not followed. The question of the maintenance cycle, however, remains open. It is yet to be decided whether the CBPR+ message specifications will follow a yearly maintenance cycle – and industry discussions on this topic are ongoing.

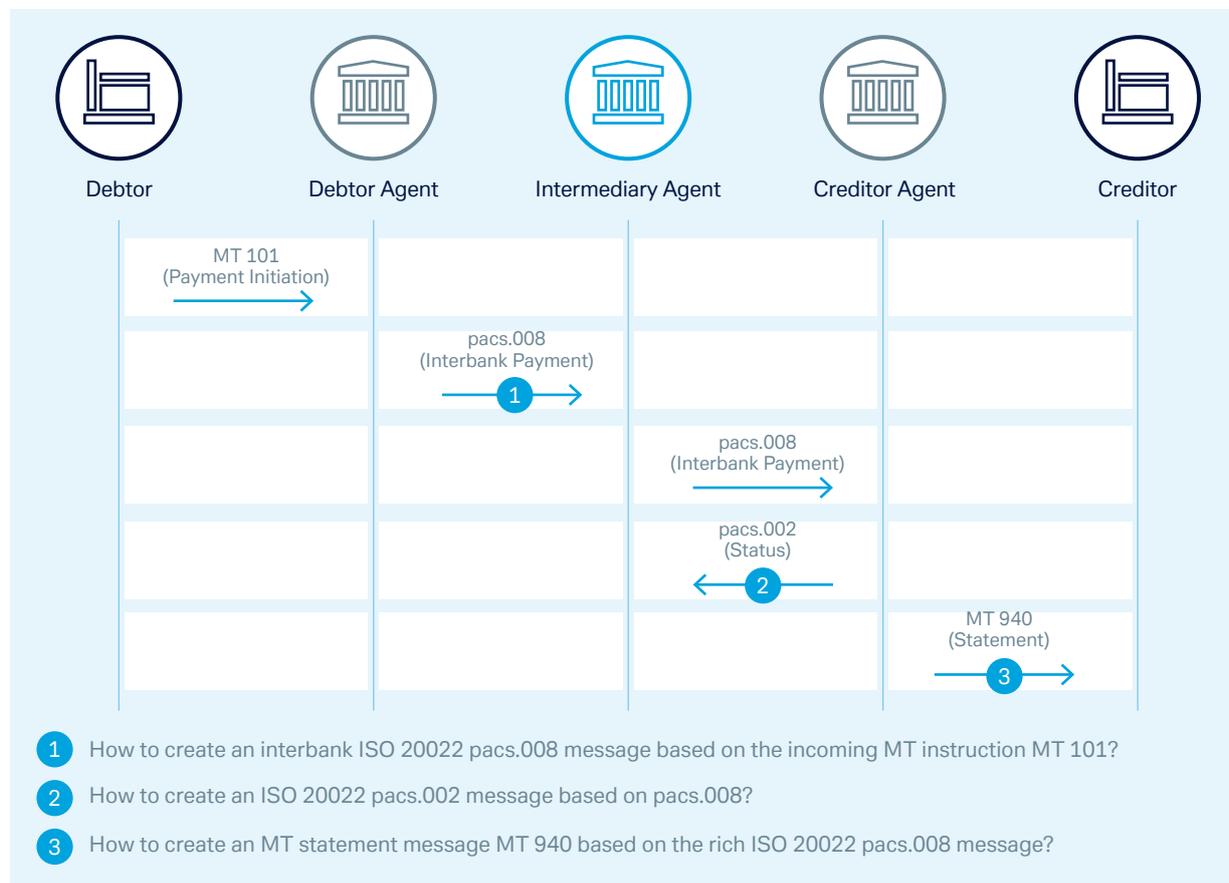


Point of attention: Amendment of CBPR+ translation rules

In July 2021, CBPR+ translation rules were amended for the last time. One of the changes concerned the mapping of ISO 20022 structured addresses to MT unstructured addresses. In particular, the TownLocationName element is now being prioritised over CountrySubDivision. The change has been made for both the party and agent elements.

Given the ISO 20022-MT coexistence period in the correspondent banking space, the CBPR+ has added mapping guidance to its book of work for 2021. Such guidance will focus on best practices for mapping information from one standard to another/into the subsequent processing. The mapping of MT 101 (Payment Initiation) into pacs.008 (Customer Credit Transfer) and the mapping of MT 103 (Customer Credit Transfer) into camt.053 (Statement) will be included in the initial set of guidance.

