

A large, stylized map of Europe is formed by a complex network of light blue lines and dots, representing a digital or payment network. The map is set against a solid blue background. The lines connect various points across the continent, creating a dense web of connections. The overall aesthetic is modern and technological.

The transformation of the European payments landscape – How SWIFT can help



A global transformation of both wholesale and retail payments is underway, driven by many forces. In Europe, the Eurosystem has set a clear path for financial market infrastructure renewal. This, along with changing customer expectations, broader market infrastructure renewal and regulations such as PSD2, is putting the region at the front of payments transformation.

In this paper we set out SWIFT's commitment to accompany its customers through these changes.

The European payments landscape is changing

Financial institutions (FIs) are preparing for extensive infrastructure change in Europe and elsewhere. Adapting systems and processes for the migration of TARGET2 to ISO 20022, the move to EBA CLEARING's new EURO1/STEP1, and the introduction of the Eurosystem Single Market Infrastructure Gateway (ESMIG) will be critical. SWIFT is committed to helping the industry manage this change by providing robust, future-proofed financial messaging and connectivity solutions along with the security, compliance and other services needed to connect and transact safely and efficiently.

The enhancements planned by the Eurosystem to its services are intended to further the integration of financial and capital markets across the EU. As part of this, ESMIG will provide FIs with a simpler and more efficient means to access the key market infrastructures – TARGET Instant Payment Settlement (TIPS) for instant payments, TARGET2 (T2) for high value payments, and TARGET2-Securities (T2S) for securities settlement – and a centralised, flexible way to manage their liquidity.

It is an approach which aligns with how SWIFT supports its customers today, by providing a single window for customers to connect to multiple MIs. It also aligns with SWIFT's raison d'être: as a cooperative owned by its members, we are committed to helping the financial community to lower costs, reduce risks and eliminate operational inefficiencies. One way we do this is by developing and managing shared services and utilities which mutualise costs across the community.

As set out in our companion report, *The Transformation of the European Payments Landscape*, FIs are facing infrastructure change on many fronts. In Europe, the UK's real-time gross settlement (RTGS) service and EURO1/STEP1 will migrate

to ISO 20022 in a similar timeframe to the Eurosystem – and beyond Europe, Fedwire/CHIPS and many other central banks – have also announced migration plans. FIs must be ready and this will require careful and extensive systems migration.

Instant payments are creating a new world-order based on 24/7/365 operations. But delivering instant payments is demanding; it requires fast, low latency processing and much more besides: all services that surround a payment, such as security and compliance as well as core banking systems, must respond at the same velocity, while 24/7/365 operations introduces new pressures in terms of service management, systems maintenance and operational resilience.

Beyond operational readiness, there are the changes required to take advantage of new business opportunities – whether that is improved reporting to corporate clients, the introduction of a request for payment, value added services or partnering propositions.

How is all this to be managed? FIs are deciding their priorities, measuring their budgets and making their plans.

SWIFT is committed to supporting the financial community through these major infrastructure and industry changes, as we have done throughout our 40 plus years' history. Below, we outline how we will help our customers to be ready for the new Eurosystem infrastructure and the EURO1/STEP1 migration and outline our roadmap for the future transformation of the settlement landscape in Europe.



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EXPERT IN MARKET INFRASTRUCTURE CHANGE

SWIFT offers connectivity to 254 live market infrastructure systems in 140 countries and territories. SWIFT's expertise and experience of managing complex large-scale market migrations is unrivalled. We have played and continue to play a pivotal role in industry transformation, including supporting CLS, TARGET2, EURO1/STEP1 and more recently TARGET2-Securities, as well as Australia's New Payments Platform (which runs on SWIFT infrastructure). We have a long track-record of working with the industry as a trusted partner. SWIFT continues to be the preferred connectivity partner for the CLS and T2S communities and is the sole provider of connectivity for TARGET2 and EURO1/STEP1. For pan-European instant payments, SWIFTNet Instant, is certified and ready to connect to TIPS in November 2018. This is the first building block for future ESMIG connectivity. At the same time, we will also go live with connectivity to EBA CLEARING's RT1.

Different players, different models – one commitment

The evolving payments landscape is segmenting the market in new ways. Global transaction banks, regional players, smaller domestic banks, central banks, start-ups and fintechs, clearing and settlement mechanisms (CSMs), securities firms, central securities depositories (CSDs) and central counterparties (CCPs), and regulators, are all participating differently, to serve different customer groups. Yet all must respond to the regulatory and market infrastructure changes occurring in Europe.

