

# Europe's Journey to ISO 20022

Challenges and Opportunities  
for Financial Institutions in  
the European Economic Area



accenture

# A key moment for financial services

**Today's global payments markets are increasingly interconnected and continually evolving. New technologies, regulatory guidelines and customer expectations have triggered a wide array of evolutionary business initiatives including open banking, real-time gross settlement (RTGS) system renewals and the roll-out of instant payments.**

However, of all the changes currently underway in the financial services industry, the global adoption of ISO 20022 is the most far-reaching and widely underestimated—as it requires significant and expensive infrastructure migration efforts across the entire banking ecosystem.

Still, this effort will be worthwhile. Once ISO 20022 is in place it has the potential to deliver major industry-wide benefits. Foremost among these, it will dramatically enhance standardization and hence interoperability between the growing ranks of payment networks around the world—ultimately benefiting all market participants and users.



# Overview: The context of ISO 20022 migration

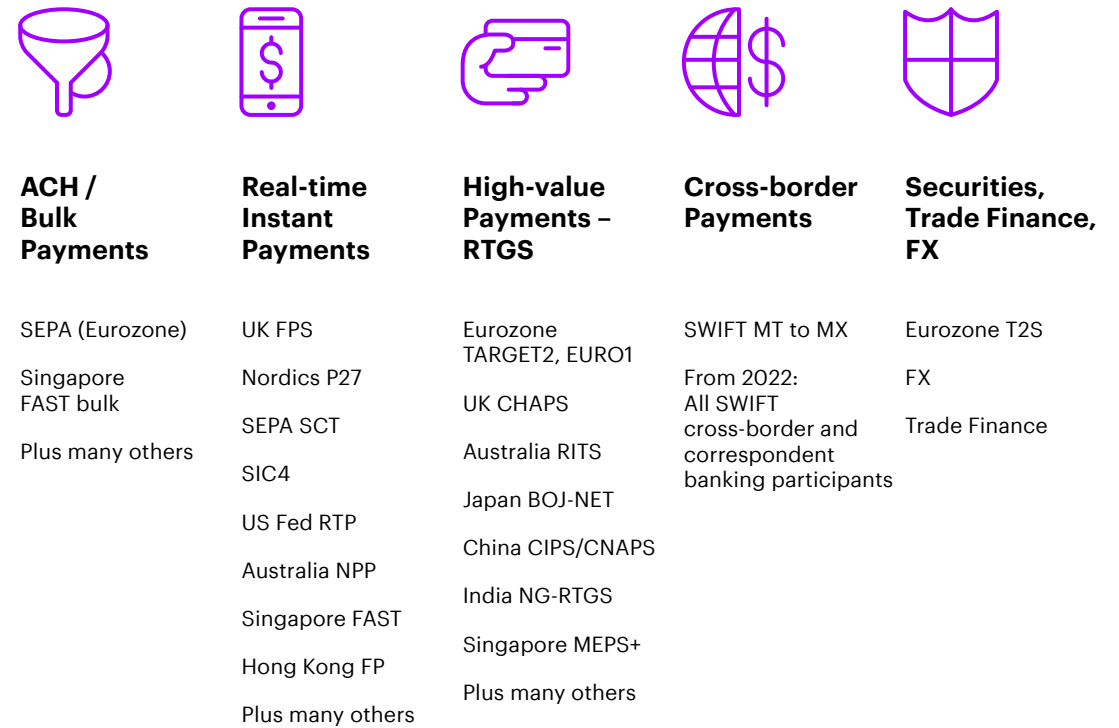
ISO 20022 is an open, international data standard that financial institutions around the world began adopting for financial messaging more than a decade ago.

# From SEPA ACH bulk payments to global dominance in real-time payments

In the payments arena, ISO 20022 has matured from the early days of the Single Euro Payments Area (SEPA) as a standard for Automated Clearing House (ACH) bulk payments to become the dominant worldwide message format for real-time payments. According to the latest 'Flavors of Fast' report from FIS,<sup>1</sup> the majority of almost 50 real-time systems around the globe are already based on ISO 20022.