Figure 18: Use cases for CBPR+ mapping guidance



Source: Deutsche Bank

2.2.3 Exceptions & Investigations messages

Exceptions & Investigations (E&I) messages form a specific part of the financial messages landscape and are usually used beyond normal payment processing – for example, when a payment cannot be processed and requires additional information or correction. The following scenarios are most common – forming approximately 90% of all investigations processes:

- 1) **Request for Cancellation:** a message is sent to request cancellation of the original payment. There are two ISO 20022 messages related to this use case: camt.056 (Request for Cancellation) and camt.029 (Resolution of Investigation). The CBPR+ Usage Guidelines for these messages have been finalised and will go-live in August 2022.
- 2) **Unable to Apply:** a message is sent when a payment instruction cannot be executed due to missing or incorrect information. The respective ISO 20022 message is camt.026 (Unable to Apply).
- 3) **Request to Modify:** a message is sent to request modification of the original payment. The associated ISO 20022 messages would be camt.087 (Request to Modify) and camt.028 (Additional Payment Information).
- 4) **Request for Information:** a message is sent to request additional information on the original payment. The associated ISO 20022 message would be camt.026 (Unable to Apply).
- 5) **Beneficiary Claim Non Receipt:** a message is sent to initiate investigation for missing funds. The respective ISO 20022 message is camt.027 (Claim Non Receipt).

After the initial discussions on the definition of CBPR+ Usage Guidelines for E&I messages, the global community concluded that the future E&I standards must facilitate end-to-end automation, be “light” in design (serve as a basis for messaging, as well as API communication) and be aligned with the pacs. messages (easing the interpretation/eliminating confusion). As a result, the current ISO 20022 E&I messages are no longer considered fit for purpose and will be redesigned. Discussions are ongoing as to whether there will be a new ISO 20022 E&I message for each use case or a generic one that would cover multiple purposes. The newly defined E&I messages are not expected to be introduced before 2023. The only exception to this is the Cancellation Request (camt.056) and Resolution of Investigation (camt.029) messages, which have already been finalised and will be implemented in 2022.

2.2.4 Relay messages

Given that Corporate-to-Bank messages are excluded from the migration, one might assume that Payment Initiation messages are out of scope. This is not the case. For the so called “relay” scenario – whereby a provider of account concentration services acts on behalf of the Debtor and forwards the payment instruction – the CBPR+ has developed Usage Guidelines. These Guidelines are developed in close collaboration with the CGI (Common Global Implementation) group and cover Payment Initiation (pain.001 relay), Payment Status Report (pain.002 relay) and Payment Cancellation Request (camt.055 relay) scenarios.

