

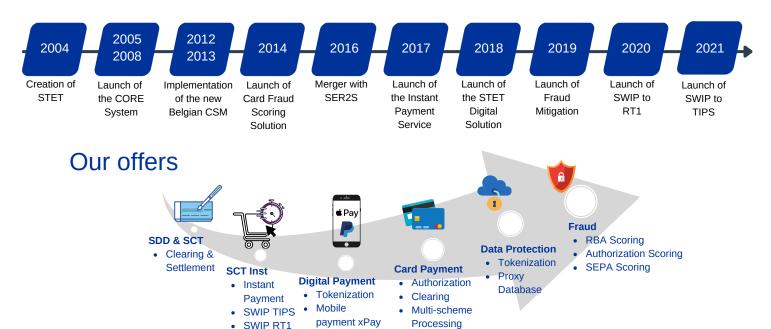
BANKING PARTNER FOR A PAYMENT WORLD

Introduction

STET is a major European payment processor working for the Belgium and the French community, with close to 25 billion transactions processed.

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 the full range of payments means (*Direct Debits, Credit Transfers, Cards and ATMs transactions, Cheques, Bills of Exchange and Instant Payments*) and provide the associated processing services (clearing, settlement, switching, fraud management).

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 propose our customers high-performance and innovative solutions.



Mobile Proxy Database



Card Based Solutions

AUTHORIZATION

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

FRAUD MANAGEMENT

Fighting fraud has always been a priority for STET, launching various initiatives aimed at reducing fraud and increasing security for its clients. STET fraud platform is continuously adapting to new technologies (AI), to payment regulations (PSD2 requirements) and moreover to client's usages.

CLEARING AND SETTLEMENT

Platform is one of the leading ACH in Europe for European card transactions.

TOKENIZATION

TSP (EMVco certified) and TSM services, for banking (apps) wallets as well as xPays acting as a digital HUB to manage the interactions with all the actors (banks, schemes, other TSPs).



Instant Payments

INSTANT PAYMENTS PROCESSING

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

FRAUD MANAGEMENT

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

PROXY LOOK UP SERVICE

That enables the transfer of funds using their phone numbers, without needing the IBAN of the beneficiary.

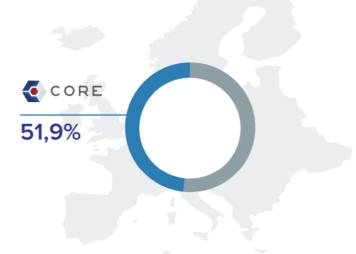
SWIP

Supporting technical interoperability connection to TIPS and RT1, which offers a number of benefits for psps delivering efficiencies and mutualizing the costs of achieving pan european reachability.

Key Figures

Clearing & Settlement

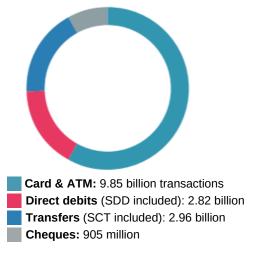
STET's CORE platform is **one of the leading ACH in Europe** with 51,9% market share of euro transaction multilaterally cleared in Clearing Systems.



In 2020, we processed

16.74 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.



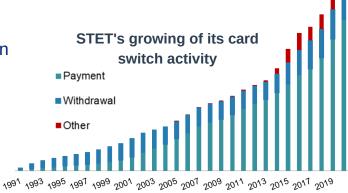
Performance of the CORE system PAYMENTS



Authorization

8.72 billion card transactions routed on our network in 2020

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



Instant Payment

128.64 million of Instant Payment transactions processed in 2020

- √ 15 Belgian direct participants & 7 French direct participants
- ✓ Daily record of 742 787 Instant Payments on 01/12/2020
- ✓ A monthly increase of 14% in France since May 2020

Our Commitment

STET is under regulator supervision and is fully committed to **strong compliance**, **security and resilience requirements**.

