OPEN BANKING AND REGULATION

Driving change and innovation



ATEL Annual Conference – 20 September 2018

Hans-Joachim Karras – Director – Global Liquidity and Cash Management



HSBC team at ATEL conference

Please do reach out to them!

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HSBC in Luxembourg

Banking Product Capabilities



In Luxembourg HSBC operates as a full branch of HSBC Bank plc. It provides a wide range of corporate and institutional banking services to multinational and domestic corporate and institutional customers.

Credit and Lending

• Overdraft (OD), Intraday line (DOD). Working capital and term loan . Subject to credit assessment

Global Liquidity and Cash Management (GLCM)

	Transaction		
Account service	Payments	Collections	Liquidity management
 LCY/FCY Current Accounts LCY/FCY Term Deposits HSBCnet Swift MT940, MT942, MT950 reporting BAI2 reporting 	Electronic payments Domestic / Cross Border Urgent / Priority Non-urgent Multi-currency SEPA (SDD/SCT) Payroll File Upload Cards	Incoming electronic payments Domestic / Cross Border Urgent / Priority Non-urgent Multi-currency SEPA (SDD/SCT) Direct Debits Cheque collection	 Overdraft and Intraday facilities Pooling Global Liquidity Solution – Cash concentration Treasury Products

Delivery Channels

• HSBCnet, HSBC Connect, SWIFT

Global Markets Broad range of services available locally in cooperation with our Markets desk in London

Trade Finance

Broad range of services available in cooperation with our GTRF BeNeLux desk

Capital Financing & Other Services

 Securities Services (HSS), Asset management (AMG), Private Banking (GPB)

HSBC Luxembourg: connectivity at the heart of Europe. Your key contacts:



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HSBC eChannels Overview

HSBC channels help centralise treasury processes and increase automation which gives corporate treasurers a greater ability to optimise their liquidity and initiate payments using a compliant and secure system.

HSBC Connectivity Options





HSBCnet is our global internet banking tool, providing secure, real-time access to cash management services, across multiple geographies through your browser.





HSBC Connect provides secure, host-to-host integration between your systems and HSBC. This allows the transmission of large volumes of transactions and information.

SWIFTNet FileAct/FIN



HSBC is independently recognized as the world's leading SWIFT for Corporates Bank. Our global reach and local know-how make HSBC a partner in the SWIFT Corporate Access journey.



The Developing Payments Landscape



The European Payments Landscape

Changes in the payments landscape are driven by factors including client expectations, regulations and new business models



- Always connected with any device and in real-time:
 - Clients are choosing solutions that are bank-agnostic based on function more than just "payments"
 - Joining eco-systems and networks to connect to counterparties and customers
 - Expect interoperability, rather than standalone services
- Be in control Alerting, notifications and track & trace capabilities for senders and receivers to provide transparency and certainty

Innovation & Fintech



- Access to technology facilitated: Increasing activity due to technology and operating/ownership models, Infrastructure being modernized step-by-step as instant payments, industry initiatives and DLT gain ground
- Quality of service: desire to service clients more completely
- Significantly higher opportunities for automation enabled by machine learning, robotics,
 APIs and cloud Transforming how payments are initiated and processed

Regulation



- Regulatory interventions are altering correspondent banking networks, opening up payments for entrants through Open Banking
- New overlay services designed to encourage innovation (e.g. "alias", 24/7 access, Real-Time, Request to Pay)
- ♦ BREXIT introduces a number of considerations for how companies make payments in Europe.

Developments in the Payments Landscape

Changes in regulation in Europe to transform the payments experience

Regulations	What is it?	Impact/Outcome of the Regulation
Revised Payments Services Directive 2 (PSD2) / Regulatory Technical Standards (RTS)	 PSD2 aims to make payments safer, facilitate innovation, competition and efficiency throughout the EEA Regulatory Technical Standards introduce higher security standards for online payments and communication with authorized third parties Phase 1- January 2018 and Phase 2- September 2019 	 Customers can safely get access to new solutions to manage finances and payments that are more personalized, frictionless and less costly Banks and TPPs will benefit from a level playing field leading to a pan European Open-Banking landscape
"SEPA Inst" ²	 Scheme to enable customers to make real time Euro credit transfers across the SEPA area Available 24/7/365 with immediate confirmation to both payor and payee Live on 21 November 2017 	 Real-time visibility of their payments and collections Improve working capital management and optimize liquidity management Allows for real time interaction with your customers, suppliers or employees
CHAPS Renewal ³	 The Bank of England intends to enhance the UK's RTGS service to deliver a range of new features and capabilities, given changing needs of customers, technology and regulation Currently in definition phase and aims to be completed by Q4 2022 	 ISO 20022 will allow for richer payment information and enhance interoperability, improve user functionality, strengthen end to end risk management Potential 24/7 availability and improved ability to make urgent high value payments securely