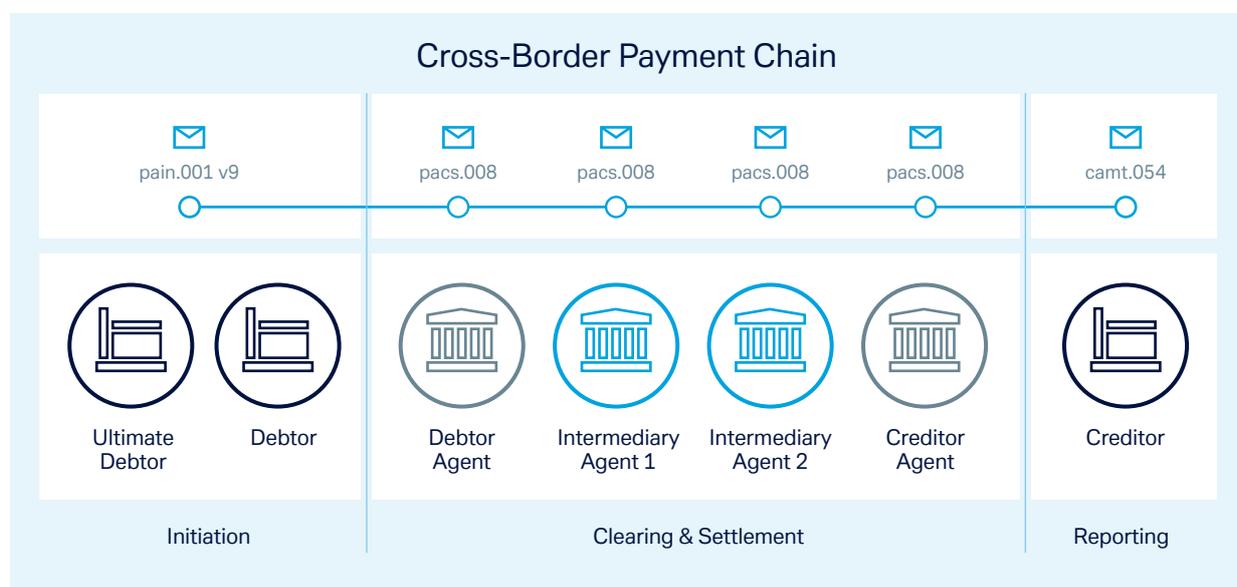


3

ISO 20022 in the end-to-end payment chain

Having outlined the roadmap of ISO 20022 migration in the correspondent banking and RTGS clearing space, we now turn our attention to the future for cross-border payments. Figure 19 shows what the cross-border landscape will look like once ISO 20022 has been adopted, and in the following sections we will explore each stage of the end-to-end payment chain – from the moment a payment is initiated to the moment it is reported upon.

Figure 19: End-to-end high-value cross-border payment chain



Source: Deutsche Bank



3.1 Initiation (pain)

In the Corporate-to-Bank space, the ISO 20022 payment journey begins when a corporate customer initiates a payment instruction – via FileAct or API – using the newly defined pain.001 initiation message (version 9).

In the below example, the Corporate Customer (Ultimate Debtor) has to pay its supplier for the goods purchased. A payment factory acts on behalf of the Ultimate Debtor and initiates a payment, using ISO 20022 payment initiation message pain.001 (version 9).



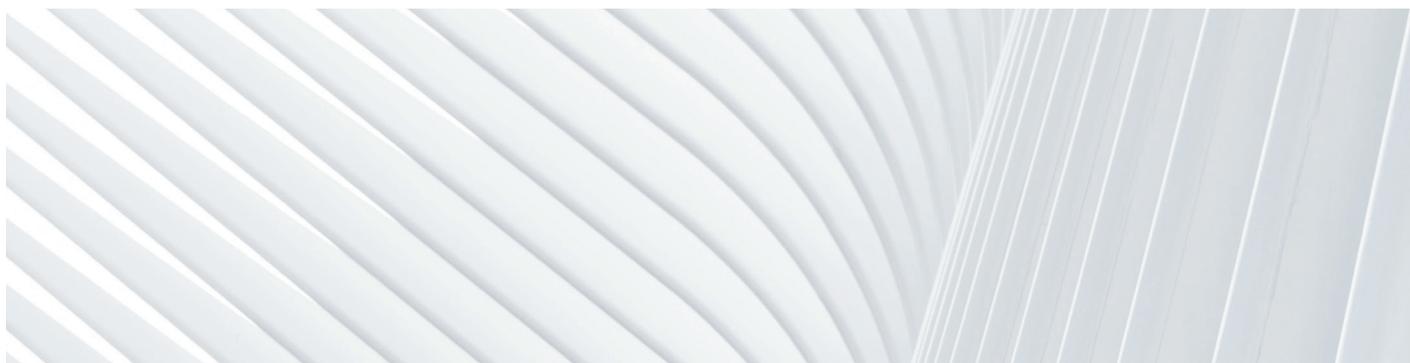
Corporate Customer (Ultimate Debtor) has to pay its supplier for the goods purchased. A payment factory acts on behalf of the Ultimate Debtor and initiates a payment, using ISO 20022 payment initiation message pain.001 (version 9)

