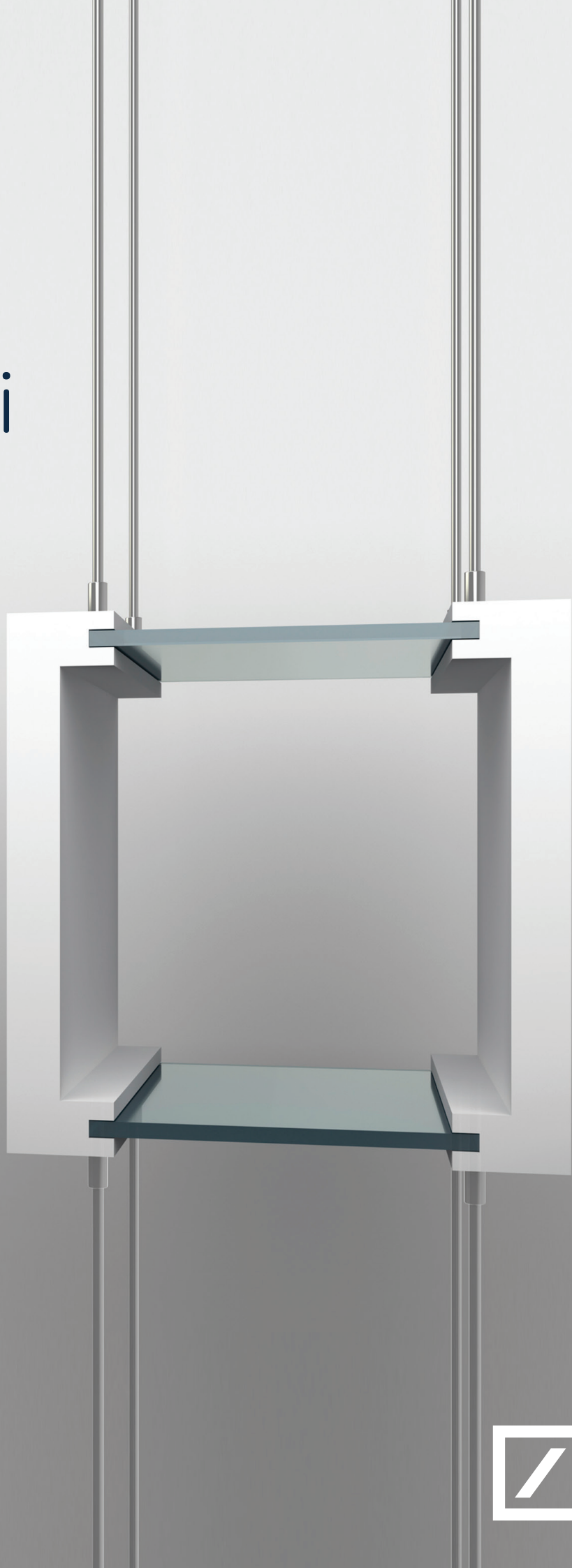


Deutsche Bank
Global Transaction Banking

SWIFT gpi

Time for action



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Foreword

A little less conversation

Corporate treasurers are putting financial institutions under mounting pressure to provide faster and more convenient cross-border payments.

At the same time, they are demanding more granular data and transparency with the respect to their payment credits and deductions, in order to inform their cash management and working capital decisions. Banks, facing margin pressures and increasing competition, are looking for ways to provide even better service to clients, while leveraging the latest technologies to deliver operational efficiencies.

SWIFT's global payments innovation (SWIFT gpi) initiative has the potential to solve all of these challenges. By connecting every party in a payment chain via a cloud solution, SWIFT gpi can improve the speed, transparency and traceability of payments. It can also deliver significant time and cost savings for banks over the longer term.

But these benefits will only be fully realised if SWIFT gpi attains sufficient market reach, which requires a critical mass of banks to be fully up and running. As such, now is the time for financial institutions to move from talk to action on SWIFT gpi. After a successful year-long trial period, we must work together to embrace the initiative's live operational mode – and ensure it becomes the new payment standard for correspondent banking.

To this end, Deutsche Bank is part of the Vision Group for SWIFT gpi – comprising the ten largest transaction banks globally helping to shape the future of the initiative. We are a member of the Initiative Group, which represents a community of banks that promote SWIFT gpi to the industry, and contribute to its collaborative design of future gpi functionality. Deutsche Bank is also one of the 33 validation banks participating in a distributed ledger technology (DLT) proof-of-concept (PoC), since collaborative innovation is a key part of SWIFT gpi implementation.

While co-ordinated action is a cornerstone of SWIFT gpi success, individual banks also have an opportunity to carve out distinctive premium services and digital user experiences around the initiative. Deutsche Bank, for example, is enriching non-gpi high-value commercial EUR and USD payments with the relevant data to enable them to be sent as SWIFT gpi payments. Not only will this deliver an immediate service enhancement to our financial institution and corporate clients, it will also help to raise awareness of the benefits SWIFT gpi offers to all parties.

This whitepaper sets out to highlight precisely why this evolution in correspondent banking is so important to financial institutions, corporates, and the payments industry. It also aims to provide a practical guide for implementation for those banks that are just beginning their roll-out projects.

We hope that you find this whitepaper both informative and insightful. To discuss any of the issues raised in more detail, or to find out how your organisation can benefit from SWIFT gpi, please don't hesitate to get in touch with your relationship manager or local Deutsche Bank representative.

Christian Westerhaus

Global Head of Clearing Products, Cash Management,
Deutsche Bank



SWIFT gpi
can improve
the speed,
transparency
and predictability
of payments

Section One

1. Transforming cross-border payments

In recent years, banks have invested significant amounts of time and money in enabling payments to be made across the globe, through correspondent banking networks.

Yet there are definite areas for improvement within the current cross-border payments setup. And as digital technologies infiltrate all areas of business life, these current challenges are becoming more of a pain point – for financial institutions and corporates alike.

1.1 The need for innovation

One of the most common frustrations around cross-border payments today is that it can take several days – in some cases up to a week – for funds to be credited to the beneficiary's account. This delay may be a result of market conditions, compliance requirements, or the availability of correspondents in certain countries. Whatever the reason, it is a growing challenge, especially in the age of “on-demand” services.

Fees are another issue. At present, banks charge for processing cross-border payments by deducting their fees from the original transaction amount – yet this makes it challenging for corporates to reconcile received and invoiced amounts. FX fees can also become obscured in a long and opaque transaction chain, so corporates are often uncertain as to the true cost of a transaction.

Corporates issue a call for action

In June 2017, six leading Swiss corporates issued an open letter stating their support for SWIFT gpi and encouraging banks worldwide to adopt the initiative in order to improve cross-border payments. Within the letter, they called for increased transparency and improvements to the investigation process, which can be time-consuming and costly.

These corporates see SWIFT gpi as “a long overdue, essential improvement of the customer needs for higher cross-border payment speed, transparency and end-to-end tracking.” However, they also emphasise the need for an increasing number of financial institutions to go live with SWIFT gpi, saying: “Banks cannot afford to not join the initiative and go live as soon as possible. Our expectation is that all of our cross-border payments will be end-to-end SWIFT gpi payments in the future.”

Source: SWIFT
<https://www.swift.com/our-solutions/global-financial-messaging/payments-cash-management/swift-gpi/corporates>

An additional challenge is the lack of full and end-to-end information available around cross-border payments. On the one hand, remittance information has not been processed in a complete and unaltered manner, which has made it difficult for corporates to reconcile their payments. On the other hand, while banks benefit from clear and linear communication of messages surrounding a cross-border payment through the SWIFT network, each participant is nevertheless limited to its own data environment. This means there is no communication across the entire value chain.

