



ISO 20022: Better data means better payments

Why correspondent
banking needs

ISO 20022 now

Introduction

The correspondent banking community will adopt ISO 20022 from November 2021, and your institution needs to be ready.

Correspondent banking payments have been a core component of transaction banking for decades, generating stable revenues from fees and currency exchange. But the landscape is changing. Regulation continues to tighten, and new competitors are entering the international payments market with compelling propositions. Customer expectations are evolving, fuelled by significant advances in the domestic payments experience that are making these instant and seamless, as well as bringing useful value-added services.

A key advantage of correspondent banking as a global payments system is that it can reach almost any account in the world. Customer experience has also improved in recent years, with payments becoming faster and more transparent thanks to SWIFT's global payments innovation (gpi)¹, and this is set to continue. However, other improvements are required to keep up with the needs and expectations of payments users, whether corporates or individuals:

- Compliance and Anti-Money Laundering (AML) processes result in regular delays, particularly where key information is missing from the transaction. SWIFT estimates that some 10% of international payments are held up somewhere along their journey for compliance checks, most of which are false-positives and avoidable investigations.
- Beneficiaries have little information to drive automated reconciliation, resulting in costly and inefficient manual processes, as well as reduced visibility on cash flow and cash positions for corporate treasurers.
- Common payments scenarios such as Payment on Behalf Of (POBO) are not fully supported, leading to tedious manual workarounds for customers.
- Banks have little insight into the business purpose of a payment, which hinders their ability to develop value-added services.
- Payments system users are similarly restricted in the business intelligence they can extract from their payments data, which should be a rich source of insight into customer behaviour.

These challenges all stem from a common cause: insufficient or poor quality data. To crack them, data needs to be improved systematically from end-to-end across the correspondent banking system, including banks, Real-time Gross Settlement (RTGS), instant and other clearing and settlement mechanisms. We need more, better defined and more granular data, and we need end-to-end consistency to ensure data is not lost or corrupted as it flows through the system.

The current cross-border payments standard (SWIFT MT) was conceived in the 1970s, when bandwidth and storage were high-priced commodities, payments volumes were much lower and systematic screening requirements non-existent. Messages were optimised to be small in size, carrying minimal datasets for ease of processing by the mainframe computers of the time.

To address the industry's data problem, a modern standard is required. A standard that prioritises richness of data over message size and processing costs (no longer a challenge for today's technology). That standard is ISO 20022². ISO 20022 is an open, international data standard that is being adopted around the world for domestic batch and instant payment systems, and high value RTGS. Following in the footsteps of major market infrastructures, in 2018 the SWIFT community decided to adopt ISO 20022 for correspondent banking, starting in November 2021.

¹ <https://www.swift.com/our-solutions/swift-gpi>

² <https://www.iso20022.org/>

What do we mean by 'better data'?

Take one of the key data elements in any payment – the beneficiary (payee, or creditor). Here's how this might appear today in the MT standard:

```
:59:/1234567890
Cuba Libre Bar and Grill
1234 Ocean Drive
90099 LA
```

And here's the name and address in ISO 20022's structured format:

```
<Cdtr>
  <Nm>Cuba Libre Bar and Grill</Nm>
  <PstlAdr>
    <StrtNm>Ocean Drive
    </StrtNm>
    <BldgNb>1234</BldgNb>
  <PstCd>90099</PstCd>
  <TwnNm>Los Angeles
  </TwnNm>
  <CtrySubDvsn>CA
  </CtrySubDvsn>
  <Ctry>US</Ctry>
</PstlAdr>
:
etc.
:
</Cdtr>
```

In the first case, it's highly likely the payment would be one of the 10% stopped by a sanctions filter, triggering an investigation. This is because 'Cuba' appears in the name and address, and it's otherwise unclear where the payment is going.

In the ISO 20022 example, the postal address (PstlAdr) unambiguously identifies the country – 'US' - using a standard two character country code. It's also clear that 'Cuba' is part of the name (Nm) of the business, so no 'false positive' compliance hit should occur. The payment can be processed smoothly; the money arrives on time and the bank benefits from reduced cost by avoiding manual processing.