Element	Sub-element		Value	
Debtor	Name		Payment Factory Inc.	
	Postal Address	Town Name	Frankfurt	
		Country	DE	
Debtor Account	ID	IBAN	DE12 3456 7890 1234 5678 90	1 Dedicated Identification element for IBAN
Debtor Agent	ID	BICFI	DEUTDEFF	2 End-to-end Identification
Payment Identification	End-to-End ID		123456789	
	UETR		8a562c67-ca16-48ba-b074-65581be6f011	3 New element for UETR
Amount	Instructed Amount		100,000 EUR	
Ultimate Debtor	Name		Ultmt Dbtr Inc.	
	Postal Address	Town Name	Frankfurt	4 Dedicated element for information on Ultimate Parties
		Country	DE	
Creditor Agent	ID	BICFI	ABCDGB2L	
		LEI	123400567AAAAA8A9A00	5 New identification option for Agents (LEI)
Creditor	Name		Sustainability Ltd	
	Postal Address	Street Name	Cuba Avenue	
		Building Number	11	
		Post Code	AA1A 1LD	
		Town Name	London	
Country	GB		6 Structured beneficiary address	
Creditor Account	ID	IBAN	GB12 AAAA 3456 7890 1234 56	
Instruction for Creditor Agent	Code		HOLD	
Purpose	Code		IVPT	
Remittance Information	Structured	Referred Document Information	Type Code	CINV
			Number	12345
			Related Date	2021-10-01

For illustration purposes (extract only)

Compared to the methods used today, which include payment initiation via MT 101 or pain.001 version 3 messages, the new pain.001 version 9 offers some clear advantages:

1. As compared to MT messages, ISO 20022 contains dedicated **account identification element** to easily identify various account types, e.g. IBAN.
2. **End-to-End Identification**, which corporates rely on for reconciliation purposes, will be transported end-to-end, given presence of this element in pain (Payment Initiation), pacs (Clearing & Settlement) and camt (Reporting) messages. Following the introduction of the TM, the End-To-End Identification will also be considered an immutable element – meaning that no party in the chain can change or remove its value.
3. Unlike the pain.001 version 3, pain.001 version 9 contains a **dedicated element for the unique end-to-end transaction reference (UETR)**, which will help to support the gpi for Corporates (g4C) service.
4. As compared to MT messages, ISO 20022 contains dedicated elements for **Ultimate parties** to enable on-behalf payments. Although today´s pain.001 version 3 already contains the Ultimate Debtor element, once the message enters the interbank space, it might become subject to truncation as there is currently no corresponding field in MT interbank messages. The new dedicated element will allow the Ultimate parties to be transported throughout the payment chain (in pain, pacs and camt messages) without truncation.
5. As compared to the pain.001 version 3, pain.001 version 9 contains a **new identification option** for agents (e.g. LEI).
6. As compared to MT messages, ISO 20022 makes it possible to provide **structured party information** in the initiation messages, which can be transported end-to-end without truncation. From November 2025, unstructured party addresses will no longer be accepted in the interbank space. It is, therefore, important for corporates to move to the new pain.001 version 9 as it will enable them to capture address information in a structured format, which can then be passed on to the interbank space unchanged.



3.2 Clearing and Settlement (pacs)

Once the first bank in the payment chain receives the corporate's payment instruction (pain.001 v9), the bank converts it in to an interbank message (pacs.008), which is then forwarded on to the next bank in the chain.



First bank in the payment chain (Debtor Agent) converts its customer's initiation message pain.001 (version 9) into an interbank instruction to be forwarded to the next bank in the chain. For this purpose, an ISO 20022 pacs.008 message is used

Element	Sub-element		Value	
Payment Identification	Instruction ID		111111111	
	End-to-End ID		123456789	
	UETR		8a562c67-ca16-48ba-b074-65581be6f011	
Interbank Settlement Amount	-		100,000 EUR	
Charge Bearer	-		DEBT	
Instructing Agent	ID	BICFI	DEUTDEFF	
	ID	BICFI	BANKGB2L	
Ultimate Debtor	Name		Ultmt Dbtr Inc.	
	Postal Address	Town Name	Frankfurt	
		Country	DE	
Debtor	Name		Payment Factory Inc.	
	Postal Address	Town Name	Frankfurt	
		Country	DE	
Debtor Account	ID	IBAN	DE12 3456 7890 1234 5678 90	
Debtor Agent	ID	BICFI	DEUTDEFF	
Creditor Agent	ID	BICFI	ABCDGB2L	
		LEI	123400567AAAAA8A9A00	
Creditor	Name		Sustainability Ltd	
	Postal Address	Street Name	Cuba Avenue	
		Building Number	11	
		Post Code	AA1A 1LD	
		Town Name	London	
Country	GB			
Creditor Account	ID	IBAN	GB12 AAAA 3456 7890 1234 56	
Instruction for Creditor Agent	Code		HOLD	
Purpose	Code		IVPT	
Remittance Information	Structured	Referred Document Information	Type Code	CINV
			Number	12345
			Related Date	2021-10-01