Since 2014, market infrastructures around the world—including central banks, private sector system operators and the Society for Worldwide Interbank Financial Telecommunication (SWIFT)—have launched multi-year programs to adopt ISO 20022 for high-value and cross-border payments. Migration dates for these programs are within the next one to four years. Other market participants—notably including the Monetary Authority of Singapore and the Reserve Bank of Australia—are still in an earlier planning phase, with precise migration dates yet to be finalized.

Figure 1: ISO 20022 is becoming the global standard for financial messaging across payment types



Source: Accenture and FIS

# Shifting RTGS roadmaps cause banks to revisit their plans

Since the early planning phases of ISO 20022 adoption, many public- and private-sector RTGS system operators have already had to revise their initial roadmaps. While SWIFT and the European Central Bank (ECB) had originally planned go-live dates in November 2021, SWIFT announced in March 2020 that it was postponing its ISO 20022 migration by one year.

As a consequence, other market infrastructures also went into replanning due to concerns regarding the simultaneous operation of two different payment standards. At the same time, the COVID-19 pandemic has impacted both resource and budget planning. As a result, at the end of July 2020, the ECB finally shifted its go-live date to November 2022.

In light of the revised timelines, European banks found themselves forced to revise their planning—some in the midst of projects they had already started, and some before beginning implementation. These delays reflected the challenges of creating a “best-fit” program approach for both euro and cross-border payments.

What’s clear is that any ISO 20022 migration strategy and planning effort must accommodate various external milestones. In addition, ISO 20022 requires more than just IT modifications. As demonstrated by experience in other markets, such as SEPA in Europe<sup>2</sup> and SIC4 in Switzerland, as well as insights from early migrators in the euro zone, ISO 20022 also demands a business-wide migration program complete with senior management support and visibility across the organization.

As a matter of fact, the complexity of requirements, the duration of the programs and the scope of compliance issues call for fundamental transformation of both infrastructure and business divisions.

## Striking the right balance

Most institutions will need to strike a balance between complying minimally within the defined deadlines and building towards a future-proof target state. This will require four components:

**01**

Conducting business-driven gap analysis

**02**

Applying strategic guidelines for planning in compliance with external milestones

**03**

Finding a rational balance in implementing multiple critical projects

**04**

Upgrading aging legacy systems

The stakes are high. Failure to realize the specific requirements of individual market infrastructures on time could ultimately see non-compliant financial services institutions shut out of participation in the payments system. This is a risk that no institution can afford to ignore.

A nighttime photograph of a city street with light trails from cars and buildings. A prominent statue of a winged figure sits atop a building in the background. The scene is illuminated by streetlights and building lights, creating a vibrant, blurred effect.

# Implications for the European Economic Area

When SWIFT announced in March 2020 that it would delay its migration to the data-rich ISO 20022 standard, it was immediately clear this would significantly impact the interoperability between the Eurosystem and correspondent banks which plan to use their legacy message formats.

## Delays and early adopters

This has resulted in the ECB's decision to also delay its TARGET2/TARGET2-Securities (T2-T2S) consolidation by 12 months.<sup>3</sup> The main drivers of this decision were SWIFT's revised roadmap and the likely impact of COVID-19 on organizations' migration plans.<sup>4</sup> The T2-T2S consolidation is now scheduled to go live in November 2022, with user testing starting in December 2021. Soon after, private-sector market infrastructure provider EBA CLEARING confirmed it would align its EURO 1 migration with SWIFT and the ECB.

These initiatives—together with many other modernization efforts—serve to underline the status of the European payments market as the frontrunner in fundamental innovation programs over the past few decades (TARGET system, TARGET2, T2S and Instant Payments with TIPS and RT1).

Despite the postponement, the T2-T2S consolidation program and EBA CLEARING's EURO1 / STEP1 remain the only programs with go-live dates as early as November 2022. This makes them the first to move to a fully-fledged ISO 20022 format for the entire euro high-value payments sector.