Accurate country information also allows risk and compliance managers to understand precisely where money originates from and where it goes in the payments the bank handles. Banks can also accurately identify other key information such as postcode (PstCd), which can be used to build up demographic data for analysis, and so on.

ISO 20022 supports the same rich party information for 'ultimate' parties – ordering customer (ultimate debtor) and beneficiary (ultimate creditor). This is particularly important for multi-national corporations that operate shared 'on-behalf-of' payment and collection (POBO and COBO) factories, which is a rapidly growing trend for global organisations.

Similar data improvements can be seen in other areas, including charge details, payment purpose codes and remittance information. For example, in the MT standard, remittance information is allocated 140 characters. An invoice can be referenced like this:

```
:70:/INV/Date 01/02/2019
Ref ABC1234567890
```

Imagine a corporate sends an invoice for several items of different types. If some were damaged in transit, the amount of the payment might not tie up with the invoice. Manual intervention on both sides – phone calls, emails, faxes – is required to resolve the discrepancy. ISO 20022 Extended Remittance Information (ERI) allows complete and detailed information about the transaction to be included with the payment, including structured references to linked documents, line items, etc., greatly extending the potential for automated reconciliation. In a recent research by Payments Canada and EY³, the estimated five year cost of low automated reconciliation rates ranges from 7.4B to 13.6B CAD in Canada alone, so the global potential for savings is huge.

"The widespread and consistent adoption of ISO 20022 standards is set to bring considerable benefits. Improving the quality of the data flow between financial institutions is key to reducing the complexity experienced by payment service users today and avoiding many of the issues that delay payments. It should be high on every bank's agenda, and while the technical changes and costs involved should not be underestimated, the strategic opportunities it creates for new efficiencies and services are huge. Today's payment rails must evolve to meet the needs of the modern economy and we encourage the whole community to take part in this journey."

John Hunter

Global Head of Clearing, JPMorgan Chase

Unstructured versus structured data



Moving from this ...



... to this

³ Source: https://www.payments.ca/sites/default/files/report_costs_of_payments_processing_eng_final_2018.pdf

No magic

The 'Unstructured versus structured data' example (see p.3) illustrates the representation of rich data in ISO 20022, but switching to ISO 20022 doesn't bring this change automatically. The data has to be available in a structured form before it can be used to populate a structured message, which dictates how data has to be captured and maintained.

Sources of data vary. Beneficiary (creditor) and remittance information is typically provided by the customer ordering the payment. Payments can be initiated via multiple channels depending on the type of customer: eBanking, treasury portals, ERP machine-to-machine connections, mobile apps, teller systems, ATMs, paper forms and so on. Any or all of these may need to be modified to capture data compatible with ISO 20022. Ordering customer (debtor) details, on the other hand, are typically sourced from the bank's own records because these are their customers. Customer databases may already distinguish between customer name and the elements of its address, but if not, data remediation and clean-up – perhaps extensive – will be required.

Acknowledging these complexities, most payment MIs' ISO 20022 initiatives do not mandate structured party details from the outset. Use of structure is, however, strongly recommended in all cases. The SWIFT community has agreed to provide structured data in payments initiated in ISO 20022, and there is a clear intention at industry level to coordinate a rapid transition to mandatory structure in Q4 2023, once initial adoption is underway. Banks are therefore urged to consider implementation holistically, looking across data silos, rather than only at messaging subsystems.

The time to act is now

ISO 20022 has already been adopted for payments in more than 70 countries, replacing domestic or legacy formats. In the next few years, the Eurosystem (TARGET2), EBA (EURO1), Federal Reserve (Fedwire), The Clearing House (CHIPS), the RTGS in Hong Kong (HKICL) and the Bank of England will switch to ISO 20022, which will dominate high-value payments, supporting 80% of the volume and 90% of the value of transactions worldwide.

