



# Doing More for Banks

# STET's History

STET was founded in 2004 by a group of major French banks with a particular goal in mind: to undertake the development of a new platform that would meet the transformation and challenges the payments industry was set to tackle with the emergence of SEPA. Since then, STET has become one of the leading payments processors in Europe operating both a highly performant Clearing and Settlement Mechanism (CSM) and a Card Authorisation Switch.

Based on years of experience and expertise, the CORE system was developed with the ambition of creating an innovative payment platform for the future European market. Since its successful launch in January 2008, the **CORE platform** has been delivering efficiency and security to a large volume market, hosting the **full range of payment instruments** in the French market in a **single clearing system**. In 2012, we consolidated our position in the European market when the Belgian banking community entrusted STET with the processing, clearing and settlement of SEPA and non-SEPA payment instruments.

Since January 2016 after merging with SER2S, STET has operated a **Card Authorisation** processing system including a Switch.

In a fast-changing technology landscape, STET pays great attention to the market's new developments and business trends. STET is further working on **PSD2 solutions** for PSPs and risk mitigation services in relation to **Instant Payments**.

Thanks to a 360° offer, spearheads technologies and the greatest importance given to security and the **fraud mitigation**, STET provides its clients with efficient and innovative solutions.

As one of the leading payment services providers in Europe, STET was awarded the International Organisation for Standardisation (ISO) 27 001.

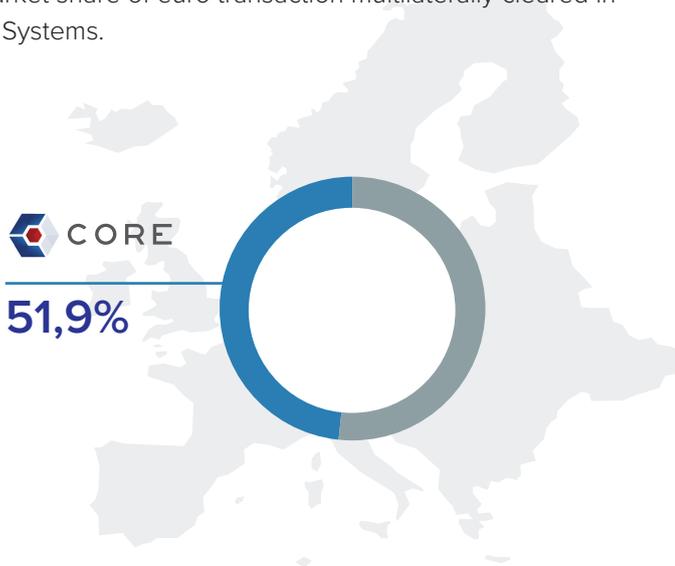
In 2018, STET processed **24.35 billion** transactions.



# STET's Key Figures

## Clearing & Settlement

STET's CORE platform is **one of the leading ACH in Europe** with 51,9% market share of euro transaction multilaterally cleared in Clearing Systems.



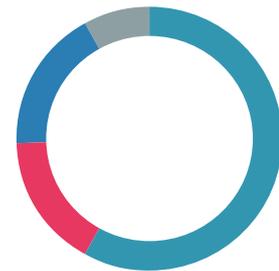
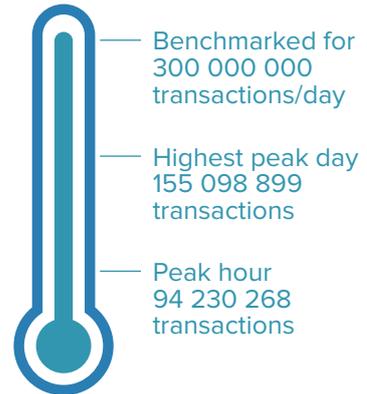
In 2018, STET processed

↔ **17.11**  
billion transactions  
on 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