Corporates also lament the inability to track the status of cross-border payments today. This not only results in poor predictability over cash flows, but can also complicate

SWIFT gpi is an industry-wide collaborative programme that aims to improve the customer experience in cross-border payments

relations with suppliers if a payment is not received – a point made in an open letter from six major Swiss corporates in June 2017 (see box on page 4). Banks are also negatively affected by this lack of visibility and control over payments, since it results in more time and resources being allocated to handling investigations and complaints.

Against this backdrop, the need for innovation is clear.

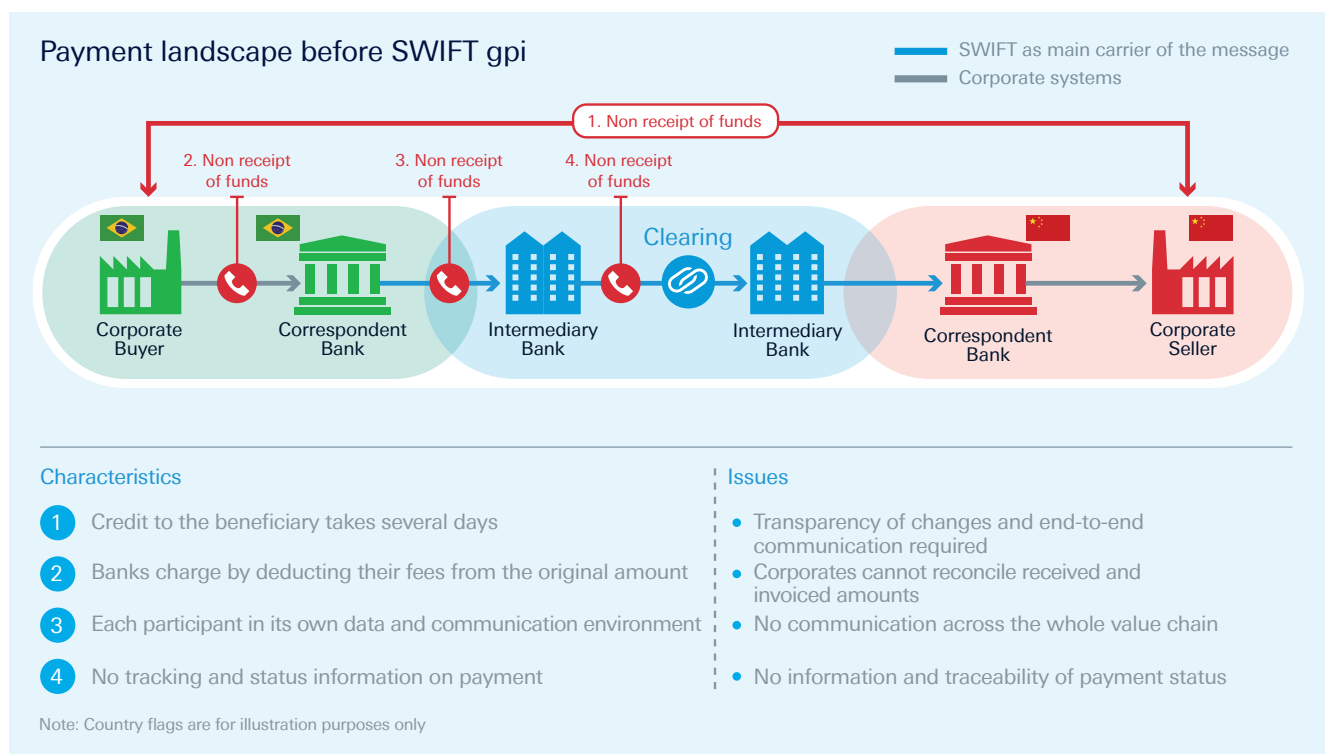


Figure 1: How cross border payments work today

1.2 SWIFT gpi at a glance

In a nutshell, SWIFT gpi is an industry-wide collaborative programme that aims to improve the customer experience in cross-border payments – and introduce new market standards by connecting all parties in the payment chain end-to-end.

Importantly, by utilising a cloud-based solution, the initiative seeks to meet the goals of improving speed, transparency and traceability for end-customers, without compromising banks' ability to meet their compliance obligations and market, credit and liquidity risk requirements.

The service leverages SWIFT's secure and resilient global platform and any supervised financial institution is eligible to participate. To ensure consistency, SWIFT gpi services operate on the basis of business rules which are captured in multilateral service level agreements (SLAs) between participating banks.

To ensure a smooth adoption, the initiative is being rolled out in phases. The first phase, known as V1, was launched in February 2017 and sets a new standard in cross-border payments by increasing speed, providing transparency over fees, enabling end-to-end tracking and ensuring remittance information is unaltered. The second and third phases, V2 and V3, focus on addressing cost and inefficiencies in the current cross-border payments landscape, and creating a competitive value proposition in an increasingly crowded marketplace (see page 9 of this whitepaper for more detail on each phase).

As of December 2017, 120+ banks have signed up to SWIFT gpi. So far, 30+ banks – including Deutsche Bank – are already live.

1.3 Benefits for corporates

Although SWIFT gpi is a bank-led initiative, its design ultimately enables banks to help their corporate clients to grow and become more efficient.

The most relevant phase of the SWIFT gpi initiative for corporates today is V1, since it focuses on responding to the current client challenges outlined on page 4 of this whitepaper. Briefly, V1 (as outlined in Figure 2) will introduce four major benefits for corporates:

1. Same-day availability of funds, if received before the bank’s cut-off time
2. Transparent fees – with regard to both deductions and exchange rates – thanks to all charges being documented in the cloud
3. End-to-end payment tracking and confirmation via the cloud
4. The transmission of full and unaltered remittance information which will ease the reconciliation of payments

It is hoped that successful adoption of SWIFT gpi should therefore help corporates to: improve their ability to conduct and grow international business; lead to better supplier relationships; and help them achieve greater treasury efficiencies.

