

SEPA Instant Credit Transfer

For payment operations teams

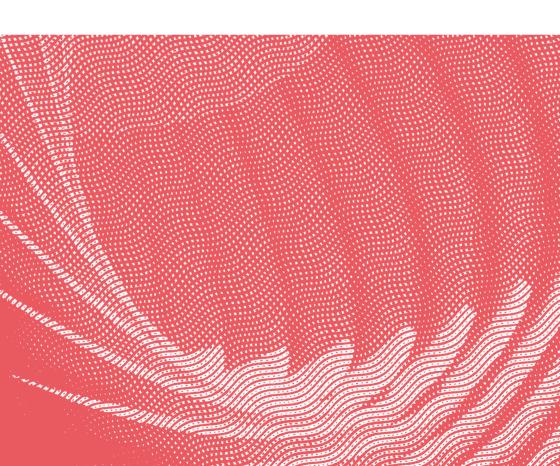


Table of contents

Introduction	3
The Business Cases for Instant Payments Transforming Insurance and Healthcare Making the Temp and Gig Economy Fairer Liberating Liquidity for Treasury	4 4 5 6
Instant Payments in Europe at a Tipping Point What is SEPA Instant Credit Transfer? The Global Rise of Instant Payment Systems A Growing Pan-European Adoption SCT Instant by the Numbers in 2022 The Policy Push Towards Ubiquitous Instant Payments	7 7 8 10 11 13
New Challenges for Payment Operations Teams Connectivity: The Transition to APIs Approvals: From Batch to Real-time Approvals Managing the (Potential) Costs of Moving to Instant Payments Fraud: Faster Payments Can Lead to Faster Fraud (in Partnership with Marble) Faster Payments Mean Faster Fraud How Can Financial Institutions Tackle Instant Payment Fraud?	14 14 16 17 17 17
Numeral for SCT Instant	20
About our Partner Marble	22
Appendixes Glossary SCT Instant Transaction Flow SCT Instant Scheme Adoption by Country Authors	23 23 24 25 27

Introduction

Instant payments are electronic payments that are processed in real time, 24 hours a day, 365 days a year, where the funds are made available immediately and irrevocably for use by the recipient. Instant payments are rapidly becoming the new payment standard for companies and consumers who no longer want to wait 2-3 days for funds to arrive into their accounts.

While only 14 countries had real-time payment infrastructures in 2015, 56 countries have dedicated real-time payment systems in 2022. The global volume of instant payments accounted for 70 billion dollars in 2020 and instant payment volumes are expected to grow at a staggering 30% per year between 2020 and 2024.

The Single Euro Payment Area (or SEPA) has been building its instant payment infrastructure by launching SEPA Instant Credit Transfer (SCT Instant) in 2017. However, compared to other central payment systems, payment service providers (PSPs) and corporates operating in the SEPA zone have only slowly adopted it.

In 2022 though, there are signs that SEPA instant payments are reaching a tipping point in terms of adoption, bank infrastructure, and market opportunities. SCT Instant is now the fastest-growing payment method in Europe. And with upcoming regulations on standardising instant payments in Europe in Q4 2022, the momentum behind SEPA instant payments is only expected to build.

The Numeral team wrote this guide for payment operations teams or anyone curious to learn more about instant payments. We explore the business opportunities instant payments enable, the new challenges it creates for payment operations teams, and their SEPA implementation.

The Business Cases for Instant Payments

Instant payments are electronic retail payments that are processed in real time, 24 hours a day, 365 days a year, where the funds are made available immediately for use by the recipient.

Before going into the specifics of instant payments in Europe, we explore what they unlock beyond the convenience of instant confirmation and availability of funds. Instant payments can have transformational potential in industries where the disbursement time of funds makes a critical difference to consumer and supplier experience, or companies' operations.

Instant payment has many use cases in retail payments and holds the potential to someday replace card payments at a fraction of the cost. This guide being geared to payment operations teams, we cover mostly business-to-consumer and business-to-business payment applications, leaving out peer-to-peer payments on purpose. We focus on three use cases where we have seen instant payments have practical and transformative implications for companies willing to embrace the change.