## Impacts from other programs

In addition to the TARGET2 and SWIFT roadmaps, European banks might also be impacted by other local migration programs. These include the following:

- In the UK, the Bank of England has two initiatives that comprise migration to ISO 20022: the recently launched multi-year modernization of its RTGS system, which has its first milestone in early 2022, and the migration program for Faster Payments Service (FPS) and BACS, which is based on the BoE's New Payments Architecture (NPA).
- Nordics banks are planning to implement ISO 20022 for cross-border real-time and batch payments as part of the P27 initiative (planned go-live date in 2021).
- In the US there is a move to Fedwire and CHIPS.

- Payments Canada's modernization program for the new RTGS system Lynx is well underway.
- The Monetary Authority of Singapore has its new MEPS+ and the Reserve Bank of Australia has RITS under consideration.

Another factor is SWIFT's mandatory phased migration program for payments and related messaging. Announced in 2018, this requires strategic planning of infrastructure changes for the coming years. Early movers could migrate across as early as November 2022, with the remainder transitioning through to November 2025.

SWIFT participants have just three years to complete their projects before support for the MT format across MT1XX, MT2XX and MT9XX is switched off in November 2025 without extension.



# Challenges beyond ISO 20022

**All in all, the banking industry finds itself having to manage the sheer complexity of different transformation programs together with compliance with fundamental system requirements—with the impact of COVID-19 causing further challenges and strains on resources and budgets.**

**The European payments market must be ready for a succession of go-live dates, some of them requiring “big bang” changes to its core payments market infrastructure. At the same time, changes must be managed with an eye on the wider impact for banks and their customers in an inter-connected, fast-changing global landscape.**

# Gearing up for the migration

For the T2-T2S consolidation project plan released by the Eurosystem, user testing will start as early as December 2021.

## Multiple timing options

There are several scenarios under which banks and other financial institutions could comply with the new timelines of the ECB and EBA CLEARING. When choosing a solution, banks should apply strategic criteria, bearing in mind that each option depends on their current project status and therefore on the individual readiness of each participant.

Accenture has developed deep expertise in T2-T2S and EURO1 consolidation through client engagements and roundtables. Based on our work in this area, and in light of the recently changed migration deadlines, we suggest that financial institutions should consider the following options:



### **Put current migration on hold until mid-2021**

Until official announcement of the delay by the ECB and EBA CLEARING, expected in mid-2021, the migration activities are put on hold. This approach could create short-term budget savings, but risks the loss of key personnel and knowledge over the longer term, as well as ramp-up costs.



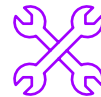
### **Run the project with reduced manpower and/or stretched budget**

This approach will minimize compatibility challenges, keep knowledge within the migration project, and maintain momentum.



### **Run the project with full manpower until completion**

This approach could allow internal testing to be completed ahead of the new official schedule. However, it may result in compatibility issues with other banks. It may also require increased budget to follow external milestones until the final “big bang.” The time and resources could be used simultaneously to further explore the business value of ISO 20022.



### **Run the project until completion of internal testing, then reduce manpower**

This approach mirrors the one above until the completion of software development. At that point, budget, staffing and schedules are reassessed to enable the adoption of a new migration timeline. User tests can be carried out with other financial institutions. The same shifted focus on business value could be considered as mentioned in the previous approach.



### **Strategic replanning**

Regardless of the status of their migration project, banks can consider the option of a complete replanning. This involves abandoning their current strategic orientation and reconsidering their project roadmap. This is an attractive option for participants who previously decided to focus only on minimum requirements to achieve external milestones. Time gained by the postponements might now be used to find a more future-proof approach and give closer consideration to the business benefits of their likely ISO 20022 migration approach.