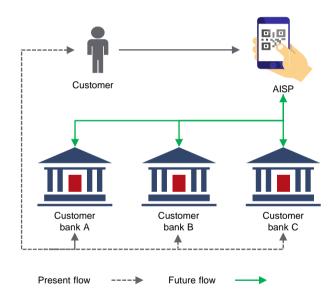
Sources:

- 1. European Payments Council, 2018
- 2. European Parliament and Council, 2018
- 3. European Commission, 2018

Payment Service Directive 2: Key new players

Account Information Service Providers (AISPs)

- Third-parties can extract a user's account information data (eg transaction history/balances) – enables new data services
- Banks, FinTechs, and tech. companies could be AISPs

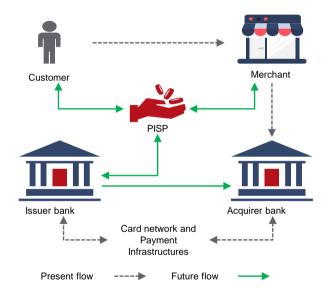


Pain Points

1-2-1 Relationships – Access multiple sites to obtain information required User Experience – Complex logins and inconsistence flows creates poor experience Fraud and Phishing – Need to ensure that financial services are protecting my interests

Payment Initiation Service Providers (PISPs)

- Third-parties can initiate online payments through a user's bank account via an online portal – enables new payment solutions
- Banks, acquirers, FinTechs, and merchants could be PISP's

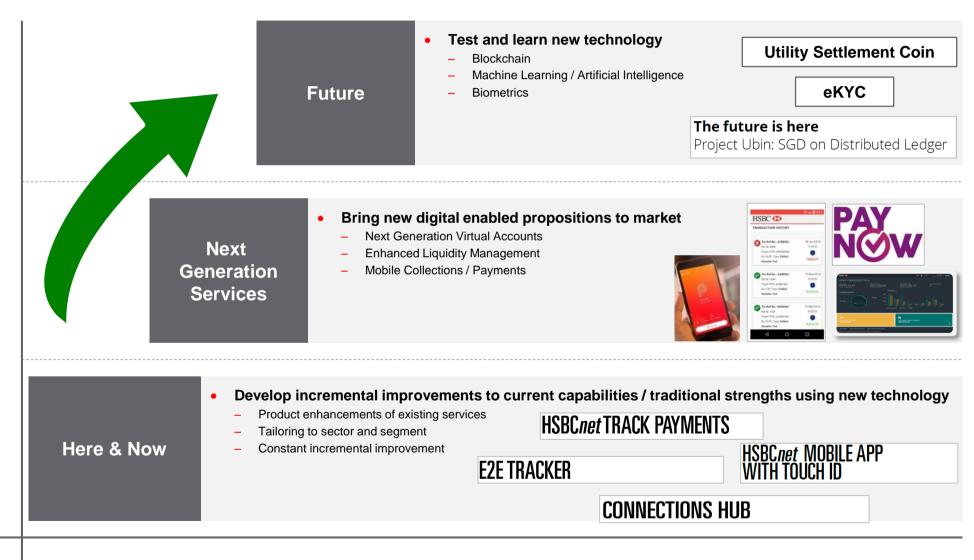


Customer Needs

Better experience as customers will be more likely to find the financial products or services which suits their needs Greater levels of control, holistic visibility and frictionless experience Enhanced security by using strong customer authentication thus reducing fraud

Bringing Innovation Journey to Life

Work continues to bring innovation both into existing products and launching the next generation of propositions



The Here & Now

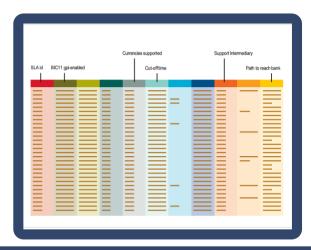


SWIFT gpi Elements

SWIFT gpi is underpinned by three SWIFT Features













TRACKER

(End-to-end SWIFT cloud hosted tracker)