Transforming Insurance and Healthcare

Over the last few years, instant payments have been in high demand in the insurance and healthcare industry.

Indeed, the true value of insurance is realised at particular moments: when policyholders experience insured events. Ranging from a broken smartphone to a need for medical care or a burnt-down home, these moments are when policyholders experience the value of their insurance for the first time after paying for it for months or years. And when they need it the most.

During these events, the speed at which policyholders receive funds can be critical. 53% of consumers are willing to switch insurance companies to receive claim payments instantly. In an industry that has seen the creation and growth of hundreds of new, digital-first insurance players, often making instant claim payments front and centre of their value proposition, insurance companies have no choice but to adapt.

But more than simply meeting customer expectations and differentiating in a crowded market, instant claim payments unlock a social impact beyond covered perils.

Providing policyholders with the funds required to fix a damaged car, buy emergency clothes after a lost suitcase, or even before they have to pay for healthcare they have received is more than a convenience. It can prevent policyholders from unbearable overdraft fees leading to long-lasting financial consequences of a covered peril. In the case of health insurance, it incentivises patients to seek the care they would not have otherwise, leading this time to dramatic health consequences later.

Making the Temp and Gig Economy Fairer

The gig economy has exploded between 2018 and 2022, with the number of digital platform workers worldwide projected to reach <u>78 million by 2023</u>, up from 43 million in 2018.

The latest generations that entered the workforce have been pushing for temporary, flexible jobs. And while the jobs present many benefits for workers, they have also contributed to making earning streams less predictable.

The impact of financial stress on employees' morale cannot be overstated. According to a PwC survey, 60% of employees claim they are stressed about their finances and, as a result, are twice more likely to leave their job. Financial stress can also be a major source of work inefficiencies as employees can be seven times more likely to have issues with work attendance.

Historically in Europe, payroll has been run monthly for permanent employees and weekly for temp workers. Today, only 7% of employers that hire gig workers pay out wages daily.

Instant payment can help realign the accrued earnings and wages for workers. A low-cost instant payment could allow incomes to be accessible instantly whenever they are needed, instead of waiting for payroll.

For instance, marketplaces like Deliveroo pay weekly on Tuesdays but have developed cash-out features where, for a small fee (£0.50), workers can get funds

instantly in their bank accounts. Faster time to money for workers helps Deliveroo retain its loyal fleet of drivers as its business grows. In the future, there is hope that marginal costs will decrease as adoption becomes mainstream.

Another example is an on-demand pay scheme like the Employer Salary Advance in the UK, where employees can get as much as 50% of their wage before payday. Championed by a new generation of fintechs like Cloudpay or Wagestream, workers can access a portion of their accrued income at any time to meet urgent financial needs without relying on credit.

Low-cost, instant payments can therefore be powerful enablers to better realign corporate and individual incentives, bringing work and wages in sync for the worker's benefit

Liberating Liquidity for Treasury

When companies pay each other with a regular bank transfer, there can be up to 3 days between payment initiation and the moment when the transaction is booked on the beneficiary's bank account. This liquidity locked in transit in the banking system is called the "payment float" and can amount to €200 billion locked on any given day in the eurozone according to the European Commission.

Switching to instant credit transfers would liberate this "payment float" back into the economy, improving cash flows and their predictability. The additional liquidity could then be put to work for further purchases or investments to accelerate growth.

Instant Payments in Europe at a Tipping Point

What is SEPA Instant Credit Transfer?

SEPA Instant Credit Transfer (SCT Instant) is the first pan-European instant payment method. Introduced by the European Payment Council (EPC) in 2017, its main objective was to make instant money transfers efficient and ubiquitous in the eurozone. We now dive into its main characteristics as defined by the EPC rulebooks.

Euro as the sole currency; BICs and IBANs to identify accounts

All SCT Instant payments are made in euros. BICs (bank identifier codes) and IBANs (international bank account numbers) are used to identify the originator and beneficiary accounts.

