

Guide to ISO 20022 exceptions and investigations (E&I) migration and case orchestration

When we published our fifth and final <u>Guide to ISO 20022</u> in September 2022, we stressed that the transformation was far from completed and that the 'after ISO' period would bring plenty more to discuss. This latest guide explores one of the key upcoming deliverables set to define that era: the transformation of exceptions and investigations (E&I) handling.

From November 2025 and continuing through to 2027, the changeover will introduce dedicated ISO 20022 messages for E&I handling – enabling richer data exchange, greater automation, and faster resolution of any issues. The introduction of new messages will be complemented by Swift's Case Orchestrator, designed to manage and ultimately redefine the end-to-end investigation lifecycle.

Realising these benefits will require significant effort and investment. Financial institutions need to modernise legacy infrastructures, equip staff with the skills to operate in the new E&I environment, and coordinate change management across business, operations, and technology functions. This guide explores the technical details of the transformation while providing a practical roadmap to support the journey.

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Foreword

The financial industry is in a state of continuous evolution, and a key driver of that change is our unwavering commitment to using technology to solve the industry's most persistent problems. While we have made significant progress in digitising core payments, a stubborn and costly challenge remains: the inefficient process of payments exceptions and investigations (E&I). For decades, this has been a manual, resource-intensive activity and a source of friction for our clients and our operations alike.

As a technology leader and an engineer at heart, I believe this is our moment to fundamentally transform this reality. The industry-wide migration to the ISO 20022 standard is not just a technical upgrade; it is a mandatory, generational shift. The crucial next phase of this transition – the launch of new messages for E&I – is a strategic imperative for every institution. It demands that we think beyond compliance and view it as a crucial business investment.

The cost of inaction – in terms of resource-intensive manual processes, a fragmented data landscape, and missed opportunities for automation – far outweighs the investment required to lead this change. We are not just adopting a new standard; we are building a new technological foundation for the future of payments.



Joanne Hannaford, CIO & CPO, Corporate Bank, Deutsche Bank



Ciaran Byrne, Global Head of Product and Client Solutions, Institutional Cash Management, Deutsche Bank

Foreword

Building on the foundation that Joanne has described, our ultimate goal is to deliver a superior and more transparent experience for our clients. For them, a smooth, reliable payments process is not a luxury – it is foundational to how they operate their business and manage risk. While the payments landscape has already begun its transition, a critical challenge has remained: the opaque and manual process of managing E&I.

This is precisely the challenge the industry's new ISO 20022 messages for E&I are designed to solve. To truly capitalise on this opportunity, we are working with our industry peers on a complementary solution: the Case Orchestrator. This powerful, centralised capability, developed by Swift in collaboration with the industry, will bring a new level of automation and intelligence to the full lifecycle of investigation cases. As active participants in this initiative, we are focused on ensuring it delivers tangible benefits.

For our clients, this means more than just faster payments and reduced operational risk. It means greater clarity, more precise communication, and the confidence that their transactions are handled with unparalleled speed and efficiency.

To help our clients and the wider industry navigate this complex transition, we have developed this guide as a practical resource. It outlines the future state vision, the ISO 20022 message portfolio, and the key actions needed to implement this change effectively.

This is a journey that we look forward to continuing together.

Executive summary

The E&I handling process has proved a challenge for the financial industry since the 1980s. To this day, it remains one of the most resource-intensive components of payment operations – a result of fragmented processes, inconsistent data structures, and a lack of end-to-end case identification. For end customers, delays in resolving investigations can cause uncertainty, reputational damage, and even operational disruption, particularly when it comes to time-sensitive transactions.

Over the next few years, the industry has a unique opportunity to resolve many of these longstanding and costly inefficiencies. From November 2025, the payments industry begins its ISO 20022 E&I migration, with the launch of a controlled live phase: the first of three phases that are set to be completed by November 2027.

The transition involves introducing dedicated ISO 20022 messages that will support structured, rich data exchanges, enabling higher levels of automation, clearer communication, as well as faster resolutions to upscale the customer experience.

To unlock true end-to-end efficiency, the industry has also developed the Case Orchestrator: a centralised capability – inspired by the Swift Transaction Manager – to oversee the full lifecycle of investigation cases. This approach offers the potential to streamline routing, eliminate unnecessary intermediary steps, and ensure only relevant parties are involved; all while upholding data privacy and access controls.

Though the benefits of the ISO 20022 E&I migration are considerable – from greater automation and clearer communication to faster resolutions and improved customer experience – the scale of the challenge ahead is daunting. This is not simply a technical upgrade or the adoption of new message formats; it requires a fundamental rethink of operating models and workflows. Financial institutions (FIs) will need to modernise legacy infrastructures, commit significant resources, equip staff with the right skills, and – critically – standardise, test, and validate solutions at every stage.

To succeed, this initiative should be treated as more than just another operations project. A smooth transition will require coordinated effort across all functions involved in initiating or handling payment-related inquiries – spanning technology, operations, and business. Institutions aiming to manage this cross-functional change effectively would be well advised to begin preparations at the earliest opportunity.

This guide to ISO 20022 E&I migration and case orchestration is intended as a practical handbook for the industry – a reference point that unpacks the technical details, sets out key milestone dates, and outlines a suggested roadmap for FIs and their clients. We look forward to continuing the conversation as developments progress in the years ahead.

1

The current E&I landscape

The cross-border payments landscape has undergone significant transformation in recent years, driven by a range of initiatives focused on improving the efficiency, transparency and reliability of payment processing. Yet while progress has been made in many areas, others remain underdeveloped – and continue to frustrate customers and impose substantial operational costs on FIs.

One such area is the handling of E&I, where average resolution times of five to eight days and inefficient processes are estimated to cost the financial services industry US\$1.6bn annually. This is largely due to a combination of fragmented processes, free-form data, limited visibility and multiple handoffs across the payment chain.

The following section takes a closer look at today's E&I processes to uncover the key contributors to ongoing inefficiencies.

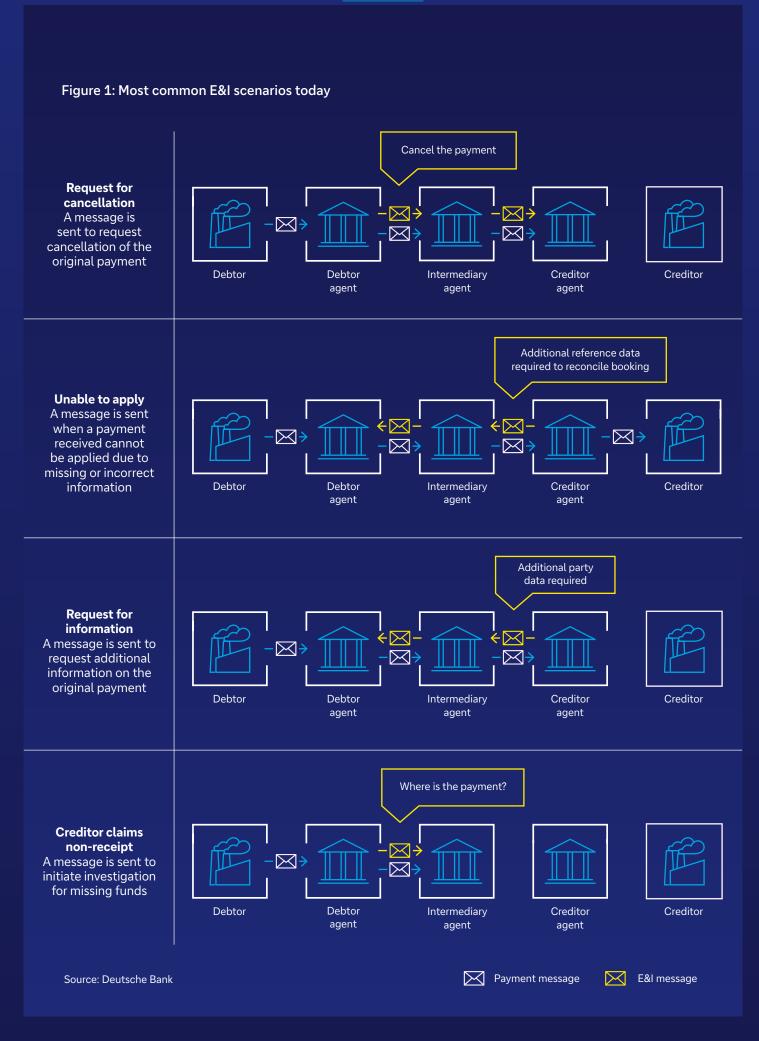
1.1 Today's payment E&I challenge

Payment E&I processes are triggered when a payment cannot be completed or settled as intended – and additional information or a correction is required. When such an exception arises, the payment is flagged for manual review, and an investigation is launched to determine the root cause and what corrective action is needed.

The most common scenarios – forming approximately 90% of all investigations processes – are presented in <u>Figure 1</u>.

While the goal of E&I processes is to resolve the issue and ensure funds are delivered accurately and securely, the process often becomes time-consuming, costly and complex. Among the underlying reasons for this is the current lack of industry-agreed processes.





Most investigations are handled through free-format MT messages (e.g. MT199/299) that are exchanged point-to-point – i.e. the request is passed from one bank to another down the payment chain. This introduces challenges for the following reasons:

- Lack of standardisation. The nature of free-format MT messages allows very limited automation
 if any which translates into greater costs, with no end-to-end identification option and no traceability.
- Inconsistent data structure. The unstructured nature of MT messages makes them difficult
 to interpret or process systematically, increasing the manual workload and the risk of
 miscommunication.
- —No end-to-end case identification. Unlike payments, which can be tracked using the Unique End-to-End Transaction Reference (UETR), investigation cases lack a common identifier across institutions. This absence of traceability makes it difficult to monitor and coordinate cases across the payment chain.
- —No centralised tooling for case tracking. There is currently no infrastructure or shared platform that provides visibility into the lifecycle or status of investigation cases, further limiting transparency and control.
- —**Use of inefficient communication channels.** In many cases, investigations are still handled through manual methods such as email or phone calls. These informal channels further increase complexity, reduce auditability, and obscure visibility into case progress.