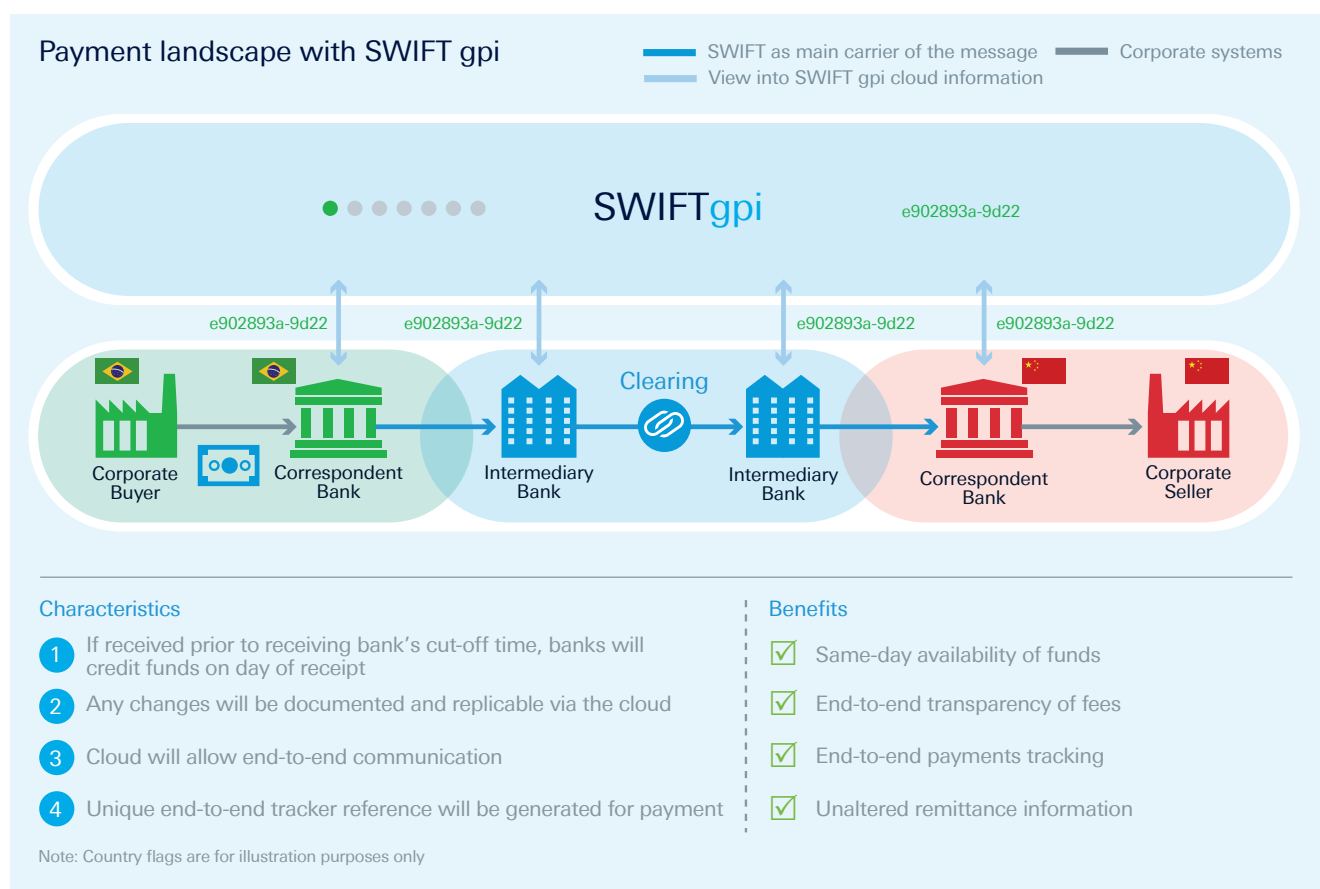


Figure 2: How cross border payments will work under SWIFT gpi

1.4 Benefits for financial institutions

Although initial investment is required in SWIFT gpi, there are a range of immediate and longer-term participation benefits that banks can reap. For example, by increasing the speed, simplicity, convenience and transparency of payment services, SWIFT gpi helps to provide an effortless payment environment for clients. In turn, this should encourage better client relationships and attract more business as clients, it is hoped, will choose to route a higher volume of payments through banks offering SWIFT gpi services.

Moreover, SWIFT gpi is an innovative service that bolsters the value proposition banks can offer customers – and it demonstrates commitment to being a payments provider of choice in an increasingly competitive space. Deutsche Bank, for instance, is delivering an immediate service enhancement to our financial institutions and corporate clients by enabling high-value commercial payments to go through SWIFT gpi. This enhancement will see non-gpi payments automatically enriched with the relevant data that enables them to be sent via SWIFT gpi, so that clients can benefit from the new payment functionality therein.

Over the longer term, the developments introduced by SWIFT gpi may also manifest operational advantages for banks. Thanks to the enhanced network and claim management processes introduced in V1, for instance, banks can expect to reduce both their operational costs and time spent on investigating claims of non-receipt and handling complaints.

Correspondent banks will also benefit strategically from the connection of all parties in the payment chain in an end-to-end digital ecosystem, as well as leveraging new technologies – helping them to remain competitive and innovative, while also improving straight-through-processing (STP) rates. In turn, future cost savings and operational efficiencies will likely arise from enhanced compliance practices and optimised intraday liquidity flows.



Section Two

2. How SWIFT gpi works

SWIFT gpi is being rolled out in phases. Each phase looks to address distinct parts of the challenges faced by correspondent banks in respect to cross-border payments.

2.1 V1: Delivering a new standard

The first phase of SWIFT gpi implementation seeks to respond to evolving customer needs and demands by improving the speed, transparency, and traceability of cross-border payments. V1 therefore focuses on Commercial Credit Transfers (gCCT) using the MT103 SWIFT message.

In order to deliver on the transparency and traceability parts of the package, SWIFT has introduced the SWIFT gpi Tracker. Available to live gpi member banks since May 22, 2017, SWIFT gpi Tracker acts rather like a UPS tracker, but for payments. It consists of a cloud-based database that is securely hosted at SWIFT, designed to give end-to-end visibility on the status of a payment transaction from the moment it is sent until it is confirmed. This represents a milestone in correspondent banking, effectively connecting all parties in the payment chain of the correspondent banking ecosystem – leading to operational efficiencies and better client service.

The Tracker can be updated by FIN Message or application programming interface (API) and accessed via a graphic user interface (GUI) – meaning it can easily be integrated into other back-office systems at a bank.

This represents a milestone in correspondent banking, effectively connecting all parties in the payment chain

API technology

Banks are increasingly embracing Application Programming Interface (API) technology, spurred by changing client demands and regulatory change such as PSD2 – which will see third party providers (TPPs) given access to bank services. Such technology allows banks to innovate without significant investment or risk, faster implement new products and services, and future-proof their businesses in the new digital world. APIs enable third parties to pull data, products and services from pieces of software that were not created by them, and embed these into their own systems and products in real time in a secure and authenticated manner.

Deutsche Bank believes that the future of banking will be based on platforms that connect TPPs, as well as service consumers (financial institutions and corporate clients). API provides the following benefits:

- **For providers:** A bank can create and document an API once, and then direct data consumers to it over and over again
- **For consumers:** If an organisation has multiple applications or hosts that need access to the data, it doesn't need to get a new database connection authorised for each one

Key characteristics of APIs include:

- **Direct access:** APIs provide data and services in programmatically reusable formats which make it easy to integrate data and services into internal systems. There is no need to convert data from one file format into another or to manually bridge gaps between platforms.
- **Timely data:** APIs are capable of providing data that is refreshed much more frequently than can be achieved through pulling, cleaning, and loading files

From a technical perspective, the tracking functionality will be supported by a unique end-to-end transaction reference (UETR) included in the header of the MT103 (field 121) in addition to the gpi service code (field 111). The UETR (see box below for more detail) means that each party in the payment chain will be able to confirm their position, making it possible for others in the chain to identify where the payment is in the lifecycle.

While protocols are in place to ensure privacy around transactions, it will be possible to see where a payment has been held up, for example. In the name of transparency, and to enhance self-service, Deutsche Bank is making it possible for its financial institutions and corporate clients to access the Tracker themselves, via Deutsche Bank Cash Inquiry (see page 20 for more details).

End-to-end visibility across the whole payments chain is also reliant on the involvement of payments market infrastructures, which play a key role in the journey of a cross-border payment and are often responsible for local clearing and settlement in domestic or regional markets. In this respect, standards used by payments market infrastructures need to be able to carry the required gpi data. Of course, the clearing systems of the most widely used currencies are already gpi-enabled – yet there remain a number of local market infrastructures that are not. To enhance efficiency and transparency across the end-to-end payments chain, as well as to avoid fragmentation and implementation costs, Deutsche Bank has worked closely with those infrastructures not operating in a SWIFT environment to establish best practices and to share insights.