Threshold of €100,000 per payment

SCT Instant payments are capped at €100,000 per payment. This maximum threshold is revisited every year by the EPC. Since 2018, there have been no changes to those limitations. It is also worth noting that banks can set their threshold for instant payment products below the official maximum.

Availability 24/7/365

Banks and their CSMs must be able to process SCT Inst payments 24/7/365. This marks a significant change from historical processing, which halted outside working hours and on bank holidays.

Maximum execution time of 10 seconds

There is a target maximum execution time of 10 seconds to process an SCT Instant payment between PSPs. During this time, the beneficiary PSP must report to the originator PSP that the funds have been made available to the beneficiary or reject the SCT Instant payment altogether. In case of technical failure, payments are set to timeout after 20 seconds.

Irrevocable settlement

SCT Instant payments are irrevocable and final. Once a payment has been processed, it can't be recalled.

How SCT Instant compares to SCT

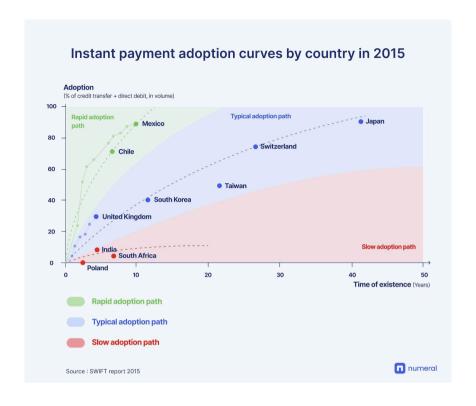
The table below summarises the key differences between SEPA Credit Transfer payments and SEPA Instant Credit Transfer payments.

Characteristic	SCT	SCT Instant
Availability	Bank business days	24/7/365
Payment speed	Between 12 / 48 hours	Under 10 seconds intra
Payment maximum amount	None	€100,000
Payment response	None mandated	Under 10 seconds
Recall	13 months in case of fraud	Irrevocable

Source: EPC

The Global Rise of Instant Payment Systems

The launch of SCT Instant in 2017 by the EPC coincided with a global trend in payments. Government-led instant payments systems have been put in place worldwide, with 56 countries now having dedicated instant payment infrastructure. As highlighted in a <u>report published in 2015 by SWIFT</u>, not all those programs have been successful, with varying levels of adoptions across markets. But ultimately, most instant payments become the predominant method of bank transfers (i.e., more than 50% of volumes) at the latest 30+ years after their launch.



Since 2015, a recent example of rapid adoption growth has been the roll-out of PIX in Brazil in 2019. Three years after launching in Brazil in 2019, close to 20% of all payments in Brazil are now supported by the PIX infrastructure, putting it on a very rapid adoption path.

Looking at PIX's success, we can unpack three main reasons leading to payment systems being widely adopted:

✓ PSP adoption was mandated centrally by the government: PIX adoption has been mandated by the government for institutions with over 500,000 users, ensuring the large institutions were onboard from day one.

- ✓ Financial innovators can participate through an indirect model: PIX has remained open to PSPs and fintech innovations through an indirect participation model. This indirect model now accounts for most of the participation in PIX with approx 85% of participants being indirect participants.
- ✓ The infrastructure was cost efficient compared to alternatives: PIX offers a
 consolidated infrastructure which is materially better than alternatives in the
 Brazilian market. It is cheaper than boletos one of Brazil's most popular
 payment methods and cards and much more convenient than cash.

A Growing Pan-European Adoption

Following the introduction of the SEPA instant credit transfer scheme, the first step to building a pan-European instant payment infrastructure has been to ensure that all the major banks and PSPs were participants in the SCT Instant scheme.