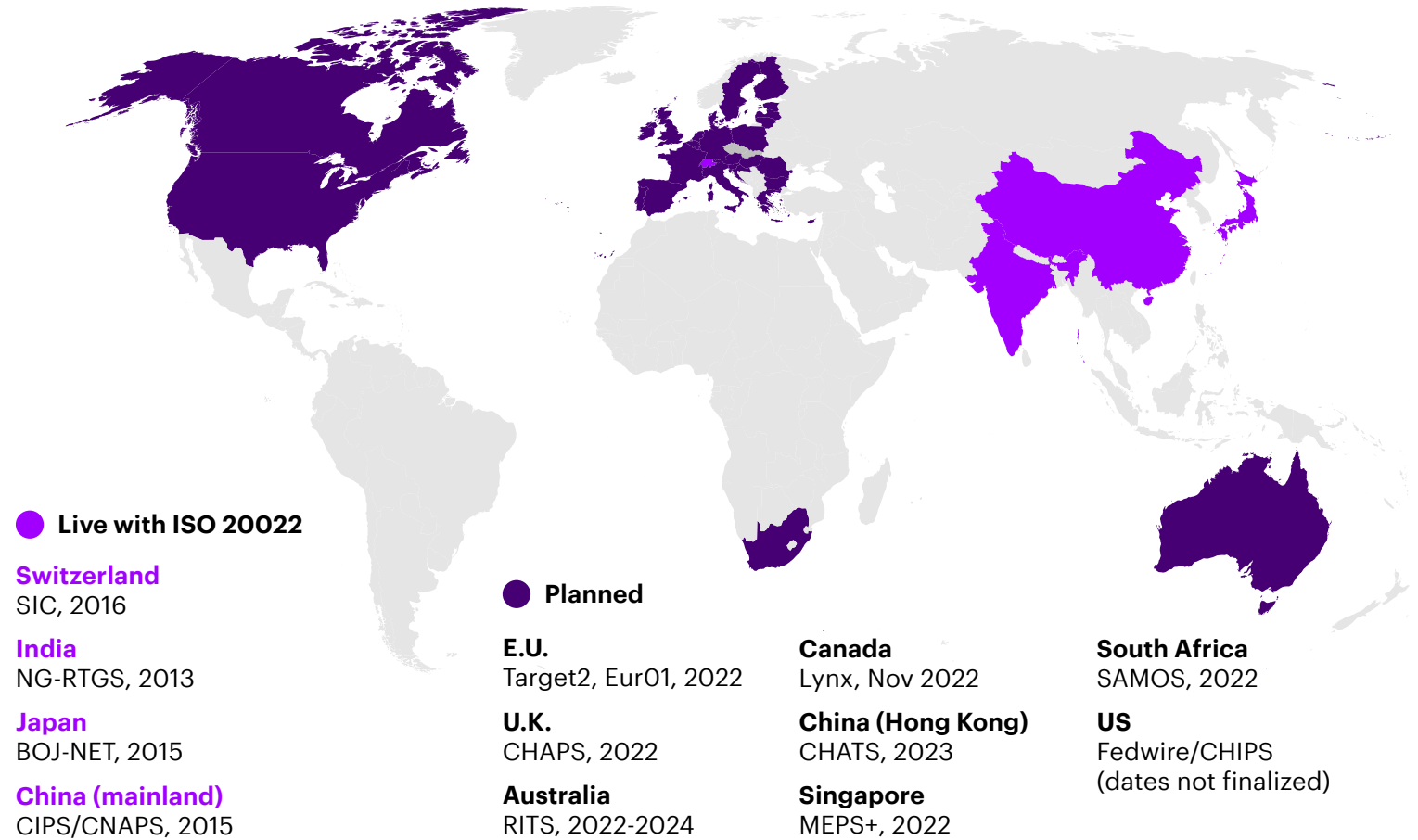
**Banks that participate in both TARGET services and EURO1/STEP1 will be able to leverage the synergy effects resulting from the aligned program and system management.**

# Specific issues for UK-based banks

UK banks have to plan their migration according to the four-phase approach foreseen by the Bank of England. The preparation phase is due to be completed at the beginning of 2022; the introductory phase (like-for-like) is expected to run until mid-2023; and the third phase—termed the “enhancement phase”—is scheduled to be finalized by the first quarter of 2024. This will be followed by the “mature phase”. The BoE, Pay.UK and PSR plan to work together on executing the migration while keeping their respective ISO 20022 programs as closely aligned as possible.