Figure 2 provides an overview of the MT messages currently used for E&I handling. Among these, the free-format MT199/299 messages remain the most widely adopted, despite their limitations.

Figure 2: Current MT E&I portfolio for payments

MT Message Type	Definition	Usage	Format
MT192/292	Request for cancellation	' I imite	
MT195/295	A message is sent to request information or clarification relating to the underlying payment		Limited structure
MT196/296	Answers A message is sent to provide a response to a previous query Limited structure		Limited structure
MT199/299	99 Free-format A message is sent to exchange information for which another message type is not applicable		Unstructured

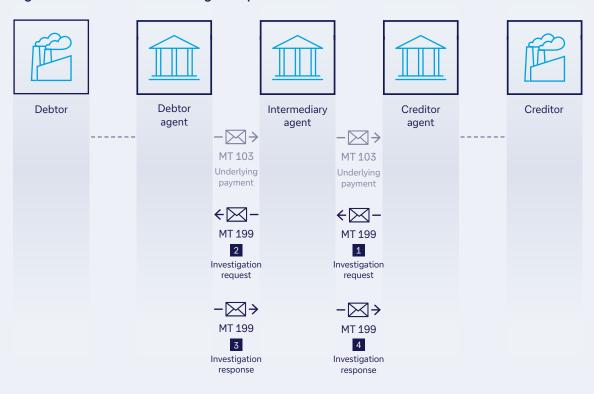
A typical E&I process in action

Take the case of a corporate client in the United States – the debtor – who sends a cross-border payment to a supplier in Germany (see Figure 3). The payment flows from the corporate's bank (the debtor agent), through a correspondent bank (intermediary agent), and on to the supplier's bank (the creditor agent), before reaching the supplier.

However, when the payment arrives, the supplier's bank flags that a required detail is missing – for example, remittance information – and is unable to apply the funds. It sends a free-format MT199 message to the correspondent bank, requesting clarification. With no context or authority to resolve the issue, the correspondent forwards the query to the corporate's bank, which then contacts the corporate client for the missing information.

The challenge is that each bank in the chain must manually review and pass on the message, even if they add no value to the resolution. This back-and-forth can take days – creating delays, added costs, and poor customer experience.

Figure 3: The traditional investigation process



Note: MT199 is typically used to exchange information related to a previous customer credit transfer message, such as an MT103. In contrast, MT299 is generally used in the context of financial institution credit transfers, for example, MT202.

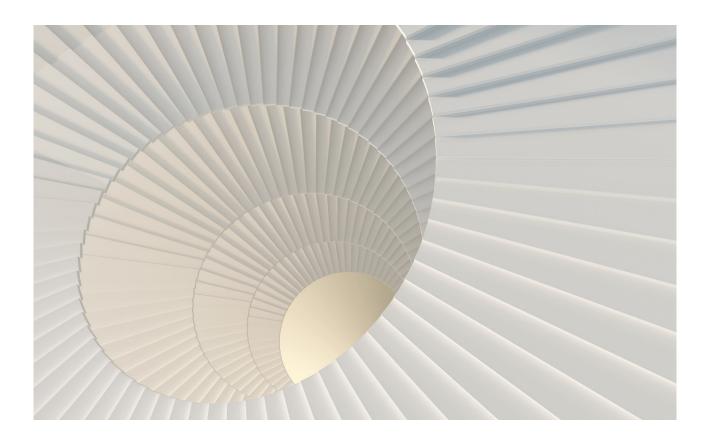
1.2 The impact of E&I

The investigation process has regularly posed a challenge for the financial industry since the 1980s, remaining one of the most resource-intensive components of payment operations. Fragmented processes and prolonged resolution times create significant workload burdens across multiple teams. These inefficiencies divert skilled resources away from higher-value, revenue-generating activities.

For end customers, delays in resolving investigations can cause uncertainty, reputational damage, or operational disruption – particularly in time-sensitive transactions. According to Swift research, industry players report a 3%+ customer attrition rate due to poor E&I experiences.²

These challenges have not gone unnoticed. The industry has made several efforts to introduce greater standardisation and innovation in the handling of investigation cases. Initiatives such as the gpi Stop & Recall Payment (SRP) launched by Swift in 2018, or the gpi Case Resolution launched the following year, introduced rulebooks and centralised handling mechanisms for addressing specific scenarios. However, while well intentioned, these efforts only addressed a limited number of use cases and failed to gain the critical mass required for broader impact. In part, this was due to their voluntary nature, as well as budgetary priorities across the industry.

Streamlining this process offers significant potential to reduce costs and improve client satisfaction. Moreover, the ongoing global migration of cross-border payments to ISO 20022 – a common global language for payment data, enabling faster processing and improved reconciliation – creates a timely and strategic opportunity to revisit and resolve longstanding inefficiencies in E&I processing.



2

Future state vision

With the global migration of cross-border payments to ISO 20022 the financial services industry has taken the opportunity to reimagine E&I processing. Rather than retrofitting legacy practices, the community has committed to designing a new, standards-based framework that reflects today's technological capabilities and data requirements.

A key pillar of this transformation is the introduction of dedicated ISO 20022 messages tailored specifically for E&I scenarios. These messages are designed to support structured, rich data exchanges. This will allow for higher levels of automation, clearer communication, and better alignment with specific use cases – ultimately reducing ambiguity and manual intervention.

In parallel, drawing on the operational success and model of the Swift Transaction Manager – a central orchestration layer launched in May 2023 that maintains a single, authoritative transaction record to manage and validate cross-border payments end to end – the industry has proposed the development of a centralised case-handling capability: the Case Orchestrator.³

The Case Orchestrator would also serve as a central orchestration layer, managing the end-to-end lifecycle of investigation cases, based on agreed industry rules. It would streamline routing, reduce unnecessary intermediary steps, and ensure that only relevant parties are involved – while respecting data privacy and access control.

By combining modern message design with centralised orchestration, the future vision aims to significantly reduce the volume of investigations, while enabling faster, more efficient resolution of those remaining. This new approach is expected to improve operational efficiency, lower costs, and enhance the overall customer experience.



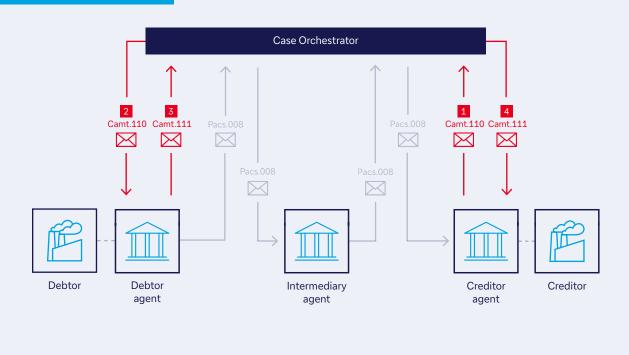
The future E&I process in action

Under the proposed new model (*see* Figure 4), the Case Orchestrator acts as a central orchestration layer. Instead of routing investigations through every party in the chain, it uses smart routing to direct queries straight to the bank best positioned to resolve the issue.

In the example below, the creditor agent identifies a problem and raises a camt.110 message. This is sent to the Case Orchestrator, which determines that the debtor agent is the appropriate party to respond and routes the message directly to them. The debtor agent sends back a response using a camt.111 message, which the Case Orchestrator then forwards to the creditor agent.

Figure 4: Future investigations

Orchestrated investigations



2.1 Redesigning ISO 20022 E&I messages

The ISO 20022 portfolio includes a set of messages designed to support E&I handling, as illustrated in Figure 5. However, these messages – originally developed in the early 2000s – have seen only limited industry adoption. Designed at a time when both technology and operational requirements were significantly different, they reflect a user-centric model focused on manual intervention rather than the automated, machine-to-machine communication that characterises today's payment environment. In response to these limitations, the global community reached consensus that future standards for E&I handling must be redefined.

Figure 5: Legacy ISO 20022 E&I messages

ISO 20022 message	Supported use case	
camt.026	Unable to apply	
camt.027	Claim non receipt Additional payment information Cancel case assignment Other investigation	
camt.028		
camt.032		
camt.035		
camt.036	Debit authorisation response	
camt.037	Debit authorisation request	
camt.038	Case status report request	
camt.039 Case status report		
camt.087	Request to modify payment	

Source: Deutsche Bank

The new standards are expected to support full end-to-end automation, feature an adaptable design, and serve as a foundation for both traditional message-based and API-based communication. Alignment with the existing ISO 20022 pacs message family was also a key design consideration, helping to ensure consistency, interoperability and clarity across the payment lifecycle. As a result, the legacy message set was deemed no longer fit for purpose and has been redesigned from the ground up to meet modern operational, technological and business needs.

The newly defined ISO 20022 'base' messages for E&I – the Investigation Request Message camt.110 and the Investigation Response Message camt.111 – were developed to reflect the updated requirements. These messages introduce several key innovations designed to streamline communication, reduce manual handling and improve traceability across the case lifecycle:

- 1. End-to-End Investigation Reference (EIR). Each investigation is assigned a unique end-to-end reference, enabling all related information exchanges to be linked and tracked consistently across all parties. This ensures complete visibility and traceability throughout the lifecycle of the case supporting transparency, auditability, and effective case orchestration.
- 2. Structured Investigation Type/Subtype. Unlike the original ISO 20022 E&I messages, the new camt.110 and camt.111 messages follow a structured question-and-answer model. This model allows for a broad range of investigation types and subtypes within a unified message format (see Figure 6). By embedding specific codes, the messages clearly identify the nature of the investigation, enabling faster and more accurate internal routing.