The ECB put dedicated efforts to driving the scheme adoption over the first few years. It launched TIPS, a dedicated clearing and settlement mechanism to complement the existing CSM from EBA Clearing called RT-1. At this point though, only direct SEPA participants to SEPA could access the CSM. In 2020, the ECB then decided to implement two additional measures in TIPS to extend its reach. Firstly, TIPS **enabled indirect participation in the scheme** by making PSPs adherent to the scheme and the existing TARGET2 CSM (the main eurosystem large volume payment system) reachable in TIPS. Secondly, all CSMs offering instant payment services migrated their technical accounts from TARGET2 to TIPS, simplifying the onboarding of financial institutions.

As of June 2022, 71% of banks adhering to the SCT scheme were adhering to the SCT Instant scheme, according to the ECB, ensuring that most accounts are now reachable for instant transactions.

The ECB also took steps to make **SCT Instant more cost-effective for PSPs to operate**. The cost for processing transactions for PSPs has been set at €0.002 per payment in TIPS, the same price as <u>a regular credit transfer</u> in the SEPA largest retail CSM STEP2. It is yet to be seen how banks will translate over time this pricing to their customers.

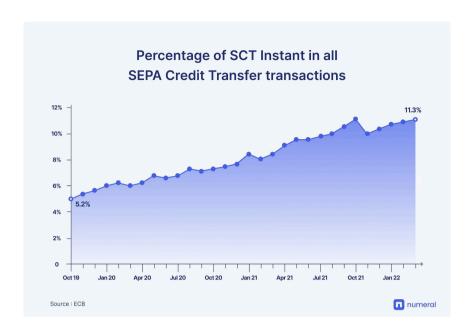
A major barrier to adoption indeed remains bank pricing. Current catalogue prices of banks are on average five times more expensive for an instant credit transfer compared to a regular credit transfer. However, there has been momentum across Europe for banks to reduce the unit costs of SCT Instant payments or even make them free.

Country	SCT Instant cost range
Belgium	€0 - €1.25
Finland	€O
France	€0 - €1.00
Germany	€0 - €1.25
Italy	€0.60 - €5.90
Lithuania	€0.41
Netherlands	€0 - €0.10
Portugal	€1.35 - €5.20
Spain	€0.95 - €12.00

Source: Bank information, Numeral benchmark

SCT Instant by the Numbers in 2022

With the scheme adoption strongly in place, SCT Instant has experienced explosive growth over the past three years. SCT Instant payments accounted for only 5.2% of total credit transfers in October 2019. They now account for 11.3% of total credit transfers as of March 2022.



Looking at the latest growth rates over the past six months, this trend is only accelerating. Over H2 2022, the number of SCT Instant grew by 46% in volume, 6x faster than the regular SEPA credit transfer.

H1 2021-H2 2022 Growth		
EBA Clearing Payments	In Volume	In Value
SEPA Credit Transfer	7.0%	17.1%
SEPA Direct Debit Core	5.3%	11.1%
SEPA Direct Debit B2B	6.6%	29.4%
SEPA Instant Credit Transfer	46.5%	50.7%
Total	6.8%	17.4%

Source: EBA Clearing, RT-1 Jan 2021-July 2022

The Policy Push Towards Ubiquitous Instant Payments

On October 26th, 2022, the European Commission further affirmed its ambition to make instant payment ubiquitous across the EU and EEA by releasing a policy proposal to further accelerate SCT Instant adoption.

The proposal aims to ensure that instant payments are affordable, secure, and processed without friction across the EU and EEA. To do so, it focused on four main objectives:

- Making instant euro payments universally available: EU PSPs that already offer SEPA credit transfers will also have to offer their instant version within a defined period.
- Making instant euro payments affordable: PSPs will have to ensure that the price charged for instant payments in euro does not exceed the price charged for SCT payments.
- Increasing trust in instant payments: providers will have to verify the match between the bank account number (IBAN) and the name of the beneficiary provided by the payer to alert the payer of a possible mistake or fraud before the payment is made.
- Removing friction in the processing of instant euro payments while preserving the effectiveness of screening of persons that are subject to EU sanctions: PSPs will have a standard procedure to verify, at least daily, their clients against EU sanctions lists, instead of screening all transactions one by one.

While the timelines for implementation of the policy are not yet set at the time of redaction of this guide, there is no doubt SCT Instant will become the norm for bank payments. The only remaining question is how guickly.