Deutsche Bank has worked closely with those infrastructures not operating in a SWIFT environment to establish best practices

UETR: under the hood

The UETR used in SWIFT gpi messages is based on a well-known and mature mechanism for generating such an identifier: the Universally Unique Identifier (UUID), sometimes also known as Globally Unique Identifier (GUID), compliant with IETF standard RFC 4211 using version 4 of the generation algorithm.

The format is a total of 36 characters composed of 32 hexadecimal characters, displayed in five groups separated by hyphens: xxxxxxxx-xxxx-4xxx-yxxx-xxxxxxxxxxxx x = any hexadecimal character (lower case only); y is one of 8, 9, a or b. The UUID is designed to be globally unique, without risk of repetition over time.

Example: {121:eb6305c9-1f7f-49de-aed0-16487c27b42d}

The UETR is included in field 121 in the User Header (Block 3 of a SWIFT MT). The UETR is generated by the instructing gpi bank (the first gpi bank in the payment chain) when initiating a payment and communicated together with the gpi Service type Identifier (field 111) in the User Header.

If a UETR is received by Deutsche Bank on behalf of an Institutional client, subject will be kept and forwarded to the next bank in the processing chain. However, if no UETR is provided, Deutsche Bank will enrich the MT103 with the UETR in field 121 and the service code in field 111.

Another important innovation in V1 is the SWIFT gpi Observer, a central service that gives all gpi banks a global view of their own performance against the multilateral gpi service level agreements (SLAs), and the ability to measure their provider against that SLA (see box below for more details). This will promote transparent working and ensure SWIFT gpi SLAs are adhered to.

By benchmarking themselves and their peers against the SLA, it is hoped that gpi banks will be able to quickly pinpoint potential areas for improvement with their correspondents, and work collaboratively towards a better implementation of the SLA.

Important aspects of the gpi SLA

As well as stipulations around how confirmation to the creditor and to debtor of credit to creditor's account is carried out by SWIFT gpi banks, the V1 SLA also demands the following:

- **End-to-end same day processing of payments**
 - With same day value to the Creditor (Creditor's time zone) if received prior to beneficiary bank's cut-off time
- **Transfer of full original amount (OUR payments)**
 - SWIFT gpi banks agree to not deduct charges from the payment's amount (i.e. respect OUR principles)
 - Guaranteed OUR rule: to enable the instructed gpi agent (Debtor bank) to provide the Debtor with the end-to-end fees at the point of payment initiation, gpi participating banks are to agree guaranteed OUR (gOUR) fees bilaterally, avoiding third-party claim backs post-payment execution
- **Transparency of fees (BEN/SHA payments)**
 - Deducts from principle based on SHA/BEN payments must be made transparent in field 71F by the deducting agent
- **Transparency of FX rate**
 - Acting as an Instructing gpi Agent (Debtor bank) agent must provide transparency to the Debtor
 - Acting as an Instructed gpi Agent (Creditor bank) agent must provide transparency to the Creditor
 - Acting as an Intermediary gpi Agent (Correspondent bank) agent must provide transparency to previous gpi Agents by updating the gpi Tracker. The Instructing Agent will relay the transparency towards the Debtor and the Instructed Agent will relay the transparency towards the Creditor
- **End-to-end tracking of payments**
 - gpi data elements: the Instructing gpi Agent needs to create and populate the UETR in the header of the MT103, field 121 and the Service Type Identifier field 111 in the gpi payment instruction and any gpi confirmations. Any other gpi Agent needs to include the same gpi data elements on any associated payment instructions or gpi confirmations, including those payment instructions sent to a non-gpi Agent (when using SWIFT, as per November 2017 standards release)
- **Transfer of payment information (remittance details F70).**
 - SWIFT gpi Agents will receive, process, and transmit the payment's remittance data up to 140 characters, without alteration, validated by SWIFT

V1 also introduces the SWIFT gpi Directory. Every bank that is enabled to send and receive gpi payments is listed in the gpi Directory, along with its BIC code. Also included in the Directory are details such as channels; cut-off times (very important for same day availability of funds); currencies; and whether a bank acts as an intermediary for gpi payments.

The Directory is available in a wide variety of formats and accessible via automated delivery channels, making it very easy to identify potential gpi counterparties.

Technical specifications for MT103 messages: quick guide

SWIFT gpi participants must identify gpi MT103 messages by populating the service type identifier; tag 111 in the header; FIN block 3. Tag 111 will have the value "001", the code for the gCCT service along with the UETR in Tag 121.

The status of a payment is provided in line with ISO 20022 pacs.002 (Financial Institution to Financial Institution Payment Status Report); the following statuses are supported:

- ACSC (= ISO 20022 code for "settlement completed"; Creditor has been credited, final status)
- ACSP (= ISO 20022 code for "settlement in progress"; pending message; cf. Reason Codes – include in box out)
- RJCT (= ISO 20022 code for rejects; transaction was rejected before the funds have been transferred or credited to creditor's account; final status)

SWIFT message type Standards Releases

In November 2017, SWIFT released its annual Message Type (MT) Standards – which aim to ensure that the MTs remain suitable and compliant, and enable new business functionality.

The standards release 2018 will require any SWIFT user – including non-gpi members – to add and pass on a UETR in all MT103, MT103 STP, MT103 REMIT, MT 202/205 and MT 202/205 COV messages sent to the SWIFT network. Any SWIFT user will also need to be able to receive the gpi fields 111 and 121 in block 3 of any Category 1 and Category 2 FIN message.

SWIFT Standards Release to make gpi the new norm

Standards release impact

Case 1: All agents are gpi (= MI is on SWIFT Y-Copy)

1 After standards release (November 2017)

All gpi agents are responsible for receiving and forwarding the UETR



No comparative change

2 After standards release 2018

All gpi agents are responsible for receiving and forwarding the UETR



Comments

Standards release 2017 - November 2017 (Scope: MT103)

- All banks able to receive MT103 with UETR
- ✓ 140 banks send, while more than 10,000 SWIFT banks can receive
- ✓ gpi banks put UETR on all their MT103, including to non-gpi, and extend tracking to next/last leg.

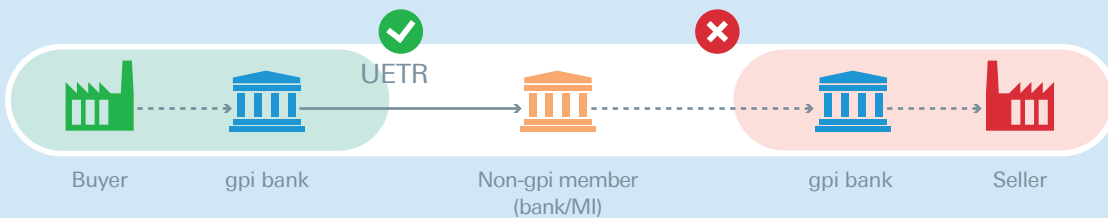
Figure 3: Upcoming SWIFT Standards Release to make gpi the new norm

Standards release impact

Case 2: Some agents are non-gpi (= MI is on SWIFT Y-Copy)

