



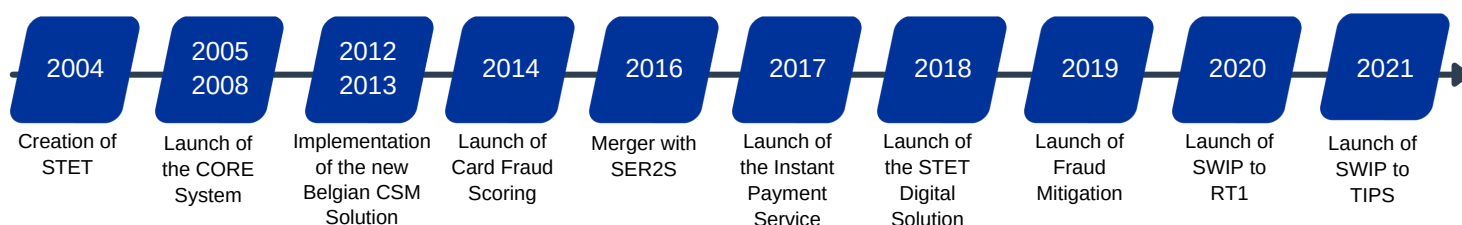
**BANKING PARTNER
FOR A PAYMENT WORLD**

Introduction

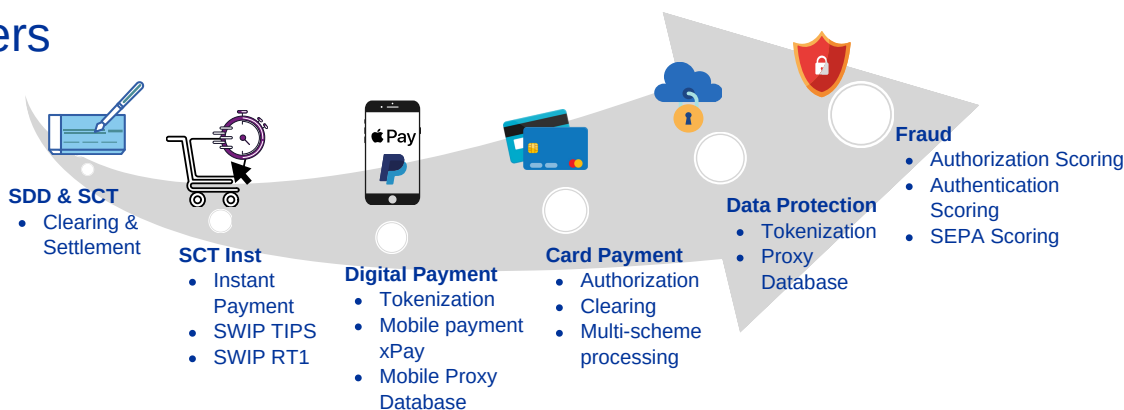
STET is a major European payment processor working for the French and the Belgium communities, with close to 28.64 billion transactions processed per year.

We are **one of the leading payment processors in Europe**, operating both a high-performance clearing and settlement system (CSM) and a card authorization network. We support a full range of payments means (*Direct Debits, Credit Transfers, Cards and ATM transactions, Cheques, Bills of Exchange, and Instant Payments*) and provide the associated processing services (e.g., *clearing, settlement, switching, fraud management, tokenization*).

We are a **critical operator for our banks and the banking communities**. As a trusted partner in the interbank ecosystem, we play a key role in the provision of payment transaction services. With a complete offer, integrating new technologies and security expertise, we provide our customers with **high-performance, secure, and innovative solutions**.



Our offers



Card Based Solutions

AUTHORIZATION

Card transactions are routed through our switching and authorization service, agnostic to schemes (ICS, domestic schemes) for any type of card transactions (withdrawal, POS, e-commerce, mobile payment).

FRAUD MANAGEMENT

Because fighting fraud has always been a priority for STET, we regularly launch new initiatives to reduce fraud and increase security for our clients. STET's fraud platform is continuously adapted to new technologies (AI), to payment regulations (PSD2 requirements) and moreover to our clients' needs.

CLEARING AND SETTLEMENT

Our CORE Platform is one of the leading ACHs in Europe for European card transactions.

TOKENIZATION

STET has its own (EMVco certified) TSP and provides TSM services for banking wallets (apps) as well as xPays which act as a digital HUB to manage interactions within the whole eco-system with all the stakeholders (banks, schemes, merchants, GAFA, other TSPs).



Instant Payments

INSTANT PAYMENTS PROCESSING

STET has implemented a new pan-European Clearing and Settlement System to process Instant Payments transactions compliant with the EPC's SCT Inst rulebook.

FRAUD MANAGEMENT

STET offers real time scoring of Instant Payments triggering alerts to debtor banks to help them efficiently fight fraud.

PROXY LOOKUP SERVICE

STET's proxy enables the transfer of funds between users using their phone numbers, without knowing the IBAN of the beneficiary.

SWIP

STET offers pan-European accessibility through its direct connection to TIPS and RT1. This provides benefits for PSPs delivering efficiencies and saving costs.

