White paper

# The transformation of the European payments landscape

**SWIFT would like to thank the following institutions for their contributions to this paper:**

BNP Paribas
Deutsche Bank
ING
Sberbank
Unicredit

European Central Bank
EBA CLEARING

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The transformation of the
European payments landscape

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 regulations such as the Second Payment Services Directive (PSD2), is putting the region at the cutting edge of payments transformation.

In this paper we outline the drivers, challenges and opportunities for financial institutions and other market players in a transformed Europe.

The transformation of the
European payments landscape

A global transformation of payments is underway, challenging incumbent providers and re-shaping long-established relationships, timescales and payment methods. Nowhere is this more the case than in Europe, where far-reaching infrastructure renewal and regulatory intervention are prompting a generational step-change.

In this white paper, SWIFT analyses the key drivers and trends impacting the industry globally and takes a close look at the challenges and opportunities for payments providers in European markets.

**Drivers of industry change: customer expectations, technology, competition and regulation**

Digitisation is driving expectations for fast, frictionless and borderless payments that are embedded in transaction chains and eco-systems, whether for retail purchases or business transactions. This is a challenging environment for financial institutions (FIs) that have invested in branded payment channels and use clearing mechanisms which are not yet instant.

**Technology** is offering opportunities for innovation and efficiency: In particular, artificial intelligence and cloud technology are combining to reduce cost and enhance performance, for example, in compliance and customer service. Application programming interfaces (APIs) are making product integration and information exchange fast and easy. Creating APIs that are standardised, secure and easy to use is a challenge that the financial industry is addressing in collaboration with SWIFT. Technology is also enabling **competitors** – fintechs, global retail giants, card networks and digital start-up banks – to challenge incumbent providers and existing business models.

**Regulators** are intervening to foster competition, protect consumer rights and promote payments efficiency and innovation, for example, by requiring banks to open customer data to third party providers for account information and payment services (open banking).

**Key global trends**

- Open banking
  Open banking is set to transform the payments landscape, making it possible for fintechs and other innovators to offer new products and services to a wide market. Open banking will take time to become established, but it is a global trend, most notably in the EU but also in other countries such as Australia, Hong Kong and Singapore.

- Instant payments and faster cross-border payments will lead to payments convergence
  Instant payment services, which settle in seconds or minutes, round the clock, 365 days a year, are an industry response to changing customer expectations and are set to become the new normal, with services now available in many markets across the world. But current services are mostly domestic and not interoperable across markets or borders. In the EU, efforts to combat fragmentation of these services include a standard message format for instant payments (SCT Inst); EBA CLEARING's RT1 cross-border euro instant payments platform and later this year, the introduction of the Eurosystem's TARGET Instant Payments Settlement (TIPS) service.

  The industry has also responded to the need for more efficient cross-border payments. The Global Payments Innovation service (SWIFT gpi) guarantees same-day credit for cross-border payments, usually within seconds or minutes. The ambition is to achieve global adoption of gpi by 2020.

  A logical future development is the convergence of payment types to deliver global instant payments.

- Redesign and renewal of payment market infrastructures supports innovation
  Payment market infrastructures are renewing ageing infrastructure. At the same time, they are taking the opportunity to redesign and provide their communities with new functionality, such as instant payments, centralised collateral and liquidity management, and data-enriched, standardised messaging.

- Global adoption of ISO 20022 for financial services is a game-changer
  Over the next five years, major payment market infrastructures worldwide will migrate their operations to ISO 20022, confirming it as the de facto standard for financial services. In the same timeframe, cross-border payments will also migrate to ISO 20022. Interoperability and data richness are key parts of the success of ISO 20022, making global adoption of the standard a real game-changer.

**Regulatory drivers are pushing payments transformation in Europe**

Within the EU, the ongoing political objective of creating a single, competitive market for Europe is giving heightened impetus to the global drivers. The implementation of the Second Payment Services Directive (PSD2), the planned consolidation of the Eurosystem's TARGET2 and TARGET2-Securities, the evolution of EBA CLEARING's EURO1 and the introduction of pan-European instant payments services (the Eurosystem's TIPS and EBA CLEARING's RT1) are challenging FIs to redefine their business models.

This paper describes these developments in detail and suggests some choices facing incumbents looking to defend and grow their business. The report includes the views of a number of banks on the challenges and opportunities in this changing European landscape.

# Introduction – a changing global landscape for payments

The global payments business continues to grow, stimulated by increasing world trade and by the accelerating move away from cash to electronic and mobile payments. New payment providers are challenging incumbents for market share, using technology to disrupt traditional networks and business models across retail and wholesale payments. Regulation is increasing; payments platforms and market infrastructures are consolidating, renewing and re-designing. Customers want everything – including their payments – to be seamless. It all adds up to a transformation in global payments. →

CHAPTER 1





Payments is a growth business. Global cross-border payments totalled $131 trillion in 2017[1]. International trade growth is forecast to continue at 7% compound annual growth rate (CAGR) to 2022, to reach $23.5 trillion, driving further payments growth[1]. While payments other than B2B trade continue to grow at 5%, select low value payments in e-commerce will show much higher growth of >15% through 2022[2]. Payments associated with securities transactions are also significant, representing at least 30% of all payments traffic over SWIFT[3]. Overall securities traffic is estimated to grow at around 9% annually to 2021.

Digital networks and devices continue to transform the way we communicate, work and transact. Cash is in decline as more value is driven to a variety of payment channels. Global electronic payments transactions are predicted to grow at 12% through 2017-2022 across segments[2]. Global digital commerce volume exceeded $3 trillion in 2017, and will more than double by 2022[2]. Wholesale payments will also see a pronounced shift with the share of electronic on total wholesale payments expected to reach over ~50% in number and ~85% in value by 2022[4].

### Competition is fierce

This growing payments pie is fiercely contested. Fintechs, telecommunications companies, social networks, global card networks and online retailers are disrupting the payments business. Apple Pay transactions tripled in 2017/8, with analysts predicting more than 227 million users by 2020.[5] In China, two-thirds of point-of-sale transactions are now made over WeChat and AliPay and they are also expanding beyond China. Remittance providers such as TransferWise and start-up banks such as the UK digital-only challenger banks are moving up the value chain, targeting SME businesses as well as individuals.

With this level of competition, delivering payments at speed, with transparency, traceability and certainty has never been more important. Banks are responding. One such response is the Global Payments Innovation service (SWIFT gpi), developed by SWIFT in partnership with the banking industry. SWIFT gpi is transforming the cross-border payments experience. Traditional correspondent banking networks can take 48 hours or longer to deliver funds to a payee's account, but with gpi, payments can be tracked in real time throughout their journey and are credited same-day, usually in just seconds or minutes, with full fee transparency. 30% of all cross-border payments traffic over SWIFT now uses gpi and the ambition is to achieve global adoption of gpi by 2020. In major corridors, such as US-China, gpi already accounts for more than 60% of payments traffic.[6]

Instant payments are another industry response to changing customer expectations for fast, anytime, anywhere payments. These payments settle in seconds or minutes, 24 hours a day, 365 days a year, dramatically improving customer experience and providing a platform for additional services. The UK's Faster Payments and Singapore's FAST are early examples. Now HKMA has launched FPS in Hong Kong and Australia's real-time New Payments Platform went live in February this year. In Europe, some 17 domestic systems are operational or in the process of implementation for instant payments in euro and other European currencies, and by the end of 2018, Europe will also have two cross-border instant payment services: EBA CLEARING's RT1 and the Eurosystem's[7] Target Instant Payments Settlement (TIPS).

### Payments market infrastructures are re-designing as well as renewing

Payments market infrastructures, including clearing and settlement mechanisms (CSMs) and real-time gross settlement systems (RTGS) are principal actors in the global payments transformation currently underway. As ageing infrastructure comes up for renewal, they are taking the opportunity to re-design as well as renew, so that, when current plans come to fruition, their communities will benefit from more efficient processing and the ability to provide their customers with richer data and more valuable services. Examples here include:

- Payments Canada's Modernisation Programme
- RTGS, automated clearing house (BACS) and instant payments (Faster Payments) renewal in the UK
- Federal Reserve's ISO 20022 migration
- Prospective Payments System in Russia migration to ISO 20022
- Migration of Hong Kong's RTGS (CHATS) to ISO 20022
- Payments Association of South Africa's Project Future
- Banco Central do Brasil's "Pagamentos Instantâneos" project
- EBA CLEARING's launch of RT1 for instant payments and the renewal of their payment system EURO1/STEP1
- Eurosystem's plans for a future consolidated platform for TARGET2 and TARGET2-Securities (T2S), TARGET Instant Payment Settlement (TIPS) and a new centralised liquidity management facility (CLM) that operates across all TARGET Services

Critical to all these plans is the adoption by payments market infrastructures of a common standard, ISO 20022. Its impact on our future payments landscape will be significant. If announced deadlines are met, by 2023, ISO 20022 will dominate high value payments, supporting 79% of the volume and 87% of the value of transactions worldwide.[8] ISO 20022 is also widely used for instant payment systems and is preferred by many large corporates for communicating with their banks.