- Real-time visibility on the payment status from gpi banks
- Credit Confirmation between each gpi participant and for final credit to the beneficiary (if beneficiary bank is gpi)
- View of charges and FX along the payment journey from gpi banks

OBSERVER

(Monitor gpi Banks SLA Compliance)

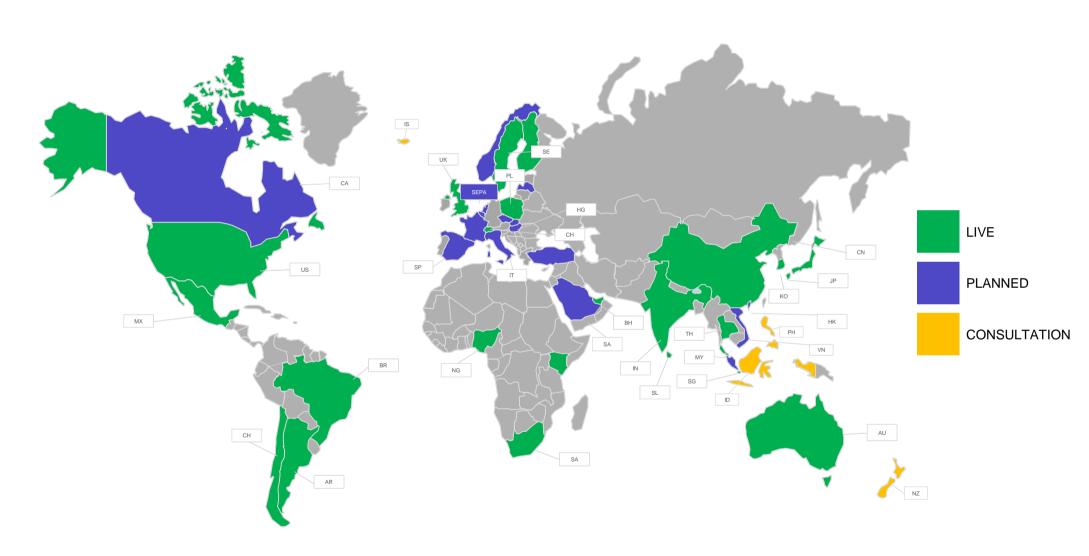
- Measures service quality against 4 SLAs:
- Speed
- Traceability (where payment is)
- Deducts (transparency + charge type)
- Unaltered remittance information forwarded

DIRECTORY

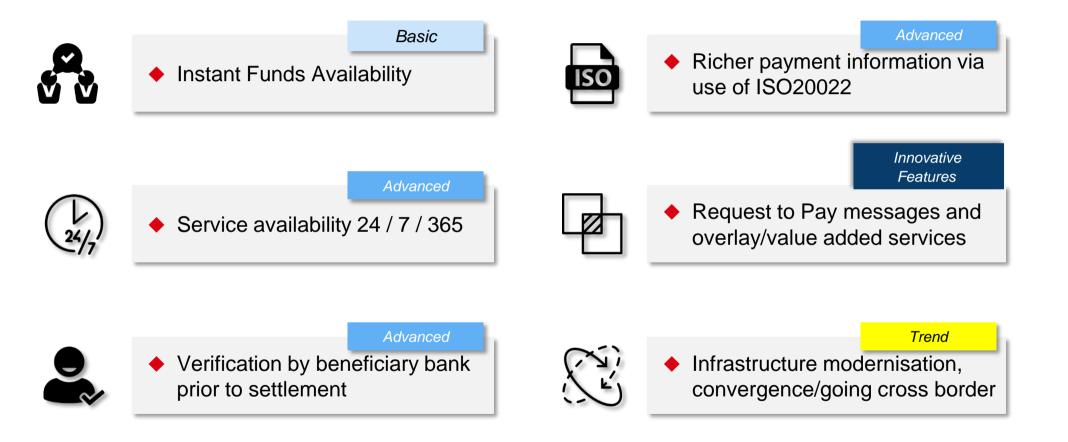
(Listing of all SWIFTgpi Members)

- Contains operational information for SWIFTgpi members (BICs, CCY, Channels, Cut Off Times)
- Allows for optimal SWIFTgpi routing to be identified and mapped