New Challenges for Payment Operations Teams

Faster payments mean faster everything: from connectivity to approvals to fraud management. To unlock the SCT Instant opportunity, payment operations teams must adapt their ways of working from batch to flow.

Connectivity: The Transition to APIs

Payment operations teams mostly use XML ISO 20022 files to initiate and track payments. They generate XML payment files from their ERP and then share them with their banks using their TMS or SFTP- or EBICS-based bank connectivity solutions. This process is asynchronous and requires manual file management at every step of the file-handling process, which generates manual work and potential errors. Batching is, however, efficient when grouping a large number of payments and thus is the norm both for credit transfers and direct debits, accounting for over 66% of all payments initiated in the eurozone.

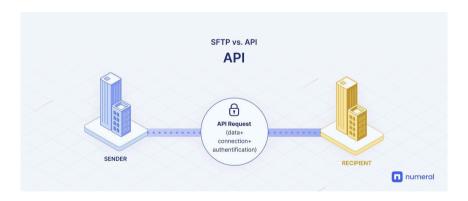
Credit Transfers	D	rirect Debits
Total Number of Payments (in Billion)	25.1	23.2
% SEPA Payments	96%	99%
% Initiated Electronically	94%	100%
% File / Batched-based	40%	94%
% Single Payments (All)	55%	6%
% Single Payments (Online Banking)	15%	0%

Source: European Central Bank Statistical Warehouse, 2021

To be able to execute instant payments (i.e., a payment in less than a few seconds between its initiation and the crediting of the beneficiary account), batching payments does not work well. SFTP or EBICS file transfers were not built for straight-through processing due to the manual nature of payment batching, file creation, file uploads, and file downloads from servers.



To enable straight-through processing, companies and banks are shifting their connectivity methods from files to APIs (or messaging queues). Instead of batch payment files, payments are created and transmitted at the individual payment level through APIs. The payment order information is carried in the encrypted API call's payload instead of a file. The bank can then provide a response for each payment in almost real-time.



While APIs theoretically reduce the number of steps the data has to travel through and merges data with connectivity, it requires different capabilities and processes. Human-based processes need to be mostly automated with the right technology and rules. This shift requires dedicated buy-in from management and the right engineering resources for implementation.

However, once those connectivity changes are implemented, the payment operations team can benefit from:

- ✓ Safer connectivity by removing the handling of sensitive payment files.
- ✓ Reduction in errors by moving to more auditable, automated processes.
- ✓ Improved business scalability through the reduction of manual tasks.

Approvals: From Batch to Real-time Approvals

Another complexity for the payment operations team lies in dealing with instant payments approvals. Currently, payments are mostly approved by batch once during the day. The head of finance, up to sometimes the CEO for smaller organisations, approves a file containing hundreds of payment lines before it is uploaded to SFTP / EBICS servers, usually just before the bank's cut-off time.

With instant payments, approvals have to be managed in real-time for each payment order. With instant approvals needed, custom approval rules have to be designed to automate the low complexity / risk payments while adding rapid semi-manual approvals for high-risk payments.

The benefits of this payment-order level approach enabled by technology are three-fold:

- More granular control of payment approvals and rejections, with custom rules focusing manual efforts on the most important payments.
- Increased visibility throughout the organisation of the approvals by providing a documented audit trail to manage issues.
- ✓ Increased process flexibility for payment operations to include the right stakeholders at the right time in the approval process.

Managing the (Potential) Costs of Moving to Instant Payments

An element to consider for businesses which envision using instant payments for their payouts is the economic equation.

Currently, instant credit transfers can be more costly than regular credit transfers when looking solely at the cost per payment. While this concern will undoubtedly alleviate when the proposed policies from the European Commission come into force, switching to SCT Instant can have a short-term impact on the total cost of payment.

Moving to instant payments can also have a short-term impact on the company's cash position. Paying suppliers and partners up to 2 days faster can result in a working capital increase. However, with instant payments becoming the norm for account receivables, this increase should only be temporary as customer invoices get paid faster.