Europe is the crucible for payments change. On the one hand, bold and ambitious regulation and infrastructure renewal is driving innovation. On the other, it is grappling with the legacy and productivity issues of mature markets. This report looks at the challenges and opportunities for financial institutions' payment businesses in Europe and outlines some of the strategies that banks are adopting. In a companion paper, we set out how SWIFT is supporting its communities and customers.

[1] McKinsey Global Trade Map
[2] McKinsey Global Payments Map
[3] SWIFT data
[4] Based on 45 countries covering ~90% of global GDP
[5] Banking Industry Concerns grow as Big Tech Turn to FinTech, Payments Cards and Mobile, 7 August 2018
[6] SWIFT data
[7] The Eurosystem comprises the European Central Bank and the national central banks of countries that have joined the Euro.
[8] SWIFT ISO 20022 Migration Study Consultation, April 2018.

### WHY IS ISO 20022 SUCH A GAME-CHANGER?

**ISO 20022 offers a single, global, open standardisation approach** for financial business flows, covering methodology, process and a standards repository across payments, securities, cards, trade services and FX. Anyone can use the existing models and schemas or contribute new candidate models and messages for approval by the ISO 20022 registration bodies.

**ISO 20022 can accommodate more data – and more structured data,** allowing for much more information to be carried and processed across a chain of market participants, from originator to beneficiary. This enables FIs to deliver more information linked to the transactions and better service to their customers.

FIs also face increasing regulatory demands to deliver more and more structured data, for example, for transaction screening and anti-money laundering reporting; to meet requirements under PSD2 to provide payment and account information to third parties (open banking); data portability requirements under the General Data Protection Regulation (GDPR). With ISO 20022, FIs can meet these requirements and operate more efficiently themselves.

**ISO 20022 is internationally accepted** as the de facto standard for financial services. This has not happened overnight – recognition is built on years of detailed standards work backed by strong governance.

**Interoperability is a key part of the success of ISO 20022.** Market practice groups formulate guidelines to ensure that the implementation of the standard is harmonised for particular use-cases. For example, the HVPS+ group, formed of high-value payments system operators and commercial banks, creates guidelines for the use of ISO 20022 for high-value payments. The European Payments Council (EPC) successfully introduced ISO 20022 for all SEPA Single Credit Transfers in 2008. ISO 20022 proved to support the required interoperability between the different players in the Euro retail payments market. In addition, the EPC recently published the SEPA Single Credit Transfer INST (SCT Inst) to standardise the use of ISO 20022 for instant payments in the Eurozone. ISO 20022 also offers interoperability of systems and works across legacy and emerging technologies such as APIs.

**Market infrastructures world-wide have adopted ISO 20022** and will be migrating their systems to the standard over the next five years.

The payments industry has signalled its interest in **the migration of cross-border payments (FIN MT messages) to ISO 20022**, following a market consultation by SWIFT earlier this year. 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.





# The drivers of change

Customer expectations, technology, competition and regulation are powerful drivers of change, transforming the payments landscape and challenging FIs to re-define their business models. MI infrastructure renewal is prompting a moment of generational shift. →

2

CHAPTER

## Innovation and new entrants are changing consumer behaviours

Rising global market places blur the frontier between payment and purchase processes

**The rise of global market places leads to more low-value cross-border transactions**

amazon

Facilitating access to international sellers

$178B — Sales for 2017

31% — Yearly sales growth 2017

>$10B — 2018 projected sales on business platform

Uber

Internationalising domestic monopolies

4B — Rides 2017

78 — Countries

$37B — Gross bookings in 2017

Source: Amazon and Uber

Ever faster communications continuously re-shape how we connect with people and markets. Giant retailers bring a wealth of opportunities right into our homes so we can choose, shop, and consume 24 hours a day from anywhere around the globe. Goods are shipped world-wide and delivered rapidly to our door. This trend is supported by analysis of SWIFT transaction data between 2014-2017 which shows a 17% rise in low value (below $500) cross-border transactions.

### Customer expectations for faster, frictionless payments

Digitisation in all industries is driving more frequent and faster financial transactions. This is the 21st century experience, and it is dramatically shaping our expectations of payments and payment providers to ensure the money can follow the goods at the same velocity. As consumers, investors, merchants and business people, we are starting to see payments as just one step of a transaction chain that must be fast, frictionless and embedded. It must also be price transparent – and safely delivered, with no risk of loss or fraud. Increasingly, financing offers are part of the mix, as well as rich customer data, invoice and transaction information.

It is a challenging environment for FIs that have invested in their own branded payment channels, be that for retail or wholesale customers, and use clearing mechanisms which are not (yet) instant. And, while payments data may represent a source of business intelligence for FIs, data confidentiality concerns require it be treated with utmost care.

> **"As consumers, investors, merchants and business people, we are starting to see payments as just one step of a transaction chain that must be fast, frictionless and embedded."**





### Payments industry disruptors

Online environments drive price transparency and market consolidation, making this a key battleground for payments providers. In some parts of the world, the retail payments market is dominated by non-bank companies – such as Tencent and Ant Financial in China. If FIs are not able to deliver on present and future customer expectations, then the worry is that global players with scale – such as Amazon and Google – will take the customer relationship and turn banks into "dumb pipes."

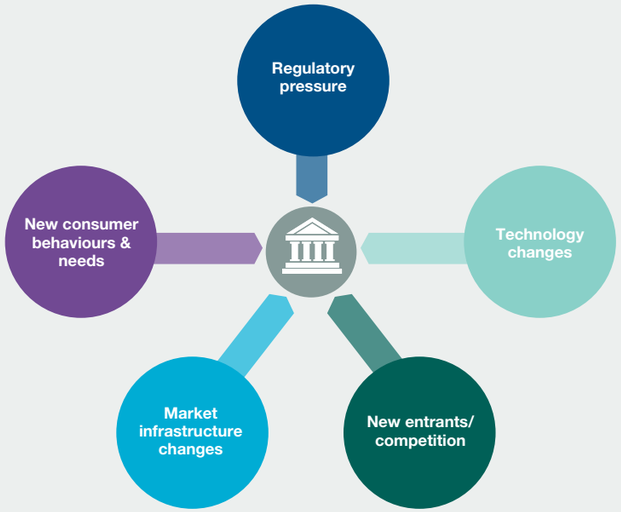
Technology, and the speed of technological change, is one driver of customer expectations and the ultimate disruptor of the payments market. FIs – even the largest transaction banks with the deepest pockets – have been hampered by legacy infrastructure and cultural and regulatory hurdles compared to nimbler, less regulated fintechs. Speculation has been raised as to whether, or when, non-bank payments providers will be regulated in the same way.

Of course, some serious competitors to incumbents are fully regulated as banks: UK digital start-ups Monzo and Starling are seeing success with millennials by offering innovative features such as categorised spending. Monzo, which started up in 2016, expects to have 1 million accounts by autumn 2018[9]; Starling now offers business accounts. Klarna, a Swedish bank founded "with the aim of making it easier for people to shop online" offers a range of payment options, including pay later financing. Klarna claims 10% of the e-commerce market share for northern Europe.[10]

Yet not all new competitors are new entrants. Card networks, for example, have long been active in many payment areas, looking to expand, diversify, protect or consolidate their business. When Mastercard announced its acquisition of Vocalink, which runs BACS and Faster Payments in the UK, it was with the stated objective of adding bank account-based payments alongside the card network to extend their business reach and meet all payment needs of businesses, governments and consumers.[11]

## Challenges for the payments industry

Many disruptions coming together in a short timeframe and cost-pressured environment




### New technologies, new possibilities

Which are the critical technologies for success in this dynamically changing market? Those that can be harnessed to increase customer satisfaction, facilitate new business and reduce operating costs.

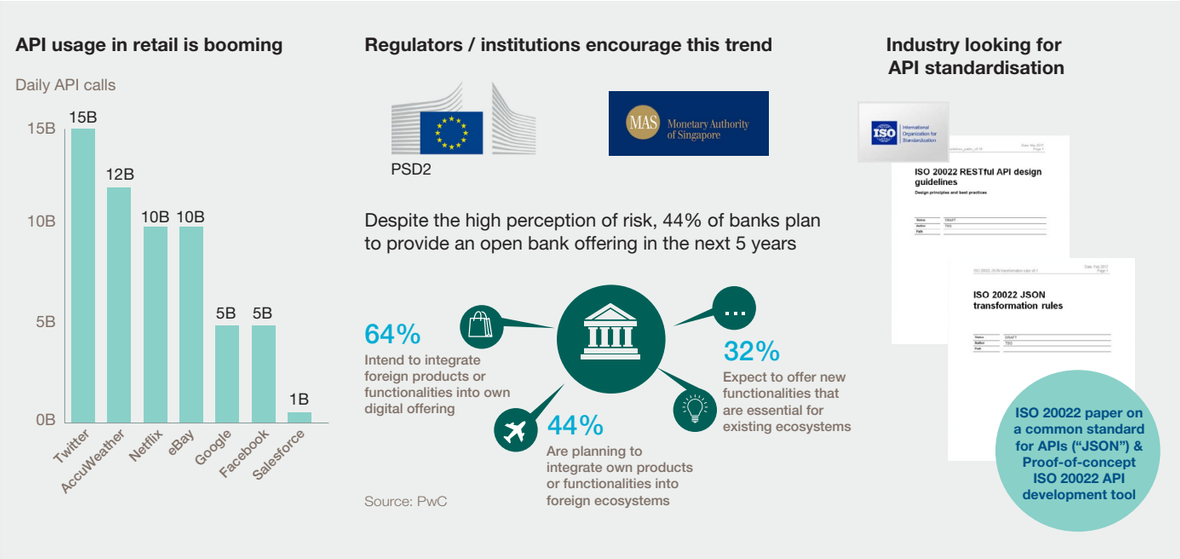
Although FIs have invested a lot of research time and budgets experimenting with new technologies such as blockchain and crypto-currencies, these have so far not fulfilled their early promise in the area of payments. Applications based on distributed ledger technology (DLT) have already been found in various industries, including the financial industry, and a good example of this is ASX's replacement of their CHESS system. However, trials in the cross-border payments area have so far not demonstrated that the technology is ready for wider use in areas such as payments, given the requirements that the market has for speed, scalability, availability and reach.