We do expect to see different technical models for ESMIG connectivity. While many FIs will choose to connect directly, some may choose to connect indirectly, for cost or other reasons.

And there will be different business models – some FIs will choose separate accounts for each of their European operations – others may decide to put all business through one nominated account. Others may choose to participate in one, or more, CSMs for instant payments.

Users of the current TARGET2 ancillary services will also see changes to the way they operate.

Yet, we would argue that regardless of different levels of participation and business models, all players will need to start with the same comprehensive list of requirements for ESMIG:

- A plan for managing change within the defined timetable – especially ISO 20022 migration for T2
- Single window, future-proofed connectivity to ESMIG and beyond – for example, to both domestic CSMs and international payments infrastructures
- Fast, 24/7 processing capabilities for instant payments
- Efficient integration with liquidity management and other reporting requirements
- Real-time, ISO 20022-enabled compliance checks
- Proven systems resilience and cyber-security

ISO 20022 migration: do it once to get the benefits

The benefits of ISO 20022 messaging for enhanced services, easier compliance and more efficient, re-engineered processes are set out in our companion report, *The Transformation of the European Payments Landscape*. But migrating from current standards will require upfront investment and a considerable change management programme in order to realise the maximum benefits down the line. TARGET2 migration will be a big bang; the Eurosystem's decision to move to full ISO 20022 messaging from day one is based on a number of considerations, including previous market resistance to a "like for like" transition. With this in mind, many FIs will choose to commence a phased migration of impacted systems and processes well ahead of the November 2021 deadline, and this is likely to also include planning for other key infrastructures – the UK RTGS (currently CHAPS), EBA CLEARING's EURO1/STEP1 payment system, and (starting in Q1 2022) Fedwire/CHIPS in the US.

Prompted by the global adoption of ISO 20022 by market infrastructures, earlier this year SWIFT consulted the market on the appetite to migrate FIN messages to ISO 20022 with a proposed 2021/2 start date and 2025/6 end date for payments, depending on progress in the MI space. Some 87% of all responses received supported the proposed migration. For securities, the overall response was not to plan for a migration from ISO 15022, but rather to continue to make ISO 20022 available on an opt-in basis. ISO 15022 messages are relatively recent compared to the message types used for payments, and they still meet current securities business needs.

In September 2018, the SWIFT Board approved a plan for the migration of cross-border payments and cash to coincide with the migration of key market infrastructures, starting with TARGET2 and EURO1/STEP1 in November 2021. This migration completes the picture, providing a rich common data model for cross-border payments end-to-end, leading to improved customer services, more

accurate compliance processes and better straight-through-processing (STP). Further efficiency benefits will be achieved, as a result of a consistent end-to-end process across different payment infrastructures and flows. For example, we note that in 2017, nearly 50% of settlements in TARGET2 were related to cross-border payments that had at least one leg outside of the Eurozone.

Supporting customers through ISO 20022 migration

SWIFT has tried-and-tested tools to assist with the necessary changes: SWIFT Translator automatically translates messages and validates them against defined formats and translation rules. Because it is network agnostic and customisable, it can be employed across operations, from back-office to front-end systems as plans dictate.

MyStandards is a collaborative online platform for users of SWIFT MT, MX and ISO 20022 standards that also links directly to SWIFT Translator. It enables access to all base standards releases, definitions and market practice guidelines and users can create, publish and share specifications and usage guidelines via the platform. MyStandards offers an invaluable support for complex migrations, including onboarding customers.

SWIFT can also provide migration support and advice. Our professional services business is already advising a number of FIs on planning and project managing their migrations.

KEY PLAYER IN STANDARDS-MAKING AND IMPLEMENTATION

Open standards drive value by being open to all to use and deploy freely, but strong governance is needed to ensure the benefits of interoperability are maintained. SWIFT'S market practice groups, such as HVPS+ for market infrastructures, draw on 40+ years' experience in standards-making to harmonise global market practice and ease implementation of ISO 20022.

SWIFT is also the registration authority for ISO 20022, charged with ensuring compliance of repository items (schemas, data dictionary etc.) with the approved specifications, and their publication.

SWIFT is now moving the standardisation agenda to a new level, working with the industry to create a methodology for standardised APIs.