STET holds all the certifications required for the provision of its services. Services are deployed on an ISO27001 certified infrastructure. Network is segmented (private, public and high security) with the latest generation FW, intrusion prevention systems are deployed, and all the activity of its systems and components is monitored by a SIEM.

All data is processed under GDPR guidelines and credit card data under PCI DSS rules. All component developments use secure development practices (DevSecOps) and the systems follow a strict vulnerability patching process.

Lastly, all the infrastructure and applications are submitted to penetration testing.

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

- **Security standards:** All systems and networks are deployed strictly following the principles for financial market infrastructures issued by the CPMI and the IOSCO.
- Certified infrastructure: All the Data Centers are deployed are certified under ISO 27001
- **Security devices:** All the necessary security components are deployed to ensure a protected environment. Within this list of components are:
 - 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



FULL-SERVICE SCORING PLATFORM

Expertise on integrating and operating full-service scoring platform (real time processing with different scoring engines, data science environments, modelization)

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 on EPI use cases, Scalable and multi-tenant solutions, Multiple interfaces (ISO 20022 messages, API XML, etc.)

RESILIENCE

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 2020, **over 9 billion authorizations** were
scored by the system,
with **99 million euro** of
fraud avoided.

64 million euro of fraud attempts were scored higher than 40, with a precision over 45%, and a 90% decline rate, which shows the trust of the issuers in our score.

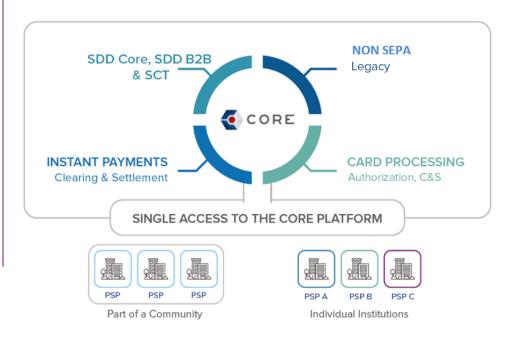
Clearing Services

Benefits for you

- 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 requirement 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 aim to lead the way of change in providing new value-added services to our payment community in support of their evolving business needs.



In an 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 2020, **1.4 billion transactions** were processed in CORE(BE), representing 11% of the total volumes in the CORE platform, for a global amount of 1 200 billion euros.

SEPA Fraud Scoring

Benefits for you

- Complementing your 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 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 pilot clients, we have developed the technical analytical functionality required to score against fraudulent SEPA Schemes transactions based on analysis of the authorized data elements from the transactions passing through its SEPA CSM clearing services. This service is proposed 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 of performance, security
- Highest possible coverage thanks to interbank cooperation

Fraud on SCTs (2020) 0,0025 0,0023 0,0017 0,0018 0,0020 0,0015 0,0012 0,0010 0,0010 0,0008 0,0005 0,0005 0,0003 0.0002 **Papers** Online Banking Corporate Channel 2018 Fraud rate on credit transfers by initiation 2019 channel (in %) 2020 Source: OSMP - Annual report 2020

Instant Payments

Benefits for you

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

Ever since the first instant payment solutions emerged around the globe, many industry leaders thought that instant payments would become the "**new normal**". Indeed, Instant Payments will deeply transform the way the money is transferred: it will impact consumers, businesses, governmental institutions and create opportunities for innovation.

As Europe has been setting into the era of SEPA transactions, we have 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 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 Users Groups (CUGs).

