



Information paper

**Simplifying payment
routing data**

November 2016

Table of contents

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Overview	3
The arrival of BIC and IBAN	4
Anatomy of the IBAN and BIC	4
Inaccurate payment processing	5
Cleaning up BIC routing data	5
Future	6

Upcoming initiatives like the SEPA Instant Credit Transfer and SWIFT's global payments innovation (gpi) initiative will give banks an opportunity to simplify their payment routing data – thereby reducing costs and increasing straight through processing rates.

Overview

The way that banks route payments internally has changed. In the past, accounts were held at local branches, making it important for banks to be able to route payments internally to the relevant branch. More recently, however, Know Your Customer (KYC) regulations, home banking and the increasing trend for physical bank branch closures, have made the branch-to-client relationship less relevant. This shift has made it possible – and indeed desirable – for financial institutions to streamline their internal routing practices.

Many financial institutions saw the migration to SEPA as a suitable moment to simplify their payment routing data and have been able to reduce costs and increase straight through processing as a result. Those Financial institutions who opted for a more straight forward transition risk found themselves, however, at a competitive disadvantage; as complex routing parameters are harder to keep up-to-date, resulting in a higher number of misrouted payments, greater costs and more customer frustration.

The good news is that it isn't too late to adopt more efficient practices. Initiatives such as the SEPA Instant Credit Transfer (SCT Inst) and the SWIFT global payments innovation (gpi) initiative will give banks another opportunity to revisit this area and simplify their payments routing.

The arrival of BIC and IBAN

SEPA was intended to make payments simpler and more efficient, and to reduce costs for financial players and consumers combined by achieving standardisation and thus greater consistency across the European payments landscape. As a result of SEPA, national payment systems have been harmonised, reducing operational complexity and the costs of running a diverse infrastructure, ultimately reducing payment costs for the consumer.

While ISO 20022 XML was used to standardise payment transaction formats for SEPA, the International Bank Account Number (IBAN) and Business Identifier Code (BIC) were also key tools in achieving these goals. IBANs ensured that account numbers were unique, while BICs enabled the effective routing of interbank payments.

The concept of the IBAN is very popular and has proven to be a successful foundation for straight through processing, both for SEPA countries and beyond. The flexible construction of the format allows countries to preserve their old bank identification and account number schemes and insert them into the new IBAN, meaning that the IBAN format varies from country to country. Thirty-five non-SEPA countries have voluntarily adopted the IBAN, while a host of other countries are now using IBANs but have yet to register their IBAN format with the International Organization for Standardization (ISO).

However, the approach taken by banks in adopting IBANs and BICs has varied considerably. Many banks have chosen the straightforward solution, simply inserting their existing bank IDs and account numbers into their IBANs, and associating them with the bank's BIC codes used for cross-border payments. Others have taken the opportunity to first clean up their account numbers and bank codes.

Anatomy of the IBAN and BIC

The IBAN consists of an IBAN country code, checksum, bank ID – and in some countries a branch ID – and an account number. Some countries add a proprietary checksum and some banks insert extra zeros in front of the account number. IBANs have a fixed length per country and their formats are registered in the ISO IBAN Format Registry on www.swift.com.

Example 1: The Belgian IBAN BE88271080782541 contains the bank ID 271. No branch ID is used.

Example 2: The Italian IBAN IT70J0200811709000040424060 contains the bank ID 02008, the branch ID 11709 and an extra checksum "J".

The BIC is an eight or 11-character code that identifies a financial institution or its branch. The fifth and sixth characters represent the country of the institution, and the ninth and 11th characters, if provided, identify the branch. BICs are registered in the ISO BIC Registry on www.swift.com.

Inaccurate payment processing

Despite the benefits of the BIC and IBAN formats, many corporations have inadvertently contributed to inaccurate payment processing by choosing not to request BICs and IBANs from their suppliers and payees – for both cost and relationship reasons.

Requesting a BIC and IBAN from an account holder is estimated to cost corporates about €10 per account. A telecommunication company with 500,000 clients would therefore have to pay €5 million to make such requests – making the conversion extremely costly. At the same time, there is a risk that contacting clients for updated information could prompt customers to reconsider and cancel their current subscriptions.

As a result, many companies have opted to generate IBANs themselves based on the pre-SEPA account number and their assumed knowledge of the IBAN generation process – unwittingly introducing the widespread use of invalid IBANs. When IBANs became mandatory, 4.5% of all IBANs used in payments were invalid. For at least 1.5%, this was due to incorrect bank/branch IDs embedded within the IBAN.

More recently, an update to EU regulation moved the responsibility of supplying the BIC from the consumer to the bank. Some data vendors took the opportunity to provide BIC derivation services. Since February 2016, financial institutions in euro countries have had to provide, for euro payments, BIC derivation from IBAN service to their customers at no cost; the same will apply in non-euro SEPA countries from 31 October 2016.

Cleaning up BIC routing data

Given that financial institutions had to re-engineer their payment processing systems for SEPA, some opted to modernise their routing capabilities by implementing centralised account management (required for KYC) and payment processing. As a result, the practice of internal payment routing to branches was rendered obsolete. At the same time, account holders are now no longer required to provide BICs.

Many institutions have therefore taken the opportunity to replace their BIC branch codes with a single BIC, without affecting their clients. Some banks replaced multiple BICs with a single BIC serving the entire institution. As the diagram shows, this has led to a significant reduction in the number of BIC codes used in SEPA payments – while the number of BICs used outside of SEPA continues to grow.