1 After standards release (November 2017)

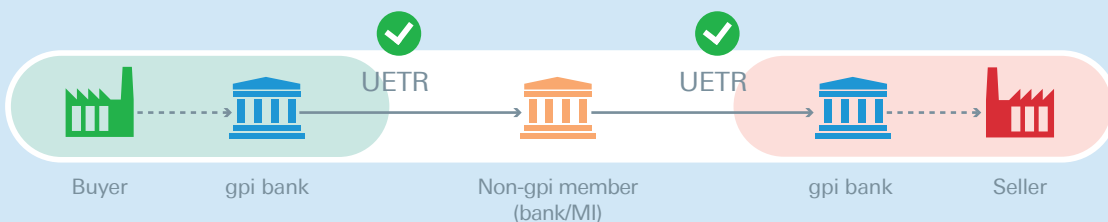
Non-gpi members may be able to receive UETR only (no forwarding requirements)



Change to non-gpi member

2 After standards release 2018

Non-gpi members are able to receive UETR, but are also required to forward it



Comments

Standards release 2018 - November 2018 ¹⁾

- All banks able to receive category 1 and category 2 with UETR
- All banks send and forward MT103 with UETR
- All banks send and forward MT202/205 and MT202/205 COV with UETR
- ✓ All 10,000 SWIFT banks send and receive
- ✓ All banks benefit from tracking info and use UETR in communication with other banks

Note:

¹⁾ Market infrastructures (MIs) not using SWIFT: SWIFT is in contact with these MIs to establish local market practices to enable the exchange of SWIFT gpi transactions between their members. List with whom local market practices exist includes the Fed, CHIPS, CIPS (RMB), BOJ-NET and SIC. Information in the gpi Tracker is visible to all authorised agents.

2.2 V2: Designing digital transformation

From a bank's perspective, the second phase of gpi implementation seeks to remove some of the costs and much of the inefficiency in cross-border payments, largely by improving investigation processes – and reducing the need for them where possible. It also aims to enhance the corporate experience through new shared digital services.

V2 is set to be introduced in November 2018 and will include two mandatory elements for gpi live member banks:

1. **Stop and Recall Payment service (gSRP)**. This service is a response to corporate demand for urgent processing, enabling a payment to be stopped immediately via MT192, no matter where it is in the correspondent banking chain, so long as it has not yet reached the beneficiary bank. If the message has already arrived at the beneficiary bank, this service allows for the funds to be recalled subject to the consent of the beneficiary bank, resulting in the return of funds back to the gSRP initiator. It is important to note that MT192 is initiated under the same end-to-end reference (UETR) as the related MT103.

The ability to stop transactions in-flight will be extremely useful in the fight against fraud. It will also help to optimise the current cancellations process for payments, introducing standard market practice where none currently exists. What's more, it will ensure cancellation requests are processed in an efficient and timely manner – whereas currently the cancellation process often lags the payments process, and only reaches the beneficiary bank after the funds have been credited.

2. **The gpi COVER service (gCOV)**. Driven by the need to provide better customer service, this service involves tracking the MT202 COV under the same end-to-end reference (UETR) as the related MT103 and would support the delivery of V1's objectives (i.e. the same-day use of funds). This service could facilitate that funds are credited to the beneficiary account more quickly, thanks to full traceability of the gCOV, visible via the SWIFT gpi Tracker.

Delivering real-time communication on cover issues, as well as real-time confirmation of credit on the nostro account, gCOV should also help to reduce counterparty risk for the instructed agent. In addition, gCOV should improve straight-through-processing (STP) rates and compliance by reducing exceptions and investigations, automating reconciliation and identifying instances of non-compliance.

Two further elements are currently being reviewed for inclusion in V2. These are:

3. **International Payments Assistant service (gIPA)**. This is a means of helping corporates to ensure their cross-border payment instructions are error-free. By performing a series of pre-checks at payment origination and potentially providing extended information with the payment, this service could further improve STP rates.
4. **Rich Payment Data Transfer service (gRPD)**. As the name suggests, this service enables the transfer of rich payment data – including line item details or documents necessary for compliance checks – along with the payment. This offers the potential to facilitate payment reconciliation where multiple invoices are involved. However, the challenge is that all information exchanged between financial institutions will need to be scanned and reviewed. In turn, scanning processes must become more comprehensive and of a higher quality. In addition, a standardised data structure will be required.

Enhance the corporate experience through new shared digital services

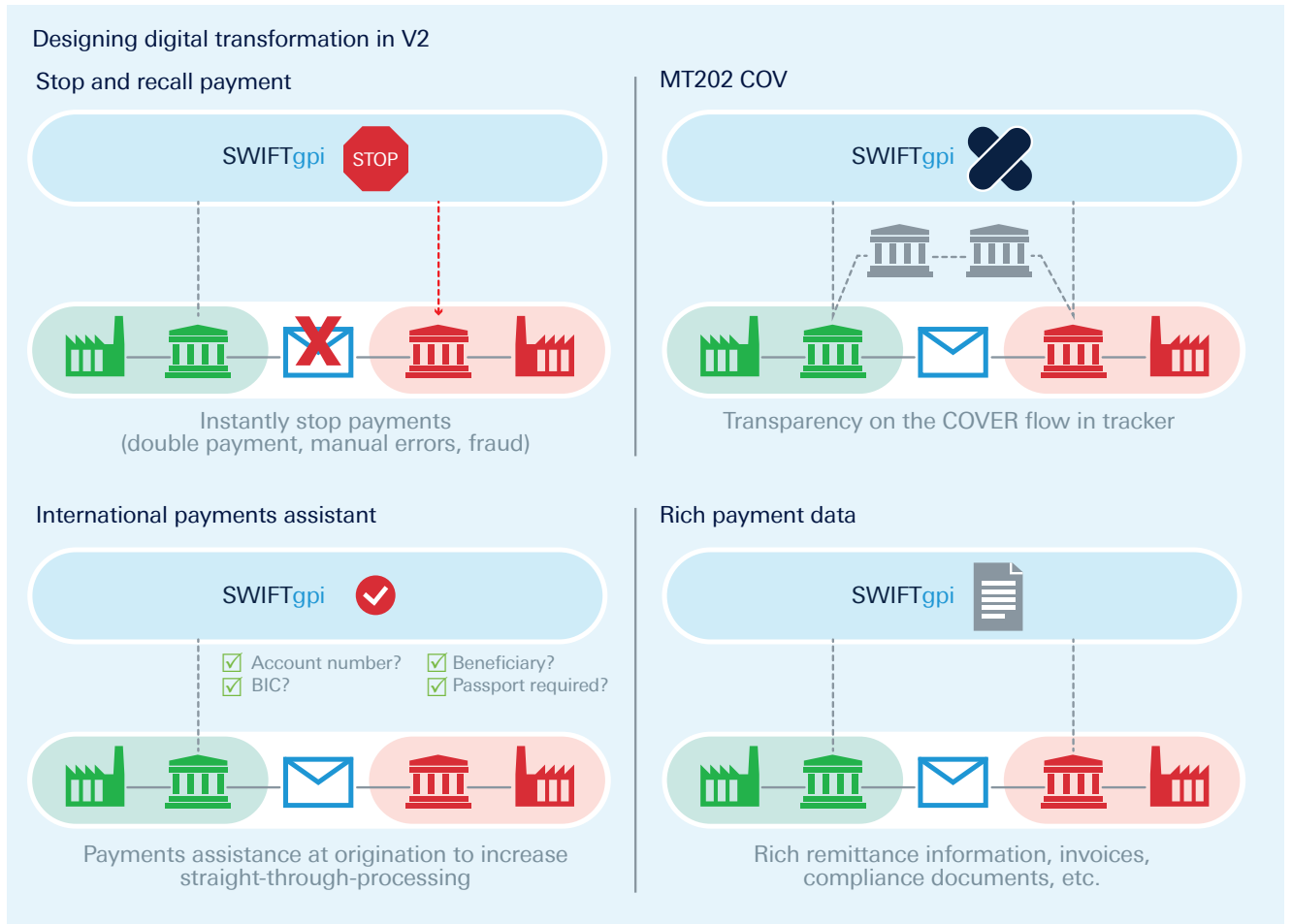


Figure 4: Designing digital transformation

2.3 V3: Exploring new technology

The final phase of SWIFT gpi implementation, which is already underway, looks at exploring the potential of using new technologies such as distributed ledger technology (DLT) in the cross-border payments process.

