

SWIFT for Retail Payments

Balancing cost savings, process efficiency and risk mitigation

Agenda

- Your challenges, our solution
- SWIFT for Retail Payments
- Making a compelling business case
- Case studies
- Practical next steps
- More info?





Scope and challenges

Scope

- Mainly netting of large volumes of retail payments with low to medium individual value
- Low priority payments with settlement in batched processing cycles (intraday or on D+1)
- Payments and collections for salaries, pensions, bills, retail payments
- Domestic or regional market players, involving mainly banks but also corporates
- Different types of payment instruments: credit transfer, direct debit, card, cheque
- Transaction life-cycle monitoring (statement reports, cancelation requests, inquiries)
- Proprietary or standard formats defined at the level of the clearing community
- Various clearing models: bilateral, multilateral or through a centralised system (ACH)

Challenges

- Market initiatives impose business and technical standardisation such as SEPA or IPF.
- Demand for interoperability in retail payment platforms
- Payment systems need to diversify revenue with new value-added services and process in-sourcing
- Geographical expansion to capture volumes and achieve economies of scale
- Increased demand for near real-time or immediate payment execution
- Increased demand for more frequent settlement cycles
- Better liquidity and operational risk management
- Unbundle scheme management from system operations
- **Extend membership** to non-bank institutions, such as payroll bureaus, payment institutions, payment service providers, money transfer operators,...



Retail payments clearing services provided by market infrastructures

Efficient clearing

- Provide multi-lateral netting and clearing services to any bank in the community
- Message conversion (e.g., SEPA, domestic)
- "Gateway" to other remote clearing systems

Reliable settlement

- Execution in the settlement system (e.g., T2)
- Transaction status monitoring
- Cash management (monitor and control cash positions)
- Reliable and efficient exception management

Additional services

- Insource payments capturing and processing
- Payment warehousing for direct and indirect participants
- Contract exchanges and accounting
- Daily and monthly statistical reports on business evolution
- Maintain and provision clearing routing data (channel, scheme)

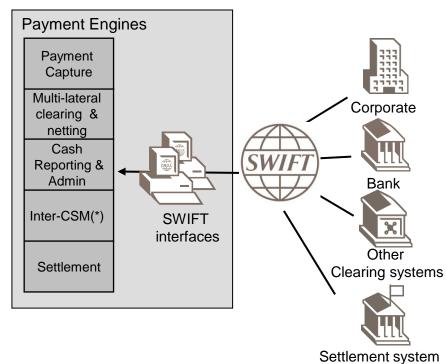


SWIFT: a single, secure and standardised access for and to banks, central banks, corporates and clearing infrastructures

Multiple channels

Payment Engines Leased **Payment** line Capture Corporate Multi-lateral clearing & nettina Leased Cash line Reporting & Bank Admin Leased Inter-CSM(* Other Clearing systems Settlement Leased line Settlement system

Single channel



- High total cost of ownership due to multiple channels
- Limited reach to domestic customers
- Lack of technical interoperability (messaging, security)

- Scalable and re-usable infrastructure
- Global access to the clearing market place
- Standardised messaging platform with single messaging and security



Benefits of using SWIFT

Global market reach

- 9000+ banks in 200+ countries
- 1000+ corporates
- 29 Retail payment systems (e.g., ACHs)
- 74 high value payment systems (e.g., Target2)

Interoperability and flexibility

- Supports both proprietary or standard format
- Same infrastructure for all currencies
- Credit transfer, direct debit, card and cheque
- Flexible exchange method to cope with each local clearing community's requirement