SCT Instant should always be considered as an investment in a better customer experience whose upsides easily offset the temporary financial cost.

Fraud: Faster Payments Can Lead to Faster Fraud (in Partnership with Marble)

Faster Payments Mean Faster Fraud

Instant payments, because they are fast and irreversible, have attracted more and more sophisticated fraudsters.

There are two main types of fraud on SCT Instant payments:

✓ With the authorization of the end-user: Fraudsters use so-called "social engineering attacks" where they persuade victims to share their screens or personal information received from their banks. Users unknowingly reveal key information about their accounts that fraudsters use to rob them. Alternatively, fraudsters also try to contact customers and dupe them into authorising the payment themselves. Most common techniques are phone number spoofing.

- robocalls and personalised text messages to initiate payment through the banking app.
- ✓ Without acknowledgement of the end-user: The most common technique is account takeover. This happens when a criminal gets access to compromised user's credentials (e.g., via phishing or malware that collects information from online logins or breach on third-party websites). Once the fraudster has accessed the customer's account, they can set up and make payments without the customer's knowledge.

The speed of instant payments raises challenges in combating fraud for financial institutions

Weight of legacy and lack of real-time fraud fighting solutions

With regular SEPA payments, risk and compliance teams have hours to perform checks. Moving to real-time payments means there are only a few seconds during which the payment can be reviewed, verified, and authorised. Since there is such a short amount of time to come to a decision, the pressure to reliably process a large volume of transactions in real time is high.

The fact that SCT Instant is available for companies 24/7 raises an additional challenge for banks and traditional institutions, requiring automated processes to operate around the clock.

Higher risk of loss for consumers and companies

The risk of loss with SCT Instant is different than with other types of transactions. Once a real-time payment has been accepted by the payee's financial institution, the payment is often considered irrevocable. The irrevocability of instant payment is a blessing for fraudsters who can instantly make use of the transferred funds.

How Can Financial Institutions Tackle Instant Payment Fraud?

Real-time money movements plead for more agile fraud prevention techniques, high performing software, and increased automation.

Make use of all your data and analyse it in real-time

A lot of financial institutions we discuss with have designed their internal processes and review management to operate on a batch basis (for instance, every day, an analyst would review the alerts of the past day). These systems can no longer support real-time payments. If you review alerts only on a day+1 basis, chances are high that fraudsters had the time to empty the account. The ability to quickly analyse huge amounts of data and to respond effectively is therefore critical to managing fraud risk.

Set up the right rules

With all this data at hand, financial institutions also need to set up the right rules. Not too generic to avoid flagging regular users and generating too many false positives. Not too specific as they might miss new fraud schemes. Fraud schemes constantly evolve and are getting more and more sophisticated. Setting up rules that monitor users behaviours and being able to identify deviations from the norm, will help you faster detect new fraud attempts.

Automate risk scenarios

Financial institutions should consider allowing certain alerts to result in automatically rejecting a transaction, banning a user or taking an action without needing human approval. The use of predefined blacklists or watchlists helps react quickly and appropriately.

Numeral for SCT Instant

Numeral is a payment operations platform making building payment products on top of your existing banks easy.

By exposing a single API across banks and payment methods including SCT Instant, Numeral helps companies streamline the whole payment lifecycle through real-time connectivity to banks, robust automations, and built-in controls.

Numeral helps payment operations integrate new payment methods like SCT Instant in record time thanks to a <u>developer-friendly API</u> and a modern dashboard. It creates value for finance and operations teams through:

- Automated payments by augmenting payment operations with real-time notifications and fast API integrations to all systems. With Numeral you can create payment flows in your products without the delay and cost created by the intermediation of a payment service provider.
- ✓ Time saved by removing manual file management and automating bank reconciliations. Finance and operations teams also spend less time troubleshooting errors thanks to continuous payment updates.
- ✓ Improved control by leveraging built-in permission management and approvals. The Numeral central dashboard allows the creation of custom approval rules and creates visibility on all payments initiated across banks.