Ultimate Debtor information is passed on as instructed by the customer

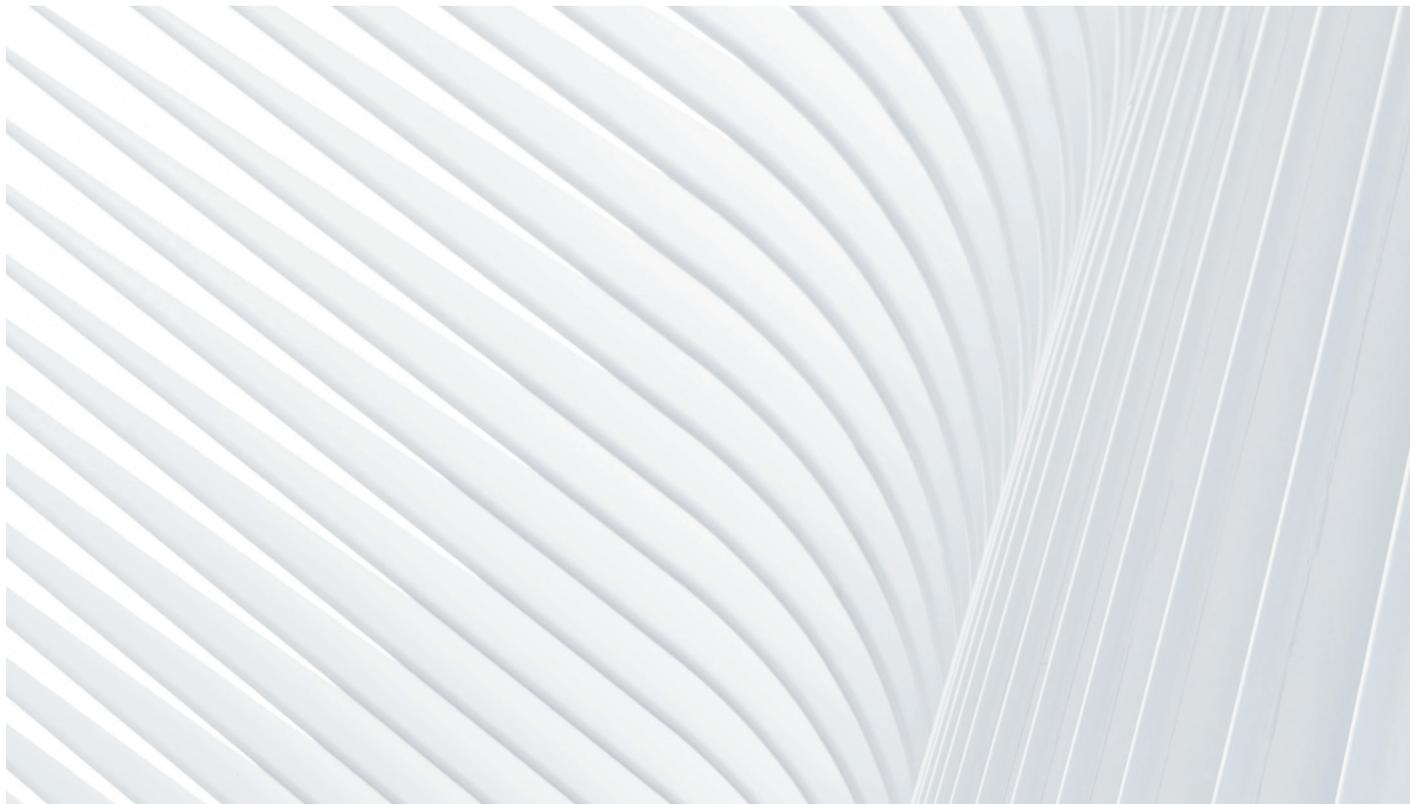
1 Mandatory Debtor / Creditor Agent

2 Dedicated element for instructions

3 Dedicated element to indicate purpose

For illustration purposes (extract only)

1. As compared to MT 103 equivalent (fields 52a Ordering Institution and 57a Account with Institution), ISO 20022 pacs.008 messages mandate the presence of the **Debtor Agent** and **Creditor Agent** to easily identify who services the customer
2. ISO 20022 messages differentiate between **Instruction for Next Agent** and **Instruction for Creditor Agent**. The latter is considered immutable and therefore delivered to the Creditor Agent unchanged.
3. Dedicated **Purpose** element in ISO 20022 messages allows identification of the reason of the payment



3.3 Reporting (camt)

Once the message reaches the last bank in the payment chain (Creditor Agent), it books the payment and notifies its customer (Creditor). The below example shows a camt.054 notification message that is sent to the Creditor to notify that the transaction has been credited.