Figure 6: Investigation types/subtypes

Туре	Subtype	Name	Description	
CCNR	None	Creditor claims non-receipt	Creditor claims non-receipt of payment	
CONR	None	Cover creditor claims non-receipt	Cover creditor claims non-receipt of cover or settlement	
UTAP	None	Unable to apply by creditor	Creditor claims non-receipt of payment Cover creditor claims non-receipt of cover of settlement A booked entry cannot be applied by the creditor A payment cannot be executed by an agent Investigation relates to sanctions Investigation relates to financial crime compliance Investigation relates to fraud Investigation relates to funds wire transfer regulation Investigation relates to anti-money laundering Other request type Debit authorisation on an entry is requested	
	UTEX	Request for information – unable to execute	A payment cannot be executed by an agent	
	SANC	Request for information – sanctions	Investigation relates to sanctions	
	FCCI	Request for information – financial crime compliance		
RQFI	FRAD	Request for information – fraud	Investigation relates to fraud	
	FWTR	Request for information – funds wire transfer regulation		
	AMLI	Request for information – anti-money laundering	,	
	None	Other	Other request type	
	RQDA*	Request debit authorisation	Debit authorisation on an entry is requested	
OTHR	RQVA*	Request value date adjustment	Revaluation of an entry is requested	
	RQUF*	Request use of funds	Use of funds as an entry is requested	
	RQCH*	Request related to charges	Investigation relating to charges that have been taken or requested	

^{*} Due to low volume observed on the network, these investigation types will be handled as part of the OTHR investigation type in the first release



Investigation types that were originally envisioned as distinct messages – such as Request Debit Authorisation (RQDA), Request Value Adjustment (RQVA), Request Use of Funds (RQUF), and Request Related To Charges (RQCH) – will initially be grouped under a general category 'Other' (OTHR) for the first release of the Case Orchestrator. However, differentiation will still be possible via the 'subtype' data element – allowing flexibility while maintaining a clean message structure. These cases may be re-evaluated in the future for possible separation into distinct investigation types.

Point of attention: RQDA

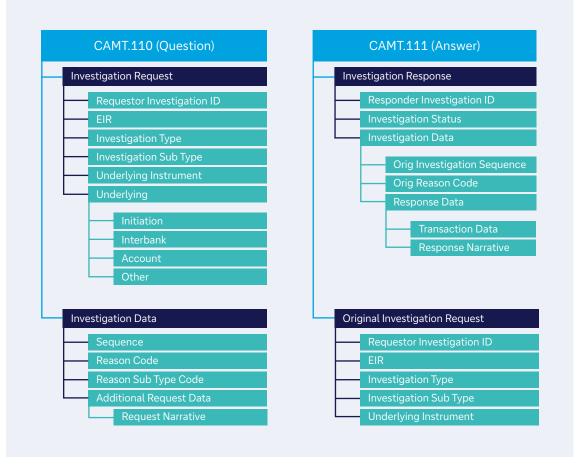


The RQDA (sub)type involves a structured exchange using a camt.110 to request debit authorisation, and a camt.111 to respond, for example, by granting the requested authorisation.

Note that camt.111 cannot be sent proactively – it must follow a prior camt.110. Only the account-servicing institution may initiate the request. If an account owner cannot apply a payment, they must return it using a pacs.004, rather than sending unsolicited debit authority.

3. **Investigation Data.** The new message structure includes a dedicated investigations data block, which captures the core details of the request. It specifies both the reason for the inquiry and the data to be investigated, using either predefined codes or free-text, as illustrated in <u>Figure 7</u>.

Figure 7: E&I message extract



Point of attention: CPMI ISO 20022 data harmonisation requirements



CPMI minimum data requirement #1 recommends the use of ISO 20022 messages that are appropriately aligned with the relevant business function. Market infrastructures that have implemented earlier ISO 20022 messages for E&I – such as camt.026 – are encouraged to transition to the updated message set (camt.110/camt.111) before the end of 2027 to align with these harmonisation goals.

Where E&I is handled outside the market infrastructure (e.g. via Swift), adoption of the new ISO 20022 messages is **not expected** unless explicitly driven by market demand.

2.2 Case orchestration

The implementation of structured ISO 20022 messages for E&I is expected to significantly enhance processing efficiency through standardised formatting, and the use of EIR and clearly defined codes. However, message structure alone is not sufficient to fully streamline industry-wide handling.

To enable true end-to-end efficiency, the industry has called for the introduction of centralised case orchestration – a function that will be delivered by Swift, building on the successful model of the Transaction Manager and leveraging insights from the Tracker, the central Swift service that records, monitors, and distributes status information related to payments and investigations. Formally referred to as the 'gpi Tracker', its scope has been expanded beyond payment tracking to include case orchestration and associated services. All ISO 20022 E&I messages and related notifications are exchanged via the Tracker, ensuring consistent visibility and control across the transaction lifecycle.

Under this model, E&I messages will be directed to a central orchestration engine for data enrichment and smart routing, allowing cases to be sent directly to the party best positioned to resolve them. In many scenarios, this will eliminate the need for intermediaries to act as passive relays, reducing unnecessary workload and delays.

For example, an Unable to Apply Payment (UTAP) request can be routed directly from the creditor agent to the debtor agent, bypassing intermediaries that have no role in resolution. This reduces friction, avoids redundant communication and accelerates time to resolution. In specific use cases, the central engine will also generate an automatic response to investigation requests, thus helping to reduce manual workload (see Section 3.2.2.2).

The orchestration framework is governed by an industry-agreed rulebook, which defines how messages should be structured, routed and processed. This rulebook is a foundational component of the solution and should be carefully understood and adhered to in implementation efforts. This rulebook is available to registered users via the Swift platform, and a link to the document is included in the reference section of this guide.

Point of attention: Message addressing from November 2026



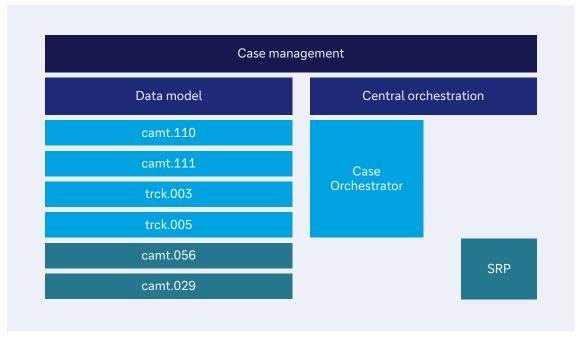
As of November 2026, all ISO 20022 E&I messages – camt.110, camt.111, camt.056, camt.029, as well as trck.003 and trck.005 – must be exchanged via the Case Orchestrator BIC (TRCKCHZZ), regardless of whether the case qualifies for smart routing. This represents a change in practice for cancellation messages (camt.056 and camt.029), which are currently exchanged either bilaterally (e.g. under Cross-Border Payments and Reporting Plus (CBPR+)) or centrally under gpi SRP. Unlike the former gpi Services, which operated on an opt-in basis, this mandated model establishes the Case Orchestrator as the new normal across the ecosystem, and the 'gpi' prefix is therefore removed from both the Tracker BIC and the Stop & Recall service. Going forward, all ISO 20022 cancellation messages must be routed through the orchestrator, and the Business Application Header (BAH) must reflect TRCKCHZZ as the sender (BAH From) or receiver (BAH To) accordingly.

3

Technical deep dive

The following chapter provides a detailed overview of the two key components driving the transformation in E&I handling: the newly defined ISO 20022 messages and the central orchestration layer (see Figure 8).

Figure 8: The E&I framework



Source: Deutsche Bank

3.1 Message portfolio

The E&I transformation introduces a new set of ISO 20022 messages, as illustrated in <u>Figure 9</u>. This includes the following messages:

-Core E&I messages:

- -camt.110 Initiates an investigation request
- -camt.111 Responds to an investigation request

-Cancellation messages:

- -camt.056 Requests the cancellation or recall of a payment
- -camt.029 Provides the response to a cancellation request

While the core E&I messages were designed from the outset to work with the Case Orchestrator, the cancellation messages were introduced earlier as part of the CBPR+ message portfolio. As a result, the camt.056 and camt.029 messages will need to be adapted to follow the same logic – and are not being formally incorporated into the core E&I message portfolio. As part of this transition, they will, however, be orchestrated through the same framework that governs E&I processing and will operate in line with the logic used for SRP services.

A key change is that participants will need to update message addressing: instead of routing messages directly to the next agent in the payment chain, all messages must now be sent to the central orchestration engine (Case Orchestrator), which is accessible via the Tracker BIC (TRCKCHZZ). This enables the orchestration layer to apply smart routing and centralised handling logic to cancellation cases as well.