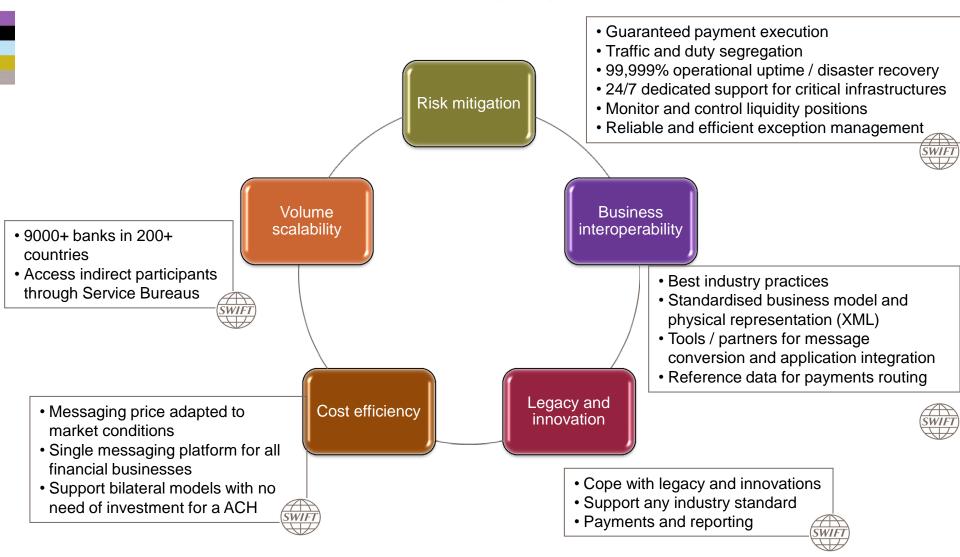
Cost efficiencies

- Closed business community
- Single security and file transfer
- Non-repudiation (proof of sender)
- Reliability and availability (99.999% uptime)



Benefits for Payments Market Infrastructures

A comprehensive messaging solution





What customers say on SWIFT value

"Combining the strengths of our partners, SIA and SWIFT, we have launched our new pan-European retail payment clearing house (STEP2) within a record timescale of 10 months. SWIFTNet was an obvious choice to allow for open access to STEP2 by a very large number of banks in SEPA."

Gilbert Lichter, Secretary General of EBA

"VocaLink's international expansion required a partner with global reach and SWIFT provided access to a global market."

John Doyle, Director of Channels at VocaLink

"We took SWIFT to ...

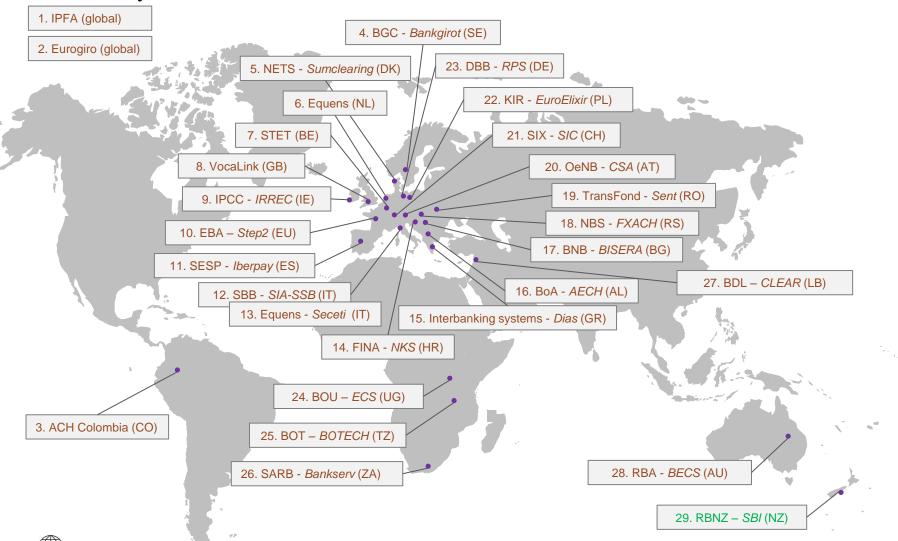
"The decision to enter into the Alliance Lite wholesale agreements will position BANKSERV within the service bureau space in South Africa and elsewhere in Africa." Brad Gillis, Head, business division at BANKSERV.

"Using Bulk Payments, Seceti is able to offer a full SEPA-compliant solution based on a flexible technical architecture allowing Italian banks to respect timings and investments."

Stefania Lasaracina, International Payments Systems, Seceti

Retail Payment Market Infrastructures

29 Systems and schemes live on SWIFT



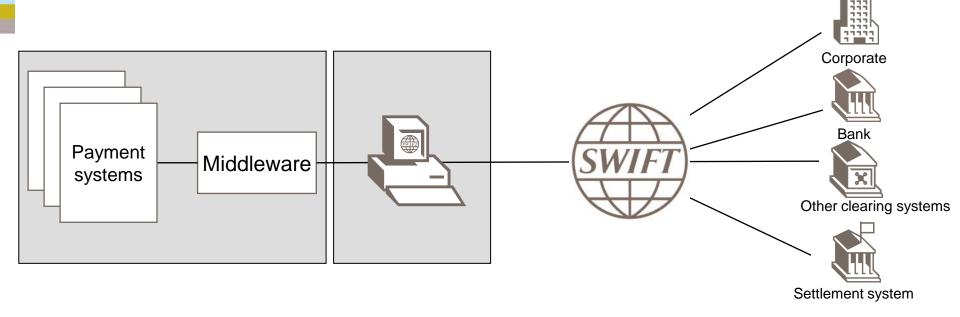
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The solution – a collaborative partnership