Current and Planned RTP Schemes

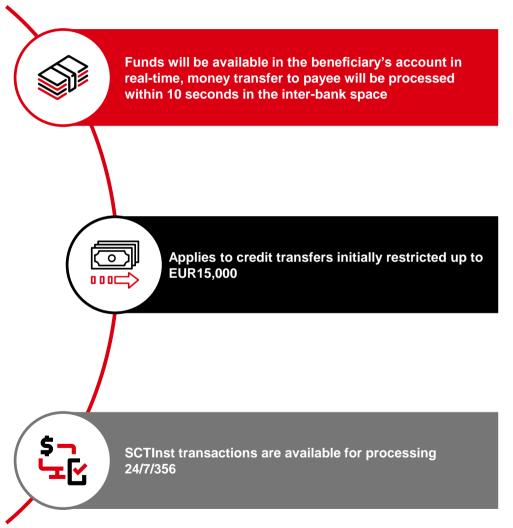


The real potential of Real-Time Payments comes from new services and use-cases



Single Euro Payments Area

SEPA Credit Transfer - Instant Payment Scheme - SCTInst



Further Characteristics

- ✓ Funds are irrevocable once a payment has been made.
- Both ordering and beneficiary shall be notified that payment has been accepted or rejected
- ✓ Use of ISO20022 to standardize large data set allows for interoperability
- Scheme supports uses of aliases (i.e. mobile numbers, email) instead of just IBANs, services to be introduced in the future)

Key use cases

- Transferring money (P2P; C2B, B2C and B2B)
- ◆ Alternative to cards based merchant acquiring

Scheme Adoption

- SCTInst went live on 21st November 2017. As at May 2018, PSP's from 11 countries have implemented with material take up in Spain and Austria. 1m instant payments milestone reached in April 2018, and an average of over 10k payments per day in May 2018
- Adoption is expected to build up during 2018 and by November include participants that provide 80% of core SEPA CT traffic

HSBC Implementation

 Go-live planned for 2019 in key HSBC European markets with further country deployment planned for 2020

Sources

1. European Banking Authority, April 2018

The European Payments Landscape

Beneficiary Self-Management (BETA1)

Customer Needs

- Payment efficiency is a challenge...
- Traditionally payments have often been initiated with insufficient or incorrect data, with limited tracking and visibility creating management overheads
- Managing and maintaining beneficiary records is costly
- Reconciliation is time consuming and needs to be optimised
- Managing Beneficiary Payment enquiries efficiently

Solution

HSBC are developing a range* of new services to provide a modern payment experience for the customers of our customers

These solutions aim to:

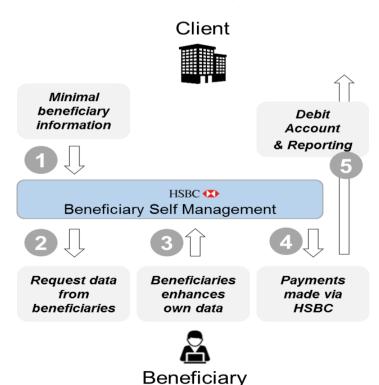
- Reduce the need to manage so-called "master data" for all but the most strategic suppliers, providing options for infrequent/flexible payments
- Allow payment origination based on a email/mobile phone* number and amount, reducing the amount of data needed

Beneficiaries are provided with self-service tools that put them at the centre of the payment process:

- On-line registration
- Self-Service tools to maintain payment details (bank details), manage balances and withdrawals
- Notification of new payments in real-time (email/SMS alert*)

Modern use-cases

- Worker/Payroll, Welfare
- Royalties, Refunds
- Merchant pay-outs for Marketplaces
- Domestic and International payments