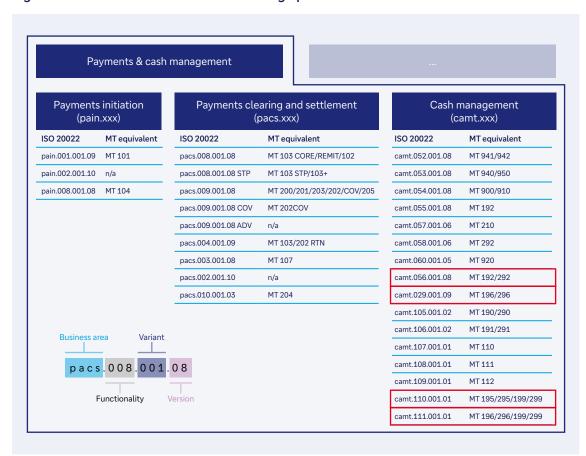


Figure 9: CBPR+ SR 2024 ISO 20022 message portfolio

Source: Deutsche Bank

In addition, the following notification messages will be introduced to deliver real-time updates on key actions taken during the investigation process – such as confirmation of delivery or status changes:

- -trck.003 Tracker Alert Notification
- -trck.005 Tracker Investigation Status Notification

Figure 10: E&I messages – a deep dive

ISO 20022 Message	Name	Description	Example
camt.110	Investigation Request	The InvestigationRequest message is sent by an agent to Case Orchestrator to create an investigation or request a status update on an open investigation.	An agent initiates an investigation request.
camt.111	Investigation Response	The InvestigationResponse message is sent by an agent to Case Orchestrator to provide a response or status update on an investigation.	An agent responds to an investigation request.
camt.056	Payment Cancellation Request	The FIToFIPaymentCancellationRequest message is sent by a case creator/case assigner to a case assignee. This message is used to request the cancellation of an original payment instruction.	An agent initiates a request to cancel a previously sent payment.
camt.029	Resolution of Investigation	The ResolutionOfInvestigation message is sent by a case assignee to a case creator/case assigner. This message is used to inform of the resolution of a case.	An agent responds to a cancellation request.
trck.003	Tracker Alert Notification	The TrackerAlertNotification message is sent by Case Orchestrator to a party involved in the business transaction that tried to update the status of this transaction to alert that party on an issue with the update.	The Case Orchestrator issues an error notification to indicate a validation failure.
trck.005	Tracker Investigation Status Notification	The TrackerInvestigationStatusNotification message is sent by Case Orchestrator to a party involved in the business transaction to report on the status of an investigation request they have sent or received for the transaction.	The Case Orchestrator issues status notifications to communicate key updates, such as the assignment of a responder, the successful delivery of a message to a recipient, the availability of an escalation request to the responder, or the generation of an automated status reminder.

3.1.1 New core E&I messages

The core investigation request and response messages – camt.110 and camt.111 – are designed to be exchanged in a sequential, request-response pattern. A camt.111 message must always be issued in response to a preceding camt.110 – it cannot be sent independently. Conversely, a camt.110 shall never be used as a notification; it is strictly a request message for which a camt.111 response is always expected.

The following points summarise the key characteristics of the messages structure:

3.1.1.1 Message structure

Similar to ISO 20022 messages used in the payments domain, E&I messages consist of two main parts:

- **−BAH.** The BAH is essential for message routing and orchestration.
- -Payload composition. The payload is structured into two main components:
 - —**Investigation data/investigation response.** Contains the details of the inquiry, including the questions being raised.
 - —Investigation request component/original investigation request component. Holds key references and contextual data needed to initiate or respond to the case.

Point of attention: Usage of the EIR

The EIR is a mandatory universally unique identifier (UUID v4). It is used to link all messages related to a specific investigation and concerning an underlying transaction or account-related activity (e.g. a payment or a statement entry). It may be generated either by the requestor or by the Swift Case Orchestrator (e.g. when using GUI).

To ensure proper orchestration, all messages in the same investigation thread – both requests and response – must carry the same EIR.

Like the UETR in payments, the EIR must not be reused across unrelated investigations. However, it may be reused across related cases tied to the same underlying value. For example, a CCNR (CreditorClaimNonReceipt) request may lead to a follow-up CONR (CoverCreditorClaimNon-Receipt) if funds are later found to be stuck in the cover leg.

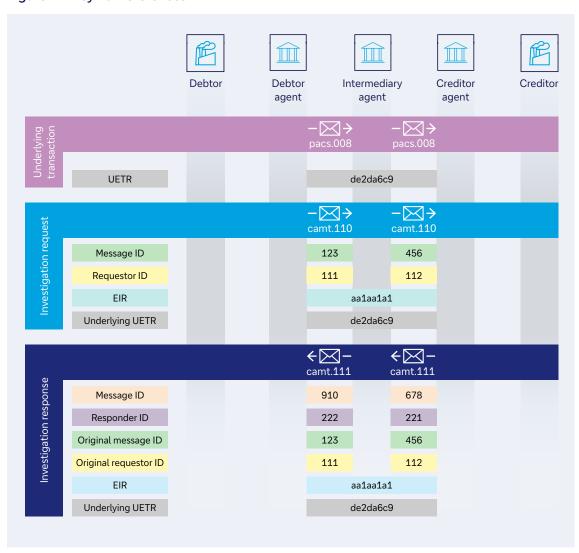
3.1.1.2 References

Investigation messages use a set of structured references (see <u>Figure 11</u>), each serving a specific purpose in the end-to-end-process:

- -Message Identification. A point-to-point reference used to uniquely identify the message itself.
- -Requestor Investigation Identification. A unique reference assigned by the requestor to identify the investigation case from their perspective.

- -Responder Investigation Identification. A unique reference assigned by the responder to track the investigation case within their system.
- **–EIR.** A globally unique reference that links all messages and responses related to a single investigation case across the entire chain.
- —**Underlying UETR.** The UETR of the original payment, enabling linkage between the investigation and the payment transaction.

Figure 11: Key E&I references



Point of attention: Inclusion of EIR in additional messages

To support cross-functional traceability and improve reconciliation, future ISO 20022 message upgrades will include the EIR in additional message types. This will enable investigation cases to be consistently referenced across related message portfolios and subsequent processes.

Examples of messages expected to include the EIR in future releases include: camt.105, camt.106, camt.056, camt.029, trck.003 and pacs.004.

3.1.1.3 Actions

While the primary purpose of the camt.110 message is to initiate an investigation request or query, the message structure also supports a set of additional actions through a dedicated 'Request Action' component. This component contains structured options that enable specific follow-up functionalities within the same message framework:

- -RQCL (Request Investigation Closure). Used to cancel or formally close an ongoing investigation.
- RQST (Request Investigation Status). Triggers a status inquiry, functioning as a status reminder.
- -RQOB (Request Objection). Indicates that the requester disagrees with the response received in a previous camt.111 message.

Point of attention: Clarification on actions



Certain actions are not permitted for specific investigation types. For example, RQOB (Objection) is not applicable to the RQFI investigation types. In such cases, if further clarification is needed, a new camt.110 follow-up should be submitted instead.



3.1.1.4 Codes

A core advantage of the ISO 20022 standard lies in its use of structured, coded data elements, which reduce ambiguity and enable higher levels of automation, for example in the handling of anti-money laundering (AML) queries (see Figure 12). This principle is also central to E&I messages, where several key elements can be populated using predefined codes to support efficient case handling:

—Investigation Type. Identifies the nature of the investigations, enabling automated routing to the relevant internal teams. For example, queries related to CCNR may be directed to a different team than those concerning sanctions screening.

Point of attention: UTAP vs UTEX investigation type



While most use cases align with current practices across the network, it is necessary to distinguish between two specific scenarios: Unable to Apply (UTAP) and Unable to Execute (UTEX). The UTAP message is intended exclusively for post-booking situations, where the payment has been credited to the creditor's account but cannot be applied – typically due to missing remittance information. In contrast, the UTEX message is used in the pre-booking stage, when an agent is unable to process the payment and requires additional information before execution can proceed.

- —Underlying Instrument. Specifies the type of business context or object the investigation relates to, such as a cross-border payment or a statement entry. This distinction also impacts message population; for example, a UETR is mandatory for cross-border payments but not required for other instruments.
- —Investigation Reason. ISO 20022 E&I messages support both free-format narrative (similar to the current FIN MTx99 logic) and structured, coded formats for specifying the reason behind an inquiry and for providing a corresponding response. While a requestor may use narrative text for flexibility, the use of standardised ISO 20022 code sets or embedded structured elements is strongly encouraged, as it enables automation and reduces ambiguity. For example, a request for the debtor's date and place of birth can be expressed either in free text or as a structured ISO 20022 data within the message. A specific list of reason and sub-reason codes has been defined per Investigation Type (e.g. RQFI_SANC), and Case Management validates not only the presence of these codes but also their permitted combination.

3.1.2 Cancellation messages

Since the start of the ISO 20022 and FIN MT coexistence period for cross-border payments in March 2023, two distinct approaches have been used to handle cancellation requests:

1. Sequential exchange (CBPR+) model. In this approach, cancellation requests are relayed step-by-step along the payment chain. A camt.056 (cancellation request) and its corresponding camt.029 (response) are exchanged between each pair of agents in sequence. Messages are formatted in line with CBPR+ usage guidelines.

Figure 12: Handling of AML queries: today vs tomorrow

Today

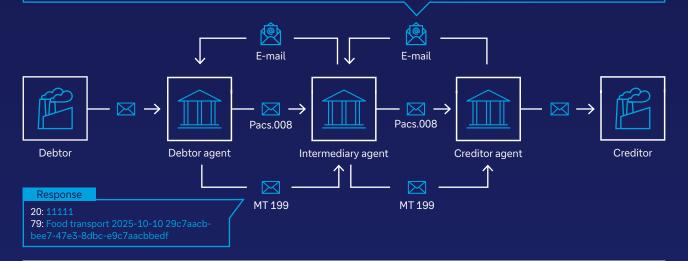
Request

UETR: 29c7aacb-bee7-47e3-8dbc-e9c7aacbbedf

Dear Sir/Madam.

Regarding Anti-Money Laundering monitoring, we detected transaction for which a review was conducted on the parties involved as well as on the transaction. Since our research did not identify all information required, we kindly ask you to provide us with additional information to understand the business purpose of the transaction and activities of your customer.

- What is the nature of the business in which your customer is engaged?
- Please provide the birth date of the ordering customer



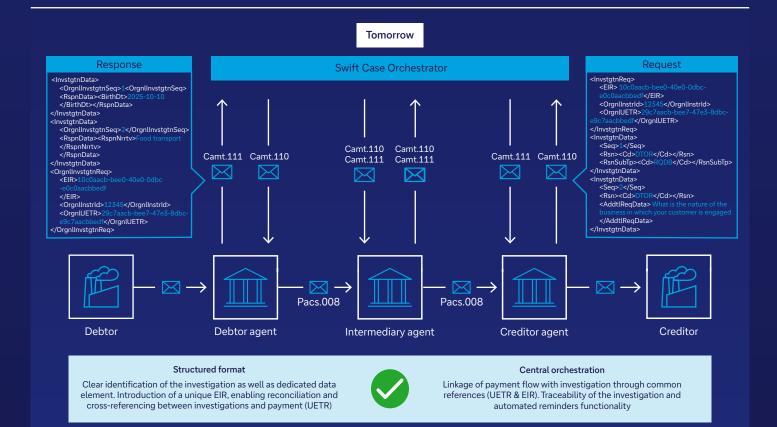
Lack of standardisation

No standard processes established. Minimal requests received via Swift – majority is handled via e-mail. In addition, no tracking is available.