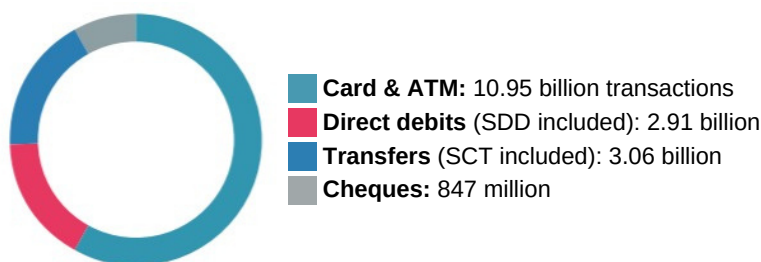
Key Figures

Clearing & Settlement

In 2021, we processed

17.97 billion transactions via CORE for the French and Belgium communities

The CORE system processes the whole range of payment instruments on a large scale, including all card transactions.



Performance of the CORE system PAYMENTS



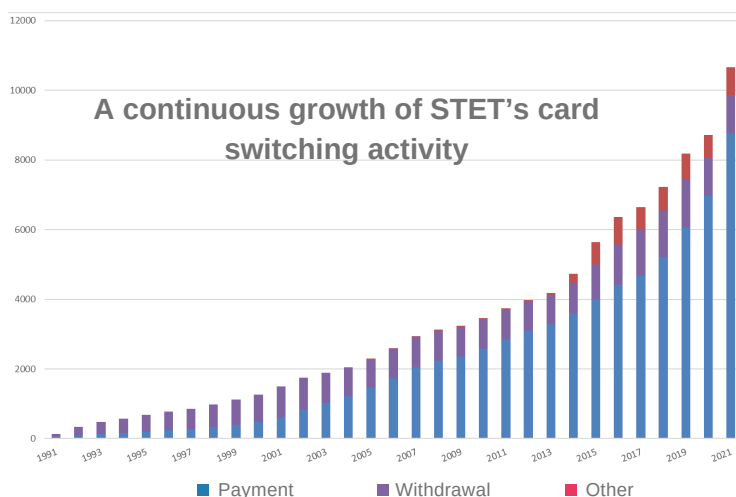
Benchmarked for 300 000 000 transactions/day

Highest peak day 161.84 million transactions

Authorization

10.66 billion card transactions
routed on our network in 2021

Our secure network for cash withdrawal and payment authorization messages is in France the reference network for cards.



Instant Payment

192.12 million of Instant Payment transactions processed in 2021

- ✓ 15 Belgian direct participants & 8 French direct participants
- ✓ Daily record: 960,146 Instant Payments on 1 December 2021



Our Commitment

STET is under regulatory supervision and is fully committed to **strong compliance, security, and resilience requirements**. STET holds all the certifications required for the provision of its services.

All data are processed under **GDPR guidelines** and card data under **PCI DSS rules**.

Our services operate on a ISO27001 certified infrastructure using a segmented network (private, public, and high security) with the latest generation Firewall.

Our solutions are mostly built in-house following **secure developments practices** (DevSecOps) and maintained through a very strict vulnerability patching process.

The whole system is protected by an intrusion prevention framework and monitored by a SIEM. Lastly, all the infrastructure and applications undergo penetration testing.

To meet all security requirements at the architecture level, all components are implemented considering:

- **Regulatory standards:** All systems and networks are deployed in strict compliance with the principles for financial market infrastructures defined by the CPMI and the IOSCO.
- **Security devices:** All the necessary security components are deployed to ensure a fully protected environment. For example:
 - Centralized log system (SIEM)
 - Intrusion Prevention System (IPS)
 - Firewalls to segment networks into public, private and high security networks
 - HSM device to generate, store and protect cryptographic keys
 - Antivirus systems management
 - Advanced capabilities in risk discovery, data loss prevention, and data governance



Fraud example

FULL-SERVICE SCORING PLATFORM

Expertise in integrating and operating a full-service scoring platform (real time processing with different scoring engines, data science environments, modelling).

ADVANCED SCORING CAPABILITIES

State-of-the-art scoring platform based on AI technologies, Customizable platform, Extended model development capabilities.

MODULAR PLATFORM

Scoring engines able to process all types of transactions for multiple use cases, Scalable and multi-tenant solutions, Multiple interfaces (ISO 20022 messages, API XML, etc.).

RESILIENCE & EFFICIENCY

No disruption for 7 years and 24/7/365 (including maintenance, upgrade tasks & patch management that are applied with no service downtime), Over 9 billion card transactions scored every year (90% of card transactions in France) and 5 billion SEPA transactions scored



In 2021, **more than 10 billion authorizations** were scored by the system, with **nearly 100 million euro** of fraud avoided.

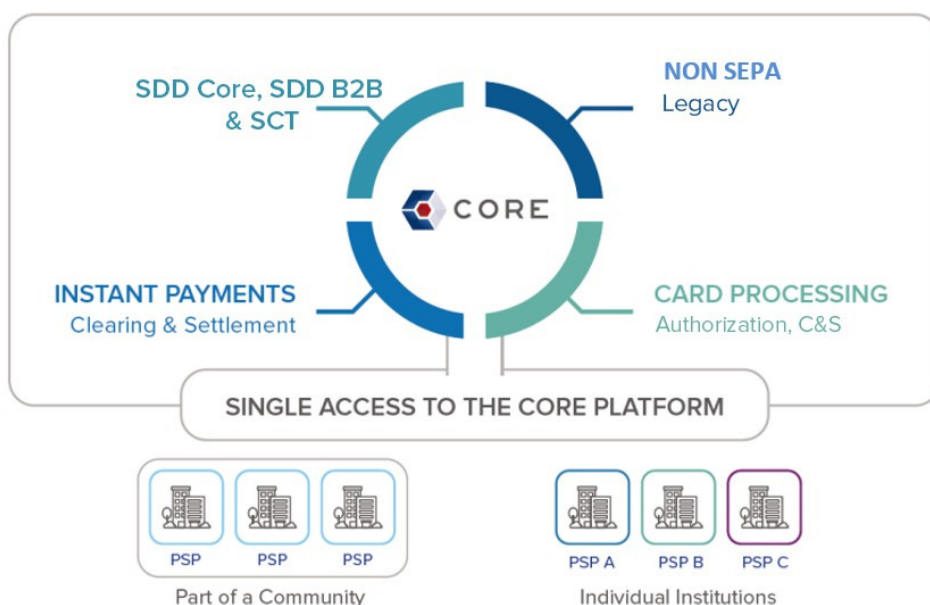
Clearing Services

Benefits for our clients:

- Our CORE platform operates a number of CSMs on a common technical architecture for access, transactions processing and reporting
- Each CSM is separately configured to clear and settle according to the specific requirements of the community
- Strong capabilities: secure, resilient, and efficient

The European payment market is complex and diverse. In this fast-changing environment, our role as a Clearing and Settlement infrastructure is to **ensure the secure and efficient exchange of transactions**.

We want to be at the forefront of change by providing new value-added services to our payment community to meet their changing needs.



In a European playing field

Based on a multi-CSM technical and governance architecture, we provide processing, clearing and settlement services to the CEC Community of Belgian Banks through the implementation of a dedicated Belgian CSM launched on 22 February 2013.

It provides multi-cycles intraday Clearing services for **the full range of payment instruments in Belgium**. Transactions are delivered after settlement to avoid any counterparty risk to the whole banking community. Settlement interface is built based on a standard use of the Target-2 Ancillary System interface.

In 2021, **more than 1.4 billion transactions were processed in CORE (BE)**, representing 8.5% of the total volumes in the CORE platform, for a global total amount of 1.312 billion euros.

SEPA Fraud Scoring

Benefits for our clients:

- Enhancing internal fraud scoring tools
- Keeping absolute control of the final decision on whether to freeze a transaction
- Support by our expert team

Since 2004, we have been providing concrete and innovative solutions to financial institutions to help them fight against fraud in payments. As a further evolution in risk mitigation for our clients, we launched a project for the delivery of a new service based on our existing functionality used for card scoring, adapted to SEPA transactions.

Working closely with trusted clients, we have developed the analytical functionality required to score fraudulent SEPA Scheme transactions based on an analysis of data elements from the transactions passing through its SEPA CSM clearing services. This service is provided to all STET Participant PSPs.

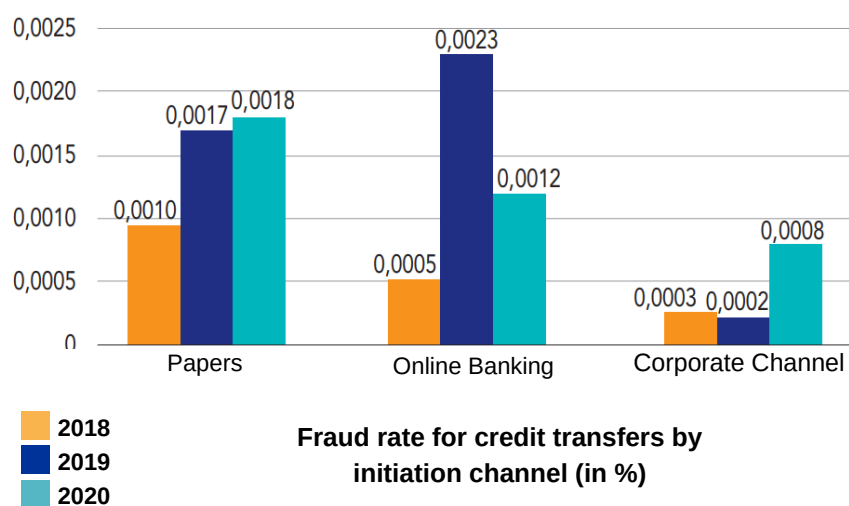
Should a suspected fraudulent transaction be identified, the system will alert the issuing and receiving PSPs, the latter being responsible to decide whether to process or to block the transaction.

A Secure and Highly Effective Solution

- Implementation of a dedicated infrastructure
- Optimal performance and security



SCT Fraud (2021)



Source: OSMP - Annual report 2021

Instant Payments

Benefits for our clients:

- Technical Infrastructure & Connectivity
- Security focus with multilevel security measures
- Reports provided by the system
- Highest possible coverage thanks to interbank cooperation