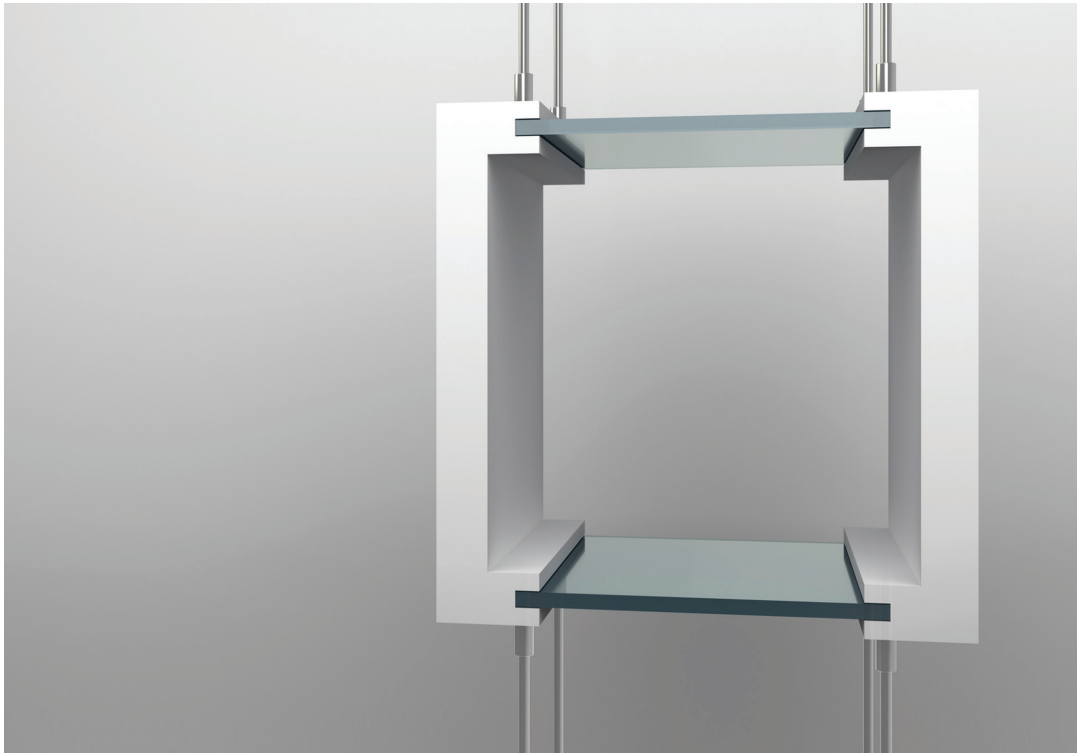
To this end, in January 2017, SWIFT announced the launch of a Proof of Concept (PoC) to explore whether DLT can improve the reconciliation of banks' nostro databases in real time and also optimise their global liquidity. Under the current correspondent banking model, banks need to monitor the funds in their overseas accounts via debit and credit updates and end-of-day statements. The maintenance and operational work involved represents a significant portion of the cost of making cross-border payments.

This PoC, which is set up for a closed user group in a "sandbox-environment", tests whether DLT can help banks to reconcile nostro accounts more efficiently and in real time – at lower costs and operational risk. The PoC is scoped in collaboration with 33 banks according to the Interim Nostro DLT PoC report, including Deutsche Bank acting in the Validation Group.

The preliminary results from the PoC have been positive, indicating that DLT can deliver the business functionalities and data richness required to support real-time liquidity monitoring and reconciliation. The project has also made significant progress on key industry requirements such as data confidentiality, governance, identification framework and scalability.

Yet challenges remain. Critically, the business case for a DLT-based solution is yet to be clarified for all financial institutions – something that is vital if there is to be industry-wide adoption. While major banks have sophisticated solutions which will likely benefit from DLT functionality, smaller institutions may not be able to optimise their usage of liquidity in the same way. Furthermore, as things stand, significant investment would be required to integrate a DLT solution with legacy systems in order to unlock the benefits.

For now, it remains unclear if DLT can help all financial institutions optimise the liquidity of their Nostro accounts in order to reduce operational costs. However, assuming the remaining challenges can be resolved, the next step would be incorporating it into the existing SWIFT gpi framework. After all, as much as V3 represents the payments space's forward-looking nature and harnesses DLT's optimising power for correspondent banks, SWIFT gpi does not aim to revolutionise payments. Rather, it is about evolution, building on the existing correspondent banking model's proven track record of stability, client trust and reach while keeping IT/system changes for corporates to an absolute minimum.



Section Three

3. Implementation

The true benefits of SWIFT gpi will only be realised once the banking community fully embraces the initiative.

International and regional banks alike must realise that SWIFT gpi is not a passing fad, but rather that it is fast becoming the new normal in cross-border payments. As such, it is critical that banks begin to implement SWIFT gpi sooner rather than later.

3.1 Route to implementation

There is no one-size-fits-all implementation plan for SWIFT gpi. Implementation approaches and timelines will vary significantly between banks, depending on the scope of the project in hand, as well as the budget and resources available. Nevertheless, based on Deutsche Bank's implementation journey and the lessons learned along the way, there are a number of steps which should be taken as best practice:

1. **Begin with collaborative design workshops.** As with any new bank offering, the key to arriving at the right destination is starting out with a thorough understanding of customers' current pain points and future needs. Not only can a customer workshop identify their challenges, opportunities, and aspirations – all of which are vital to building the business case – they can also encourage design-thinking around SWIFT gpi user journeys and the value-added services the bank could build around those.

Deutsche Bank took precisely this approach, running two customer collaborative design workshops – one at DB Lab Berlin and another at DB Lab Silicon Valley – with a selection of financial institution and corporate clients, as well as its own experts. Bringing different participants in the payment chain together, these workshops enabled Deutsche Bank to better understand where and how improvements could be made in the international payment process. Regional representation among the customers in the workshops was vital here, since expectations and perceived hurdles vary significant from region to region.

These workshops also enabled Deutsche Bank to understand desires and expectations around the future of cross-border payments, and to explore the “art of the possible”.

2. **Involve internal stakeholders early on.** Taking the insights gleaned from the external workshops, the next step is to understand where and how a SWIFT gpi implementation project would impact – and benefit – internal stakeholders. This includes every function from sales to product, operations and technology, and legal.

The diagram below indicates just some of the many considerations to discuss with internal stakeholders. These conversations are beneficial from a relationship-building perspective, but can also assist in recruiting SWIFT gpi champions from each department when forming an internal working group at a later stage.