With Numeral, companies can design workflows and automate payments throughout their entire lifecycle:

- Payments Create and validate payments across multiple payment methods, such as SEPA credit transfer, SEPA instant credit transfer, SEPA direct debit, and SWIFT
- Reconciliations Automatically reconcile payments and accounts to close books faster.
- Counterparties Create, onboard, verify, and assign virtual IBANs to counterparties, such as customers, vendors, or partners.

- ✓ Ledgers Track all financial flows across bank accounts, internal accounts, and counterparties with double-entry accounting and immutable ledgers.
- Real-time notifications Receive real-time notifications as payments are sent, received, or reconciled.

Numeral is loved by developers for its <u>clean API and documentation</u>, making it easy to programmatically initiate payments without the steep learning curve of working with banks' systems and partial documentation.

Numeral's customers include fintech unicorns Spendesk (company spend solution) and Swile (employee benefit solution).

If you would like to learn more, our team is here to help. Email us at sales@numeral.io and you will hear back from us shortly.

About our Partner Marble

Marble is a real-time fraud and compliance decision engine. Our solution is specifically designed for fintech companies and financial institutions.

We are developing a no-code rule builder to help ops and risk teams easily create their own detection models and quickly adapt to new threats without relying on engineers.

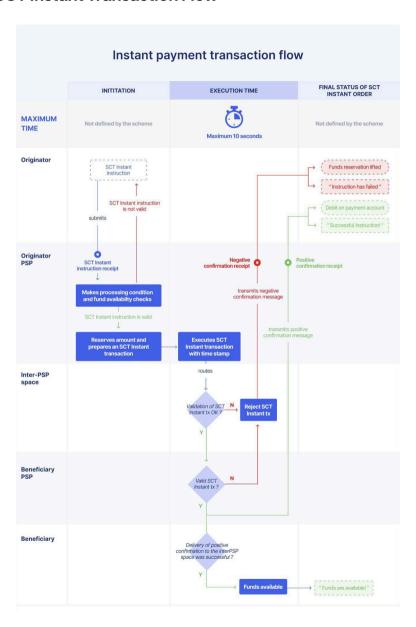
Working on risk, financial crime, financial ops at fintech companies? Email them at sales@checkmarble.com.

Appendixes

Glossary

Term	Definition
BIC	Bank identifier code
CAMT	Cash management ISO 20022 message
CSM	Clearing and settlement mechanism
EBICS	Electronic Banking Internet Communication Standard
ECB	European Central Bank
EPC	European Payments Council
ERP	Enterprise resource planning
IBAN	International bank account number
ISO 20022	ISO standard for electronic data interchange between financial institutions
FSR	File status report
PACS	Payment clearing and settlement ISO 20022 message
PAIN	Payments initiation ISO 20022 message
PSD1/PSD2	European Commission's payment services directives 1 and 2
PSP	Payment service provider, either bank or non-bank
PSR	Payment status report
RTP	SEPA Request-to-Pay
SCT	SEPA Credit Transfer
SCT Inst	SEPA Instant Credit Transfer
SEPA	Single Euro Payments Area
SFTP	Secure (SSH) File Transfer Protocol
STP	Straight-through-processing

SCT Instant Transaction Flow



SCT Instant Scheme Adoption by Country

Country (eurozone)	% of SCT Instant adherent banks (as % of SCT adherent)
Austria	93%
Belgium	48%
Cyprus	14%
Estonia	58%
Finland	78%
France	50%
Germany	89%
Greece	48%
Ireland	4%
Italy	71%
Latvia	56%
Lithuania	46%
Luxemburg	9%
Malta	17%
Netherlands	32%
Portugal	46%
Slovakia	24%
Slovenia	100%
Spain	78%

Source: EPC June 2022

Country (non-euro)	% of SCT Instant adherent banks (as % of SCT adherent)
Croatia	0%
Czech Republic	5%
Denmark	2%
Hungary	0%
Poland	4%
Romania	4%
Sweden	40%

Source: EPC June 2022

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