Unstructured format

Free text messages do not allow for automated categorisation and routing. Each bank in the chain is likely to rely on an operator to 'read the message' to ensure further appropriate action.



Note: Data element path has been shortened for illustration purposes. Code description: DTOR=Debtor, RQDB= RequestDateOfBirth

2. Centralised orchestration (SRP) model. Under the SRP service (only applicable to customer credit transfers – pacs.008), camt.056 messages are sent to the Tracker, which then routes the messages directly to the most relevant party for resolution. This model leverages central orchestration and follows the rules defined in the Stop and Recall Rulebook.

With the roll-out of the new Case Orchestrator, the handling of cancellation messages will be fully standardised – eliminating the current distinction between CBPR+ and SRP processes.

Following the E&I migration, all camt.056 and camt.029 messages – regardless of whether they relate to a customer credit transfer (pacs.008) or a financial institutions credit transfer (pacs.009) – will be routed through the central orchestrator (Tracker BIC: TRCKCHZZ) for processing. The corresponding usage guidelines will be updated to reflect this new model, as illustrated in Figure 13.

Figure 13: Key differences between CBPR+ vs SRP

Data element	CBPR+ v8	SRP	Future orchestrated camt.056
BAH <from> or <to></to></from>	Addressing towards the next agent in the chain	Addressing towards the Tracker	Addressing towards the Tracker
Cancellation Reason Information <additional Information></additional 	mation Two occurrences of 105-character text allowed Two occurrences of with 'INDM' code Values 'INDM', 'RQS allowed if <reason amos="" during<="" frad="" td=""><td>Values 'INDM', 'RQST', 'RQCL', and free text allowed if <reason code=""> data element = FRAD, AM09, DUPL</reason></td></reason>		Values 'INDM', 'RQST', 'RQCL', and free text allowed if <reason code=""> data element = FRAD, AM09, DUPL</reason>
Cancellation Reason Information <reason Code></reason 	Embedded codes, incl. 'NARR'	NARR (narrative) Codes to be supported by NARR	
<request action=""> (to request a status on the cancellation request)</request>	tatus ation Not available Not available Not available At a later stage Action> block		In the first release, usage via code word 'RQST' as part of <additional information="">. At a later stage, introduction of <request action=""> block is planned in line with camt.110 messages</request></additional>
<request action=""> (to request cancellation/ closure of a cancellation request)</request>	Not available	Not available	In the first release, usage via code word 'RQCL' as part of <additional information="">. At a later stage, introduction of <request action=""> block is planned in line with camt.110 messages</request></additional>
NARR=Narrative FRAD=Fraudulent Origin			

Source: Deutsche Bank

3.1.3 Notification messages

As part of the Case Orchestrator lifecycle, new notification messages (see <u>Figure 14</u>) will be introduced to keep participants informed of key events and system-driven actions throughout the case process. These include:

 -trck.003 (tracker alert notification). Sent to the requestor or responder to indicate that a submitted message has failed validation (e.g. due to incorrect formatting or missing data)

- —trck.005 (tracker investigation status notification). Provides the requestor with real-time updates on the status of the investigation, for case management as well as SRP. The notification covers the following status acknowledgments:
 - -S000. SRP request was valid and accepted by the Case Orchestrator (SRP).
 - -S001. UETR placed on network cancellation list (SRP).
 - -**S002.** Network stop executed on the UETR.
 - -S003. SRP request assigned to assignee (SRP).
 - -**S004.** SRP request delivered to assignee (network ack) (SRP).
 - -ASGN. Investigation request assigned to responder (Case).
 - -DTRP. Investigation request delivered to responder (Case).
 - -ERMD. Reminder sent by assignee/requester (Case and SRP). May be followed by a DTRP status.
 - -ARMD. Reminder sent by assignee/requestor (Case and SRP). May be followed by a DTRP status.

These notifications are designed to improve transparency, traceability and user awareness across the lifecycle of each investigation case.

trck.003 (rejection)

Group Header

Message ID

Tracker Status and Transaction

Alert Status

Alert Status Code

Status Reason

Additional Information

Transaction

Tracked Message ID

Investigation Tracking

Investigation Type

Investigation Subtype

Status and Assignment

Status Reason

Tracker Informing Party

Payment ID

Instruction ID

End-To-End ID

UETR

Service Level

trck.005 (notification)

Message ID

Creation Date Time

Service Level

Investigation Type

Status and Assignment

Tracker Informing Party

Tracked Message ID

Investigation ID

Requestor Investigation ID

EIR

Investigation Requestor

Investigation Requestor

Investigation Reponder

Figure 14: Notification messages

<u>Point of attention: Understanding the application programming interface (API)</u> release schedule

The initial API release will support POST (to submit investigation requests and response) and GET (to retrieve case details). PUSH APIs – which would enable automatic delivery of updates, including new cases, case events, or changes to existing investigations – are not yet supported. Today, several segregated APIs exist, each covering a specific investigation type. These will be replaced by an overarching GET API to streamline access across investigation types. Further details on the release schedule and functionality will be published by Swift.

3.2 Case orchestration layer

Alongside the new E&I message portfolio, the other key driver of the upcoming changes is the Case Orchestrator. This section outlines the core concepts of the case orchestration layer and highlights key considerations for the future handling of E&I within a centrally coordinated, automated ecosystem.

3.2.1 Connectivity options

Participants can connect to the Case Orchestrator through one of the following three channels:

- -FINplus. Enables the exchange of investigation and notifications messages in ISO 20022 format.
- -Swift Graphical User Interface (GUI). A screen-based interface designed for users to manually initiate, monitor, and respond to investigation cases.
- **—API.** Supports system-to-system integration, allowing automated submission and retrieval of investigation-related data via the Case Orchestrator.

Although messaging users (i.e. those connected via FINplus) will need to implement and consume the relevant ISO 20022 messages as outlined above, the same underlying data model applies across all channels – API and GUI included. For example, FINPlus users will exchange trck.003 and trck.005 notifications, while GUI users will receive the same updates via on-screen interface notifications.

Point of attention: Using Case Management GUI



Users operating via the Case Management GUI should evaluate how best to meet internal requirements for screening, archiving, and reconciliation. Where needed, a GUI option can be activated to provide ISO 20022 message copies of the GUI data. This supports effective filtering, archiving, and ensures consistency between manual action and system records.

3.2.2 Key considerations for centralised orchestration

Core features of centralised investigation orchestration include smart routing, auto-response, data pre-population, and automated status reminders, as well as end-to-end visibility on the case status. However, the applicability of each feature is governed by predefined business rules and may vary depending on specific case conditions, as detailed below:

3.2.2.1 Smart routing

Rather than passing investigations through every intermediary, the Case Orchestrator uses smart routing to send gueries directly to the bank best able to resolve them (see Figure 15):

- -Investigation type dependency. Smart routing will be selectively applied to specific investigation types, such as CCNR/CONR and UTAP - where it delivers clear operational benefits. For other types, including RQFI and OTHR, smart routing will not be enabled due to limited processing efficiency or sensitivity concerns raised by the compliance community, particularly in cases involving high-risk data.
- Migration phase dependency. The application of smart routing rules will evolve over the course of the phased E&I migration. In the initial phase, smart routing will only be applied when the relevant counterparty – such as the creditor agent (for CCNR) or debtor agent (for UTAP) – has completed migration to ISO 20022 messaging and is therefore automatically participating in case orchestration for E&I. Full smart routing capabilities will become available once market-wide adoption is achieved.

Figure 15: CCNR investigation Serial CCNR investigation Where is the Where is the Where is the payment? payment? payment? Debtor Debtor Intermediary Intermediary Creditor Creditor agent agent 1 agent 2 agent **Smart routed CCNR investigation** Case Orchestrator Where is the Where is the payment? payment?

Intermediary

agent 2

Creditor

Creditor

agent

Source: Deutsche Bank

Debtor

agent

Intermediary

agent 1

3.2.2.2 Auto-response

Instead of requiring manual intervention for every enquiry, the Case Orchestrator uses automated rules to send instant, tailored responses to the relevant party:

- —Investigation type dependency. Auto-responses will be enabled for CCNR/CONR and UTAP cases. These responses are automatically generated by the Case Orchestrator, leveraging data available in the Tracker such as booking date and time for CCNR or remittance content for UTAP. If the automated reply does not provide sufficient details, the requester may submit a follow-up camt.110, which will then be smart routed to the appropriate responder for further investigation.
- —Message population dependency. The effectiveness of auto-responses depends on how the original message was populated. For UTAP cases, if Unstructured Remittance Information was used in the underlying payment, the Case Orchestrator may extract and return this content from the first message in the chain. However, if Structured Remittance Information was used but not captured in the Tracker, the Case Orchestrator will route the request to the Debtor Agent, as no automated response can be generated.

Point of attention: Applicability of auto-response



While all auto-response use cases fall within the scope of smart routing, the reverse does not necessarily apply – not all smart routing cases are eligible for auto-response. In essence, when a use case qualifies for auto-response, the Case Orchestrator will automatically generate a reply on the first attempt. Figure 16 illustrates an auto-response example, in contrast to the smart-routed investigation, which is directed to the appropriate responder.