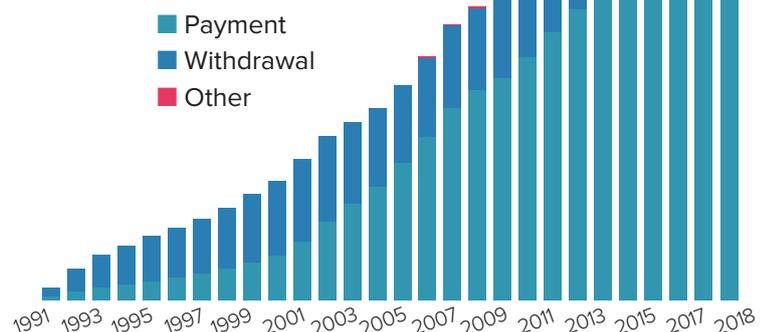
- Card & ATM: 9.8 billion transactions
- Direct debits (SDD included): 2.76 billion
- Transfers (SCT included): 2.9 billion
- Cheques: 1.35 billion

## Authorisation

 **7.24** billion card transactions  
routed on our network

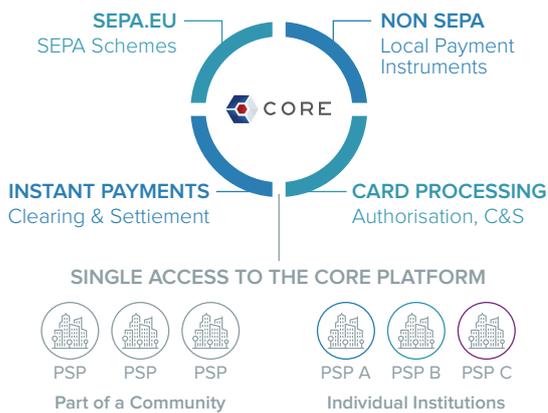
In 2018, more than 7 billion transaction were routed through our routing and authorization service. Our secure network for cash withdrawal and payment authorisation messages is in France the reference network for all cards types, including CB, Diners Club International, JCB, Mastercard, Paylib, Visa.

### STET's growing of its card switch activity



# STET's Clearing Services

Providing Efficient Solutions to the Banking Industry



The European payment market is complex and diverse. In this fast-changing environment, STET's role as a Clearing and Settlement infrastructure is to ensure the secure and efficient exchange of transactions between the participants in its system. STET aims to lead the way of change in providing new value-added services to its payment community in support of their evolving business needs.

STET's services portfolio aims to provide PSPs across SEPA with an integrated solution for Clearing and Settlement for **all payment instruments** through a **single access**. This approach allows PSPs to significantly **reduce internal operational costs** related to their participation in multiple systems for the different payment instruments, as well as **reduce PSPs' liquidity requirement** through optimized consolidation of the settlement obligation in a net position.

## SEPA(EU)

A Future-Oriented SEPA Schemes' CSM for the Pan-European Banking Community

STET's SEPA(EU) CSM is a pan-European CSM delivering standard SEPA schemes functionality along with value-added services. It has been live since 2016 with the French Banking Community's migration and is now open to all European banking communities and individual PSPs operating in SEPA.

Building on a strong performance and its second-to-none experience, STET successfully launched a new European CSM in November 2016. Named SEPA(EU), the CSM is integrated in STET's CORE platform and aims to **deliver SEPA clearing and settlement services to the European market**, connected as whole communities or as individual PSPs. The system thus delivers efficiency through a **single access for all payment instruments**, liquidity efficiency and facilitating pan-European reach for PSPs. This platform focuses on **making easier for the European PSPs to exchange transactions** on a common platform while keeping options available in the technical platform so that local requirements can be catered for.

# SEPA Fraud Scoring

## Benefits for our Clients

- > Complementing their individual scoring tools
- > Enhancing their clients' protection
- > Protecting their own interests
- > Generalising fight against fraud to all participants
- > Keeping absolute control of the final decision on whether to freeze a transaction

## A Secure and Highly Effective Solution

- > Implementation of a dedicated infrastructure
- > Compliance with GDPR
- > Optimal conditions of performance, security and volume
- > Highest possible coverage thanks to interbank cooperation

**Fighting against fraud has always been a priority for STET. In this context and in agreement with PSPs, STET is proposing a new service. STET will give its clients the opportunity to score SDDs and SCTs on a central based infrastructure.**

Since its creation, and even more since it set up an *ad hoc* anti-fraud committee in 2016, STET has been providing concrete and innovative solutions to the PSPs to help them fight against fraud. Going even further, STET has decided to implement a new system comparable to the one used for card scoring but fully adapted to SEPA operations. An innovative initiative in the CSM market.