Reference data

provided by SWIFT or by the payment system

Integration

provided by partners or by SWIFT Consultancy

Connectivity

provided by SWIFT, banks and service bureaus

Messaging

provided by SWIFT

Standards

provided by SWIFT or by a payments community

Market players

banks, corporates, other payments clearing systems, central banks



Services for retail payments

Comprehensive components

Payment scheme

Community based rules and agreement including admission criteria, operating rules, billing options and business SLAs

Services

Payment initiation

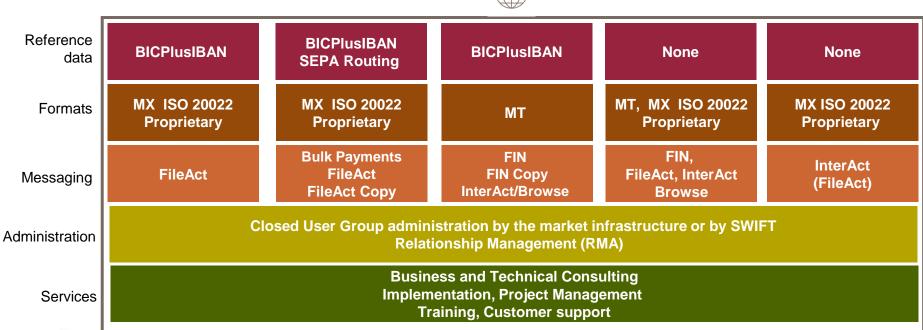
Payment clearing and netting

Payment settlement

Payment settlement

Exceptions and Investigations



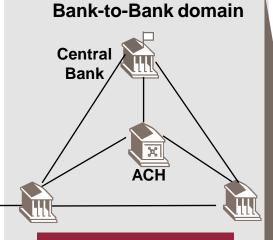




Standards

Domains and formats for payments exchange

Corporate-to-Bank domain





Payments Initiation (pain)

Credit transfer
Direct debit
Payment Reversal
Payment Report

Cash Management (camt)

Request for Cancelation Payment investigation

Payments Clearing & Settlement (pacs)

Credit transfer
Direct debit
Payment Reversal
Payment Report
Payment return

Cash Management (camt)

Request for Cancelation Payment investigation

Standard formats

Co-Existence

SWIFT committed to support today's and tomorrow's standards

| МТ | UNIFI MX (ISO20022) |
|---|--|
| MT101, MT103, MT102, MT202, MT204 | Pacs.008 Pacs.003 Pacs.004 Pacs.007 Pacs.002 |

| МТ | UNIFI MX (ISO2022) | |
|---|-----------------------|--|
| MT900, MT910, MT940, MT941, MT950 | camt.056, camt.XXX | |



Value-added file transfer service for retail payments clearing

Efficiency and value-added services

- Enhanced Header to provide payment summary information
- Copy service to a 3rd party market player, i.e.: a central bank
- Routing directories with clearing channel and scheme adherence information (e.g., SEPA Routing directory)
- BICPlusIBAN directory to map the IBAN to the BIC codes

Community features

- Closed User Group administration and management
- Bilateral or multilateral clearing configuration options
- Rulebook describing a common operating framework (e.g., formats)
- Direct or reverse billing options