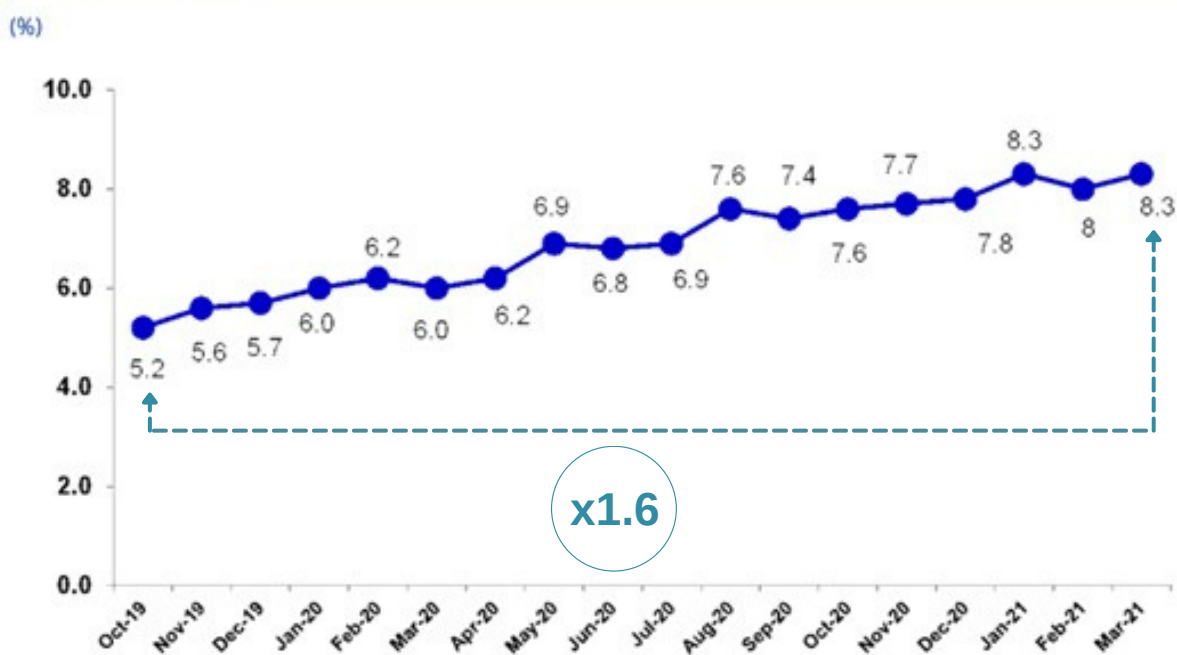
Instant Payments are progressively becoming a “**new normal**”. Instant Payments deeply transform the way the money is processed: it impacts consumers, businesses, governmental institutions and creates opportunities for innovation.

As Europe has been entering into the era of SEPA transactions, we have implemented a new pan-European CSM to process Instant Payments transactions compliant with the **EPC's SCT Inst rulebook**.

To support local consumer requirements, STET's application design also takes into account possible variations at a community level, such as the maximum amount of payments cleared, end-to-end transaction timing limits or field variations. Our CSM can support these variants through Closed User Groups (CUGs).

Further to the IP CSM, we have developed a new value-added service: **the SWIP Service** (Single Window for Instant Payments) which enables intra-European instant payment clearing.

The percentage of SCT Inst in all SEPA Credit Transfer transactions



Source: ECB - What are Instant Payments? (March 2021)

Single Window for Instant Payments (SWIP)

Benefits for our clients:

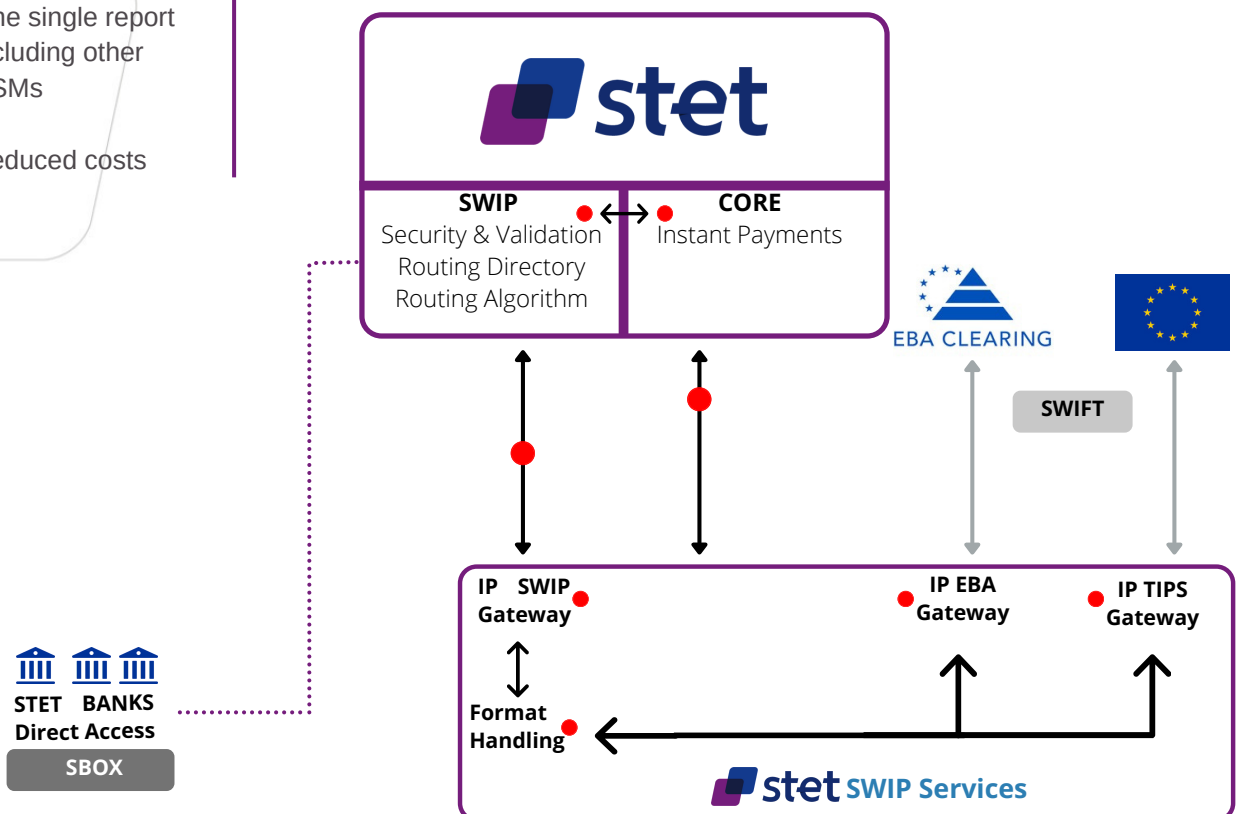
- One technical connection to access Instant Payments system
- One directory for all reachable PSPs through other CSMs
- Our payments data set for all Instant Payments regardless of final CSM (dataset different by CSM)
- One single report including other CSMs
- Reduced costs