Working closely with trusted pilot clients, STET is developing a technical project based on all the transactions passing through its Clearing and Settlement Mechanisms. After a significant test phase, STET will launch its new service. This shared system will then be proposed to all PSPs, as a great opportunity to reduce the risk of fraud and increase the security for their clients and for themselves.

Should there be a suspected fraudulent transaction, as a fully independent operator, STET will alert the issuing and receiving PSPs, without interfering in the payment workflow. Only PSPs can decide whether the transaction will be processed or blocked.



## Fraud on SCTs and SDDs (2018)

### SCTs

**87%** of cashless payments in France

Total amount of fraud on SCTs from bank accounts held in France: 97 million euros

### SDDs

Total amount of fraud on SDDs from bank accounts held in France: 58 million euros

1 fraudulent SDD for every 28 185

Source: OSMP – Annual report 2018

# Instant Payments

## About STET's IP CSM

- > Open to individual PSPs (or organised within a community of PSPs)
- > Fully compliant with the EPC's SCTInst rulebook and Implementation Guidelines
- > Hosted on a highly secure, robust and efficient infrastructure
- > Designed for processing SEPA-scale volume
- > 24/7/365 service
- > Real-time messaging
- > Both flexible and tailor-made
- > Cutting-edge technology
- > 1 second e2e SLA

The world of payments is moving forward: increasing the speed at which payments are processed is an objective many are enthusiastic about. Instant Payments (IP) will deeply transform the way money is transferred: it will impact consumers, businesses and governmental institutions, and create opportunities for innovation.

As Europe has been setting into the era of SEPA transactions, **STET has implemented a new pan-European CSM in order to process Instant Payments transactions** compliant with the EPC's SCTInst rulebook.

In support of local consumers' requirements, STET's applicative design also **takes into account possible variations at community level**, such as maximum amount of payment, end-to-end timing or field variations. STET's CSM can support these variants through community Closed Users Groups (CUGs).

Further to the IP CSM, a new value-added service has been developed by STET. The SWIP service (Single Window for Instant Payments) gives participants a significant competitive edge: through their **single access** to the CORE payments platform, they are able to **reach all other participants**, regardless of whether they can be reached within STET's IP CSM or reachable through another CSM.



# Fraud Scoring on Instant Payments



*“We are at the beginning of an important transformation in the way we will experience payments for a purchase or a service. Beyond the benefits it will undoubtedly deliver, we must ensure that security and risk are not compromised.”*

**José Beltran**  
Director Business  
Development

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

The increased speed of exchanges also reduces the time available for PSPs to execute the necessary risk controls. As a trusted partner in the interbank space, STET plays a key role in providing risk mitigation services such as **scoring for fraudulent transactions**.

## Instant Payments: An Opportunity for PSPs and Merchants

Instant Payments will be used for commerce by consumers for the payment of goods and services at a point of sale or online. This payment method will be an alternative to a payment with a card: it will be a matter of choice. **For merchants, Instant Payments are a great opportunity to reduce the time to receive the funds on their accounts. For PSPs, instant funds eliminate the risk given through guarantees.**

Both consumer and merchant will want the same level of risk mitigation offered in the cards world, that is to say that transactions are scored in real-time by the operator for possible fraud. Instant Payments are a **hybrid payment system**, providing card real-time experience on account based transaction.

## 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 **STET launched a new innovative service**. Based on its **strong experience of scoring card transactions**, STET offers its clients an **on-demand scoring of Instant Payments**. Thanks to this real-time technology, PSPs can ask for scoring before the payment order is sent.