For the present, much attention is focused on the development of Application Programming Interfaces (APIs). They expose services or data (such as account information or liquidity positions) for consumption by other programs (such as account aggregation or treasury management services) over the internet or private networks. APIs are very widely used in the on-line retail sector and elsewhere.

[9] Digital bank Monzo's losses more than quadruple, Financial Times, 2 July 2018
[10] Klarna website
[11] Mastercard wins approval for £700m Vocalink deal, Financial Times, 17 April 2017.

## API-sation at industry level

Moving from the retail world to banking




APIs dramatically reduce the time needed to develop and integrate new applications or services – and therefore can present a threat, as well as an opportunity, for incumbents in the payments industry. Open banking is an obvious example.

But at the same time, APIs offer FIs opportunities to easily partner to deliver innovative services, or to make their own services – such as financing - easy to integrate into transaction platforms and broader ecosystems. They could also be used to exchange information flows with market infrastructures or core banking systems, for example, for liquidity or compliance monitoring. Exposing financial APIs in a way that is standardised, secure and easily consumable by services is one issue facing the industry; SWIFT is building an API platform that will deliver this.

Growing use of cloud technology is also opening up new opportunities and generating operational efficiencies. Storing, managing and processing data in the cloud means organisations can reduce the costs of owning and operating their own infrastructure. Last year, DTCC suggested that the technology had reached a tipping point in financial services with the capability, resiliency and security of services surpassing on-premise capabilities.[12] And when cloud processing is combined with artificial intelligence, the costs of customer service, compliance and other operational requirements could be dramatically reduced. In future, many believe artificial intelligence is likely to become the primary means of responding to customer enquiries, detecting fraud on instant payments in run-time and supporting compliance screening processes.

> **"Exposing financial APIs in a way that is standardised, secure and easily consumable by services is one issue facing the industry."**

[12] White paper: Moving Financial Market Infrastructure to the Cloud, DTCC, May 2017





### Regulators are catalysing payments innovation

Significantly, regulators are intervening to foster competition, protect consumer rights and promote payments efficiency and innovation through use of developing technologies. By such intervention, they are acting as a catalyst for game-changing development. One example is PSD2, which has established the framework for far-reaching change by mandating 'open banking' across the EU; this is expected to dramatically alter the payments landscape and payments ecosystem.

Open banking, which facilitates third-party access to customer information and accounts held by banks, will allow non-traditional players to provide new services. The customer must give permission for an authorised third party to access his or her data, and there are stringent security requirements. Another aspect of open banking is payment initiation; this can be done by the payment service provider (PSP) on behalf of the customer (retail or wholesale).

Open banking is a global trend, most notably in the EU but there are also initiatives at different stages in Australia, Singapore and Hong Kong. In the UK, the nine largest current account providers developed standards and implemented open banking in response to instruction from the country's Competition and Markets Authority ahead of the implementation of PSD2.

### The impact of compliance on market dynamics

Regulation is also having a significant impact on operational models across the financial industry.

For example, the Financial Action Task Force (FATF) targets money laundering and terrorist financing and, through local regulators, places heavy monitoring and reporting requirements on financial institutions. At both regional and local levels, there is also a raft of regulation addressing financial crime. The compound effect of these is proving challenging for the traditional cross-border payments business. Know Your Customer (KYC) and anti-money laundering (AML) regulations require banks to make extensive checks on correspondents, counterparties and transactions. These demanding processes and new frameworks are shifting the economics of correspondent banking models, making some banking relationships expensive to maintain.

As a result of these increased costs – combined with low interest rates and downward pressure on pricing and earnings as a result of increased competition – many financial institutions have consolidated their networks: today fewer than 150 banking groups are responsible for 80% of the international payments messages sent over SWIFT.[13] In many mid-sized economies, the same "de-risking" trends have led to even the largest bank in the country having a single correspondent for the main cross-border currencies, and the smaller banks struggling to have even one.

### Combating cybercrime

Protection against cybercrime is an escalating concern and cost for all payments markets participants, but the industry is continuously improving its defences. Following payment frauds in some banks' locally managed infrastructure in 2016, SWIFT introduced its Customer Security Programme (CSP), which aims to improve information sharing throughout the community, enhance SWIFT-related tools for customers and provide a customer security control framework. Last year, the Eurosystem set up the Cyber Resilience Board for Financial Infrastructures to foster collaboration and joint initiatives between market participants and public authorities, and has also enhanced self-certification requirements for TARGET2 participants; this will make use of information from the SWIFT Customer Security Programme.[14] The Framework for Threat Intelligence-based Ethical Red Teaming (TIBER-EU) enables European and national authorities to work with financial infrastructures and institutions to put in place a programme to test and improve their resilience against sophisticated cyberattacks.

### Market infrastructures evolving

The financial crisis of a decade ago demanded global regulatory action and responses. Since then, financial market infrastructures have increasingly moved to respond to regulatory or technology change. Greater collaboration and interoperability between market infrastructures will be the key to harnessing the benefits of these changes for market participants.

Global acceptance of ISO 20022 and the accelerated migration of financial market infrastructures to the standard, (facilitated by the work of the HVPS+ group) is a clear example of this. The result is a generational step-change for the industry.

Together, these drivers are transforming the global payments landscape.

> **"Protection against cybercrime is an escalating concern and cost for all payments markets participants."**

[13] SWIFT data
[14] TARGET Annual Report, 2017, page 54

# The European payments market

Regulatory drivers are putting Europe at the cutting edge of payments transformation. PSD2 and open banking, instant payments and market infrastructure renewal are presenting FIs with operational and strategic challenges. →

CHAPTER 3





The European Union – an area encompassing 28 member states and 512.6[15] million people – has made strides towards harmonisation and the reduction of friction for cross-border payments within the region. Today 19 member states have the euro as their currency and the Payment Services Directive (2007) established the Single European Payments Area (SEPA), which enables consumers and businesses to make euro payments under the same conditions across 33 countries. In this context, it is worthy of note that 63% of all EU exports flow between EU member states.[16]

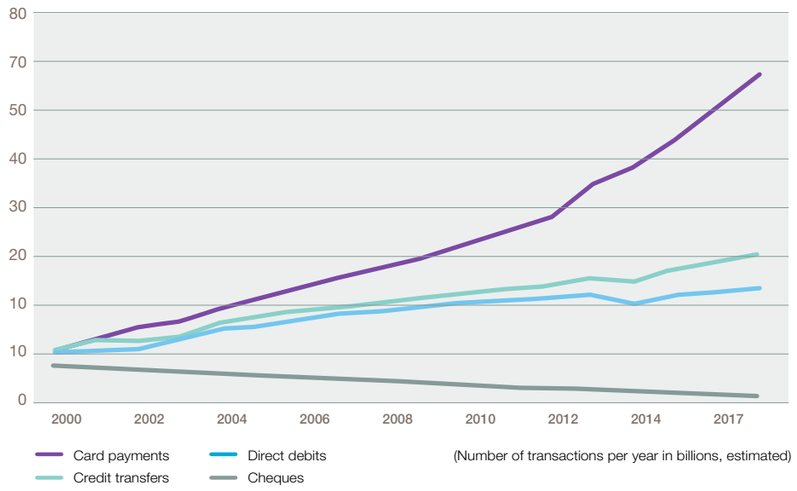
Still, Europe remains a diverse region with a wide range of payments systems and customer preferences. For example, in the retail sector, card payments accounted for 52% of all transactions across the EU in 2017, with citizens owning on average 1.6 payment cards each[17]. Yet in Germany, cash is still preferred for payments – 74% of all consumer payment transactions by volume[18] – compared to 34% in the UK[19]. Sweden is generally considered Europe's most cash-free economy; seven out of ten people questioned said they could cope without cash[20] and consideration has been given to digitising central bank money[21].