Corporate Customer (Creditor) receives a notification from its bank (Creditor Agent), showing an entry booked to the Creditor's account. For this purpose an ISO 20022 reporting message camt.054 is used.

Element	Sub-element		Value				
ID	-		999999999				
Account	ID	IBAN	GB12 AAAA 3456 7890 1234 56				
	Entry Reference		1212121212				
Entry	Amount		100.000 EUR				
	Credit Debit Indicator		CRDT				
	Status Code		BOOK				
	Bank Transaction Code	Domain	Code	PMNT			
			Family	Code	RCDT		
				Sub Family Code	XBCT		
	Entry Details	Transaction Details	References	Instruction ID	222222222		
				End-to-End ID	123456789		
				UETR	8a562c67-ca16-48ba-b074-65581be6f011		
			Amount		100.000 EUR		
			Credit Debit Indicator		CRDT		
			Related Parties	Debtor	Name		Payment Factory Inc.
					Postal Address	Town Name	Frankfurt
						Country	DE
				Ultimate Debtor	Name		Ultmt Dbtr Inc.
					Postal Address	Town Name	Frankfurt
	Country	DE					
	Creditor	Name		Sustainability Ltd			
		Postal Address	Street Name	Cuba Avenue			
			Building Number	11			
Post Code			AA1A 1LD				
Town Name			London				
Country	GB						
Purpose		Code	IVPT				
Remittance Information	Structured	Referred Document Information	Type Code	CINV			
			Number	12345			
			Related Date	2021-10-01			

For illustration purposes (extract only)

1. While there are several MT notification messages – MT900 (Debit Notification) and MT910 (Credit Notification) – ISO 20022 only provides **one message, which covers both scenarios:** the credit and debit of a transaction. In order to differentiate between these, the camt.054 message contains a mandatory element known as the “Credit Debit Indicator”.
2. Dedicated structured elements, such as **Structured Remittance Information**, have been transported end-to-end from the payment initiation to reporting (camt). This enables corporate customers to easily reconcile the payment.



4

What's next?

With just over a year to go, it is important to once again reflect on the scale of the project ahead. The migration to ISO 20022 will not impact just a few flows or branches – it is a truly global, end-to-end change, affecting everything from client channels and payment processing to surveillance, core banking and statements. The key to success – as laid out in all three of our previous guides – is “preparation, preparation, preparation”. The message today is the same – and as we edge closer to the finish line, there are several key areas of preparation we would like to highlight:

- **Delivery:** The earlier we are ready for testing, the more prepared we will be as a community when the time comes to switch over. As a result, it is important to be ready for partner bank and industry testing as early as possible. Ideally, all would leverage the MyStandards portal, build out and automate their most critical ISO 20022 use cases, use Market Infrastructure (MI) simulators to ensure they are on the right track, and carry out end-to-end testing with feedback from all parts of their processing chains.
- **Design:** Based on experiences with early deliveries – such as those in Switzerland and Thailand – it is important that ISO 20022 ready components are deployed as soon as possible. This will make the switch as smooth and seamless as possible and help avoid a flurry of big-bang migrations come November 2022.
- **Collaboration:** It is important to establish ISO 20022 expertise by working closely with payment providers, technology/business, operations partners, clients, peers, market infrastructure working groups and SWIFT – creating an environment where participants can learn from one and other. This will help the industry unlock the full benefits of ISO 20022, such as improved straight through processing rates, controls and automation, come November 2022.

In the period remaining before the November 2022 go-live, among the issues likely to come to the fore are the following, which will be explored in greater detail by future editions of this Guide:

- Last mile preparations by the MIs due to migrate in 2022, as well as the CBPR+ community (as we expect that testing will reveal the need for last minutes changes in the Usage Guidelines, testing or migration tasks)
- Exploration on the CBPR+ mapping guidelines for subsequent processing
- Deep dive into the Transaction Manager functionality and rulebook
- Attention to relevant market practices for the coexistence period

We look forward to continuing to share the journey with you.

References

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⁸Ibid

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