# Single Window for Instant Payments (SWIP)

## Benefit to PSPs

- > One technical connection to STET for all Instant Payment.
- > One reach directory for all reachable PSPs through other CSMs
- > STET's payments data set for all Instant Payments regardless of final CSM (dataset different by CSM)
- > STET's report formats for reports from other CSMs (reports different by CSM)
- > Shared cost of NSP connection to other CSMs
- > Reduced costs of annual change management, which is managed by STET

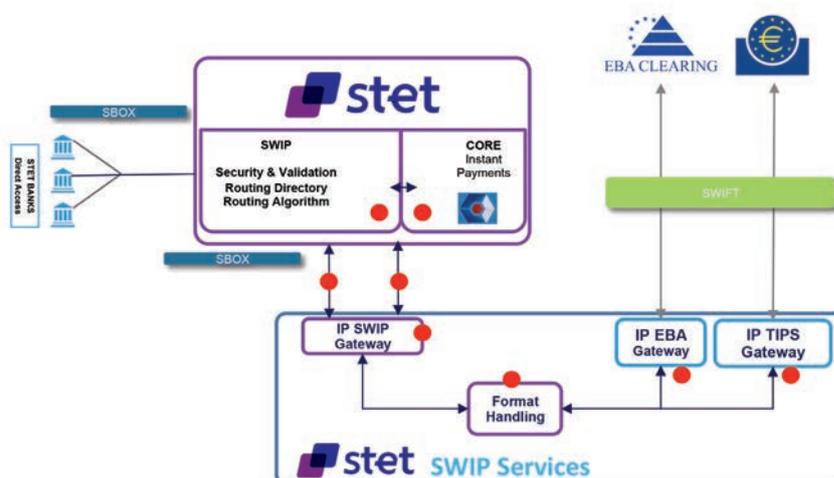
Instant Payments is now a reality through the launch of new SCTInst based payment services.

These services have largely emerged through local brands and local payment services providers initially meeting the requirements of their home markets. The first Instant Payments have been the PSP offering to the market for immediate execution of payments alongside traditional credit transfers under a maximum D+1 regulation. These payments together with the new brands that have facilitated the launch of P2P mobile payments initiated from smartphones and tablets based on mobile number to mobile number using IBAN look up through proxy databases.

The market take-up varies by country from slow build-up to Instant Payments as the new normal but without a doubt the take up is progressing rapidly and expectation is that instant will be the new normal.

The take-up expectation further foresees that what today are local services will become pan-European Instant Payment services and therefore pan-European reach is fundamental.

STET as an open processor is in a position to support different interoperability models between euro IP CSMs in SEPA and has developed a Single Window (SWIP) service for PSPs that have decided to also participate in TIPS or RT1 to enhance their reach.



The SWIP service is a technical interoperability connection to TIPS and RT1 offering a number of benefits for PSPs delivering efficiencies and mutualising the costs of achieving pan-European reach.

# STET Proxy Database

## Our Offer Includes:

- > API Directory Management
- > API ContactCheck
- > API Vault Management
- > API IBAN Bank Search
- > API IBAN Search
- > API Notifications Management
- > API Statistic Report



“Transferring money from peer-to-peer has never been easier: you only need a phone number! Proxy database service will transfer the recipient’s IBAN to the bank to get the payment order executed.”

**Florent Martin**  
Payment System Manager

STET has developed a new technical service enabling P2P instant credit transfers. The service facilitates mobile/email to IBAN lookout. Thanks to this new Proxy Database, PSPs can **offer their clients an innovative service that facilitates the transfer of funds** using their smartphones, **without needing the IBAN** of the beneficiary.

Our Proxy Database Offer includes several APIs developed with the latest technological standards and allowing the payer’s bank to:

- > Check whether the payer’s contacts are registered in STET’s mobile directory
- > Find the IBAN of the beneficiary
- > Manage beneficiaries with several IBANs attached to a single phone number
- > Manage beneficiaries not registered in STET’s mobile directory
- > Get statistic reports on all IBAN searches over a period of 14 months

## Main Service Indicators:

- > Compliant with SCT Inst scheme
- > Accessible 24/7 – Rate of availability 99.9%
- > Storage capacity:
  - ✓ Directory: 200 million contacts
  - ✓ Vault: 50 million IBANs
  - ✓ IBAN search: up to 650 million transactions
- > Processing of requests < 5 seconds
- > Secure exchanges: TLS 1.2 protocol and X.509 certificates
- > RPO (Recovery Point Objective): 5 minutes



## on 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.**

# STET's Card Services

## STET's Card Routing & Authorisation Service

- > 24/7/365 service
- > Highly resilient system
- > Possibility of rerouting to a back-up issuing host
- > Maximal business continuity
- > Real-time service + card scoring on-the-fly
- > Optimized scoring thanks to large volume of transactions
- > Average response time: 50 milliseconds

## Additional benefits

- > Optimizing solutions and costs
- > Controlling risks
- > Managing change
- > Fee calculation

STET provides the card authorisation processing including switch, for the French market.