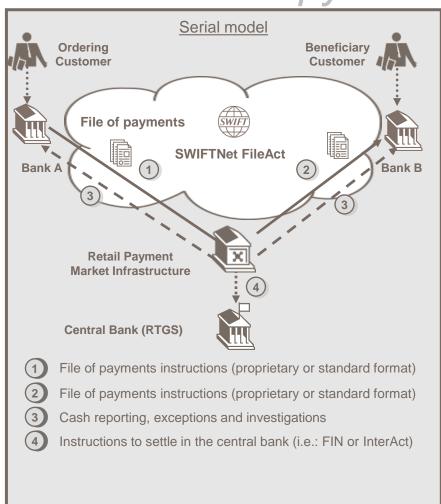
Cost efficient, secure file transfer

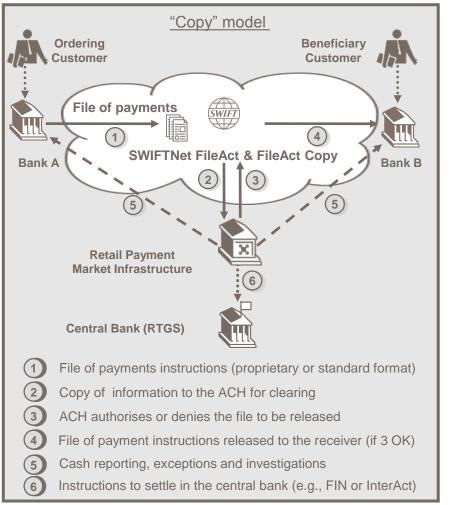
- Non-repudiation, delivery notification, urgent priority
- Reliability, security, resilience
- Real-time and store & forward transfer capability
- · Few eurocents per payment, depending on the community volume



Retail payment messaging models

Serial vs. Copy models







Copy messaging model

A guaranteed settlement

(2) The File is kept on hold by **SWIFT**





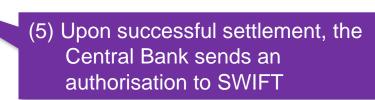
(6) SWIFT releases the File to Receiver, and sends success notification to Sender





(1) A file of bulk payments is sent to the receiver with settlement info in the file or in the FileAct Header

(4) Central bank executes the settlement process



(3) The settlement data is sent to the Central Bank for authorisation



Copy messaging model A failed settlement

(6) SWIFT sends a refusal notification to Sender and deletes the file









(5) Upon settlement failure, the Central Bank sends a refusal notification to SWIFT



Retail payment service

Setup configuration

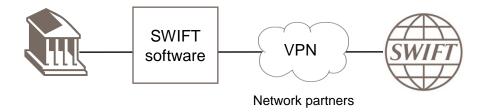
| Services | <pre><admin>.bulkp.<service>.<mode>[!p] where <admin> is the Administrator MI bulkp is the Bulk Payments Service <service> is the service name of the MI <mode> is the messaging mode (real-time or store-and-forward)</mode></service></admin></mode></service></admin></pre> | |
|-------------------|---|--|
| Messaging | live service and optionally a pilot service ([!p]) FileAct and InterAct, optionally Browse | |
| Wicosaying | The tot and intervet, optionally browse | |
| Mode | Real-Time (serial model) or Store-and-Forward (copy model) | |
| Request Types | ISO20022 messages as per MI defined XML schema Payments clearing and settlement (pacs): pacs.008 (credit transfer), pacs.003 (direct debit), pacs.002 (status report), pacs.004 (return), pacs.007 (reversal) Cash Management (camt): camt056 (request for cancellation) System (xsys): xsys.002.001.01 / xsys.003.001.01 Other reporting data as per MI specifications | |
| Certificate Roles | access_to_ <service>, where <service> is the service name of the MI</service></service> | |
| Non-Repudiation | Mandatory | |
| HeaderInfo | Validated against MI defined XML schema Optionally, may contain the Settlement Instruction (Copy Model) | |