Of these major payments market infrastructures (PMIs), the first to move to use the full benefits of ISO 20022 will be TARGET2 and EURO1. Both operators plan a 'big-bang' migration to full ISO 20022 in November 2021. The US (Fed and CHIPS) will join slightly later, starting with a reduced scope implementation in Q1 2022, moving to full ISO 20022 18 months later.

This means that from November 2021, high value EUR payments can be expected to carry richer data than the existing cross-border standard allows. This trend will quickly accelerate in 2023 as USD and other currencies adopt full ISO 20022. A high proportion of high-value payments that originate in HVP systems go on to include an international 'leg out' – around 10% for TARGET2, up to 90% for CHIPS. Regulation in many countries, such as the 'travel rule' in the US, requires banks to pass on all the payment data they receive, so it's important that the standard used for cross-border is compatible with that specified for high value PMIs.

To enable banks to comply with and further reap the benefits of better data, in 2018 the SWIFT community resolved to adopt ISO 20022 for cross-border payments and cash reporting. Adoption will take place over a four-year coexistence period starting in November 2021 to coincide with adoption in the Eurozone. SWIFT will provide products and services to ease the transition, including comprehensive translation solutions for different segments that will enable users to continue to interoperate. But banks still need to act to align with their peers around the world and ensure that better data reaches every part of the system.

The end-to-end story: Market practice specifications

ISO 20022 is an extremely flexible standard, capable of representing any payment in any business scenario. The cost of this flexibility is complexity. One of the first tasks for any implementation initiative is to create a simplified 'market practice' specification for key message types to guide implementers and to ensure consistency, which will in turn ensure the best rates of automated processing.

A working group of industry experts – Cross-border Payments and Reporting Plus (CBPR+) – is creating common specification for correspondent banking and international payments. The aim is to eliminate as much unnecessary variation in the way messages are used as possible, and to reduce reliance on the types of undocumented conventions and bilateral agreements that have grown up around the MT standard in the 30+ years it has existed.

A similar initiative – High-Value Payments Plus (HVPS+) – exists for high-value payments, aimed at ensuring ISO 20022 HVP systems in different markets work consistently, while accepting that there will always be small differences for legal or other reasons.

The CBPR+ and HVPS+ groups meet regularly to align their specifications, to ensure that data can be carried end-to-end without loss or truncation in transactions that encompass cross-border and HVP processing. Institutions need to ensure they implement not just ISO 20022, but the CBPR+ ISO 20022 specification for cross-border payments, and the localised version of HVPS+ for each high-value system in which they participate.

Specifications for CBPR+, HVPS+ and major high-value system operators can be found on SWIFT's MyStandards portal. A (free) user login is required.

Don't be the weakest link

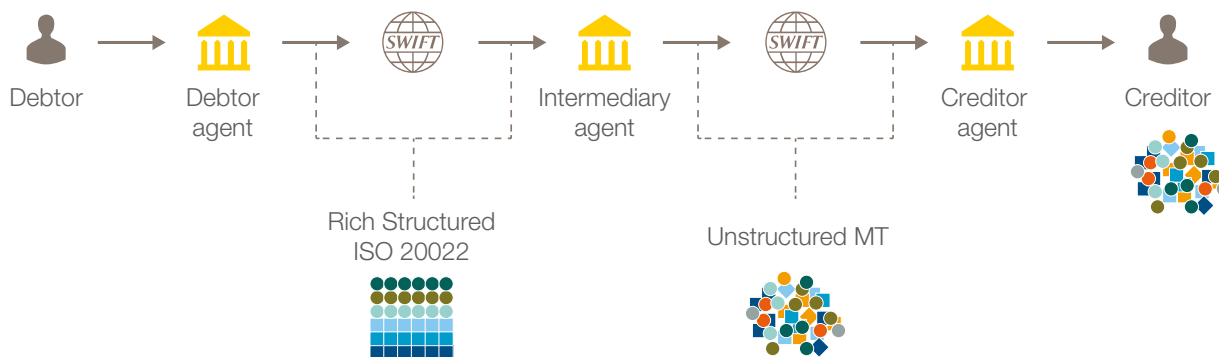
Correspondent banking is an ecosystem of over 10,000 banks, many connected to RTGS and other domestic payments mechanisms, which interact over the SWIFT network. Payments can reach almost any bank account in the world and some 17 million payment messages are exchanged over SWIFT every day. No alternative has comparable scale or reach. But the system is under pressure on many fronts, from the growing body of financial crime regulation, to fierce competition from new 'closed loop' entrants offering new ways to make international payments in particular currencies and corridors. The upgrade to ISO 20022 represents a significant industry-wide effort to modernise correspondent banking for the digital age, and confront the challenges of compliance and competition. For ISO 20022 to deliver on its promise, every connected institution needs to play its part.