STET operates the secure network for card authorisation transactions at the Point of Sales (POS), and supports the cash withdrawal ATM network.

STET's highly performant card network routes authorisation requests and responses round the clock, 365 days a year.

**In 2018, STET processed 7.24 billion transactions in support of:**

- 70.4 million of cards in circulation
- 54 000 ATM
- 1.77 million merchants that accept CB card.

For international business, our authorisation network is further connected to international card processors to switch transactions with partners of the Carte Bancaire scheme.

**Used every day by millions of consumers to withdraw cash, make purchases in stores and pay on the Internet or mobiles, our European network is a reference network for CB, Paylib, Diners Club, JCB, Mastercard and Visa cards.**



“Payment with a Card is embedded in our every day life whether we make an on-line purchase from home, pay at the store or when travelling the world. Ease of use together with the trust and guarantee it provides consumers and merchants make the card the most popular means of payment. STET works continuously on improving wider geographical acceptance in a highly secure infrastructure with unbeatable performance.”

**Rodolphe Meyer**  
Marketing & Business Development Director

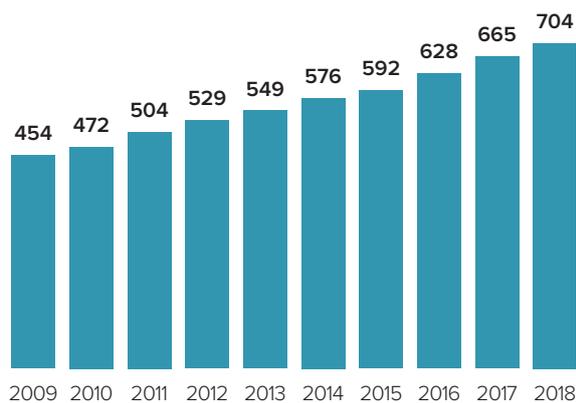
# Card Fraud Scoring

Thanks to its card authorisation network, STET ensures routing of authorisation messages in France. With very high transaction volumes, STET's network delivers optimized scoring on card transactions. In 2014 STET implemented its fraud scoring system. Since then, statistics have clearly shown that French domestic card fraud is constantly decreasing: clearly a consequence of STET's efforts to give PSPs the best support, this decline of fraud encourages STET to go even further and to keep on refining its scoring system.

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

- > Cancel the transaction
- > Authorise the transaction and set up a monitoring process
- > Contact its client

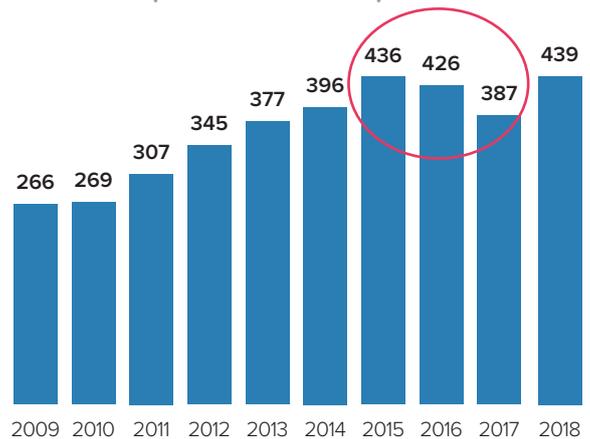
Total value of French card transactions  
(in billion euros)



**A steady rise of card transactions over the years**

Source: OSMP – Annual report 2018

Total value of fraud on French domestic cards  
(in million euros)



**The need to remain vigilant to fight against card fraud**

Source: OSMP – Annual report 2018

# STET Digital Solution (SDS)

## Why using digital payment?

- > Increased security
- > Highly-performant customer experience (real-time reachability/instant notification)
- > Improved communication
- > Facilitates data management for enrichment

## Tokenization:

use of a piece of data less sensitive to fraud, called “token”, instead of a Primary Account Number (PAN), and dedicated to a specific usage (e.g. proximity purchase, e-commerce purchase)

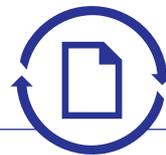
## The token:

- > Has the same format as a PAN
- > Is generated from a BIN range never used to issue a physical card

Electronic payment instruments continue to evolve with faster innovations. **Digital payment** is becoming increasingly common: it enhances the customer experience and gives the issuer/merchant the opportunity to enrich its offering thanks to mobile payment. Based on **tokenization** (a way of reducing the card number sensitivity), digital payment is a highly-effective way of increasing security around card payments.