As an agnostic processor, we are able to support different interoperability models between euro IP CSMs in SEPA.

That is why we have developed the SWIP Service (Single Window for Instant Payments) for PSPs.

The SWIP Service gives participants a significant competitive edge: through their single access to the CORE payments platform, they can reach any other EU participants, regardless of whether they can be reached within STET's IP CSM or are reachable through TIPS & RT1.

It is a technical interoperable connection offering a number of benefits for PSPs by allowing them to improve their performance and optimize their costs to reach pan-European services.





Fraud Scoring on Instant Payments

Our Instant Payments CSM has emerged as a new generation infrastructure ready for today's reality and tomorrow's evolutions. CSMs have rapidly evolved from traditional non-urgent batch clearing to real-time single transaction clearing.

The expected increase of transaction volumes through new SCT Inst use cases together with the increased speed of exchange, requires enhancements for PSP internal systems. To help PSPs to mitigate fraud and payment risks management, STET is providing enhanced real time scoring tools which are based on advanced analytics.

As an active player in the interbank ecosystem, we already play a key role in providing risk mitigation services for **scoring fraudulent transactions** in the SCT Schemes. We have now launched a new project to deliver **a state-of-the-art fraud scoring service for SCT Inst transactions.**

On-Demand Scoring by STET

With Instant Payments, fund transfers happen in a few seconds only and are irrevocable. With the objective of reducing the risk of fraud and strengthening security around Instant Payments, **we have launched a new innovative service.**

Based on our **strong experience of scoring** card transactions, we offer our clients **on-demand scoring of Instant Payments.**

Card Services

Benefits for our clients:

- Highly resilient system
- Possibility of rerouting to a back-up issuing host
- Business continuity
- Real-time service and card scoring on-the-fly
- Optimized scoring thanks to large volume of transactions
- Managing change

Our high-performance card network ensures the routing of authorization requests and responses round the clock, 365 days a year.

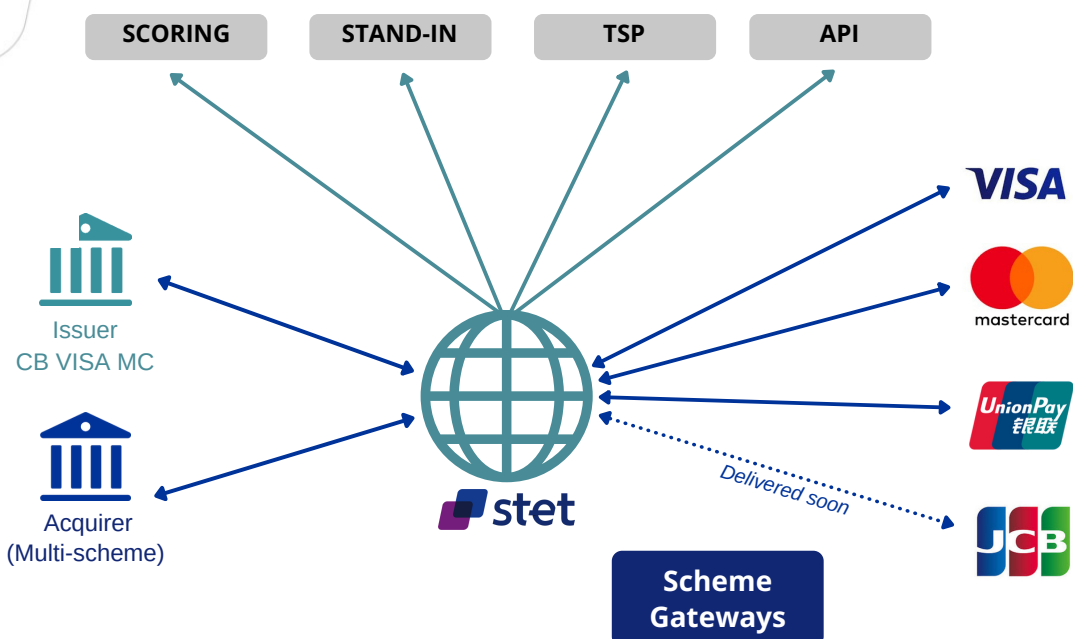
We operate the secure network for card authorization transactions at the Point of Sales (POS) and support the cash withdrawal ATM network.

In 2021, we processed 9.85 billion transactions in support of:

- 73.9 million* cards in circulation
- 2.0 million* merchants that accept CB cards

This switching activity is available for many schemes: Cartes Bancaires, Visa International, Mastercard, etc.