International banks operating in the Eurozone and the Nordics will have to address the challenge of planning and realizing a multi-year transformation in compliance with both external roadmaps and their own infrastructure plans.

Figure 2: ISO 20022 adoptions by RTGS systems globally



Source: Accenture and FIS



# Key challenges and solutions

For banks to effectively execute an end-to-end migration they will need to address a number of challenges that are typical to the process of preparing for and implementing the ISO 20022 format. The following approaches discussed below have been used successfully by Accenture and its clients.

# Conducting business-driven gap analysis

Since migration to ISO 20022 is a multi-year project, banks will need to budget accordingly and avoid misalignment of workstreams. The target-state architecture model must be reviewed carefully and funds allocated adequately and on time.

**Carry out a thorough impact assessment** to identify and realize all of the business benefits of ISO 20022.

**Invest in creating a center of knowledge** and in streamlining processes and value chains. Core banking, payments middleware, screening, reconciliation, and interbank channel infrastructure will typically be impacted and should therefore be included in the change roadmap.

**Initiate a dialogue with clients** and internal operational units to identify basic pain-points and requirements that can be addressed once the ISO 20022 message format is implemented.

**Consider clients' migration planning** as well: multi-nationals and other large corporates may need to be informed, managed and supported in their own ISO 20022 migrations.

# Finding a rational balance in implementing multiple critical projects

At any given time, most banks are running a number of business-related projects in addition to their ISO 20022 migration program. This can result in settling for “design to budget” solutions which offer minimum adaptations and provide a poor fit with the long-term strategic target state. Belated impact analysis may then reveal the need for unforeseen infrastructure changes, which are implemented through “quick and dirty” solutions. In these situations, complying with deadlines becomes more important than considering a strategic approach that might require a multi-year transformation project.

Minimal compliance with milestones and other requirements invariably entails missing out on the opportunity to use this watershed moment for innovation, for the overhaul of legacy infrastructure, and for the use of ISO 20022 to improve customer service. It is critical that banks focus on a future-proof strategy rather than on an immediate business case.

**Elaborate the best migration approach** for parallel programs, considering major business areas, the complexity of the infrastructure and the organization’s “migration fitness level”.

**Consider the benefits of complying with MI schemes** that request fully-fledged migration from the go-live (e.g. EURO1 and Target2), as opposed to the more relaxed migrations of those that allow first like-for-like and later fully-fledged migration (e.g. CHAPS from the Bank of England). Evaluate the pros and cons of each approach, while making the migration period as short as possible.

**Consider the potential synergy effects** of aligning several different migration programs (e.g. SWIFT and T2) where applicable.

# Upgrading aging legacy systems

Very old systems often can neither process and support, nor fully leverage the potential of the ISO 20022 format. In these cases, outdated legacy systems must be shielded from the impacts of ISO 20022 with the help of convertors or translators. Should an upgrade of multiple interconnected systems be required, banks will need to reach agreement swiftly with stakeholders and partners on the budget which will have to be invested. ISO 20022 should be considered as a driver for replacing and dismantling outdated systems and planning for a major IT upgrade to enhance digitalization.

**Evaluate and decide on a best-fit approach**—fully-fledged, like-for-like or mixed—that might allow transitional states for the initial phase to shield legacy systems before upgrades or replacements are implemented.

**Consider using tools and accelerators** to support rapid migration and shield non-compliant legacy systems.

**Use ISO 20022 as a trigger for long-term transformation** programs that include a full analysis of payments processing and operations, and resulting in streamlining and increased straight-through processing (STP).

**Evaluate your business models**, thinking holistically about improving operational efficiency infrastructures along with exploring the potential for a consolidated, in-house payments processing solution which will service all business lines. Apply convertors (only) where it is necessary to shield legacy systems from replacement.