Historically, there have also been stark variations across markets in preferences for credit transfers and direct debits and differences in terms of legal requirements and liabilities, depending on the set up and operation of national clearing houses.

### The European payments market today[22]

In 2017, the total number of non-cash payments in the EU, comprising all types of payment services, increased by 7.9% to 134 billion. After cards, which accounted for 52% of non-cash payments in the EU in 2017, credit transfers were the most used payment instrument at 24%, followed by direct debits, at 19%, according to ECB statistics.

**Chart 1: Use of the main payment services in the EU**




[15] Eurostat, 1 January 2018
[16] World Trade Statistical Review, 2017, World Trade Organisation – figures for 2015.
[17] Press release: Payment Statistics:2017, European Central Bank, 14 September 2018
[18] Payments Behaviour in Germany, 2017 survey. Deutsche Bundesbank, February 2018
[19] Press release: Convenience of debit card payments puts cash in second place, UK Finance, June 2018
[20] Payments Patterns in Sweden 2018, Sveriges Riksbank
[21] https://www.riksbank.se/en-gb/financial-stability/payments/e-krona/the-e-krona-projects-first-interim-report/
[22] Statistics and charts in this section are taken from Payments Statistics: 2017, a press release from the European Central Bank, 14 September 2018.

### Retail payment systems[23]

Retail payments are low value payments made by individuals or businesses for everyday needs.

In 2017, there were 43 retail payment systems in the EU, 22 of which were in the euro area, representing 73% of the EU total by value. The largest of these by value is EBA CLEARING's STEP2, which processes and settles SEPA Credit Transfers and SEPA Direct Debits for participants across SEPA.

Around 57 billion transactions were processed by retail payment systems in the EU in 2017, with an amount of €44 trillion.

### High value payment systems[24]

High value payment systems (HVPS) provide real-time and irrevocable settlement. They are designed primarily to process urgent or high-value interbank payments, but some also settle a large number of retail payments. During 2017, 12 systems settled 842 million payments with a total value of €702 trillion in the EU.

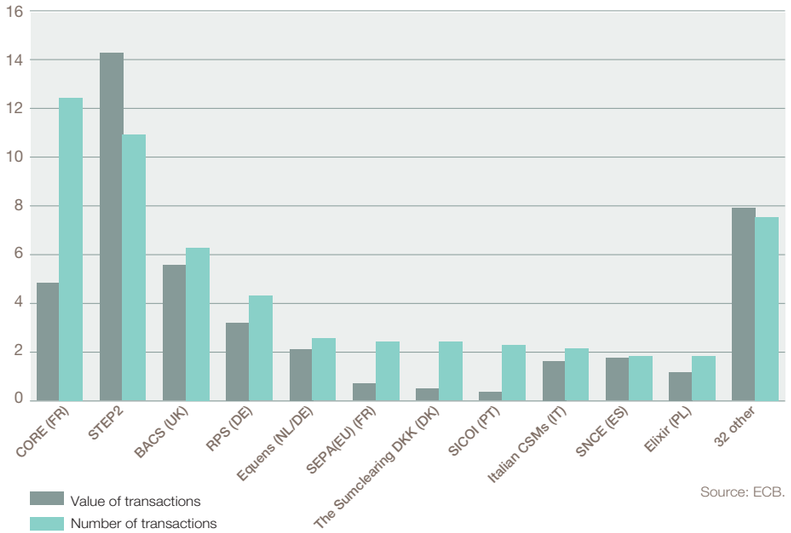
The two largest HVPS systems in the euro area, (TARGET2 and EURO1/STEP1) settled 143 million transactions amounting to €528 trillion (75% of the total value).

In the non-euro area, the United Kingdom's CHAPS Sterling is the largest HVPS in terms of both value and number of transactions, followed (by value and excluding CERTIS) by Poland's SORBNET, Sweden's RIX and Denmark's KRONOS[25].

In the foreign exchange market, Continuous Linked Settlement (CLS) is the most important HVPS. In 2017 it processed 198 million transactions in multiple currencies with a value of €1,193 trillion.

**Chart 2: Retail payment systems in the EU in 2017**

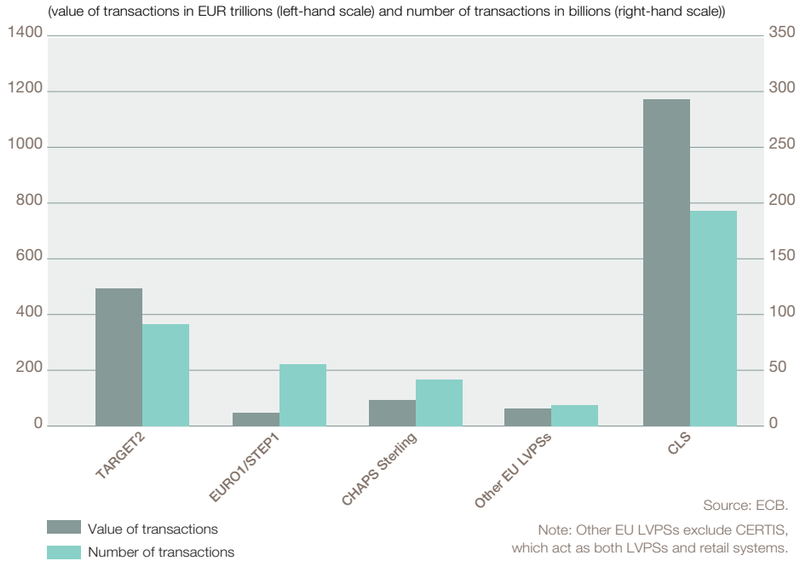
(value of transactions in EUR trillions (left-hand scale) and number of transactions in billions (right-hand scale))




Source: ECB.

**Chart 3: Large-value payment systems in 2017**

(value of transactions in EUR trillions (left-hand scale) and number of transactions in billions (right-hand scale))




Source: ECB.

Note: Other EU LVPSs exclude CERTIS, which act as both LVPSs and retail systems.

[23] Statistics and charts in this section are taken from Payments Statistics: 2017, a press release from the European Central Bank, 14 September 2018.
[24] Statistics and charts in this section are taken from Payments Statistics: 2017, a press release from the European Central Bank, 14 September 2018.
[25] ECB Payment Statistics, Comparative tables, Statistical Data Warehouse, European Central Bank





### Payments change and renewal in Europe

The European Union is a unique project with a long regulatory reach. While the global drivers of change described earlier are causing payments markets everywhere to evolve at a very fast rate, within the EU, the ongoing political objective of creating a single, competitive market for Europe is giving heightened impetus and immediacy to this transformation. In the sphere of payments, this can be considered to be one of the main drivers behind the opening up of the payments market as facilitated by PSD2.

Financial institutions and payment providers are facing three significant changes which will not only require large operational adjustment, but also impact their future business models:

- PSD2 and open banking
- The move to instant payments
- Major market infrastructure change – such as the TARGET Instant Payments Settlement (TIPS), the consolidation of the Eurosystem's RTGS TARGET2 and T2S, and the migration of EBA CLEARING's EURO1/STEP1 to ISO 20022

### PSD2 and open banking

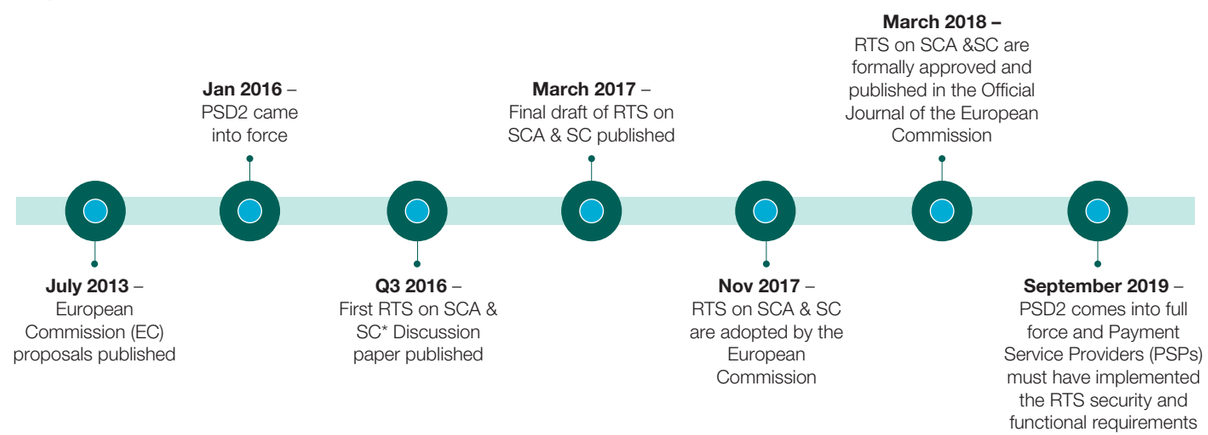
PSD2 will come into full force in September 2019. It responds to recent "technical innovation, rapid growth in the numbers of electronic and mobile payments and new types of payments services," and states that "equivalent operating conditions should be guaranteed, to existing and new players on the market, enabling new means of payment to reach a broader market and ensuring a high level of consumer protection."[26] To achieve this market competition, consumer choice and protection, PSD2 requires FIs to open customer account information to authorised third party providers for payments as well as for information; creates two new categories of Payment Service Providers (PSPs) – Account Information Service Providers (AISPs) and Payment Initiation Service Providers (PISPs); and places strong customer authentication requirements on providers of online and mobile payment services.