*References: CB website



Card Fraud Scoring

Benefits for our clients:

- Mitigating PSP risks
- Extending fight against fraud to all participants
- Keeping absolute control of the final decision on whether to freeze a transaction
- Support by our expert team

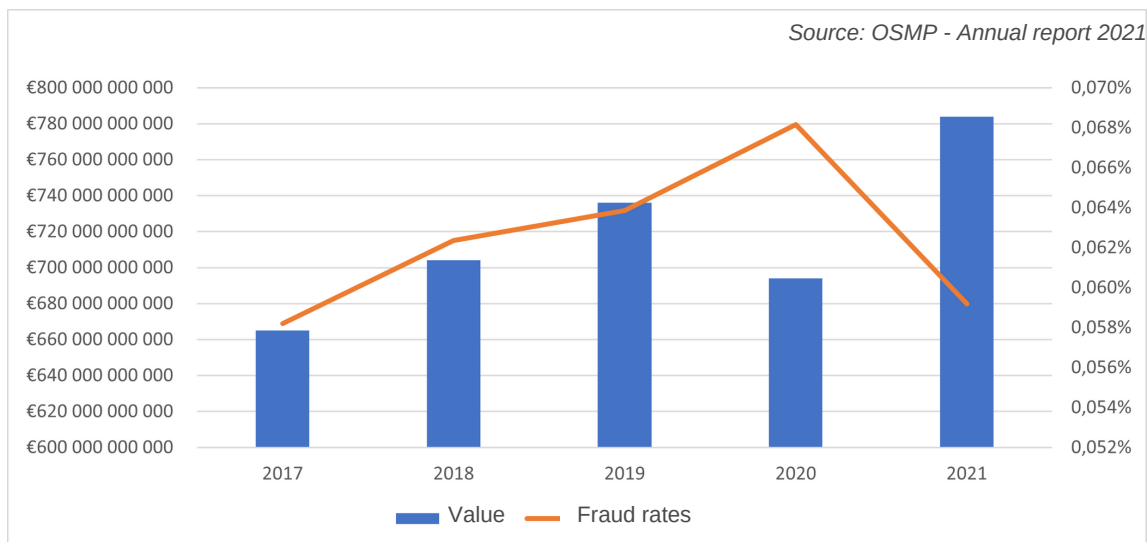
Thanks to our card authorization network, we ensure routing of authorization messages in France. With very high transaction volumes, our network delivers optimized scoring for card transactions.

In 2014, we implemented our fraud scoring system. Since then, statistics have clearly shown that French domestic card fraud is decreasing: a consequence of STET's efforts to give PSPs the best support. This decline in fraud encourages us to go even further and to keep on refining our scoring system.

In the scoring process, we play a key role in alerting PSPs in case of suspected fraud. Every time a transaction looks suspicious according to our scoring instruments, the issuing bank is alerted and can make its decision to either:

- Deny the transaction
- Authorize the transaction
- Contact its client

Payments made with cards issued in France (all channels)



There is an increase in the fraud rate in 2020 which is an impact of the health crisis, a migration of fraud to distance selling has taken place over this period, due to the lack of fraud realisation on physical points of sale with confinements.

However, the fraud rate in 2021 is lower with a fraud rate established at 0.135% for card transactions on the Internet in France.

STET Digital Solution (SDS)

Benefits for our clients:

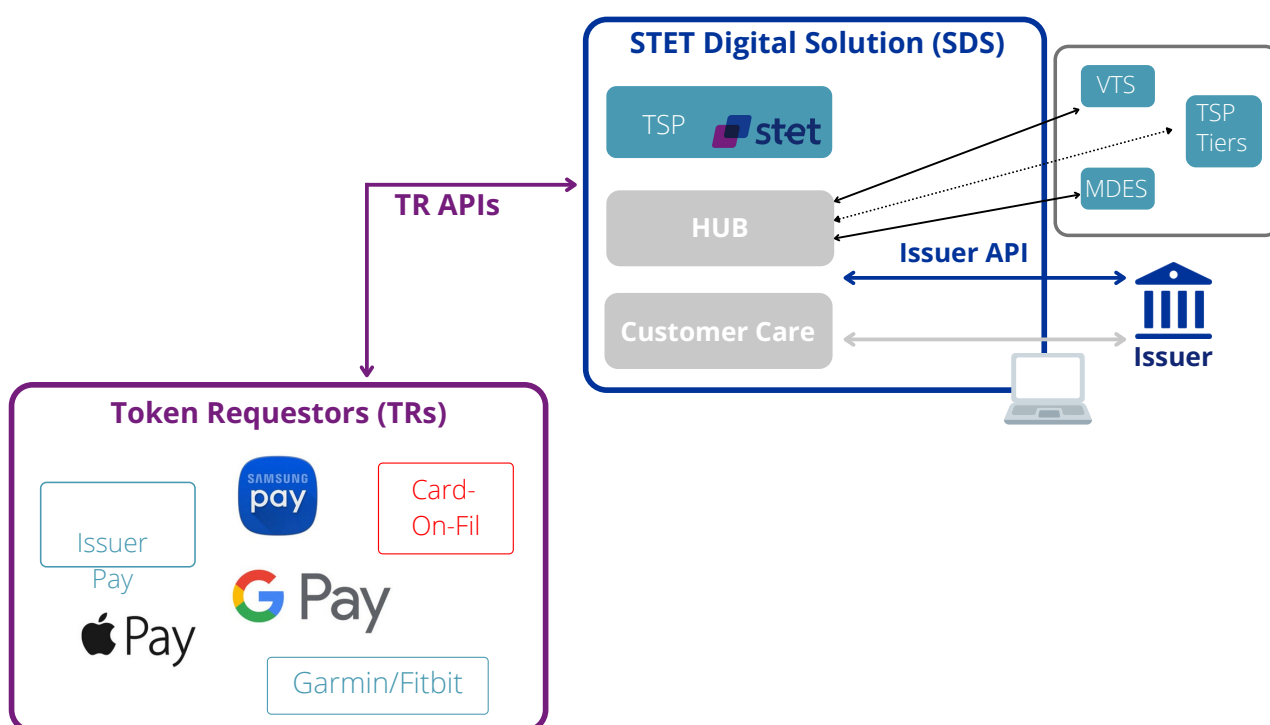
- A scalable offer allowing cost sharing between banks
- A wide range of partners and TSPs
- A single API set allowing access to all services without having to redevelop new requests
- Back-office tools to manage all cards and tokens via a single interface (extranet "Customer Care" (tool allowing the issuer to act on the status of the token))