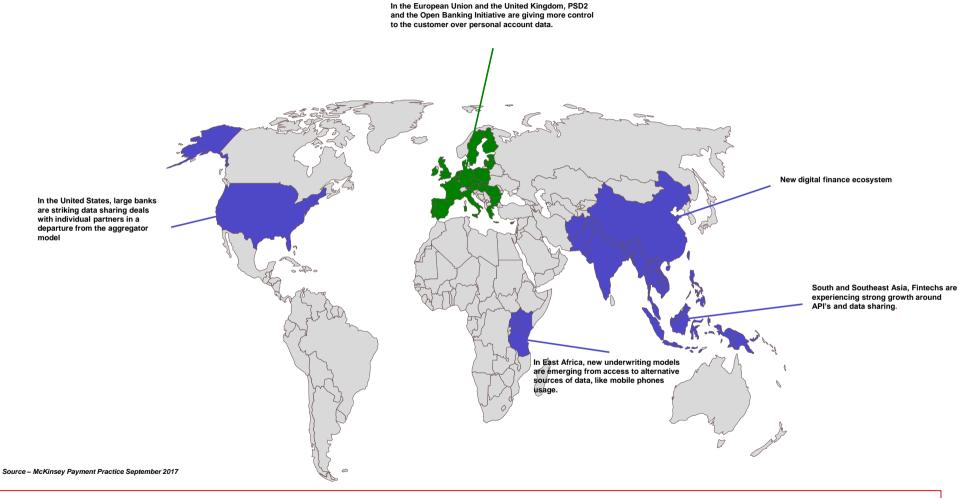
^{*} Not all services are available in BETA1

Next Generation



Open Banking across the globe

Regulations and standards that are set to radically change the banking landscape and the customer banking experience



Open Banking revolves around the standardisation of how banks share their own data, but also how banks allow customers more choice and sharing of their data for use in third party (FinTech) applications in a secure and resilient fashion.

Next Generation Services: Mobile Payments & Collections



Pain Points

Cash – Cash still widely popular as payment tool because of ease of use

Infrastructure – Many countries lack infrastructure to support traditional banking **Customers –** Pushpayments mode limits effective interaction between parties

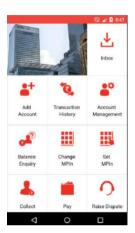
Customer Needs

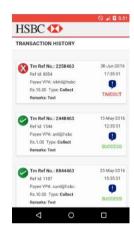
Alternative to cash that maintains ease of use and improves transparency

Solution that leverages massive mobile footprint in un(der)banked countries

Self servicing options in payment collections

eus





HSBC Solution¹

Next-generation payments platform, that facilitates transfer of funds instantly between person-to-person and person-to-merchant using a smartphone

- UPI enables push and pull payments corporates can pull payments through instantaneous CollectPay requests, and consumers can push payments in real-time;
- Convenience UPI is available 24x7x365, with immediate confirmation and settlement in an intuitive mobile app
- Transparency Real-time transfer of funds improves visibility and working capital management
- Privacy and Security immediate mobile registration by payor, Virtual Payments Addresses (VPA) to protect privacy, security with 2-factor authentication and consent-based collection
- Agnostic platform enabled to link all bank accounts

Initial Screen



Enter MPIN



Transaction Status



Note:

Solution outlined is based on the UPI network and is specific to India. Solutions in other markets will look to PUBLIC leverage key components of the India solution

The Future



Technologies that will impact the future of Cash Management

Global Liquidity and Cash Management (GLCM) are tracking six technologies, their potential impact and how to apply these within Liquidity and Cash Management



Al & Machine Learning

Impact

- Reduce operational costs
- Increase call centre effectiveness through Chatbot / Machine Learning
- Ability to analyse data to create insight

HSBC's Application

- Now Helpdesk support of MI / AI
- Future: Create payment outliers detection and resolution



Big Data & Insights

Impact

- Utilise data to create new or additional value
- Create improved forecasting and identify anomalies that can increase productivity and reduce fraud
- Ability to view and interrogate data public / private; structured / unstructured sources

HSBC's Application

- Now: Track Payments
- Future: Payment routing, scheduling, transaction screening



BlockChain

Impact

- Improve payment transparency / creation of smart contracts
- Improve efficiency within a cross border payment flow
- Alignment to Central Bank Distributed Ledger Technology (DLT) initiatives

HSBC's Application

 Future: R3 Argent – Cross border; Utility Settlement Coin (USC) Consortium



Mobile

Impact

- Flexibility to access products and services anytime anywhere
- New payment distribution channels utilising mobile wallets
- Use channel to increase security

HSBC's Application

- Now: Move Money; Mobile Collections
- Future: Push notification and self service



Impact

- Easy integration with third parties to deliver new products and services
- Richer customer engagement with deeper integration
- Decrease time to market

HSBC's Application

- Now: HSBC Connect
- Future: Open banking / PSD2



Biometrics

Impact

- Create frictionless payment experiences
- Manage systems security in digital world
- Improve customer experience through digital identify / signatures

HSBC's Application

- Now Fingerprint authorisation; Voice Recognition
- Future Multi-factor & continuous authentication for payments

Together we thrive