Open banking will drive profound change in the industry, but this will take time. Some countries have yet to transpose the Directive into national law and Regulatory Technical Standards for strong customer authentication will not be implemented until 2019. Before rolling out services, PISPs and AISPs must complete registration procedures. And consumers will likely take time to understand and choose the new providers and services that will come available. So payment providers still have a short window to prepare, comply and decide how to use the new conditions to retain customer relationships and win more; for instance, by themselves becoming third party service providers.

When Deloitte asked 90 EU banking institutions about PSD2, most said PSD2 represented an opportunity. Major top tier incumbent banks and established fintechs were seen as the biggest threats in the PSD2-enabled ecosystem. Respondents saw financing and enhanced decision-making around lending, and the potential to offer more services to SMEs, as some likely benefits of open banking for established payments providers, while perceived threats were to savings and investments and reduced use of cards for online payments.[27]

A challenge for the industry is balancing the demands of open banking for access, frictionless payments and customer experience against security concerns and obligations; these include how to implement customer authentication, the liability of third parties and customers' rights under GDPR.

**Key dates for PSD2**




*Regulatory Technical Specifications on Strong Customer Authentication and Secure Communication

[26] Directive (EU) 2015/2366 paragraphs 3 and 6.

## PSD2 – The basics

| | |
|---|---|
| **Competition & Innovation**<br><br>**Open Banking** | **Authorised Third Party Providers:**<br>– Payment Initiation Service Providers (PISPs)<br>– Account Information Service Providers (AISPs)<br><br>Granted non-discriminatory access to customers data / accounts via Dedicated Interfaces (API) |
| **Customer Protection** | **Strong Customer Authentication and Secure Communication**<br><br>– 2-factor authentication mandated for remote payments initiation and other potential fraud inducing actions |

**"A challenge for the industry is balancing the demands of open banking for access, frictionless payments and customer experience against security concerns and obligations."**

### Instant payments

It is now accepted that instant payments are set to become the new normal. According to research from Ovum,[28] 85% of banks surveyed expect real-time payments will drive revenue growth – up from 53% last year. Yet the development of instant payments highlights the continuing diversity of payment habits across Europe. Of the 17 domestic instant payments services in Europe, eight are in non-euro countries and nine in countries within the Eurozone. In large part, they have been developed for their own domestic markets with interoperability initially a secondary concern.

To address this, the European Payments Council (EPC) made available the SEPA Instant Credit Transfer (SCT Inst) scheme in November 2017. It sets minimum requirements and implementation guidelines for instant payments in euros including 24/7/365 operations, a settlement speed (i.e. settlement at the final beneficiary account level) that must be below ten seconds and a maximum transaction limit of €15,000.

SCT Inst is a voluntary scheme and there is no requirement for payment providers to offer, or receive, euro instant payments. Because it establishes only a minimum set of requirements (rather than specifying a strict set of rules), providers can choose to offer services that exceed these requirements – for example, faster settlement speeds for larger transactions. Both Belgium and The Netherlands, for example, have selected to offer a settlement speed of below five seconds and no transaction limit for their instant payment schemes.

[27] European PSD2 Survey, The Voice of the Banks, Deloitte, January 2018
[28] 2018 Global Payments Insight Survey: Retail Banking, Ovum





## Instant Payments Market context


In November 2017, EBA CLEARING launched RT1, a new pan-European payments platform, open to any account-servicing payment service provider adhering to the SCT Inst scheme. As at September 2018, RT1 was processing 20,000 transactions a day on average, on behalf of 29 participants and over 1,000 registered payment service providers[29] in 13 different countries.

The next pan-European development will be the introduction of the Eurosystem's TIPS in November 2018. This is expected to accelerate the adoption of instant payments at pan-European level, even beyond the Eurozone. Currently, for example, the Swedish Central Bank, Sveriges Riksbank, is consulting the market on whether settlement of instant payments in Swedish Krona should be made available on the TIPS platform.[30]

TIPS is a key element of the planned new financial market infrastructure in Europe. While the implementation of instant payments presents both a challenge and an opportunity for banks, it is expected that TIPS, with its pan-European scope and use of central bank liquidity, will be a game-changer.

[29] EBA CLEARING press release, 11 July 2018
[30] Consultation on instant payments and the Riksbank's role in the payments infrastructure, Sveriges Riksbank, 5 June 2018

# The Eurosystem's blueprint for a transformed market infrastructure

"A single market for Europe is a key priority for both the ECB and the European Commission. This requires an integrated financial market infrastructure where consumers and businesses are offered Europe-wide products at competitive prices." →

4

CHAPTER





"A single market for Europe is a key priority for both the ECB and the European Commission. This requires an integrated financial market infrastructure where consumers and businesses are offered Europe-wide products at competitive prices."[31]

When PSD2 comes into full force in September 2019[32] it will be a key pillar of payments transformation in the European Economic Area (EEA) and beyond. By requiring banks to open customers' account information to third party providers, the Directive will put Europe at the forefront of open banking development – and further the EU's single market objectives by increasing competition and fostering innovation.

Ambitious change is also underway in Europe's financial infrastructure; change that goes well beyond legacy renewal to deliver deeper integration and efficiency for financial markets.

The Eurosystem[33] is tasked with delivering an infrastructure for central bank money settlement which serves the Europe-wide, integrated financial market (for both money and capital markets) that is key to realising the overall objective of an efficient single market. This infrastructure currently comprises TARGET2, the large value payment system for the settlement of national and cross-border transactions and TARGET2-Securities (T2S) for securities settlement, both in central bank money. Now, following market-wide consultation, the Eurosystem is evolving its infrastructure to meet changing requirements. The vision was first outlined in 2015[34] and is now well into its realisation phase. There are three key projects:

**A new pan-European, instant payments service: TIPS**

The increasing ubiquity of instant payments systems, and the drivers of this development, are described earlier in this report. Instant payments are now expected to become "the new normal" for low value payments, but services have mostly been introduced at the domestic level.

The European Payments Council responded promptly to bring instant payments into the SEPA orbit; a standardised scheme for instant payments in euros, the SEPA Instant Credit Transfer (SCT Inst) scheme, was launched in November 2017.

But with some 17 domestic instant payments initiatives across Europe using different currencies, market practices and formats (not all using SCT Inst), there was a clear risk of a new fragmentation of payment methods across the region. The Eurosystem considered it essential to have a market infrastructure for instant payments that provides full European reach and took the decision to develop the TARGET Instant Payments Settlement (TIPS) system, for settlement of domestic and cross-border instant payments in central bank money. TIPS will go live on 30 November 2018.

### KEY FACTS ABOUT TIPS

The Eurosystem's TARGET Instant Payments Settlement (TIPS) will:

- Settle payments within ten seconds in central bank money, round the clock, 365 days per year, using ISO 20022 (the SCT Inst standard)
- Be capable of handling multiple currencies
- Use the same participation rules as TARGET2:
  - participants will hold one or more TIPS accounts in central bank money
  - reachable parties will settle payments on participants' TIPS account
  - instructing parties (i.e. clearing houses, technical service providers) will be able to provide technical access to a participant or reachable party
- Charge 0.2 eurocents per transaction for first two years of operation[35]
- Be available from 30 November 2018

[31] Marc Bayle de Jessé, Director General, Market Infrastructure and Payments, European Central Bank, 14/05/18
[32] https://www.finextra.com/newsarticle/31380/commission-extends-deadline-for-banks-to-meet-new-payment-standards
[33] The Eurosystem comprises the European Central Bank and the national central banks of countries that have joined the Euro
[34] The future of Europe's financial market infrastructure: the Eurosystem's Vision 2020, Yves Mersch, member of the Executive Board, European Central Bank, 14 October 2015
[35] TIPS pricing structure finalised, ECB, 6 August 2018

### Consolidation of TARGET2 and T2S

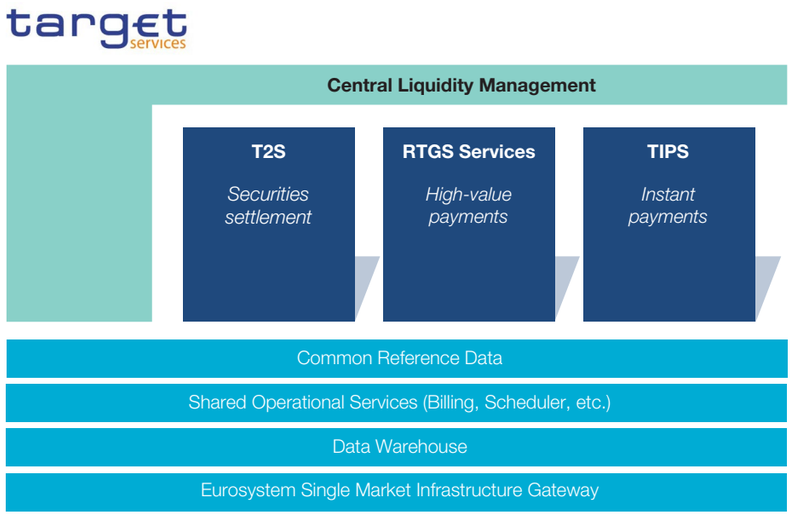
The Eurosystem is also in process of delivering another significant infrastructure project: the consolidation of TARGET2 and T2S. This new project will enable operational efficiencies and savings through shared services and operations (for example, common reference data, data warehouse and security components) and will provide users with a flexible, highly automated service based on industry standard ISO 20022 messaging. (T2S was introduced in 2015 and already uses ISO 20022, but TARGET2, which has been operational since 2007, will migrate to ISO 20022 in 2021.)