Electronic payment instruments continue to evolve with faster innovations. Digital payments are becoming increasingly common: it enhances the customer experience and gives the issuer / merchant the opportunity to improve its offering thanks to mobile payment.

Digital payments security is based on **tokenization** (a way of reducing card number sensitivity).

We launched the SDS (STET Digital Solution) which includes:

- Access to different wallet providers through the HUB. This dedicated platform enables access to xPay and issuer wallets (with a customer experience controlled by the wallet owner and highly secured online selling)
- TSP CB which is responsible for creating, issuing, managing, and administering CB tokens associated with PANs
- Token authorization



STET Proxy Database

Our offer includes:

- API Directory Management
- API ContactCheck
- API Vault Management
- API IBAN Search
- API Notifications Management
- API Statistics Report

The payment industry is clearly moving towards the digital sphere. The COVID-19 pandemic has increased the need for PSPs to provide digital payment solutions to their customers to replace the use of cash.

As a trusted third-party provider, we offer a **Proxy Database Solution** providing a centralized Mobile Directory, a secured IBAN Vault and a set of JSON REST to facilitate the initiation of an Instant Payment to a beneficiary:

- Managing subscriptions of PSP customers to the Mobile
- Operating Mobile directory / IBAN Vault
- Checking whether the payer's contacts are registered in STET
- Retrieving the IBAN of the beneficiary (stored in internal or external central vault)
- Managing beneficiaries with several IBANs attached to a single phone number
- Allowing non-registered beneficiary to receive funds
- Sending Instant Notification messages to the Beneficiary
- Providing statistical reports on all IBAN lookup requests over a period of 14 months
- Monitoring the IBAN lookup status in real-time

Main Service Indicators:

- Compliant with SCT Inst Scheme
- Accessible 24/7 - Rate of availability 99.9%
- Processing of requests < 5 seconds
- Secure exchanges: TLS 1.2 protocol and X/509 certificates
- RPO (Recovery Point Objectives): 5 minutes

via ContactCheck



With the ContactCheck service, the payer quickly and easily recognizes which of his contacts are already registered in STET's mobile directory.

ContactCheck is available 24/7 and checks up to 500 contacts/sec.

Request to Pay Service

Benefits for our clients:

- Interoperability with other systems
- Resiliency with Active/Active cluster
- Security and Access control
- Open API access
- Messaging system for business and technical messages
- Time-out management
- Business support via GUI
- Online and offline reporting
- Full range of use cases supported

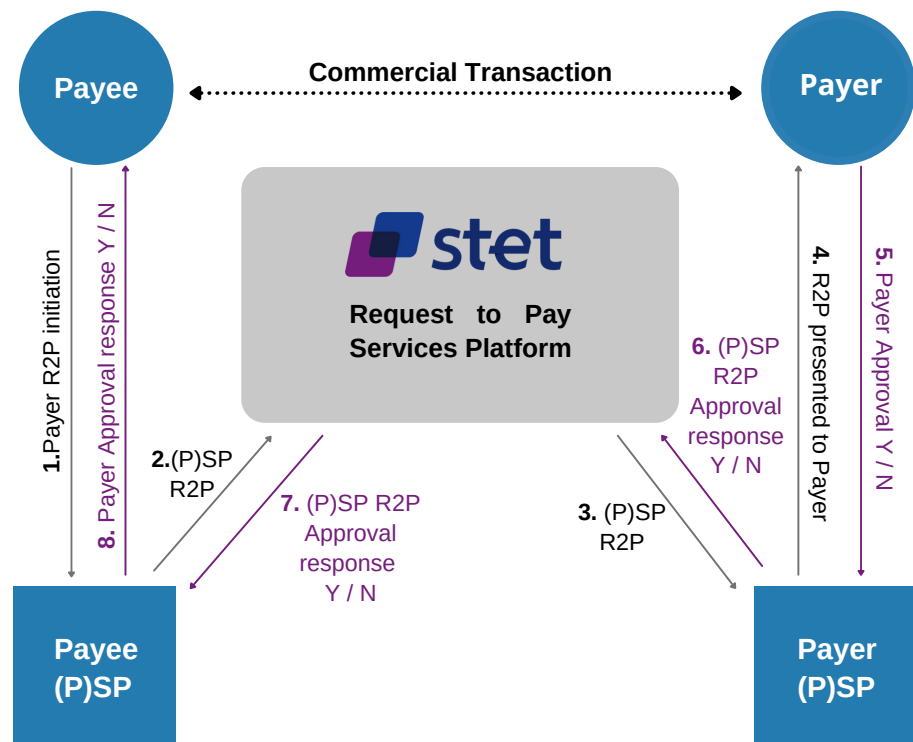
The Request to Pay Service is harmonized through the EPC and is based on ISO 20022 messaging standards. This is built on top of the payment schemes already implemented in SEPA to offer a new service for the Payee to request a payment for services or goods.