“Our strategy is to shield our customers from the costs and risks of managing multiple systems changes for multiple markets as they occur. In this way, we future-proof infrastructure change and mutualise the costs of change for the industry.”

SWIFT single window for financial messaging

We are evolving our technical platforms to enable them for ESMIG – and beyond. This means that, whatever our customers' market reach and ambitions, they will be able to participate in all existing and future TARGET Services from day one – as well as to EBA CLEARING's EURO1/STEP1 and RT1 – and connect to SWIFT for international payments, to instant payments systems of their choice and to market infrastructures world-wide, all via the same window.

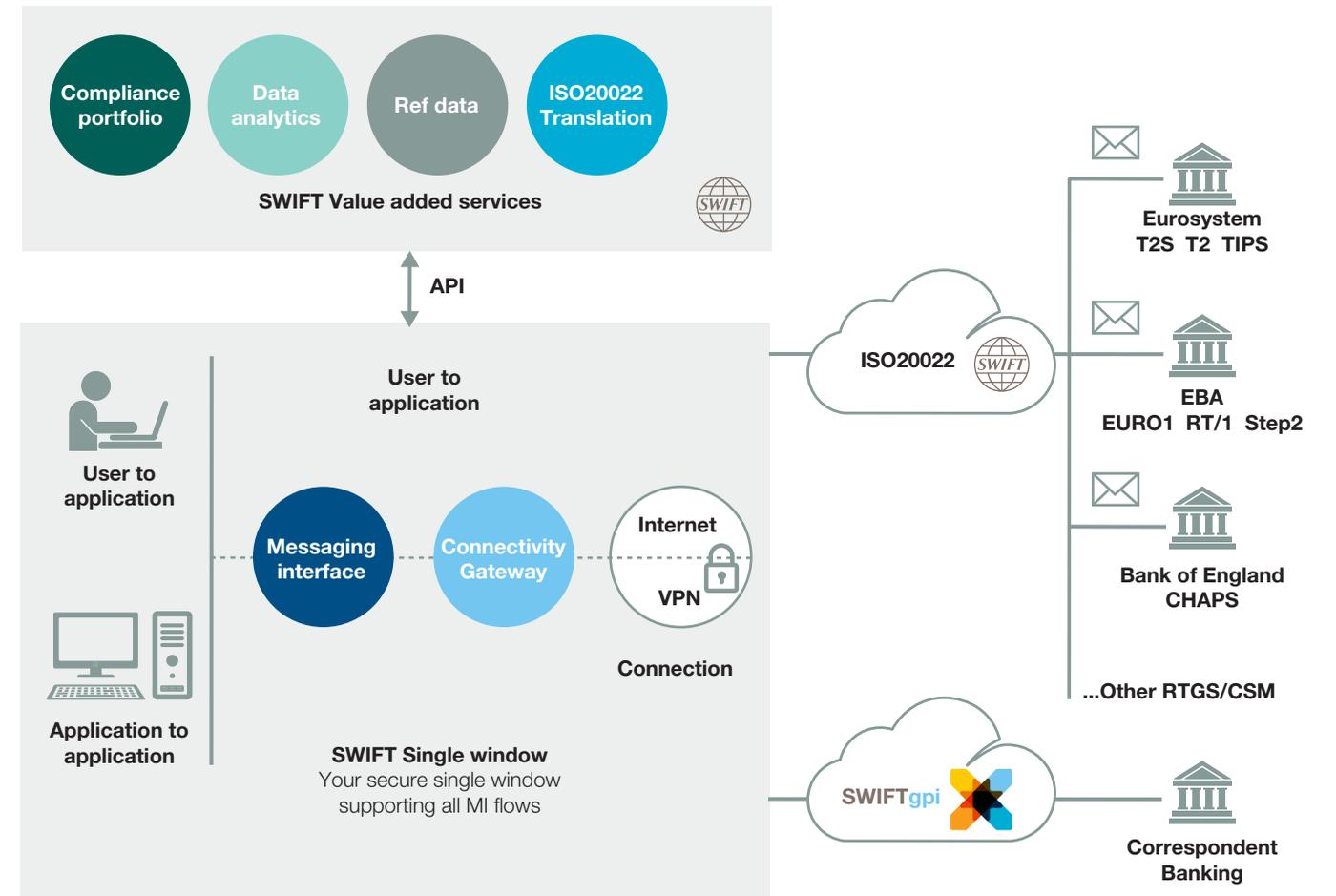
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infrastructure change and mutualise the costs of change for the industry.