Explore the “art of the possible”

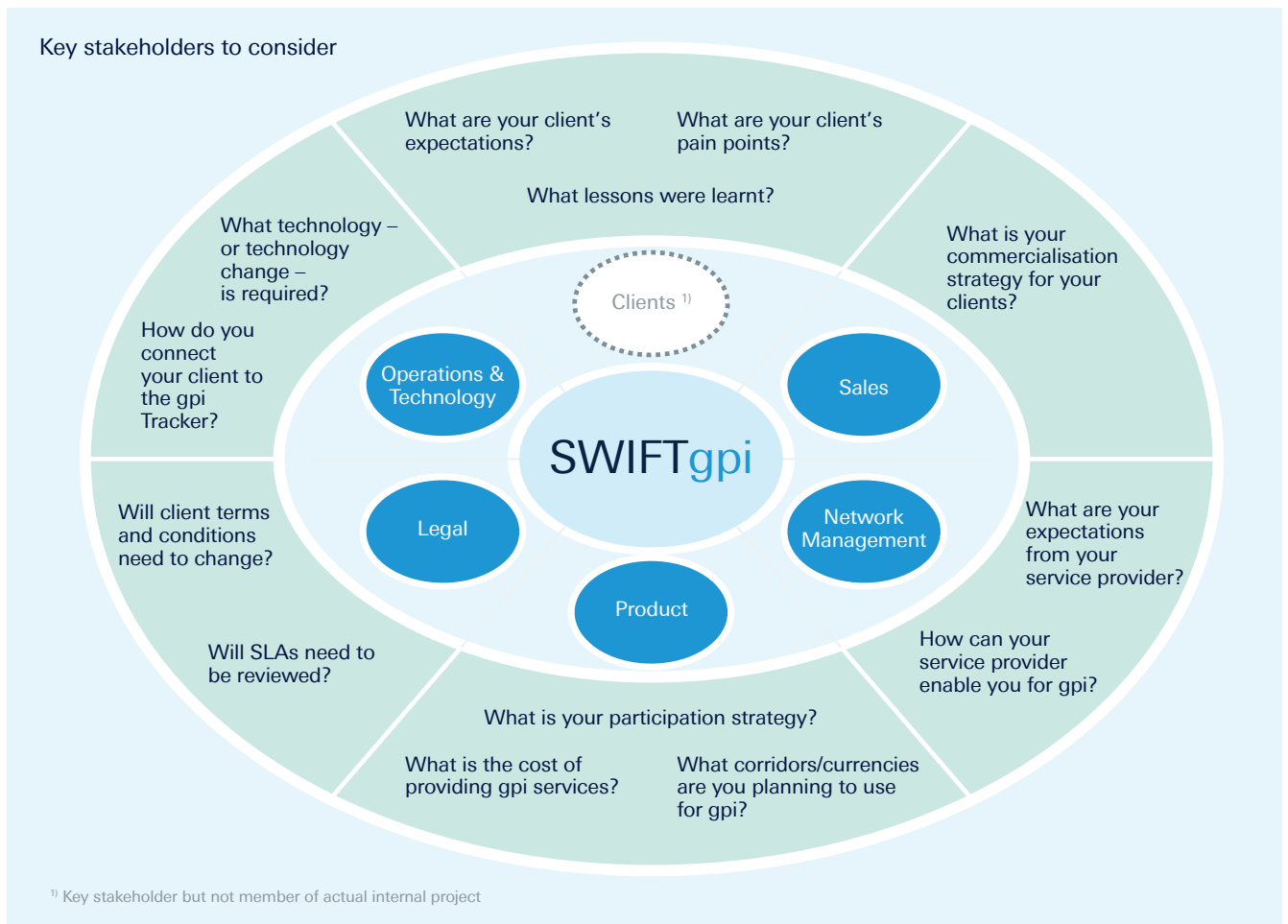


Figure 5: Key stakeholders to consider

3. **Build the business case.** Arguably, creating the business case for SWIFT gpi is the greatest challenge of the process, especially for smaller or regional banks. At a time when margins are extremely tight, it is important to ensure the business case is robust, drawing on the groundwork with external and internal stakeholders.

Presenting SWIFT gpi's value proposition in the business case is also critical. Arguments for implementing the initiative are unlikely to succeed if they are based on generating additional revenues and two-year time horizons. Rather, they should emphasise the longer-term, strategic opportunity to protect bank's revenues in an increasingly competitive marketplace.

Operational efficiencies should also be clearly outlined in any successful business case, with SWIFT gpi enabling banks to automate extremely manual processes, such as investigation process. These gains should start to be realised within a relatively short timeframe after implementation, and should continue to accelerate as more innovations come through the SWIFT gpi pipeline.

4. **Define and refine your implementation strategy.** If the business case adds up and the budget and resources have been secured (if not, other options for leveraging SWIFT gpi are available – see section 3.2), the next step is to define a clear implementation strategy. Creating an internal working group comprising representatives from across the organisation – and across regions, where possible – can be useful to draw insights

from the work conducted with internal and external stakeholders. What's more, the group's role can be to engage with technology vendors as well as SWIFT's dedicated implementation team. Key considerations should include: in which regions to initially roll-out SWIFT gpi, in which currencies, as well as which technologies will be used (including the API option). Milestones and timelines can also be set at this stage. Remaining engaged with both SWIFT and the wider gpi community will be critical for the timely adjustment of budgets when it comes to implementing V2 requirements, such as Stop & Recall, MT202COV – as well as the upcoming SWIFT Message Type Standard releases.

Deutsche Bank first focused its efforts on USD and EUR payments in the Bank's major cash management hubs in the US and Europe. A joint project was set up, incorporating a core team of around 20 people from across the organisation: Institutional Cash Management, Corporate Cash Management, Product Management, IT, Communications and legal professionals. Deutsche Bank also welcomed the opportunity to adopt gpi using API connectivity, and was one of the first banks to go live with this option.

5. **Prepare internal systems and staff.** Once the strategy is decided and the agreement is signed with SWIFT, banks must enhance their internal systems and processes in order to become compliant with SWIFT gpi's necessary requirements – including the business rules and technical specifications.

It may be that additional talent or resources are required to prepare and train numerous business departments, including investigations, implementation and operations. Deutsche Bank, for example, ramped up its development capacity on the IT side to prepare for (and to accelerate) the implementation process.

6. **Enter the testing phase.** After internal preparations have concluded, the formalised certification testing process can begin. This takes place in phases. First, bilateral testing with SWIFT certifies that the bank's systems are compliant with gpi rules and technical specifications. Second, community-scripted tests with other gpi banks are conducted, followed by live penny testing within a pre-defined group of banks. Once the tests are complete, the bank can then enter into the controlled live-usage stage. This involves undertaking a subset of live transactions with other banks that are already SWIFT gpi-ready.
7. **Go fully live.** Banks must then transition into fully live operational mode. Timelines to reach this point will vary significantly between banks, however six months is a useful rule of thumb. During this phase, banks should collaborate with SWIFT, and engage with the industry, in order to ensure a smooth and successful implementation. Banks should also consider future developments – notably around V2 – and how these can be incorporated into their gpi proposition in future.
8. **Go-to-market.** Once fully live, banks should communicate this to clients – via specific client information sessions – and to the market as a whole.

3.2 Alternative ways to leverage SWIFT gpi

For global banks, building the business case to invest in and implement SWIFT gpi is not difficult, since correspondent banking and cross-border payments are key parts of their business. For smaller (perhaps regional) banks, however, the budget involved in implementing SWIFT gpi can often be prohibitive to building the business case for early adoption. Others, meanwhile, are opting to wait for SWIFT gpi to become the industry standard – thereby minimising the investment required yet also forfeiting gpi's benefits.