Further to the IP CSM, we have been developed a new valueadded 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)

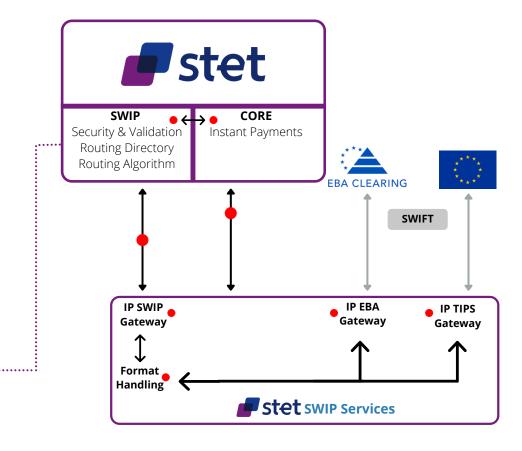
Benefits for you

- 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 report including others
 CSM
- Reduced costs for change management

As an open processor, we are in a position 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 are able to reach any other EU participants, regardless of whether they can be reached within STET'S IP CSM or 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 optimized their costs to reach pan European services.





Fraud Scoring on Instant Payments

Our Instant Payments CSM emerges 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 take up of transaction volumes through new SCT Inst use cases together with the increased speed of exchange, requires enhancements for PSPs' internal systems. In order 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 a **close ally** in the interbank space, 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 launched a new innovative service.

Based on our strong experience of scoring card transactions, we propose our clients through an on-demand scoring of Instant Payments.

Card Services

Benefits for you

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

We provide the card authorization processing including switch, for different card schemes.

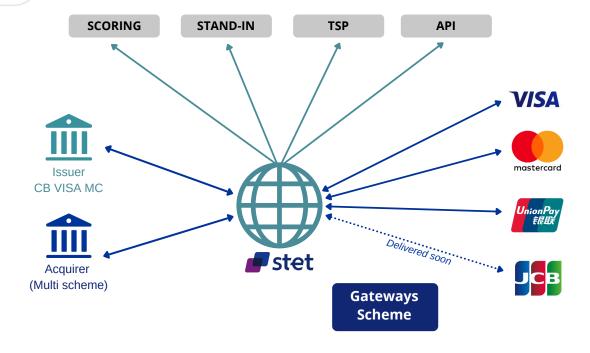
Our highly performant card network ensures the routing of authorization requests and responses round the clock, 365 days a year.

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

In 2020, we processed 9.85 billion transactions in support of :

- 72.7 millions of cards in circulation
- 51 900 ATM
- · 2.0 millions merchants that accept CB card

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



Card Fraud Scoring

Benefits for you

- Mitigating PSP own risks
- Generalising 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 card authorization network, we ensure routing of authorization messages in France. With very high transaction volumes, our network delivers optimized scoring on card transactions.

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

In the scoring process, we hold 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

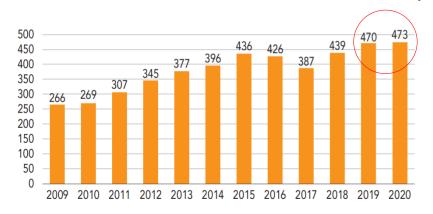
Total value of French card transactions (in billion euros)



A decrease of card transactions because of the coronavirus crisis

Source: OSMP - Annual report 2020

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



The need to remain vigilant to fight against card

Source: OSMP - Annual report 2020

STET Digital Solution (SDS)

Benefits for you

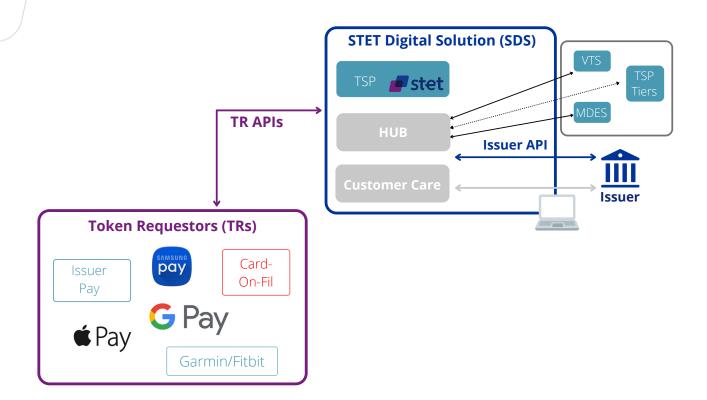
- A scalable offer allowing cost sharing between banks
- A wide range of partners and TSPs
- A single API set allowing access to all services without having to redevelop new requests
- Back office tools to manage all cards and tokens via a single interface (extranet "Customer Care" (tool allowing the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

Electronic payment instruments continue to evolve with faster innovations. Digital payment is becoming increasingly common: it enhances the customer experience and gives the issuer / merchant the opportunity to improve 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.