**Implement solutions based on message transformation** and mapping technology to insulate your existing systems from change, including those located both on-premise and in cloud.

**Review your infrastructure components** (systems, databases, lines etc.) for their ability to process larger data volumes, intraday liquidity management, compliance checks, and fraud detection and prevention.

# Applying strategic guidelines for planning

Many banks still have no clear roadmap (blueprint), nor an end-to-end understanding of or planning for the implementation of ISO 20022. While ISO 20022 messages allow for the inclusion of additional data, there is a risk of messages being truncated and data being lost unless message enrichment and transformation challenges are addressed properly. Companies should also choose a strategy which complements the migration and translation needs of their clients. Leadership needs to prioritize data governance, risk management and compliance to ensure the smooth transition.

**Implement master project planning** for ISO 20022. Set a mandatory end date with a limited migration period, centralize management, set clear goals, and provide clarity on the entire end-to-end process chain. Apply the analytics and machine learning expertise needed to work with the payments software provider to leverage the data within its customer base and deliver personalized experiences. Hire the right talent to support the chosen market positioning.

**Include adequate resource planning** for ISO 20022 implementation and migration (e.g. project management, additional support services, test execution and available tools).

**Emphasize testing and quality assurance.** Test your end-to-end readiness in a closed or private environment. Assign sufficient time, resources and budget to implement a future-proof testing environment for future annual release upgrades.

**Involve clients,** external partners (such as vendors) and other stakeholders, and compile information that is made available by their respective payment infrastructures.

**Plan for post-migration control management** and implement regular monitoring and risk control measures.

**When these challenges arise at scale they may appear quite difficult to overcome. However, challenges caused by ISO 20022 migration also provide an opportunity for banks to improve through transformation.**



# Building a benefit case for ISO 20022

## Already used by payments systems in over 70 countries, ISO 20022 is the increasingly dominant global language for payments messaging.

By 2025 it will be the de facto standard for the high-value payments systems of all reserve currencies, supporting 80 percent of volumes and 87 percent of the value of transactions worldwide.<sup>5</sup> ISO 20022's growing market strength and ongoing harmonization and standardization, coupled with the removal of all format barriers in the payments processing arena, will

eventually allow financial institutions to maintain data as the strategic asset enabling digitization, and to foster innovation in business models to deliver a wide range of value-added services.

The migration to ISO 20022 might not immediately lend itself to a solid business case. However, the new format opens the way to several important advantages for the entire financial services industry.

These include:

- Global interoperability across all operators;
- Rich remittance data;
- Increased data quality through enhanced structure and granularity;

- Uniform and reusable terms and message components;
- Harmonization across all payment types;
- A base for innovative service offerings and products;
- Lower overall operational costs.

Based on these advantages of adopting ISO 20022, banks now have the opportunity to:

- Leverage ISO 20022 and APIs as the standard for data exchange in payments within the applicable regulatory and compliance regimes.
- Achieve higher automation, enhanced STP and redesigned processes, all with the goal of reducing friction.

- Reduce costs by dismantling obsolete legacy applications.
- Increase the effectiveness of fraud detection and prevention measures.
- Improve insight into the business purpose of customer payments as a base for innovative value-added services.
- Develop new integrated consumer-oriented services and products to meet the increasing demand for speed, transparency and granular tracking information (e.g. the SWIFT GPI service).

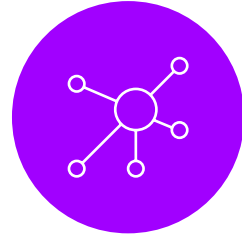
# How Accenture can support your ISO 20022 journey

Through its extensive experience of ISO 20022 migration projects and continuous dialogue with leading banks across Europe, Accenture has gained a deep understanding of the requirements, pain-points and challenges that banks face in planning and realizing their ISO 20022 programs.

This understanding has been centralized and consolidated within a global ISO 20022 initiative for gathering expertise, collecting best practices and developing tools and methodologies.