Connectivity options, adapted to your needs and your customers

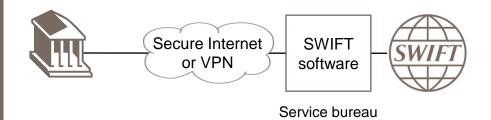
Direct connection

Global or large bank
Millions payments/year
Manage your own SWIFT connection



Indirect connection

Medium bank
Hundred thousands payments/year
Outsource SWIFT connection



or Bank

Alliance Lite2

Small bank +/- 200 files of 200 Kb/day Light software footprint



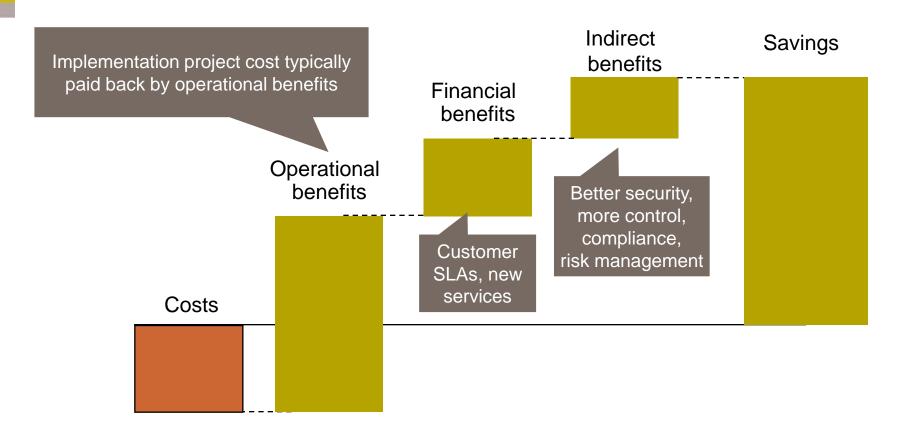


Agenda

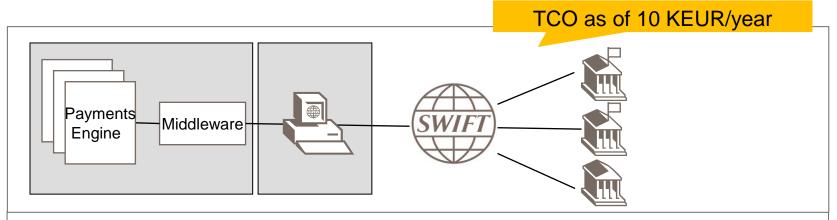
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Making a compelling business case



Assessing the total cost of ownership (TCO)



- 1. Overall project costs
- 2. Integration costs (payment engine, middleware)
- 3. Hardware costs (machines, routers, lines)
- 4. Operations costs (prime and disaster sites, site monitoring and operations)
- 5. Registration to the market infrastructure closed user group: 1 KEUR/year
- 6. Payments traffic in files, x eurocent per payment depending on MI community price
- 7. Software costs depending on the type of connectivity

| Connection type | Software description | One-time (KEUR) | Annual (KEUR) |
|---------------------|--|--------------------|------------------|
| Direct connection | Software ownership and maintenance | 44 | 14 |
| Indirect connection | See Service Provider | n.a. | 10-50 |
| Alliance Lite | Connectivity with up to 200 files of 100KB per day | n.a. | 10 |



Quantitative and qualitative benefits

| Driver | Benefits | Measures | |
|--------------------------|--|--|--|
| Operational efficiencies | Staff reduction, reallocation and/or growth containment | # FTE * cost per FTE | |
| | Transaction efficiencies | Economies of scale with payments volume growth (e.g.: organic growth trends from 6% to 10%) | |
| | Rationalising systems and/or building scalability | # systems * 5 to 20 KEUR | |
| Financial benefits | Lower end transaction cost and better price transparency for end-users | Customer retention levels (KPIs) Offering attractiveness compared to competitors (value proposition) | |
| | Meeting clearing and settlement cut-off times and obligations | # of charges and amounts for delayed execution # of unmet customer SLAs (KPIs) | |
| | Revenue from innovating in new adjacent services | # of new successful services and revenue # of new market segments and size | |
| Indirect benefits | Avoidance of fraud, manual errors, reputation risk | # of losses and amounts due to frauds or errors (benchmarks) | |
| | Meeting compliance regulations | Less control points, documentation, legal costs, Improved liquidity management levels (KPIs) | |



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Examples of Retail payments systems on SWIFT

| | EBA/Step2 | Equens ACH | VocaLink |
|-----------------------|---|---|---|
| Payment instruments | Credit transfer, Direct debit | Credit transfer, Direct debit Credit transfer, Direct | |
| Payment scheme | SEPA SCT and SDD scheme for EBA members | SEPA SCT and SDD, as well as domestic schemes | All GBP and EUR payments (SEPA) |
| Services | Centralised clearing, cash monitoring and exceptions management | Centralised clearing, cash monitoring and exceptions management | Centralised clearing, cash monitoring and exceptions management |
| Reference data | SEPA Routing directory | SEPA Routing directory (Equens Italy) | SEPA Routing directory |
| Standards and formats | MX (ISO 20022) | Proprietary and MX (ISO 20022) | Proprietary and MX (ISO 20022) |
| Messaging | FileAct real-time | FileAct real-time | FileAct real-time |
| Administration | CUG services by EBA | CUG services by Equens | CUG service by VocaLink |
| More information | http://www.abe.org/ | www.equens.com | http://www.vocalink.com/ |