SWIFTNet Instant, which will go live in November 2018, is an important first building block of this strategy. It offers seamless connectivity to TIPS (SWIFT is fully certified by the Eurosystem to provide connectivity to TIPS), to RT1 and to other interested domestic instant payments systems in Europe, and can be used with customers' existing SWIFT platform. By implementing SWIFTNet Instant, customers will be adopting a future-proof solution that will facilitate their migration to ESMIG. We will build SWIFTNet Instant into the next version of our customer platforms and full ESMIG connectivity will follow as specifications become available.

Fast, 24/7 processing capabilities for instant payments

SWIFTNet Instant provides everything that is needed to connect with TIPS, RT1 and other instant payment systems: 24/7 operations, real-time, low latency processing and a resilient and highly secure infrastructure. But a remaining challenge for FIs will be to enable other internal systems and processes, such as compliance and batch-based transaction processing systems, to operate at the same speed and availability. In the area of compliance, we see pre-release validation of payment messages as well as industry-sharing of risk data via application programming interfaces (APIs) as areas of development.



RESILIENCE AND SECURITY AT THE CORE

FIs choose SWIFT for unparalleled connectivity and reach – and for so much more. SWIFT is the first choice for performance, reliability, security and resilience.

SWIFT has been overseen by the central banks of the G10 countries since 1988 because of its importance to the smooth operation of the world-wide financial system. In addition, in 2012 when the SWIFT Oversight Forum was set up, extending information sharing on SWIFT oversight activities to a larger group of central banks.¹

Our core systems operate with at least 99.999% availability.

SWIFT's Customer Security Programme works to improve cybersecurity across the financial ecosystem, for example through the mandatory Customer Security Controls Framework; it also facilitates cybersecurity risk assessment by and amongst users.

Standardising APIs

At SWIFT, we see standardised APIs as a vital component of the future payments landscape and of our customer platforms.

In collaboration with the industry, we are developing a methodology for defining ISO 20022-compatible API specifications in a highly agile way that meets the needs of FIs and of fintech developers and we are working with a group of MIs to specify an Open Treasury API which would expose MI liquidity monitoring in a standardised and secure way. Market participants will be also able to reuse the SWIFT network to provide secure connectivity for API-based services.