Banks unable to invest in SWIFT gpi themselves may be looking to their service providers to enable their payments for gpi – and to allow them to deliver gpi information to their own customers. While service providers will lay most of the groundwork in this arrangement (see Section 4), it remains crucial that banks opting for this model are equipped to handle gpi information – and then transmit the payment information to the client.

Banks must enhance their international systems and process in order to become compliant with SWIFT gpi

Section Four

4. Adding value to SWIFT gpi

Deutsche Bank, as a large clearer of USD and EUR-denominated payments, is always searching for ways to cement its position as a payment partner of choice.

The screenshot shows the 'Autobahn Instant Access' interface for managing transactions with Cash Inquiry. The main header includes the Autobahn logo and the text 'Instant Access Manage your transactions with Cash Inquiry'. On the right, there are icons for 'CB', 'CI', and 'CM'. Below the header, the search criteria '03MT170901100320' is displayed. The transaction details for 'ZYGL BANK' show an amount of '1,030,00 EUR' completed on '01.09.2017'. The GPI Tracking Status is 'Completed 01.09.2017' with 'ACSC - Accepted Settlement Completed'. A table provides a detailed breakdown of the transaction, including initiation and completion times, amounts, and UETR. The 'Ordering Customer' section identifies 'ZYGL BANK' with its BIC and address in New York, NY, USA. A 'Sender Ack. Receipt' is noted as '01.09.2017 09:21:27'. The interface also includes buttons for 'Export to PDF' and 'Create Case for Payment', and a tabbed navigation system with 'GPI Tracking' selected.

Autobahn Instant Access
Manage your transactions with Cash Inquiry

Search for Debits ▶ 03MT170901100320

ZYGL BANK
1,030,00 EUR Completed 01.09.2017
03MT170901100320

GPI Tracking Status
GPI Track Status: Completed 01.09.2017
ACSC - Accepted Settlement Completed

Export to PDF
Create Case for Payment

Instruction | Payment | Advice | **GPI Tracking**

Header			
Transaction Status	Settlement Completed - ACSC	Initiation Time	01.09.2017 09:21:27
Status	Credited to customer	Completion Time	01.09.2017 10:53:16
Instructed Amount	1,000.00 € EUR	Last Update Time	01.09.2017 10:54:10
Confirmed Amount	1,000.00 € EUR	Total Elapsed Time	1h 32m
Deductions	DEBIT	UETR	0080f006-a517-4276-a7f5-8d27ad9c9343
Funds Available	01.09.2017 10:53:00		

Ordering Customer

ZYGL BANK
BIC: ZYGLBEB0XXX
789 BANK STREET
NEW YORK, NY USA

Sender Ack. Receipt: 01.09.2017 09:21:27
Sender Ref.:
Sender Deductions:

Additional Details

In this respect, SWIFT gpi is no exception. Deutsche Bank believes all of its clients should be able to benefit from SWIFT gpi – and without any financial or operational impact on their payment initiation.

For this reason, Deutsche Bank is, by default, enabling SWIFT gpi for high-value commercial payments, provided the next bank in the payment chain is also live with SWIFT gpi. We are also enriching non-gpi payments with the respective service code in field 111 and the UETR in field 121 of the header of the MT103.

Furthermore, both financial institutions and corporate clients will have access to the cloud-based SWIFT Tracker themselves, via Deutsche Bank's Cash Inquiry solution. Deutsche Bank Cash Inquiry has been enhanced to include a new "gpi Tracker" tab, which displays all the relevant information to the user instantly as Deutsche Bank Cash Inquiry is connected to SWIFT gpi cloud via API.

This means that non-gpi financial institution customers, as well as corporates, will be able to see for themselves the status of their gpi payment(s) and the reason code if the status is pending or rejected. They will also have transparency over fees deducted and FX rates applied by the banks.

SWIFT gpi: the Deutsche Bank way

In SWIFT gpi, banks have an opportunity to improve their own offerings for financial institution and corporate clients. Here are two scenarios in which SWIFT gpi's capabilities can complement Deutsche Bank's existing client services:

Use case 1: using Cash Inquiry

A Deutsche Bank financial institution client, who is not gpi-enabled, has a query about the status of a cross-border EUR payment routed via Deutsche Bank. Since the beneficiary bank is gpi-enabled, Deutsche Bank has automatically enhanced the payment – so it can be processed as a gpi transaction.

Deutsche Bank has then updated the cloud-based SWIFT gpi Tracker with a real-time payment status, along with completion date and time. The beneficiary bank also has instant access to this information, via the SWIFT gpi Tracker.

Although the Deutsche Bank client is not gpi-enabled – and therefore has no access to the gpi Tracker – all the information from the Tracker can be accessed via the Tracker tab in Deutsche Bank's Cash Inquiry solution. This tab automatically displays all the relevant information to the user, allowing the client to view a payment's status almost instantly.

As a result, the Deutsche Bank financial institution client can access the required payment information in an efficient self-service environment, and respond to any queries from their underlying client in a timely manner.

Use case 2: contacting a Deutsche Bank investigator in case of non-receipt

A USD payment has been sent by an Australia-based, non-gpi bank to a gpi-enabled bank in China, routed via Deutsche Bank. But the remitting bank contacts Deutsche Bank to say that the beneficiary is claiming non-receipt of funds.

Since the payment has been gpi-enabled for the leg from Deutsche Bank to the beneficiary bank, the Deutsche Bank investigator can quickly check the payment status via the gpi Tracker – and provide details of the credit to beneficiary's account at the beneficiary bank.

All this can be achieved in a matter of minutes, rather than days, by eliminating the need to contact the beneficiary bank via MT199 Inquiry message and to await the beneficiary bank's response. This results in a much quicker and efficient investigation process, benefitting all banks in the payment chain and the end client.

Section Five

5. The road ahead

In an increasingly competitive marketplace, where digitalisation and disruption are watchwords, SWIFT gpi represents a way for correspondent banks to remain competitive.

Clients are increasingly demanding simpler, more convenient and efficient cross-border payment services; and banks can no longer rely on longstanding relationships to retain their customers' payment business.

By providing end-to-end transparency on fees, together with the ability to track payments and offer same-day use of funds, SWIFT gpi is a tangible answer to clients' rapidly evolving needs. At the same time, it represents an opportunity for banks to reap significant long-term operational efficiencies and cost savings, not least through the reduction of investigations and complaints.

Certainly, there are opportunities for banks to differentiate themselves through SWIFT gpi, too. Unique service enhancements that leverage each bank's existing strengths can be woven around the core SWIFT gpi offering to increase clients' benefits, while establishing a self-service environment which is less labour-intensive for the bank in question.

However, the true goals of SWIFT gpi cannot be achieved alone. A critical mass will be vital to ensuring SWIFT gpi has sufficient reach to allow banks, and their clients, to realise its full benefits. As a keen SWIFT gpi supporter, and member of the Vision Group, Deutsche Bank therefore calls upon others in the space to work together to drive the initiative forward.

Between now and the first half of 2018, banks must move toward SWIFT gpi's live operational mode. And banks' clients must continue to demand that SWIFT gpi services be made available to them.

Only through co-ordinated action will SWIFT gpi become the new standard for cross-border payments, and the future of correspondent banking.

[For more information please contact your client manager.](#)

SWIFT gpi is a tangible answer to clients' rapidly evolving needs

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