In particular, banks that fulfil an intermediary role, passing on payment transactions in a connected chain of institutions, need urgently to consider how ISO 20022 will affect them.

The diagram below illustrates a scenario in which an intermediary relays a payment from the bank (agent) of the ordering customer (debtor) to that of the beneficiary (creditor). The intermediary does not have an ISO 20022 capability in the back office, so translates to MT before processing, and forwards the transaction in MT format. This has two important consequences:

- First, because ISO 20022 allows more and richer content than MT, it is likely that data is lost in translation and the intermediary is exposed to the compliance risk of breaking the travel rule, or its local equivalent.
- Second, the creditor fails to receive the rich data that was sent, so cannot use it. From a systemic point of view, many of the advantages of rich data have been lost.

Given that adoption of rich ISO 20022 begins in November 2021 for high-value Eurozone payments, banks with significant intermediary business, particularly with European correspondents, will need to be at the forefront of ISO 20022 adoption in the cross-border payment space. This doesn't mean that every back-office application has to be ready on day one. Many applications, like treasury, lending or trade finance solutions generate payment messages, and these can remain MT during the coexistence period. The key focus is on those dedicated payments applications that process cross-border intermediary transactions.



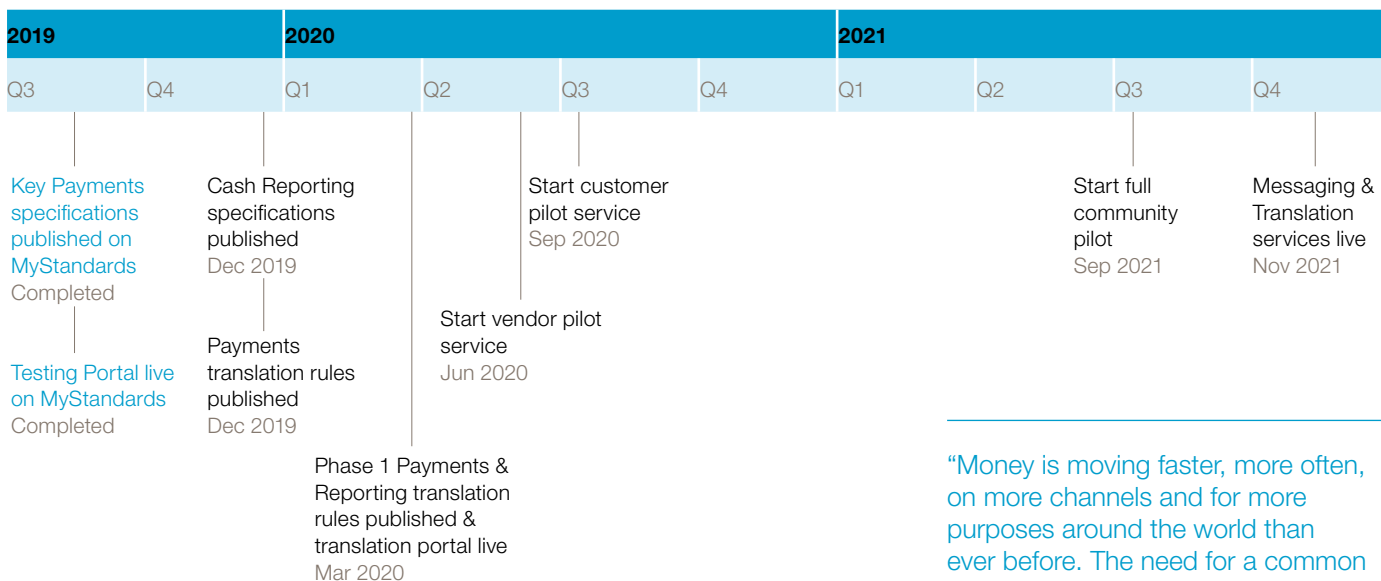
Prepare now

At the request of its community, SWIFT has created the ISO 20022 Programme to support the adoption of the new standard in cross-border payments and reporting. Working with a subset of the Payments Market Practice Group (PMPG), SWIFT is facilitating the definition of Cross-border Payments & Reporting (CBPR+) usage guidelines and translation rules from legacy MT standards. The documentation will be completed by end-Q1 2020 and a new SWIFT messaging service, with supporting coexistence measures, will be live to pilot starting in September 2020. The community will have an opportunity to pilot for 12 months and go live in November 2021.

Now is the time to prepare for the adoption of ISO 20022 CBPR+ usage guidelines. All financial institutions processing MT 1, 2 & 9 series message types should be able to receive and process ISO 20022 CBPR+ payments by November 2021. Institutions with a large intermediary payments business should also be able to send ISO 20022 CBPR+ payments based on received ISO 20022 CBPR+ payments.

SWIFT will provide a set of documentation, tools and services to support the community in the adoption of this new standard. You are also encouraged to join one of our webinars or working group sessions near you to find out more. More information can be found at www.swift.com.

ISO 20022 Programme - CBPR+ related deliverables