Alongside a structured impact analysis, we apply a standardized approach to developing a tailor-made solution blueprint for each client. This is based on an end-to-end gap analysis focused on the relevant payments engine as well as the vast and complex system landscape. In larger banks, changes in the payments process can impact up to 150 systems—and must take account of both the short-term needs of internal operational units and the longer-term requirements of corporate clients.

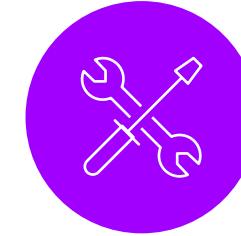
## There are several reasons why Accenture is the ideal partner for your bank's ISO 20022 journey.



**Our ISO-specific methodology** helps you prioritize the migration of various capabilities to focus on those most impacted by the change, and on the parts of the payments processing chain where ISO 20022 offers the highest value (fraud, embargo checks, etc).



**We provide a framework specific to ISO 20022** for determining your best target solution, including a make/buy analysis. MT-to-ISO 20022 mapping tools help to accelerate this process. For TARGET2, we recently developed the main scope of the consolidation program at a German financial services client, including a test automation framework.



**You benefit from a suite of tools and first-hand expertise**, the product of concrete ISO 20022 development projects (e.g. the T2 migration). These complement our many decades of deep involvement in the European payments landscape, working with clients across the spectrum of financial services.

# Case study: Major payments system transformation for a large European bank

## Accenture and FIS worked with a large European bank to support the successful implementation of a large payments system transformation as part of an enterprise-wide technology overhaul.

The bank's aim was to run on one global payments engine in preparation for ISO 20022 migration. Achieving this involved addressing an array of challenges, the first of which was ensuring the integrity of 700 integration points with 250 systems—and doing this with 49 payments systems across several countries.

The core component in the payments transformation journey was FIS's Open Payments Framework (OPF), which addressed compliance with SCT. Additionally, the bank benefited from an Accenture-run payments simplification and transformation program, which reduced the number of systems it needs to manage from 49 to just 10. The bank also now boasts a consistent product offering across all the countries in which it operates.

On the ISO 20022 side, the change program delivered a number of benefits for the bank:

- A full ISO 20022 processing capability, with no data truncation.
- Support for multiple ISO 20022 payment types on the same OPF

platform, including SCT Inst and SCT Batch. Going forward, support for TARGET2, the Eurozone's RTGS system, and the Nordics' P27 payments platform is also planned.

- Readiness for migration to ISO 20022 for SWIFT MX, which is now simply a matter of configuration.

The client has gained a number of additional benefits: infrastructure harmonization, which reduced the knowledge base needed to operate and run the payments environment; a more stable payments system; fewer production incidents; easier payment-processing monitoring capabilities; and a consistently high STP rate.