T2S and the future TARGET2 will, together with the TIPS service, form the Eurosystem's TARGET Services.

Access to all the TARGET Services will be via a single gateway, the Eurosystem Single Market Infrastructure Gateway (ESMIG). TIPS and T2 will be accessible via ESMIG from November 2021, and T2S from June 2022. Network service providers will need to comply with technical and business requirements and compliance checks and offer access to all the TARGET Services. The Eurosystem has not yet issued a detailed tender document for ESMIG connectivity. SWIFT is a certified network provider to TIPS.

Efficient use of liquidity is a critical component of integrated financial markets. The Eurosystem is addressing this through the introduction of a central liquidity management facility for the TARGET Services which will give participants a single pool of central bank liquidity for use across their high value payments, securities and instant payment settlements. So, for example, a TIPS participant will hold a dedicated account at their central bank from which instant payments can be settled round the clock. The balance on these dedicated accounts would count towards minimum reserve requirements. Centralised liquidity management will enable participants in TARGET Services to manage their liquidity more efficiently and help to reduce risk.

### Towards consolidated services

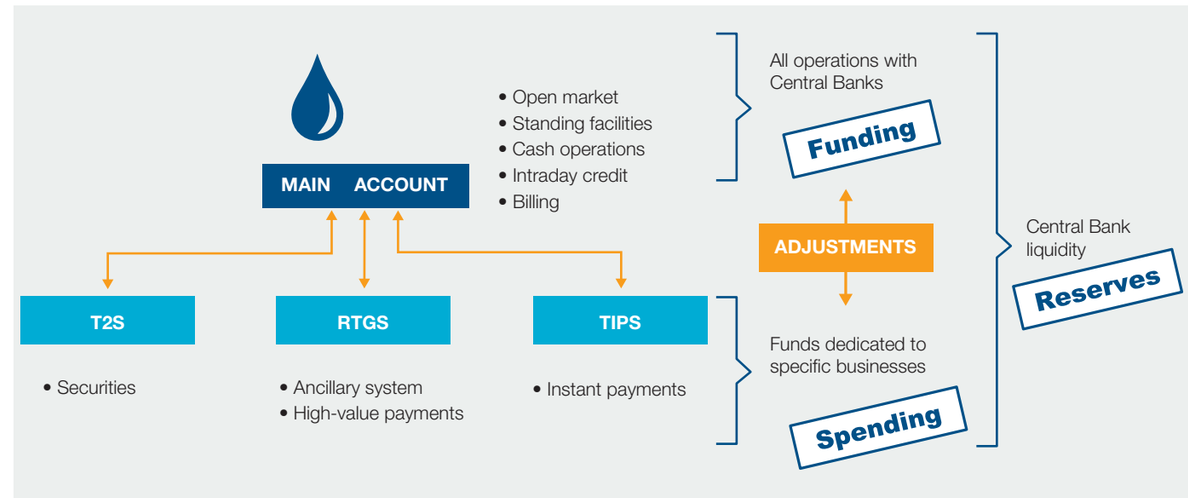



A third project is the Eurosystem Collateral Management System (ECMS). Currently there are 19 different local systems used by national central banks for managing collateral assets held against central bank liquidity. ECMS will provide a harmonised platform for collateral operations across the Eurosystem with harmonised functionality and using ISO 20022 messaging. ECMS will go live in November 2022.





### Central liquidity management




### A clear vision with challenges ahead

The evolution of the Eurosystem's market infrastructure may so far have attracted less attention than PSD2 or GDPR, but it stands to play just as important a role in the transformation of payments in Europe.

The plan is challenging: for the Eurosystem, the interdependency of different projects and a tight timeframe for implementation, as well as 24/7 operations for TIPS, are demanding targets. Bank readiness requires migration to ISO 20022 in addition to strategic choices about connectivity and transaction routing.

What should banks be doing to be ready for the new infrastructure and how can they harness the opportunities it offers? In the companion paper to this report, we explore how SWIFT will support its community in this future environment.

**"At the ECB, we are currently developing large-scale projects to form the new generation of TARGET Services. TIPS and the TARGET2 and T2S consolidation will foster the uptake of innovation and optimise efficiency, using across-the-board functionalities like the central liquidity management tool. Our aim is to steer a stable and state-of-the-art market infrastructure, which will facilitate seamless payment, securities settlement and flow of collateral, ultimately supporting the creation of an integrated European market."**

**Marc Bayle de Jessé, Director General, Market Infrastructure and Payments, European Central Bank**

# EBA CLEARING payments systems evolution

**Private-industry payment systems of pan-European scale**

Founded in 1998 by 52 payment banks operating in Europe, EBA CLEARING's mission is to deliver market infrastructure solutions for the pan-European payments industry. The strategic aims of the company are to ensure a pan-European and country-neutral approach for the development and delivery of user-driven and highly robust infrastructure solutions, allowing cost minimisation for their users.

CHAPTER

5





The transformation of the
European payments landscape

EBA CLEARING manages and operates the payment services EURO1, STEP1, STEP2 and RT1. Both EURO1 and STEP2 have been classified as systemically important payment systems (SIPS) by the European Central Bank, which oversees the systems with the participation of National Central Banks of the Eurosystems.

### The evolution of the RTGS-equivalent EURO1 System

EURO1 is the only private-sector large-value payment system for single same-day euro transactions at a pan-European level. It offers an RTGS-equivalent net settlement system combining high liquidity efficiency with immediate finality of each processed individual transaction. On average, 1 euro of injected liquidity enables the processing of 110 euro in the system.

The EURO1 System has a market share of close to 40% processing on average over 200,000 payments per day with an average total value of about EUR 200 billion. 95 percent of the EURO1 transactions settle in real time at system level.

In order to optimally support its users in recycling their liquidity, EURO1 offers a liquidity bridge, which enables banks to proactively and independently manage their liquidity. This makes it possible for participants to withdraw excess liquidity and inject additional funds into the system throughout the day as needed.

### Future outlook for EURO1 and pan-European large-value payment processing

EBA CLEARING plans to migrate EURO1 to ISO 20022 in 2021, which matches the Eurosystem timeframe, to allow its users full business interoperability between EURO1 and TARGET2. This is in line with the company's programme for the future positioning and evolution of the EURO1 System, which EBA CLEARING started in 2017. The aim of the programme is to develop and position the system in a large-value payments environment that is increasingly impacted by the ramp-up of real-time euro payment instruments, the industry-wide migration to ISO 20022 standards as well as evolving regulatory and oversight requirements affecting many relevant areas, including liquidity management and payment system operation.

"The blueprinting exercise and subsequent user consultation we completed earlier this year confirmed that, while there is a need to ready EURO1 for the longer-term future, the system continues to be highly valued by its user community in its current set-up, as a liquidity-efficient channel for large-value and non-SEPA commercial payments, operating alongside, and as an alternative, to TARGET2. Against this background, it came as no big surprise that our users set out two goals for the future of EURO1: 'keep the core' and 'align to the maximum'," says Hays Littlejohn, CEO of EBA CLEARING.

"In line with this user mandate, we are seeking to maintain the core components of the system while putting cross-service alignment – with the future euro RTGS but also with our other systems, the retail payments platform STEP2 for SEPA transactions and the instant payment platform RT1 – at the top of our strategic agenda for the next few years.
In light of the complexity created by the multiple payment systems banks have to run, it is key for financial market infrastructures (FMIs) to support their users in the integration of management and monitoring tasks for the different services they participate in, via tools and interfaces that enable and facilitate cross-service views and activities."

To give a sneak preview on the cross-service deliverables to come, EBA CLEARING and SWIFT presented a proof of concept of a liquidity dashboard in mid-2018, which provided an overview of the payment capacity and position of participants both in EURO1 and in RT1 based on existing EURO1 and RT1 APIs.

**In line with this user mandate, we are seeking to maintain the core components of the system while putting cross-service alignment – with the future euro RTGS but also with our other systems, the retail payments platform STEP2 for SEPA transactions and the instant payment platform RT1 – at the top of our strategic agenda for the next few years."**

**The evolution of the STEP2 SEPA Services**
As the only Pan-European Automated Clearing House processing mass payments in euro, the STEP2 SEPA platform is a cornerstone of the payment infrastructure in the Single Euro Payments Area (SEPA), extending full pan-European reach for both SEPA Credit Transfers and Direct Debits.