Compliance and cyber-security demand collaboration

Aside from regulatory obligations and potential fines and costs, compliance

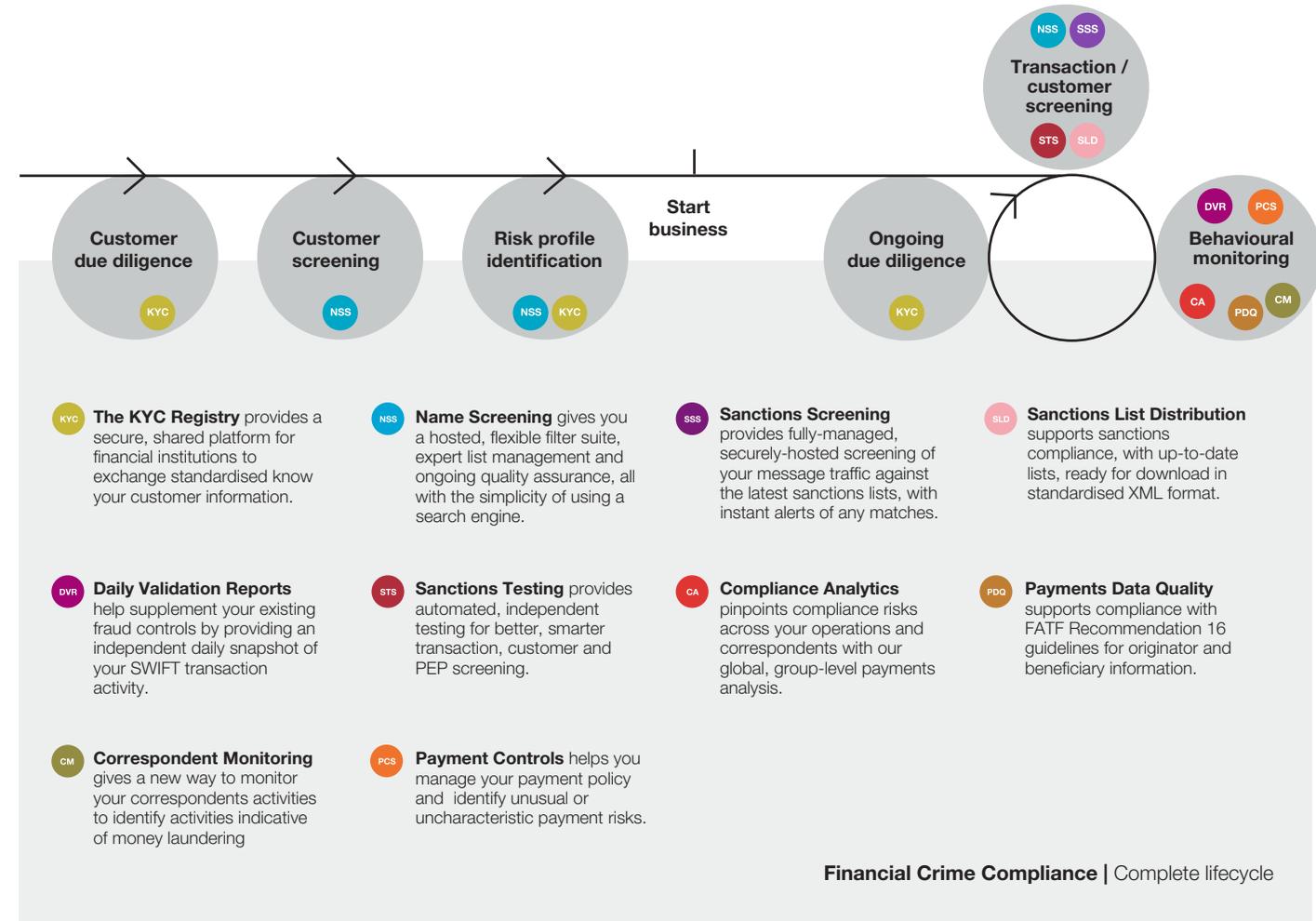
and cyber-security lapses have serious reputational impacts on FIs: trust is a key asset, to be vigorously defended. This will only become more challenging in our connected environment.

Know Your Customer (KYC) and anti-money laundering regulations – together with fraud protection – become even more demanding in a high-value or 24/7 payments environment. And all online organisations face a serious threat from cyber-attacks: denial of service attacks, hacking, phishing and other forms of data theft and online fraud are pervasive and escalating. (26% of merchants in Europe, and 22% of billing organisations, say they have experienced data theft, according to research from Ovum.²)

To meet regulatory compliance requirements and build effective defences against cyber-attacks, we believe cross-industry collaboration is essential. Shared databases and utilities reduce the need for multiple data requests (for example, for customer due diligence) facilitate the exchange of complete and standardised information and offer the potential for intelligence gathering and data analysis. We have invested to develop such services.

SWIFT's portfolio of shared financial crime compliance services and utilities is comprehensive, covering sanctions solutions, KYC requirements, and compliance analytics and intelligence using data from an institution's activity over SWIFT.

- The KYC Registry enables FIs to upload and update their KYC data on a shared platform and permission counterparties to access it, greatly reducing the time and cost of KYC monitoring
- Sanctions Testing is a managed service for optimising the performance of in-house sanctions filters
- Sanctions Screening, a fully-managed service, including list updates from a variety of sources, is another option
- Compliance Analytics analyses payment activity for activity spikes or policy breaches, enabling further investigation of suspicious activity
- Daily Validation Reports use a customer's incoming and outgoing messages to provide a global message flow summary. It can be used to verify payment activity and highlight potential risks
- The Payment Controls Service provides a secure, real-time, in-network means to monitor, identify and stop out-of-policy or uncharacteristic sent payments patterns³



ISO 20022 also promises big gains in compliance efficiency as a result of complete and better quality, structured data. When all the information needed for compliance is contained in the message, false positives and exception queues will be dramatically reduced. We will also enable our compliance solutions with APIs; this will facilitate payment- and scheme-agnostic interrogation of data.

Additionally, our Customer Security Programme aims to improve information sharing throughout the community; it also enhances SWIFT-related tools for customers and provides a customer security control framework.