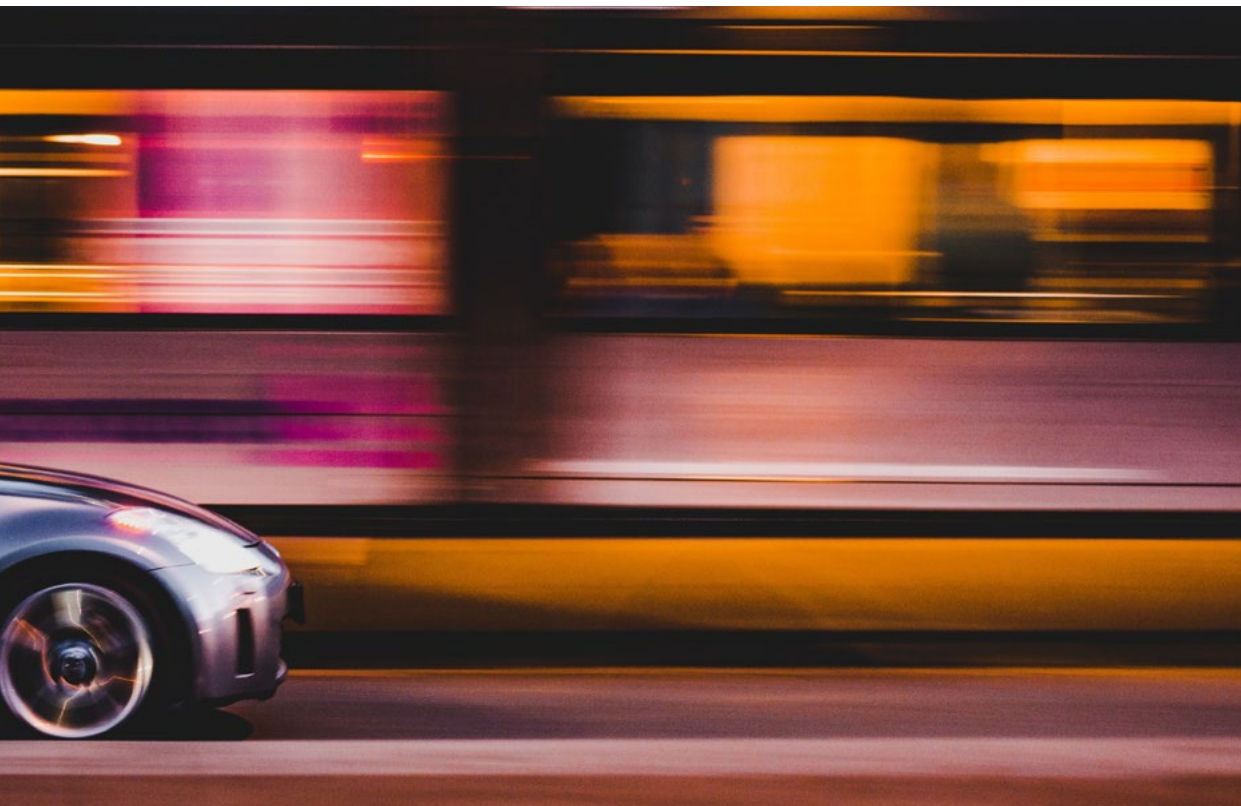
It's important to stress that full ISO 20022 transformation is appropriate mainly for financial institutions that are forward-thinking and relatively large. Smaller players with lower volumes and less capacity to implement a platform solution should consider the cloud translation solutions that are now available—assuming they can accommodate some manual processing and can carefully manage and mitigate operational and compliance risks.

Overall, the best way of meeting the ISO challenge is by leveraging an ISO 20022-native payments solution suite such as OPF from FIS, which includes modules for existing and upcoming ISO 20022 schemes worldwide.

# Deciding your course of action

Despite the delays in various migration programs, deadlines are now looming—and the time has come for banks to decide exactly how they will adopt the ISO 20022 messaging standard. To make the process as smooth and painless as possible, they should focus rigorously on immediate action.





Payments market infrastructure operators will plan to integrate all participants while avoiding industry-wide risks. Participants should play their part to avoid further delays and support end-to-end testing. Completing migration to ISO 20022 on time will provide the base for a single common global message standard, carrying richer and more structured data. It will also enable payments service providers to deliver new, more value-adding services to customers—while improving compliance and straight-through processing.

**The message is clear:** ISO 20022 migration is coming, and there is no benefit in delaying the journey. There's a great deal to think about and much planning to do, so the time to get started is sooner rather than later.

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Accenture Payment Services offers a unique combination of deep payments industry expertise, robust technology capabilities, innovative thinking and unsurpassed global outsourcing delivery experience. In addition to our payments consulting expertise, we have access to specialist teams in technology, finance and risk, and workforce and talent management.

The 5,000+ specialists in our Payments practice are engaged in business and IT consulting, systems integration and business process outsourcing for more than 150 clients. These include banks, card processors, payment schemes, merchant acquirers, central market infrastructures, retailers, marketplace platforms, telecom companies and government departments. Learn more at [www.accenture.com/Payments](http://www.accenture.com/Payments)

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