“Money is moving faster, more often, on more channels and for more purposes around the world than ever before. The need for a common standard based on rich, structured data to support the efficient transfer of payments across the globe has never been greater, which is why the industry is adopting ISO 20022 now. Although it is up to each individual institution to assess the impact of the migration, given the magnitude and importance of this initiative, it is imperative that the whole community works closely together in order to fully maximise its potential benefits.”

Christian Westerhaus

Head of Cash Products, Cash Management, Deutsche Bank

Conclusion

Better data, based on ISO 20022, will be necessary to bring correspondent banking to the level that payments users demand, in terms of speed, reliability and service level, and to enable the banking industry to compete effectively with the 'closed loop' systems that are starting to erode its international payments business.

The adoption trend is already well underway in many markets. The SWIFT community's decision to switch to ISO 20022 for cross-border traffic completes the picture, providing a consistent, rich representation end-to-end, unlocking efficiencies and enabling new and innovative value-added services.

The road ahead is not an easy one; there will be obstacles along the way. A sustained effort is required at industry level in terms of planning, investment and execution. But a common standard model for payments worldwide is a big prize, with major long-term benefits for the industry and its customers. While much remains to be done, that prize is finally in sight.



About SWIFT

SWIFT is a global member owned cooperative and the world's leading provider of secure financial messaging services.

We provide our community with a platform for messaging and standards for communicating, and we offer products and services to facilitate access and integration, identification, analysis and regulatory compliance.

Our messaging platform, products and services connect more than 11,000 banking and securities organisations, market infrastructures and corporate customers in more than 200 countries and territories. While SWIFT does not hold funds or manage accounts on behalf of customers, we enable our global community of users to communicate securely, exchanging standardised financial messages in a reliable way, thereby supporting global and local financial flows, as well as trade and commerce all around the world.

As their trusted provider, we relentlessly pursue operational excellence; we support our community in addressing cyber threats; and we continually seek ways to lower costs, reduce risks and eliminate operational inefficiencies. Our products and services support our community's access and integration, business intelligence, reference data and financial crime compliance needs. SWIFT also brings the financial community together – at global, regional and local levels – to shape market practice, define standards and debate issues of mutual interest or concern.

Headquartered in Belgium, SWIFT's international governance and oversight reinforces the neutral, global character of its cooperative structure. SWIFT's international office network ensures an active presence in all the major global financial centres.

For more information about SWIFT, visit www.swift.com.