3.2.2.3 Data pre-population

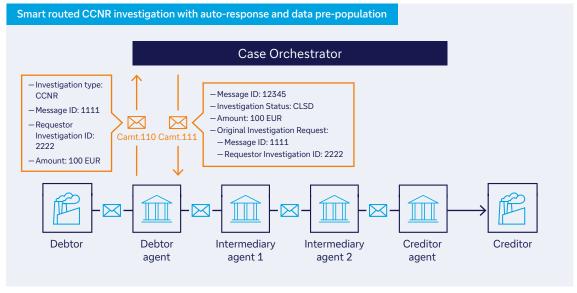
Instead of manually re-entering details for each case, the Case Orchestrator automatically populates fields with available data to speed resolution and reduce errors (see Figure 17):

- -Channel dependency. The extent of data pre-population varies by access channel. For example, GUI users will benefit from automatic data enrichment performed by the Case Orchestrator, with data elements in the camt.111 message pre-filled based on content from the preceding camt.110.
- —Data availability dependency. Certain data elements are enriched using information retrieved from the Tracker. Among others these include the Original Instruction Identification, Original Endto-End Identification (when available in the Tracker), Original Interbank Settlement Amount, and Original Interbank Settlement Date. However, the Tracker retains only data exchanged via the Swift network or submitted through status updates and is subject to a retention period of 124 days. After this period, no tracker data will be available for the corresponding UETR, which may limit pre-population capabilities.

Serial CCNR investigation Where is the Where is the Where is the payment? payment? payment? Debtor Debtor Intermediary Intermediary Creditor Creditor agent 2 agent agent 1 agent Smart routed CCNR investigation with auto-response Case Orchestrator Payment status: ACCC Where is the payment? (credited to creditor) ШШ Intermediary Intermediary Creditor Creditor Debtor Debtor agent 1 agent 2 agent agent

Figure 16: Auto-response to a CCNR query







3.2.2.4 Automated status reminders

Instead of chasing updates manually, the Case Orchestrator sends automated reminders to keep all parties informed of a case's progress:

—Investigation type dependency. Each investigation type is subject to a defined frequency of reminders, as reflected in the Service Level Agreement (SLA) data element. This frequency does not constitute a community-agreed SLA, it defines when the Case Orchestrator may trigger a status request (see Figure 18). For example, compliance-related reviews typically allow for longer resolution windows and are therefore associated with less frequent reminders. In contrast, CCNR cases are expected to be resolved more quickly and are linked to shorter reminder intervals when no timely response is received.

Point of attention: Automated vs escalated status reminders



It is necessary to distinguish between automated and escalated status reminders. Automated reminders, delivered in the form of a camt.110 message, are triggered directly by the Case Orchestrator system within the defined timeframe. In contrast, escalated reminders – also camt.110 messages – are initiated manually by the requestor. Notably, when an escalated reminder is sent, it resets the timing mechanism for subsequent automated reminders.

Figure 18: Automated status reminder scheduling

	CCNR/CONR	UTAP	RQFI_UTEX
Timing of first reminder	After two days	After three days	After three days
Follow up reminders	Every two days	Every three days	Every three days
End of reminder cycle	After 10 days (or once investigation status is closed/rejected)	After 10 days (or once investigation status is closed/rejected)	After 10 days (or once investigation status is closed/rejected)

Please note that a timeframe for automated status reminders has not yet been established for investigations categorised under Other (OTHR) and RQFI_COMP

4

Timelines

The migration to ISO 20022 for E&I will follow a phased implementation strategy, similar to the approach used for cross-border payments. This phased rollout is designed to ensure a smooth and coordinated transition, minimising market disruption and allowing sufficient time for participants to adapt their systems and processes.

Unlike the payment migration, however, the coexistence period for E&I will be limited to 12 months. This shorter timeline reflects the technical complexity and the need to avoid long-term fragmentation in exception handling. It underscores the need for early engagement and timely implementation across the industry.

The migration will progress through three key stages: controlled live, general availability, and ultimately, the achievement of the full target state (Figure 19).

4.1 Controlled live

An early adoption period began in November 2024, allowing a limited number of institutions to pilot ISO 20022 E&I messaging in preparation for broader migration.

The official launch of the E&I migration will take place with the controlled live phase starting in November 2025. This phase marks the formal beginning of industry migration to ISO 20022 for E&I but remains limited in scope and participation.

Controlled live enables a defined group of institutions to process a minimum viable product (MVP) covering four E&I use cases using ISO 20022 messaging, supported by central orchestration. Participation is governed through a closed user group, underpinned by a centrally maintained list of live participants institutions. This list functions as a directory of live participants, allowing banks to identify which counterparties are ready to exchange E&I messages via Case Orchestrator. As a result, messages are exchanged only where both parties are enabled, while all other flows continue to follow existing channels.

This setup allows for the validation of processes in a real-time production environment, but full interoperability across the broader market will only be achieved in the subsequent general availability phase. Controlled Live builds on the preceding early adoption period (November 2024-November 2025), which involved a smaller number of participants and was not part of the formal market-wide rollout.

During this phase, the following E&I cases are enabled:

- -CCNR CreditorClaimNonReceipt
- -CONR CoverCreditorClaimCoverNonReceipt
- -UTAP UnableToApplyByCreditor
- RQFI UTEX RequestForInformation UnableToExecute

Figure 19: E&I timeline



Additional scenarios are scheduled for activation in November 2025, particularly for compliance-related investigations:

- -RQFI SANC RequestForInformation Sanctions
- -RQFI COMP RequestForInformation Compliance

While the Case Orchestrator is designed to centrally coordinate the full investigation lifecycle, orchestration capabilities during controlled live remain limited. This is primarily due to restricted reachability, as message flows are confined to a defined set of participants within the closed user group. As a result, orchestration – including smart routing – will only be activated where both parties are technically enabled and mutually reachable (see Figure 20).

Smart routing will apply in the following scenarios:

- -CCNR. When the Creditor Agent is identified as the payment holder and is ISO 20022-enabled for E&I messaging.
- **CONR.** When the **Creditor Agent** is identified as the payment holder and is ISO 20022-enabled for E&I messaging.
- -UTAP. When the Debtor Agent is ISO 20022-enabled for E&I messaging.
- -RQFI. Smart routing is not applicable for RQFI use cases during this phase.

Smart routed CCNR investigation with auto-response and data pre-population Case Orchestrator Camt.111 Camt.110 Camt.110 Camt.111 \bowtie \bowtie \bowtie Intermediary Debtor Debtor Intermediary Creditor Creditor agent agent 1 agent 2 agent Smart routing not activated when creditor agent is not E&I ISO enabled Case Orchestrator Camt.110 Camt.111 Camt.111 Camt.110 Pacs.008 Pacs.008 Debtor Debtor Intermediary Intermediary Creditor Creditor agent agent 1 agent 2 agent

Figure 20: Smart routing enablement during Controlled Live



4.2 General availability

The general availability phase will commence in November 2026, marking the next milestone in the E&I journey. From this point forward, all Swift users must be capable of receiving a camt.110 Investigation Request message.

To support continued interoperability during this period, investigation requests submitted as camt.110 messages by participating agents will be delivered to the recipient together with an embedded translated MT199 version (see Figure 21). This dual-format delivery is designed to enable onward forwarding of the MT message to the next agent in the investigation chain, should that party not yet be onboarded to the Case Orchestrator.

Recipients will also be able to opt out of translation and receive only the ISO 20022 message if they prefer.

It should be noted that while the receipt of camt.110 becomes mandatory, there is no obligation to send camt.111 Investigation Response message at this stage. Institutions may continue to respond using the MT format (e.g. MT199/299) throughout the general availability period.

This coexistence model remains in place until November 2027, when the full target state will be reached, and the legacy MT 199/299 messages are expected to be decommissioned.

Unlike the controlled live phase, the general availability rollout will enable all defined investigation types (see Figure 6), broadening support across both payment and compliance-related use cases. However, the application of orchestration – including smart routing – will continue to follow the same parameters as the controlled live phase. For investigation types not supported during the controlled live phase, such as OTHR, smart routing will not be applied.

Figure 21: Translation camt.110 to MT199

```
Original Investigation Request (camt.110)
<InvstgtnReq>
    <Msgld>111111</Msgld>
    <RqstrInvstgtnId>1234567890</RqstrInvstgtnId>
    <EIR>fff0e2e6-d024-45c3-be0a-584f0dc40001</EIR>
    <InvstgtnTp>
        <Cd>CCNR</Cd>
    <UndrlygInstrm>
        <Cd>XBCT</Cd>
    </UndrlygInstrm>
    <Undrlyg>
        <IntrBk>
            <OrgnlUETR>fff0e2e6-d024-45c3-be0a-584f0dc45ec1
    </Undrlyg>
InvstgtnReq>
<InvstgtnData>
    <Rsn>
        <Cd>CCNR</Cd>
    </Rsn>
Translated MT199
:20:1234567890
:79: Auto generated from camt110///InvstgtnTp/CCNR/EIR/
fff0e2e6-d024-45c3-be0a-584f0dc40001
///Msgld/111111///UndrlygInstrm/CrossBorderCreditTransfer///
IntrBk///OrgnlUETR/fff0e2e6-d024-45c3-be0a-584f0dc45ec1///
InvstgtnData///Rsn/CreditorClaimNonReceipt
1 :20: Sender's Reference
2 :79: Auto-generated text indicating translation
3 :79: Investigation Type
4 :79: End-To-End Investigation Reference
5 :79: Message ID of the underlying payment
6 :79: Underlying Instrument
7 :79: UETR of the underlying payment
8 :79: Investigation Reason
```



Point of attention: Cancellation messages during the coexistence phase

As of November 2026, all ISO 20022 cancellation messages – specifically camt.056 and camt.029 – must be addressed to the Case Orchestrator BIC (TRCKCHZZ) rather than directly to the next agent in the payment chain.

However, until November 2027, there will still be flexibility: institutions may continue to exchange MT-based cancellation messages, which may still be addressed bilaterally. This coexistence period supports a gradual transition to centrally orchestrated cancellation flows.

4.3 Full target state

Effective November 2027, all users must be fully capable of exchanging E&I messages in ISO 20022 format via the Case Orchestrator. This milestone marks the transition to the mandatory use of the ISO 20022-based messaging framework for investigation processes.