¹ For more information on SWIFT oversight, visit swift.com

² 2018 Global Payments Insight Survey: Cross-vertical, Ovum

³ For a full overview of SWIFT's Financial Crime Compliance portfolio, please visit SWIFT.com

The transformation of the European payments landscape
How SWIFT can help

TRANSFORMING CROSS-BORDER PAYMENTS

SWIFT gpi was introduced rapidly in response to market need and has been quickly adopted. It enables payments to be credited to end beneficiaries within minutes, many within seconds.

To date, over 270 financial institutions around the world are signed up, to provide their customers with a faster service, transparency of fees, and end-to-end payments tracking. Almost 80 institutions are live, with more than USD 100 billion in SWIFT gpi payments being sent daily across 700+ international payment corridors – representing over a third of all SWIFT payments.

Gpi is an example of the agile transformation approach we have adopted within SWIFT, in order to serve the financial community.

Our vision for the future

Changing customer expectations, technological development, increasing competition and regulation are transforming the global payments landscape. In Europe, infrastructure change and PSD2 are game-changing, but beyond these events, payments will continue to evolve rapidly. We expect the next payments era will be characterised by convergence of payment types, the acceleration of processing and settlement and the emergence of API-driven payments ecosystems for end-to-end transaction management.

Real time (or near real time) with 24/7 availability is becoming the new normal for domestic payments. At the same time, gpi is becoming the new global standard for cross-border payments – with half of the payments made over gpi already credited within 30 minutes, many within seconds, allowing fast confirmation of incoming funds. Since the first or last leg of many cross-border payments are settled within a domestic or pan-European RTGS system, this will drive further harmonisation between domestic and cross-border transactions.

Today, individual gpi payments are trackable throughout the payment chain by means of a unique identifier, the Unique End-to-end Transaction Reference (UETR), within the MT103 message format. In November 2018, as part of the annual SWIFT Standard MT Release, the UETR will become mandatory for all payment messages on SWIFT, ensuring that all payments can be tracked and rapidly reconciled – and we expect the UETR will be more widely adopted by key market infrastructures, potentially enabling end-to-end transaction tracking for other types of payments too.

With the help of agreed standards, APIs and our shared services, end-to-end, automatic transaction orchestration can become a reality. Transactions will be screened for compliance and settled with all requisite controls and with full transparency, 24/7/365.

In partnership with our community, SWIFT will continue to work at the cutting edge of payments evolution to deliver a secure, resilient and future-proofed transaction ecosystem, together with the standards, compliance and security services to support safe, fast and efficient payments.



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SWIFT – committed to supporting the European financial community



Support all Eurosystem 2020 connectivity requirements for TIPS, TARGET2, CLM, T2S, etc. while allowing its community to re-use the generic SWIFTNet messaging services, also with **EURO1**



Business advisory services to:

- Analyse the strategic impacts and opportunities of the T2-T2S consolidation and EURO1 revamp
- Understand the new messaging flows and orchestration needs (FIN to ISO 20022, Y-copy to V-shape)
- Understand the new Liquidity Management functions and Accounts structure



Standards expertise services:

Extensive understanding of the ISO 20022 standards used for the future RTGS service
ISO 20022 migration strategy across segments (many-to-many, TARGET2, EURO1..)



Translation, standards management, testing products and services
Integration products and services



Project management

Building on SWIFT experience in large migration projects



Tailored training



Ensure ESMIG readiness of current SWIFT value added portfolio

SWIFT footprint evolution, Compliance, Business Intelligence, Reference Data



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 financial crime compliance. Our messaging platform, products and services connect more than 11,500 banking and securities organisations, market infrastructures and corporate customers in more than 200 countries and territories, enabling them to communicate securely and exchange standardised financial messages in a reliable way.

As their trusted provider, we facilitate global and local financial flows, support trade and commerce all around the world; we relentlessly pursue operational excellence and continually seek ways to lower costs, reduce risks and eliminate operational inefficiencies. Headquartered in Belgium, SWIFT's international governance and oversight reinforces the neutral, global character of its cooperative structure. SWIFT's global office network ensures an active presence in all the major financial centres.

Disclaimer

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To find out more

If you would like to find out more about how SWIFT can help your institution through the changes happening in the European payments landscape, please contact your SWIFT account manager.

For more information on the drivers, challenges and opportunities for financial institutions and other market players in a transformed Europe, please consult our companion report *"The Transformation of the European payments landscape."*

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