VocaLink case for retail payments

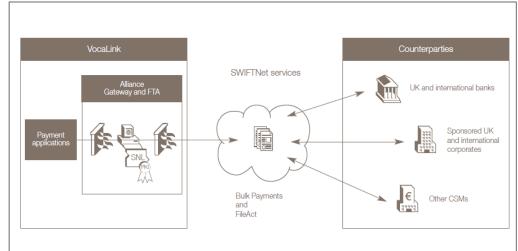


Company profile

- Specialist provider of retail payment services for banks and corporates
- Processes both £ and € payments (SEPA)
- +90% of salaries and +70% of bills in UK
- 15% of European automated payments
- +90 mio payments on peak day
- New Faster payment services

Challenges

- Reach into new (international) markets
- Improve processing capacity and drive down costs
- Provide innovative payment products
- Common infrastructure for local BACS community,
 European and international ACHs, (EBA,..)



Key benefits of using SWIFT

- One single channel to all market players
- Secure, reliable, resilient, cost effective channel for communicating with all banks
- Transmission of large volumes of critical data in restricted timeframe



Equens Italia case for retail payments

Company profile

- Joint venture between ICBPI (Istituto Centrale delle Banche Popolari Italiane) and Equens SE
- Electronic payments management services
- Infrastructural, software and operating services
- Domestic and international debit, credit and pre-paid cards.
- Outsourcer for domestic clearing of RNI, ACH and SEPA
- Over 50 banks in Italy
- Over 8.5 billion payments at the Equens group level

Equens Italia SWIFT Services for retail payments Clearing engines Connect: Direct middleware SWIFT Services for retail payments Connect: Direct systems Settlement system

Challenges

- Compliance with international standards
- Highly competitive and open market environment
- Pressure to offer cost-effective processing
- Target market in Italy and in Europe
- SEPA compliance

Key benefits of using SWIFT

- Reach large number of banks in SEPA
- Use both domestic and SEPA XML standards
- Ability to reach Target2 and EBA/Step2
- Benefit from low entry costs by leveraging existing SWIFT infrastructure.



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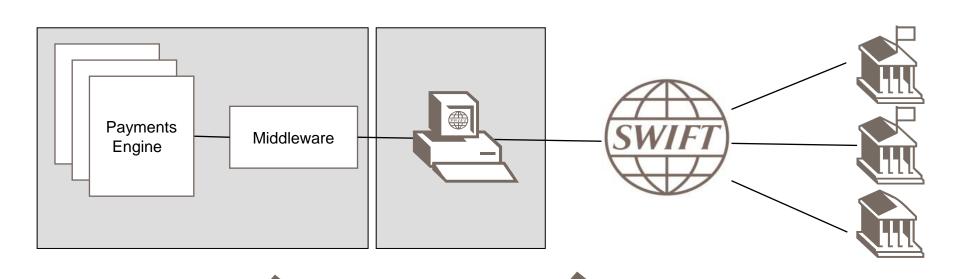
Defining your project

Which applications flows to move to SWIFT?

Which middleware and messaging to use?

What messages apply to my business?

Which are the banks, corporates and ACHs for my business?



What tools and test scenarii to use?

What connectivity option to use?



Plan your project

| Define | Prepare | Implement | Test | Roll out |
|--|--|--|--|--|
| Identify the type of payments and flows Identify the formats and messaging requirements Assess the volumes Identify ACHs, Corporates and banks Select the model: bilateral or multilateral Assess the impact on applications and middleware Choose the type of connection (direct, indirect, Lite) | Contact relationship manager or see swift.com for more information See SWIFT Ready applications Join SWIFT (see the ACH CUGs defined on www.swift.com) Get trained on SWIFT services, connectivity and standards Define the testing plan and scenarii | Install and configure the software Integrate the application and middleware Implement the guidelines of the ACH(s) | Setup pilot and live environments Execute pilot and end-to-end tests Notify operational readiness to ACH and SWIFT | Kick-off meeting with each counterparty per clearing channel Test live environment Go live |



• **6-12 months**, for the middleware or EAI of a payments shared services platform with 4 market channels (ACHs, banks)

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More info?

- Your SWIFT relationship manager
- swift.com
- As a participant, your Payment Market Infrastructure
- Other Market Infrastructures on SWIFT
- Other banks on SWIFT



Thank you