As part of this shift, the corresponding MT message types – MT192/292, MT 195/295, MT 196/296, will be removed, and free-format MT 199/MT299 used for investigation purposes will be retired (meaning that they cannot be used for E&I purposes).

With all participants equipped for ISO 20022 exchange, the full orchestration capabilities of the Case Orchestrator will be activated. This includes:

- —Smart routing, applied to the predefined set of eligible investigation types (e.ge. CCNR, CONR, UTAP).
- -Stricter enforcement of SLA adherence, ensuring timely response handling across the network.
- -The consistent application of agreed business rules and usage guidelines.

Additional refinements to the initial release – particularly related to message population, routing logic, and usage guidance – are expected to follow, reflecting ongoing operational insights and community feedback.

5

Implementation considerations

Effective implementation of E&I case management demands careful consideration of several key factors, including project setup, solution strategy and deployment, connectivity, migration planning (see Figure 22), testing and validation, and training and awareness; each to ensure a smooth and successful rollout. Building on practical experience and lessons learned, the following section outlines key considerations and recommended steps that can serve as a foundation for successful adoption.

Figure 22: The E&I checklist

Project roadmap – at a glance	
Project setup	 Secure budget (s) and create a dedicated project structure. Extend involvement beyond technology and operations to include product, training, client-facing teams.
Solution strategy	 Evaluate investigation processing options: Swift GUI for manual handling. Vendor-provided investigation platform. Fully tailored in-house application.
Solution implementation	 Review all relevant specifications and reference materials. Design intuitive user interfaces for operators and clients. Assess impact on existing processes. Identify automation opportunities. Appraise broader capabilities from structured E&I messages.
Migration planning	 Ensure teams understand all implementation phases. Plan consistent rollout across operational hubs. Involve investigation team members in implementing and testing.
Testing & validation	 Register for the Case Orchestrator test environment. Use designated test sparring partner (TSP) tool to simulate realistic cross-institution interactions. Include custom cases reflecting your operational profile in addition to standard scenarios.
Training and awareness	 Define new operating model and update relevant workflows and key operating procedures. Train staff in structured ISO 20022 messages and message flows, orchestration concepts and new user interfaces. Ensure training extends beyond core investigations teams to include client-facing staff and, where applicable, client awareness.

5.1 Project setup

Unlike the ISO 20022 migration in the payments space – where translation between MT and ISO 20022 messages offered a temporary bridge – the E&I transformation introduces the first industry-wide process standard for investigations. It is not only a technical upgrade or the deployment of new message formats; it requires a fundamental rethinking of operating models and workflows, supported by a coordinated programme across all parties involved in initiating or handling payment-related inquiries – spanning technology, operations, and business functions.

Securing budget early on in the E&I implementation process is essential and should be supported by a well-articulated business case tailored to the institution's specific context, as the expected benefits will vary by organisational size and structure:

- —For larger institutions, value often comes from eliminating serial message processing and reducing intermediary flows through smart routing.
- —For smaller institutions, the greatest gains may lie in faster case resolution particularly for the 1-3% of payments that typically require manual follow-up where automation can directly accelerate payment completion.

Once funding is secured, a dedicated project structure should be established, and key stakeholders engaged early to allow for timely execution and comprehensive testing ahead of the implementation deadlines. Stakeholder involvement should extend beyond the directly impacted technology and operations teams to include product management, training coordinators, and client-facing teams. Engagement should also reach beyond payments to all divisions that initiate payments – such as investment banking, trade finance, and securities services – as well as compliance, anti-financial crime units and vendor management.

Operational readiness should not be underestimated. This change redefines how investigations are handled, introducing orchestration logic, and affects both internal workflows and external counterparties. Institutions should coordinate closely with their partners to ensure mutual preparedness. Clear internal alignment, extensive training, and open-minded process review will be key to achieving a smooth transition.



5.2 Solution strategy

Defining the right solution is a pivotal step in the E&I implementation journey. Institutions should evaluate whether to process investigations through the Swift GUI for manual handling, adopt a vendor-provided investigation platform, or to develop a fully tailored in-house application. The decision should be guided by investigation volumes, the degree of automation required, integration with existing payment and compliance systems, and the institution's long-term operational strategy. In the following sections, we outline the considerations for each of the available solution options.

Point of attention: Connectivity channel (GUI, API or messaging)



Selecting the optimal connectivity channel is central to the effectiveness of an E&I implementation, as it directly influences integration depth, operational efficiency and access to timely information.

Swift GUI: For smaller institutions or branches with low investigation volumes, the GUI provides a cost-effective and practical option, offering a straightforward interface for manual handling.

API connectivity: Provides flexibility and access to additional insights, particularly in cases of indirect participation in investigation flows. For example, when an institution is part of the underlying transaction but not an active part of the investigation, no notification messages are currently planned. In such cases, information can be retrieved via API queries or manual look-ups through the GUI. The current Swift API offering does not support push notifications, meaning data must be actively pulled – a factor that should be addressed in both solution architecture and operational planning to avoid delays.

Messaging: For larger institutions, especially those acting as intermediaries and handling high volumes of investigations, messaging remains the most robust and scalable option, enabling standardised and automated case handling between counterparties.

5.2.1 Swift GUI solution

When opting for the Swift GUI to manage payment investigations, institutions should carefully assess the security framework and integration requirements. Depending on the result of a risk assessment, integration with internal systems, such as sanctions screening, data archiving, and retrieval tools for the underlying transaction record, is recommended. It is also important to account for Swift's data retention policy, under which case-related data is available for a maximum of 124 days. Institutions relying on the GUI should therefore ensure that relevant information is captured and stored internally within this period. Establishing these connections and safeguards is essential to maintain operational efficiency, and support adherence to internal and regulatory standards through the investigation workflows.

5.2.2 Vendor solution

When considering the purchase of a ready-made solution from a vendor, it is advisable to start with a formal request for information (RFI) and invite multiple providers to present their capabilities. This approach supports a thorough comparison of functionality, integration options, and total cost of ownership, helping institutions identify the solution that best fits their needs.

In most cases, vendor products operate as a workflow-management layer, meaning they rely on internal systems to supply transactional data and related information. Seamless integration with these systems is therefore essential to unlock the full value of the solution.

While vendor-managed products can accelerate deployment and offer proven industry practices, they may limit flexibility, as feature development and release timelines are controlled externally. For organisations with unique requirements, alignment with the vendor's standard feature set is generally recommended to ensure stability and long-term support.

5.2.3 In-house solution

Building in-house offers maximum flexibility, but requires careful planning to successfully integrate the new ISO 20022 messages into the broader case management framework that governs end-to-end investigation handling. For institutions opting for this approach, success will depend on securing sufficient internal expertise and resources to fully address system development, process redesign and ongoing maintenance.

One of the most significant new elements is the EIR, which must be passed consistently along the entire investigation chain to ensure traceability and transparency. Effective in-house generation and management of the EIR requires a solid understanding of its business purpose and application rules. For instance, a single EIR should never be reused across unrelated investigation types or applied to multiple underlying transactions.

Beyond technical implementation, institutions should design intuitive, user-friendly interfaces for operators, especially when integrating investigation capabilities into a client-facing portal. They should also redefine operational processes to align with the structured messaging model of ISO 20022 and the orchestration logic of the case management framework. This combination of robust technical architecture and process alignment will be critical to realising the full benefits of in-house development.

5.3 Solution implementation

When implementing an investigation solution, institutions should address several critical factors to ensure a smooth and effective rollout. This includes a thorough review of all relevant specifications and reference materials, the design of intuitive user interfaces for both operators and clients, and a careful assessment of how existing processes will be impacted. Equally important is the identification of opportunities for automation and a realistic appraisal of broader capabilities enabled by the structured E&I messages.

The first step is to become fully acquainted with the available materials and documentation (see Section 6) to gain a clear understanding of the functional and operational changes ahead. Given that all three channels share a common data model, process analysis should cover the end-to-end investigation lifecycle, highlighting where automation can streamline handling and where human intervention is still preferable.

Figure 23 below provides a simplified illustration of the decision logic for managing a Creditor Claims Non-Receipt flow. In practice each institution's actual process will differ based on its operational structure, the types of client it serves, and the complexity of its case mix. To determine where automation adds value, it is essential to examine both straightforward and complex scenarios – for example, multiple investigation types linked to a single UETR or sequences that combine actions, such as initiating a request and lodging an objection.

By mapping these variations, institutions can make informed decisions about the optimal balance between automation and manual handling – ensuring flexibility and maintaining accuracy in cases that require a more nuanced, exception-driven approach.

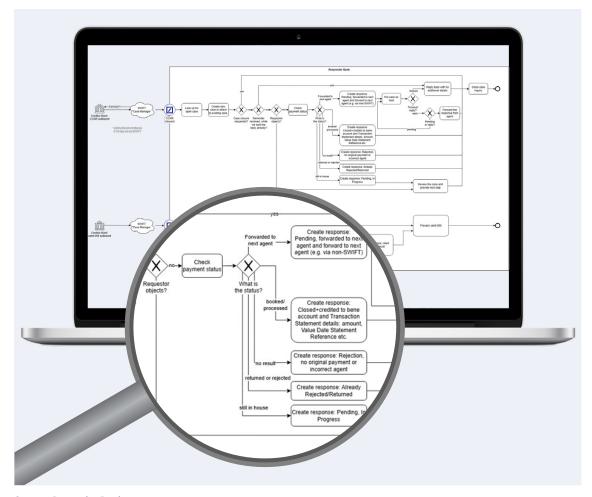


Figure 23: CCNR inbound flow for cross-border payment (XBCT) underlying

Regardless of whether an institution adopts an in-house solution or a vendor platform, careful attention to user interface design and integration is essential. All incoming and outgoing investigation messages should be filtered according to institutional policy and securely stored in internal databases for traceability and compliance.