The scheme service is stand-alone and separated from the payment schemes allowing the flexibility for different payment instruments to be used in response to a request.

We are in the early stages of the development of a new Request to Pay Service in support of market demand following the launch of Instant Payments and the Implementation of the PSD2.

The combination of these two enablers to the payment industry facilitates the emergence of new payment initiation solutions delivering benefits to both merchants and consumers.

Our R2P service leverages the existing secure, robust, and high-performance instant payments infrastructure to deliver its customer base the latest technology service for request to pay.





PSD2: STET's Open API for PSPs and TPPs in Europe

Standards & Norms

As part of PSD2, we regularly organize working groups for our clients. This customized support is an opportunity to:

- Keep up to date with the latest legal & regulatory changes
- Identify and deal with any potential issues
- Maintain a consistent approach regardless of the country or the context

The banking industry is facing major changes prompted by a new directive on payment services (PSD2) whose requirements came into effect on 13th January 2018. In this evolving environment, we provide a PSD2-compliant API that establishes a secure gateway between Third Party Providers (TPPs) and Account Servicing Payment Service Providers (ASPSPs, i.e., banks).

Standards & Norms

In 2016, our shareholders asked us to design and write the specifications of for an API between TPPs and ASPSPs. Although it was designed for the French banking community, this API can be extended to the entire SEPA system.

Our company is involved in ISO standardisation work as well. We also regularly consult all the stakeholders and work together on other initiatives.

Our offer includes:

- Testing environment hosted on a shared infrastructure
- Acceptance plan
- Technical documentation
- Data hosting
Evolutions of PSD2 specifications
- Online registration portal
- Online support and hotline (optional)

A Secure Solution for ASPSPs and TPPs

The STET API is a secure gateway between TPPs and ASPSPs to exchange high volumes of data.

It allows:

- Identification between TPPs and ASPSPs
- Authentication of parties with qualified certificates
- Payment initiation / Information on the initiation and the execution of the payment
- Confirmation of the availability of funds
- Access to payment account information and associated payment transactions
- Management of audit trails for payment transactions by ASPSPs
- The same level of availability and performance as the online banking services made available to the client.



History

In 2004, a group of major French banks founded STET with the vision of building a new platform that would meet the challenges raised by the payments industry with the emergence of SEPA. **STET has thus become one of the leading payment processors in Europe, operating both a high-performance clearing and settlement system (CSM) and a card authorization network and Instant Payments.**

Since its successful launch in January 2008, the **CORE platform** has offered an efficient and secure industrial bulk processing clearing system, hosting **the full range of payment instruments on the French market.**

In 2012, the Belgian banking community entrusted STET with the processing, clearing and settlement of SEPA and non-SEPA payment instruments, which has enabled the company to consolidate its **position on the European market.** Following the merger with SER2S in January 2016, STET became the operator of the card payment authorization network. In a rapidly changing technological environment, STET constantly monitors market developments and trends.

As Europe enters the real time era, STET launched the development of **a new pan-European payment system** in 2017 to process SEPA instant payment transactions. Starting in 2019, as part of this process, STET developed the **SWIP** (Single Window for Instant Payments) service for technical interoperability with TIPS and RT1 systems, offering many benefits for PSPs, including efficiency gains, cost pooling and pan-European reachability. As **a trusted partner in the interbank ecosystem**, STET plays a key role in the provision of payment transaction **security services.** To reduce the risk of fraud and enhance security around SEPA payments (SCT, SDD and SCT Inst), STET offers its customers an innovative scoring service based on its experience in card transaction scoring.

In an increasingly **digital world**, the use of tokenisation mechanisms is a very efficient way to increase the security of card and SEPA payments. STET has launched the STET Digital Solution (SDS) service, which includes a white-labelled Token Service Provider (TSP) and access to different wallet providers through a digital HUB. This complete solution provides access to the various xPay solutions and issuer portfolios in the card business. The combination of Instant Payments and DSP2 implementation facilitates the emergence of new payment solutions.

STET is also the standardization party of the DSP2 APIs on behalf of the French community. With a complete offer, integrating new technologies and security expertise, STET offers its customers high-performance and innovative solutions.

In 2021, STET processed 28.64 billion transactions and 192.12 million instant payments.

Experienced

We have a proven track record operating today with a high service level at similar scale. We have extensive experience in the payment industry and have been operating at **a high service level for multiple decades.**

Capable

We have a unique set of human and system capabilities to surf within the changing regulation and market demands. We are continuously working on implementing more functional and technological solutions **to adapt to an ever-changing environment.**

Reliable

Thanks to our proven know-how and expert knowledge of the European Payment industry, **we have a clear understanding on how take-over, set-up and services to meet timing and quality requests.**

Advanced

Best-of-breed operations and technologies to increase time-to-market and response to challenges. In a constantly changing technology landscape, we have implemented **the newest of technologies in order to keep up to date.**

Inclusive

Our service model offered with **partners collaboration, but open for third party providers across.**



STET - Cœur Défense
Tour B - 100, Esplanade du Général de Gaulle
92400 Courbevoie
information@stet.eu
www.stet.eu

Tel. +33(0)1 55 23 55 00