Replacing BIC branch codes with a single BIC also makes the process of deriving BICs from IBANs simpler. In many countries, the IBAN includes both the bank and the branch ID. As the IBAN format cannot be changed, these branch IDs will remain in the IBAN in the future, while the single BIC can be accurately derived from the bank ID alone. Some countries have taken advantage of this by eliminating the branch ID from the IBAN to BIC translation process.

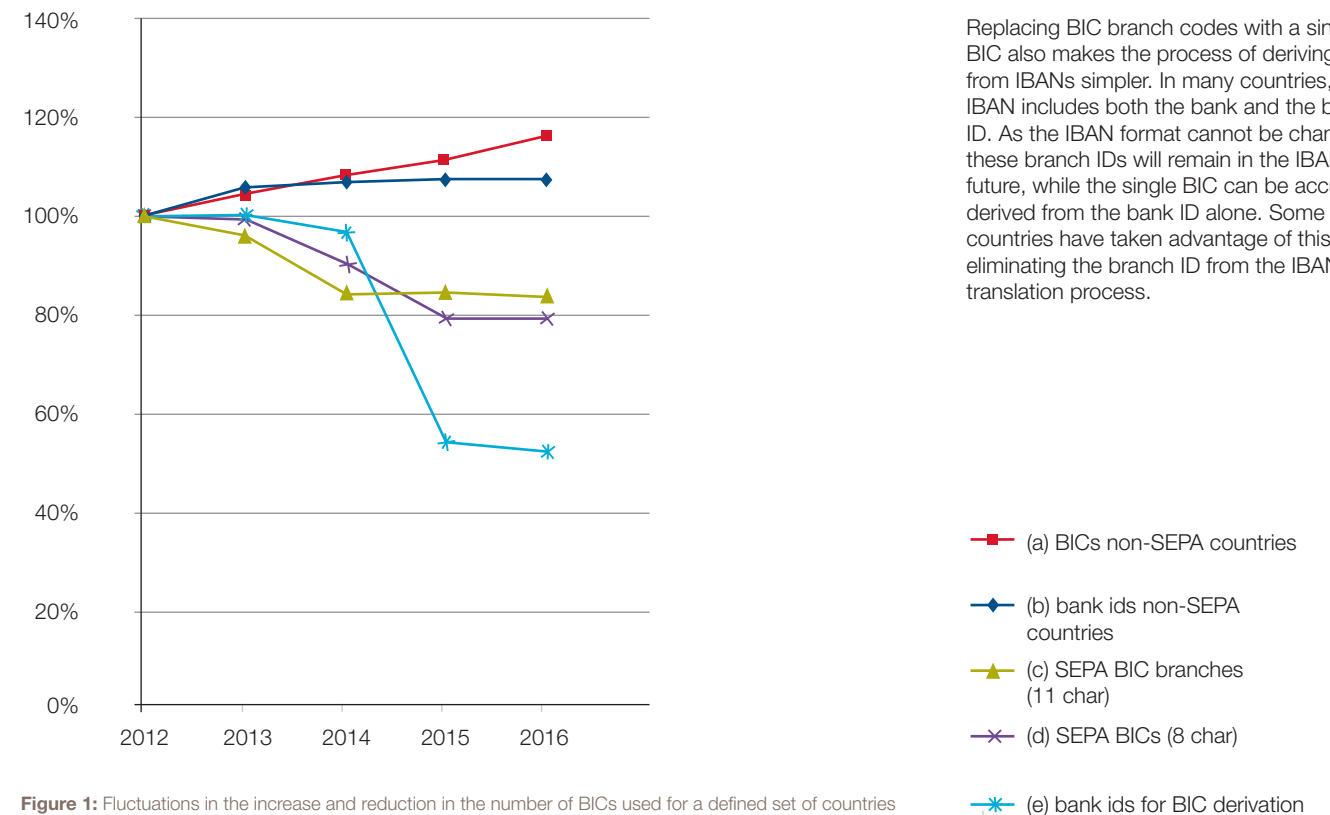


Figure 1: Fluctuations in the increase and reduction in the number of BICs used for a defined set of countries

Re-engineering a financial institution's back office payment processing application can be difficult and costly. The most practical approach is to tackle this area at a time when the bank's payment processing application already needs to be re-engineered for another purpose.



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Future

For banks which missed the boat with the original SEPA transition, other upcoming initiatives may provide a further opportunity to simplify routing data – such as the SEPA Instant Credit Transfer (SCT Inst) payment service currently being developed. By using a single BIC per bank, and by centralising the internal routing of SCT Inst payments to individual accounts, banks may be able to increase the data quality of their counterparty databases. They will also be able to increase straight through processing – particularly crucial in the context of instant payments which do not support payment repairs or returns and which provide customers with a faster service.

Similar opportunities may arise from SWIFT's gpi initiative, which aims to transform cross-border payments and provide corporate clients with a significantly improved payment experience. Another possible opportunity is the introduction of new identifier types such as the legal entity identifier (LEI), which require back office systems to adapt to new reference data.

In conclusion, many banks are already benefiting from simplified routing data – and it isn't too late for others to do the same. While not all institutions used the transition to SEPA to rationalise their payment routing data, other initiatives currently in the pipeline could present similar opportunities. National co-ordination bodies such as banking associations and central banks should also play a role here, as they have successfully done in a number of countries in the past.



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