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

- > A white-labelled **Token Service Provider** (TSP) providing ISO and other payment tokens
- > 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 a much secured on-line selling).



## e-Token: STET's New Exclusive Service

With the huge development of e-commerce and apps providing services (e.g. Uber, Netflix, Amazon...), a customer's card number is registered many times and hence is less secure.

Aiming to support payment cards' life cycle, STET has developed an e-token.

Totally detached from the card number, this e-token:

- > Strengthens the security of the card
- > Makes changing card easier (when the card is blocked, lost or expired)
- > Simplifies subscriptions management within a single wallet

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

## Standards & Norms

As part of PSD2, STET implements regular working groups for its clients.

This tailored support is an opportunity to:

- > Keep up to date with the latest legal & regulatory changes
- > Collect any potential issues
- > Find adapted solutions
- > Maintain a consistent approach regardless of the country or the context

## API PSD2 Sandbox

→ Enable any ASPSP to test its Information System and ensure continuity of service

→ Enable a TPP to test its PSD2 APIs on a virtual ASPSP

### Our Offer Includes:

- > Testing environment hosted on a shared infrastructure
- > Acceptance plan
- > Technical documentation
- > Data hosting
- > Evolutions of PSD2 specifications
- > Registration online portal
- > On-line support and hotline (option)

The banking industry is facing major changes induced by a new directive on payment services (PSD2) whose requirements came into effect on 13th January 2018. In this evolving environment, STET provides 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, shareholders mandated STET to design and write the specifications of an API between TPPs and ASPSPs. Although it was designed for the French banking community, this API can be extended SEPA wide.

STET takes part in the discussion within the Euro Retail Payments Board (ERPB) and the European Payment Council (EPC). Our company is involved in ISO standardisation work (TC68 / SC9 / WG2 / ISO200022) as well. STET is also consulting all the stakeholders and working together with other initiatives (Berlin Group, Open Banking).

## A Secure Solution for ASPSPs and TPPs

The STET API is a secure gateway enabling TPPs and ASPSPs to exchange high volumes of data. It allows:

- > Identification between TPPs and ASPSPs
- > Authentication of actors 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.

### Open source API

Specifications available on [www.stet.eu/en/psd2/](http://www.stet.eu/en/psd2/)



# Request to Pay Services

## STET RTP Services

- > Real-time RTP system
- > Security and Access control
- > Messaging system for business and technical messages (ex: Ack/ Pain.013/014)
- > Technical and business validation
- > Routing and database management
- > Time-out management
- > High availability – 24/7 – 99.999%
- > Resilient in Active/Active cluster
- > Business support via GUI
- > On-line / Off-line reporting
- > Audit and archive
- > Interoperability with other systems

STET is in the early stages of 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 solutions delivering benefits to both merchants and consumers.