Given the expanded requirements introduced by structured E&I ISO 20022 messages, the interface should prioritise clarity and simplicity to promote operational efficiency. Practical measures include pre-population logic to automatically fill available data from the underlying transaction or related investigation request, reducing manual input and minimising errors. Validation rules should also be applied to restrict users to meaningful code combinations (e.g., reason and subtype), ensuring consistency and accuracy.

Rather than exposing operators to raw technical message formats, the interface should present data in an intuitive, user-friendly way – much like displaying a web page rather than its HTML source code. This user-centric design approach streamlines workflows and makes the system accessible to a wider range of users.

Implementation example: Fedwire Funds Service E&I migration

As part of its ISO 20022 migration in July 2025, the Fedwire Funds Service introduced dedicated message types for E&I – namely, camt.110 (Investigation Request) and camt.111 (Investigation Response). While these messages are aligned with CBPR+ E&I usage guidelines, they have been implemented in a more flexible format. Unlike CBPR+, which applies distinct usage guidelines depending on the investigation type, the Fedwire Funds Service's format specifies the investigation types to help simplify message composition. At the same time, this flexibility requires careful consideration to ensure correct population of the data elements in each scenario.

Integrating E&I into the Fedwire Funds Service migration has proven to be a valuable exercise for familiarising teams with the new ISO 20022 message formats. It also provides a solid foundation for future CBPR+ adoption, as the interface designs and workflows being used today can be reused when the additional rules and validations required by CBPR+ are implemented.

The figures below illustrate the investigation platform screens developed to support operators in handling Fedwire Funds Service-related investigations.

Figure 24 shows a user-friendly interface for a CCNR request, clearly presenting the names of relevant data elements derived from the camt.110 message structure (as well as the corresponding ISO 20022 XML message view, showing the complete tag structure and element composition for reference). To maximise operator efficiency, the number of data elements requiring manual completion is intentionally kept to a minimum. Essential data elements are included to ensure plausibility and compliance, while remainder functions are automated wherever possible. This approach reduces manual workload and simplifies the user experience, enabling operators to focus on resolving cases rather than navigating complex message structures or redundant data.



Figure 24: Interface for a CCNR request vs. ISO 20022 XML message view

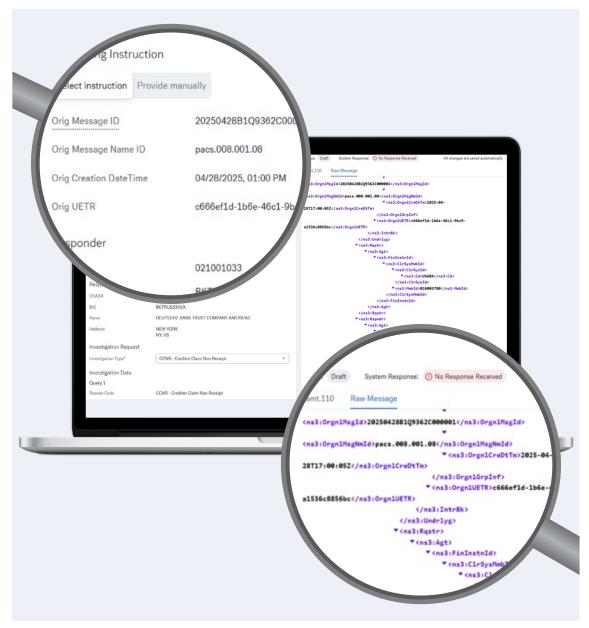


Figure 25 illustrates an RQFI request, where operators can choose between a coded subtype format or a free-text entry. As previously noted, reason codes and their corresponding reason subtype codes are interdependent and subject to validation, ensuring that only valid combinations are presented. This targeted approach simplifies the selection process, reduces complexity and saves time – allowing operators to focus on resolution of the case rather than navigating long and potentially irrelevant code lists.

</ns3:FinInstr </ns3:Agt> </ns3:Rspndr> </ns3:InvstgtnReq> ▼ <ns3:Rsn> ▼<ns3:Cd>CTOR</ns3:Cd> </ns3:Rsn> ▼ <ns3:RsnSubTp> ▼<ns3:Cd>CCPT</ns3:Cd> </ns3:RsnSubTp> </ns3:InvstgtnData> <ns3:InvstgtnData> ▼ <ns3:Rsn> ▼<ns3:Cd>CTOR</ns3:Cd> </ns3:Rsn> ▼<ns3:RsnSubTp> c666ef1d-1b6e-46c1-9bc9-a1536c885 Cd>RQNM/ps3:Cd SANC tigation Data iery 1 Reason Code* CTOR - Creditor CCPT - Request Passport Reason Sub-Type Code* Additional Request Data CTOR - Creditor

Figure 25: Interface for a RQFI request vs. ISO 20022 XML message view

5.4 Migration planning

Effective migration planning relies on early, structured preparation and a clear understanding of the different implementation phases. While the controlled live period in 2025 and general availability in 2026 both enable the exchange of E&I ISO 20022 messages, they differ in scope, supported investigation types and available data elements. Institutions adopting early must therefore be ready to meet current requirements, while simultaneously planning for the enhancements that will follow.

For global organisations, consistency of rollout across the operational hubs is essential. For example, a team based in Eastern Europe supporting Europe, Middle East and Africa (EMEA) operations should work with the same solution and processes as teams in other locations to avoid fragmentation and ensure a unified approach.

During the coexistence phase, dual-format support will be necessary. Even if an institution commits to sending camt.110 messages after November 2026, it must still be able to handle legacy MT messages until their decommissioning in November 2027. Similarly responses may arrive as either camt.111 or MT199 during this period.

To preserve process consistency – regardless of whether routing is serial or smart – it is always advisable to populate the 'Expected Responder' data element in request messages. This ensures predictable handling across varying participant readiness levels.

Where possible, involve key investigation team members in the implementation and testing phases. This not only leverages their operational expertise during design but also creates internal champions who can facilitate effective training and knowledge transfer ahead of the go-live.

A well-prepared migration plan naturally leads into a structured testing phase. Once key timelines, scope, and participant readiness are defined, institutions should translate these plans into structured testing activities, ensuring the chosen solution is validated not only against formal specifications but also under realistic investigation conditions.



5.5 Testing and validation

Testing is a critical success factor for E&I case management implementation. Institutions are encouraged to register for the Case Orchestrator test environment, which supports all connectivity options – API, messaging, and GUI – to provide flexibility in how scenarios are executed. As all channels connect to the same database, test flows can be initiated via one channel and validated through another, offering full coverage and integration insight.

A TSP list is available to help simulate realistic cross-institution interactions. Testing should go beyond executing the standard Swift 'plain vanilla' scenarios by including custom cases that reflect the institution's specific operational profile.

It should be noted that meaningful end-to-end testing requires participants to create realistic underlying payment (pacs) messages in the test environment. These messages serve as the basis for subsequent investigation scenarios, enabling validation of investigation flows in a way that reflects production behaviour.

The environment also supports the generation of corresponding camt messages for transmission via the messaging channel, ensuring all stages – from payment creation to investigation resolution and reporting – can be thoroughly validated.

5.6 Training and awareness

Given the operational transformation introduced by E&I and case management, institutions should define a new operating model and update all relevant workflows and key operating procedures. Training programs should equip staff with skills to navigate structured ISO 20022 messaging, orchestration concepts and new user interfaces.

Training should extend beyond core investigations teams to include:

- —E&I handling operators
- -Customer service officers
- -Other operational teams with indirect involvement in investigations
- -Stakeholders with Swift access who require awareness of E&I's broader institutional impact

Consider a 'train-the-trainer' approach, nominating experienced staff as internal champions to cascade knowledge across the organisation. Maintaining open communication channels with stakeholders throughout the transition will help sustain engagement and readiness.

Institutions acting as service providers or in correspondent banking roles should proactively assess how the migration impacts their client base. Raising awareness among FI clients and counterparties – particularly those that rely on their infrastructure – will support a more coordinated market transition and reduce friction across the ecosystem.

6

Additional resources

To support the community in implementing the future E&I case orchestration via the Case Orchestrator, Swift has published a comprehensive set of materials tailored to needs of various stakeholder groups. These resources are primarily hosted across two platforms (Swift access required) and serve as central repositories for implementation guidance, message specification and operational support.

MyStandards Page⁵

The MyStandards platform provides technical documentation to support the correct implementation of ISO 20022 E&I messages. Key resources include:

- Usage guidelines. Detailed specifications on how to populate ISO 20022 E&I messages, including schema definitions (XSD).
- User handbook. Guidance on dedicated ISO 20022 data elements and explanatory documentation of message flows.
- -Sample messages. Example ISO 20022 E&I messages that illustrate typical structure and content.
- -Translation portal. A tool that allows users to simulate the translation of camt.110 messages into equivalent MT199 formats for testing and validation.

Knowledge Center⁶

Swift's Knowledge Centre hosts a broad range of reference documentation covering the operational, technical, and onboarding aspects of Case Orchestrator and related services:

- —Case management getting started. A high-level overview of the migration approach, including key steps for implementation, testing, and readiness planning.
- -Case management service description. A comprehensive description of the Case Orchestrator, its orchestration logic, and the integrated Stop and Recall functionality.
- -Case management APIs. Technical documentation on the available API services to support automated integration with the Case Orchestrator and SRP services.
- Case orchestrator operations guide. Operational details on investigation message handling, orchestration logic, supported channels, and lifecycle behaviours.
- —Case orchestrator user guide. Provides information on the underlying data model and the use of ISO 20022 camt.110 and camt.111 messages, along with corresponding APIs.
- -Case orchestrator rulebook. Defines the orchestration capabilities, including smart routing, auto-responses, and service-level expectations across supported use-cases.
- —Stop and recall rulebook. Formal business and technical rules governing gpi Stop & Recall functionality, which is now applicable to all FIs connected to Swift starting November 2026.

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