STEP2 serves 150 direct participants with over 4,800 reachable institutions and processes over 50 million payments per day on average with a daily value of 60 billion euro.

Future outlook for STEP2 and SEPA Bulk/ batch processing
In the light of new requirements stipulated by the revised SIPS Regulation, which was published in December 2017, EBA CLEARING is reviewing the settlement model of the STEP2 SEPA platform in consultation with its users.

"The evolution of the STEP2 settlement model will further enhance the operations of the system. Given the critical role of STEP2 for the industry and the many implementation projects that European PSPs have on their plate for the next three to five years, it is vital to minimise the impact of the related changes on the large STEP2 user community," say Hays Littlejohn. "While we expect bulk and batch processing to still play a major role in the retail payment space for the coming years, helping individual users and communities to smoothly migrate selected bits or all of their retail traffic from SCT to SCT Inst will become increasingly important for FMIs. That is "another important reason why cross-service alignment is a top priority on our agenda, because it will facilitate this migration."

**The evolution of the first pan-European instant payment system RT1**
RT1 went live in November 2017 with 17 participants as the first pan-European instant payment system and was also the first real-time payment system in the world processing cross-border transactions. The payment system operates 24/7/365.

Financial institutions from all over Europe can use RT1 for any payment product in euro that is fully compliant with the SCT Inst Scheme of the European Payments Council (EPC) and is in line with the ISO 20022 global messaging standards for real-time payments. The system currently reaches over 1,000 payment service providers.

Future outlook for RT1
"The industry-wide migration to instant payments, which has only just started, will certainly be a major game-changer not just for the infrastructure space but also for the entire payments ecosystem," says Hays Littlejohn.

"Given the learning curve we are currently going through together with our first movers, we believe that being there early and iterating fast are key success factors for real-time payment systems, because they allow for the system to capture and support evolving user needs."

For the first RT1 releases, EBA CLEARING has particularly focussed on evolving and fine-tuning the liquidity management and reporting tools of the system based on first user experiences. From November 2018 on, RT1 will offer SWIFTNet Instant to its choice of connectivity options. EBA CLEARING will also connect RT1 to TIPS on the date when TIPS goes live.

The company also supports interested users in offering their customers value-added services. RT1 plans to introduce two value-added options on a closed user group basis in November 2018: one for users wishing to offer to their customers the real-time processing of payments without any amount limit and one supporting users with shorter processing timeframe requirements.

"Europe is a multinational and diverse community. To create reach, our core infrastructure has been built to be use-case agnostic and we have re-used many of our STEP2 SEPA components and interfaces to facilitate migration. The underlying objective is that everyone can move at their own pace and build products that best fit their clients' needs and that make them ready for real time."

"Given the learning curve we are currently going through together with our first movers, we believe that being there early and iterating fast are key success factors for real-time payment systems, because they allow for the system to capture and support evolving user needs."





# The way forward for financial institutions

Payments transformation is forcing FIs to make strategic choices based on their scale, customer base and product strengths. Mid-sized banks are particularly challenged. To retain and win business in the new European landscape, FIs will need to choose the right partners, focus keenly on operational efficiency and collaborate at industry level to reduce the costs of compliance and benefit from technology change. →

CHAPTER 6

In this report we have seen how global drivers of change are accelerating payments transformation in every region, but particularly in Europe, where open banking, instant payments and market infrastructure change are creating multiple and immediate challenges: incumbents face new levels of competition, major technology innovation and an unprecedented re-shaping of long-accepted payment products, relationships and timescales.

The status quo is overturned, and in order to defend and grow their business in this new environment, FIs must choose how to differentiate themselves, where to invest and how to partner. Yet their traditional assets are considerable: customer base and data; risk management capabilities; balance sheet strength; industry knowledge and trust.

### Who will prosper?

Last year we explored the challenges facing banks' international payments business in a report with Boston Consulting Group (BCG).[36] We predicted that global transaction banks with scale would continue to prosper in the payments market. Small domestic banks would focus on local relationship banking, while outsourcing their international payments to larger players. We saw mid-sized banks as the most challenged – by larger competitors with greater scale and by new, more technologically-nimble payments providers. Our analysis with BCG suggested four potential, if demanding, strategies for these mid-sized players:

- Focus on flagship products to own a vertical
- Develop a top-quality platform by integrating the best products from fintechs and other providers
- Leverage infrastructure expertise to become a scale payment factory
- Consolidate through acquisition to become a scale player

In Europe, we are starting to see these scenarios play out; some regional players are tailoring their offers, perhaps by streamlining their product set, or focusing on a particular customer segment. There is increasing talk of mergers to create more pan-European banks, although cross-border mergers still face regulatory complexities.[37] Incumbent institutions, new entrants and fintechs are exploring complementary strengths. Recent research by the European Banking Association (EBA) found a significant proportion of incumbent banks are forming joint ventures with fintechs: "currently this appears to be a win-win situation, with institutions offering capital/funding, banking expertise… brand visibility and a broad customer base," says the research. For the time being, partnerships/indirect investment is prevailing over direct acquisition.[38]

### Operational efficiency through digitisation and collaboration

As FIs develop distinctive business models for the new European payments landscape, an intense focus on operational costs will be of critical importance. As well as delivering innovation and service excellence for customers, new technologies can also be harnessed to reduce capital expenditure on IT infrastructure, future-proof operations against change, improve compliance and mutualise the costs of non-competitive utilities through shared services. As a member-owned industry cooperative serving banks, central banks and MIs, securities markets, corporates, payment service providers and certified vendors, SWIFT exists to help the industry achieve this. In the next chapter, we hear how market participants are meeting the operational and strategic challenges of the changing European landscape.

**"As well as delivering innovation and service excellence for customers, new technologies can also be harnessed to reduce capital expenditure on IT infrastructure, future-proof operations against change, improve compliance and mutualise the costs of non-competitive utilities through shared services."**

[36] White paper – International payments: accelerating banks' transformation, BCG/SWIFT, October 2017
[37] Will open banking replace mergers? Brian Caplen, The Banker, 31 August 2018
[38] EBA Report on the Impact of Fintech on Incumbent Institutions' Credit Models, European Banking Authority, 3 July 2018, paras 97, 101.





# Financial institutions' vision for the future

BNP Paribas
Deutsche Bank
ING
Sberbank
Unicredit

CHAPTER 7

## The future of payments – rising to the challenge

Financial services are living through exciting times as rapid technological evolution makes payments faster, more flexible and transparent. However, many argue that the most relevant change and challenge for both banks and corporations, is to take advantage of the open banking environment.

While consumer benefits are evident as new means of payments and multi-bank services are created, for corporations the benefits will come from the integration between banks, FinTechs, and IT Vendors. This new level of collaboration will produce fresh perspectives that lead to new and better services and banks have an interest to play the integrator role. The best solutions will be those integrated by one key partner in the relationship, where the resilience and risk management of a bank is combined with the agility of fin techs, leading to a promising combination of skill sets. BNP Paribas is already active in this space and has implemented real open Banking services in areas such as e-commerce and cash forecasting.

In the payments area, we believe that Europe should benefit from seamless euro transactions across its borders. This is the vision of the European Commission and the most logical way, in economic terms, to facilitate commerce and trade within the common market. However, evolution in the payments market remains fragmented by local markets initiatives, which, while supported by the same payment scheme, has seen local practices emerge when it comes to defining how clients initiate and reconcile payments. One case in point is that of SEPA direct debits. For instant payments, we see flourishing national initiatives in addition to the two pan-European initiatives that while interoperable, still differ in terms of performance and supporting services by the clearing houses.

As a bank that is connected to clearing institutions in 17 European countries, BNPP has the particular challenge of needing to adopt and provide both pan-european services for the large corporations operating in multiple countries, while at the same time catering for the local specifics set by the local clearing houses or business practices. The emergence of Instant Payments in Euro in several domestic markets across the EU already indicates a probable fragmentation of the services in the future.

Another key future evolution is the convergence of the cross-border payments market and domestic instant payments. This development is probably still several years ahead, but the horizon is clear and the benefit is an end-to-end delivery of payments which will be significantly superior to today's reality, combining a transparent and rapid SWIFT gpi message and its onward journey into a domestic instant payments system to credit the beneficiary banks. Countries such as Australia are already lighting the way in this area and are looking at how cross-border SWIFT gpi payments and local instant payments can be used together to create a fast, frictionless, transparent and trackable payment experience for the end beneficiary.

We can conclude that the current modernization initiatives in the payments markets, combined with real time payment infrastructures and the adoption of ISO 20022 by corporates, will enable the creation of new business models and a host of new, integrated banking services that cater to the evolving needs of corporate and retail customers alike. The key question is how long it will take and which regions will be amongst the first to be ready.