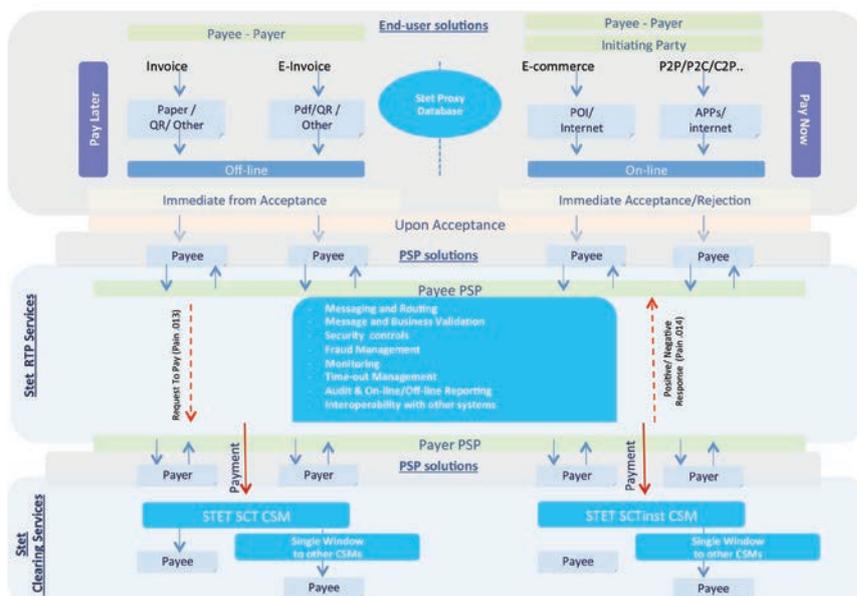
STET's RTP solution will be aligned with work being carried out by the EPC and other industry bodies to ensure the delivery of standardised pan-European services to our customers.

RTP offers PSPs the opportunity to offer new payment services, leveraging investments already made through the implementations of Instant Payments and PSD2, to deliver further efficiencies and gains in payments to both merchants and consumers.

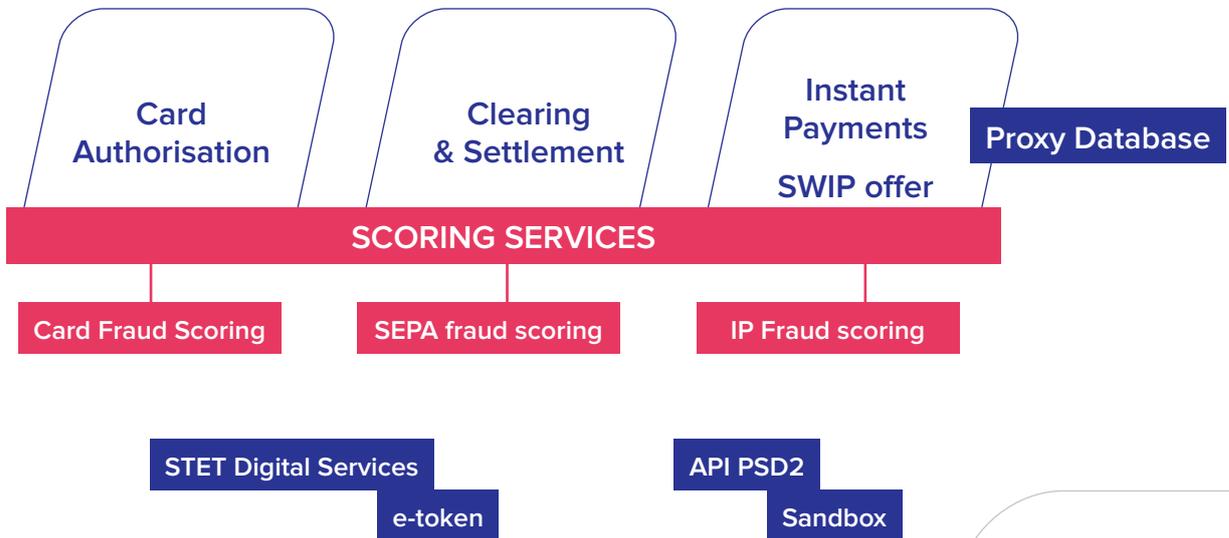


## Benefits

- > New Account to Account services
- > Fast and efficient
- > Wide range of use cases supported
- > Pay Now / On-line RTPs leveraging SCTinst & Proxy infrastructures
- > Pay Later / Off-line RTPs using Real Time Acceptance & SCT / SCTinst
- > Ease of use for Payee and Payer
- > Reliable Data e2e
- > Improved Reconciliation
- > Status view throughout the RTP life cycle



# Our Offers



“STET is proud to contribute to the European payments infrastructure with state-of-the art technology platforms for all payment instruments including cards. They deliver operational and economic efficiencies to our clients in a risk control environment supported by latest technology. We further work with our bank community to support their initiatives in the fight against crime and in the secure introduction of market innovations.”

**Jean-Marie Vallée**  
Chief Executive Officer



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