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

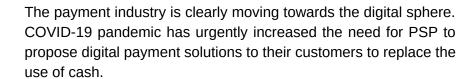
- Access to different wallet providers through the HUB. This
 dedicated platform enables access to xPay and issuer wallets
 (with a customer experience controlled by the wallet owner
 and a much secured on-line selling)
- TSP CB which is responsible for creating, issuing, managing and administering CB 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 Statistic Report



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 API to cover the full exchange of data required to initiate an Instant Payment to a beneficiary:

- Manage subscriptions of PSP's customers to the Mobile Directory / IBAN Vault
- Check whether the payer's contacts are registered in STET's mobile directory
- Find out the IBAN of the beneficiary (stored in internal or external central vault)
- Manage beneficiaries with several IBANs attached to a single phone number
- Allow non-registered beneficiary to receive funds (through an external solution supplied to seize his IBAN)
- Send Instant Notification messages towards the Beneficiary
- Get statistical reports on all IBAN lookup requests over a period of 14 months
- Follow-up 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 protocal and X/509 certificates
- RPO (Recovery Point Objectives): 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.

Request to Pay Services

Benefits for you

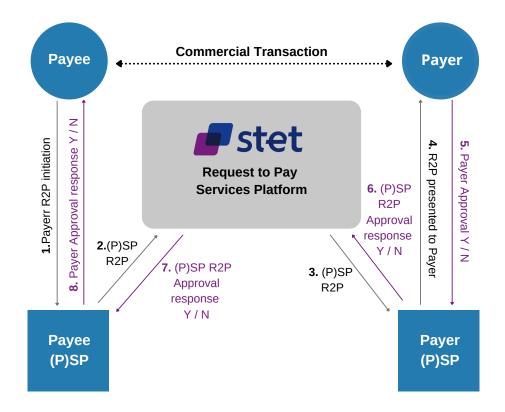
- Interoperability with other systems
- Resilient in Active/Active cluster
- Security and Access control
- · Open API access
- Messaging system for business and technical messages
- Time-out management
- Business support via GUI
- Reporting on-line / off-line
- Full range of use cases supported

The market delivery of a harmonised Request to Pay Scheme through the EPC, based on ISO 20022 messaging standards, builds on the payment schemes already implemented in the SEPA to now offer for Payee initiated request for a payment from a Payer for services or goods delivered. The scheme is stand-alone and separated from the payment schemes thus allowing the flexibility for different payment instruments to be used in response to a request.

We are 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 initiation solutions delivering benefits to both merchants and consumers.

Our R2P service leverages on the existing **secure**, **robust and highly performant instant payments infrastructure** to deliver its customer base a 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 implement regular working groups for our clients. The tailored support is an opportunity to:

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

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 included 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, shareholders mandated us 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.

Our company is involved in ISO standardisation work as well. We are also consulting all the stakeholders and working together with other initiatives.

A Secure Solution for ASPSPs and TPPs

The STET API is a secure gateway 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.

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 authorisation network and 183.4 million 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 authorisation 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 space, STET plays a key role in the provision of payment transaction security services. In order to reduce the risk of fraud and enhance security around SEPA payments (SCT, SDD and SCTinst), 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 actor 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 2020, STET processed 25.46 billion transactions and 183.4 million instant payments.

Experienced

We have a proven track record operating today with a high service level at similar scale. We have ample experience in the payment industry, operating at a high service level during multiple decades.

Capable

We have a unique set of relevant 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 the everchanging environment.

Reliable

Thanks to our proven know how and expensive 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. Within the technology landscape constantly changing, we implement 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.



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