## Building a dynamic payments ecosystem

Based on the current dynamics transforming the industry, banks will have to set out their long term position in the payments segment. These dynamics include the emergence of real-time and alternative technology; standards harmonisation through the adaptation of ISO 20022; establishment of integrated digital payment and 3rd Party ecosystems; modernisation of cross-border payments; and increasing regulations (such as PSD2) and their resultant impact.

In order to capitalise on the opportunities arising from these dynamics banks should be looking to invest in new technologies, establishing themselves as the ecosystem connector and positioning themselves as network agnostic provider beyond current market infrastructures covering critical network.

In order for banks to reach that ultimate goal, they will have to complete a number of stages. Typically in first step they would identify strategic opportunities for growth and value as well as the required levels of digital capabilities (analytics, API connectivity, cloud, AI/robotics etc). Preparation work would be carried out in the form of identifying target value propositions, offerings and target customer segments. At the same time and in order to meet long term goals, strategic investments would have already been made to secure profitable growth. Examples could be lowering e2e processing cycles, preparing for huge market infrastructure changes coming up and migration to ISO 20022.

In a next phase, banks could ideally build out their digital offering and lay the foundation for a "fully" digitalised, fast, network agnostic offering. This entails continued investments in cross-border capabilities with the aim for 100% gpi ratio for SWIFT payments with pre-validation and incorporating V2 developments such as Stop and Recall and gpi COVER service. At the same time, banks will roll out real-time payments capabilities as they accompany corporate client base moving from batch and daily processes to more real-time systems.

Banks should also look at regulation as a means of providing business opportunities for clients. PSD2, for example, has acted as catalyst for platform business models, a driver for APIs and shows a need for new interaction models with clients. A new development facilitated by APIs and new clearing systems are 'push payments' – an alternative payment method to existing methods, such as debit or credit cards.

Going forward, Deutsche Bank's goal is to have a unified API ecosystem which will become the foundation to support the Open Banking business models that will enable our clients, partners and FinTechs to integrate with us in a seamless and secure way (protecting our clients against financial crime will remain a non-negotiable priority). In short, we are opening up our infrastructure to expand our payments leadership, providing an ecosystem to most relevant payment solutions of our clients. Ultimately that means being established as a leading network agnostic payments provider offering efficiency and global reach through highly automated payments services.

## Being relevant in payment services: a fascinating customer journey

The most important game changer in the European payments landscape are the changing customer expectations based on digitalised services in a more open banking environment, where speed and transparency are key. This development started with retail customers, but is also now affecting the corporate market.

**The launch of Instant Payments**
The 24 hours economy and need for speed is a catalyst for ING to expand its Instant Payments servicing throughout Europe. Though we see differences in the local communities, we firmly believe that we will see a convergence into one European instant payments market in the end. Instant Payments have the potential to become the new normal both in the retail and corporate space. New services can be built and might substitute cards related products and services.

**International Payments & Fintechs**
Transparency in fees, speed and pricing, are key customer requirements in the world of international payments. We therefore believe in the added value of SWIFT gpi. However, it also makes sense to collaborate with Fintechs that develop outstanding services with attractive low and transparent fee schedules. The agility of Fintechs enables time to market delivery. ING Bank therefore took a minority stake in the Irish Fintech TransferMate in July this year, which will be an additional service proposition to our corporate clients.

**Open Banking & Agile way of working**
Another real game changer is PSD2 which will result in a more open banking environment where open APIs are real standardised interfaces which enable optimal connections with our customer base and other financial parties in the chain. We are currently looking at which services to deliver to our customers, taking into account the development of the PSD2 related payment initiation, account information and confirmation availability of funds services (PIS, AIS and CAF).

Our Innovation Centre is a catalyst and supports the development of these business initiatives. The Agile way of Working programme is the other key initiative to develop real customer oriented services.

**Harmonisation & Standardisation**
As an international player, ING invests heavily in harmonising its product suite. With a strong European footprint, it makes sense that we join pan-European initiatives – for instance, ING was one of the front runners to plea for a joint Instant Payments initiative facilitated by the Euro Banking Association.

We are therefore a strong believer in standardisation on a European and global level. The ISO 20022-based migration from MT to MX by, for example, TARGET2/T2S/TIPS and Chaps over the next years will strongly affect the customer experience in a positive way. More and higher quality client and transaction related information will be of benefit for customer reporting and reconciliation, among others. We experience this already with the XML based SEPA-related transactions in the world of corporates. It goes without saying that in the opinion of ING, SWIFT is a strong contributor to and accelerator for these standardisation initiatives in the market.

**SWIFT and pro-activeness**
It will be of great importance that SWIFT follows, and where possible, guides the market extensively and that it pro-actively develops an ever more efficient express highway for transactions over the next 5 years. With a wide and secure network, we expect SWIFT to support financial institutions and corporates to further optimise the customer experience in payment services around the globe.





## Staying ahead of the game

At a time when technology is moving at a faster pace than ever, new regulations are coming into force, new competitors are entering the financial services market and consumer needs are evolving, an in-depth study of customer insights will become the primary objective for payment providers for the next few years.

Sberbank distinguishes a number of major trends that should have a significant impact on the payment market landscape on a mid-term horizon: the introduction of new transaction formats – due to a general transition to a flexible and adjustable format of financial messages – ISO 20022; the transition towards open banking as mandated by the European PSD2 directive framework; the growing demand for real-time payments with status tracking; safer and “smarter” payments based on Artificial Intelligence (AI) and Internet of Things (IoT) technology; blockchain technology as well as investments in the field of RegTech and other technologies that are mitigating the regulatory pressure on banks and financial institutions.

It is essential for private clients to be able to execute a cross-border transfer based on a personalized receiver’s ID, which should not be bound to a bank’s SSI.

We expect to see further expansion of instant payment systems at the national level on the one hand, and growing demand for high-performance cross-country payment corridors that could ensure of interoperability of the above systems on the other hand. Furthermore, we forecast that the launch of common projects between traditional players in the payments market and fintechs in order to set up payment ecosystems will continue to grow, and the close interaction of ecosystems and payment services companies will become the core driver to gain a competitive advantage in the financial services market.

In the next 5 years, customer data collection and its operational analysis based on Big Data will be in high demand and we can see ahead the rise in the creation of new financial products that bring together information from various sources to offer the customer a fully-integrated service.

## Fostering a harmonised payments ecosystem

In the next five years, we expect to see the much-sought-after pan-European payments system truly come together. The European Central Bank (ECB) and European Payments Council (EPC) have laid down strong foundational infrastructure, and what remains – as Yves Mersch, Executive Board Member of the European Central Bank, identified in a speech made in Paris in September 2018 – is for the region's banks to take advantage of these technological and structural advances to improve the usability and increase the efficiency of payments across Europe.

UniCredit is determined to work in partnership with banks and fintechs to answer this call for seamless pan-European payments services. We were among the few banks to implement and execute the EPC's SCT Inst instant payments on the first day of operation in November 2017 – taking advantage of the cross-border functionality of the scheme's SEPA format to execute the first instant payment between Italy and Germany.

UniCredit is also a pilot bank for SWIFT gpi – a vital tool in facilitating efficient transactions beyond the euro zone. While domestic payments systems are being upgraded in many jurisdictions around the world, there is still a large degree of fragmentation on a global scale. SWIFT gpi, however, enables banks and businesses to transact seamlessly across borders – settling payments on the same day they are executed, with 50% received within half an hour, and many within minutes or even seconds. The introduction of clear tracking for cross-border payments – a previously opaque area – is another important step forward, bolstered by the recent SWIFT gpi for corporates pilot, which adds multi-bank tracking.

Issues still persist, however, with no current functionality in place to provide tracking when non-gpi members are involved in a cross-border payments chain. Looking ahead, the upcoming MT Release 2018, scheduled for November, will be a welcome upgrade – eliminating these problems by mandating all SWIFT members to pass on payment reference numbers, even if they aren't members of the gpi programme.

Combined, SWIFT gpi and instant payments will become the foundations for a future-ready payments market, but there is still room for innovation. PSD2, which, from September 2019, will oblige banks to provide licensed third parties with open access to their clients' account data, has opened the door to Open Banking, bringing new models of payment – such as "push" payments – and greater scope for bank-fintech collaboration.

UniCredit, for its part, is keen to embrace the possibilities of Open Banking. The bank is already engaged in a number of fintech collaborations, including a partnership with Alibaba to provide payment services for Chinese account-holders in Italy, and we continue to seek new partners that can add value for our clients.

Certainly, the opportunity is there for the payments industry to mature into an efficient collaborative ecosystem, developing and deploying products that ultimately benefit banks' corporate clients. Underpinning all of these infrastructures are SWIFT's ISO 20022 messaging standards. With ISO 20022 slowly establishing itself as the global industry standard – boosted by adoption from central banks such as the ECB (for TARGET2, T2S and TIPS) and the Bank of England (for the upgraded Faster Payments System) – the industry is moving towards a fully interoperable payments market, able to transact funds domestically, regionally and globally without compromising on speed and transparency.

## 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.

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## To find out more

If you would like to find out how SWIFT is evolving its portfolio of products and services to support customers through the changes happening in the payments landscape, please see our companion report on swift.com or contact SWIFT.

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October 2018