

SEPA: BIC/IBAN validation and conversion



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What is SEPA?

SEPA stands for Single Euro Payments Area

“SEPA will be the area where citizens, companies and other economic actors will be able to make and receive payments in euro within Europe, whether between or within national boundaries under the same basic conditions, rights and obligations, regardless of their location.”

(Source: European Payments Council Roadmap, December 2004)

- Initiated by European Payments Council with support from European Central Bank and European Commission
- Account domiciled in any of the SEPA zone countries can initiate and receive SEPA Credit Transfer as long as banks on both side of the transaction are SEPA participant
- SEPA Credit Transfer can be domestic and cross border
- SEPA Credit Transfer is in EURO only
- IBAN and BIC are essential to make a SEPA Credit Transfer

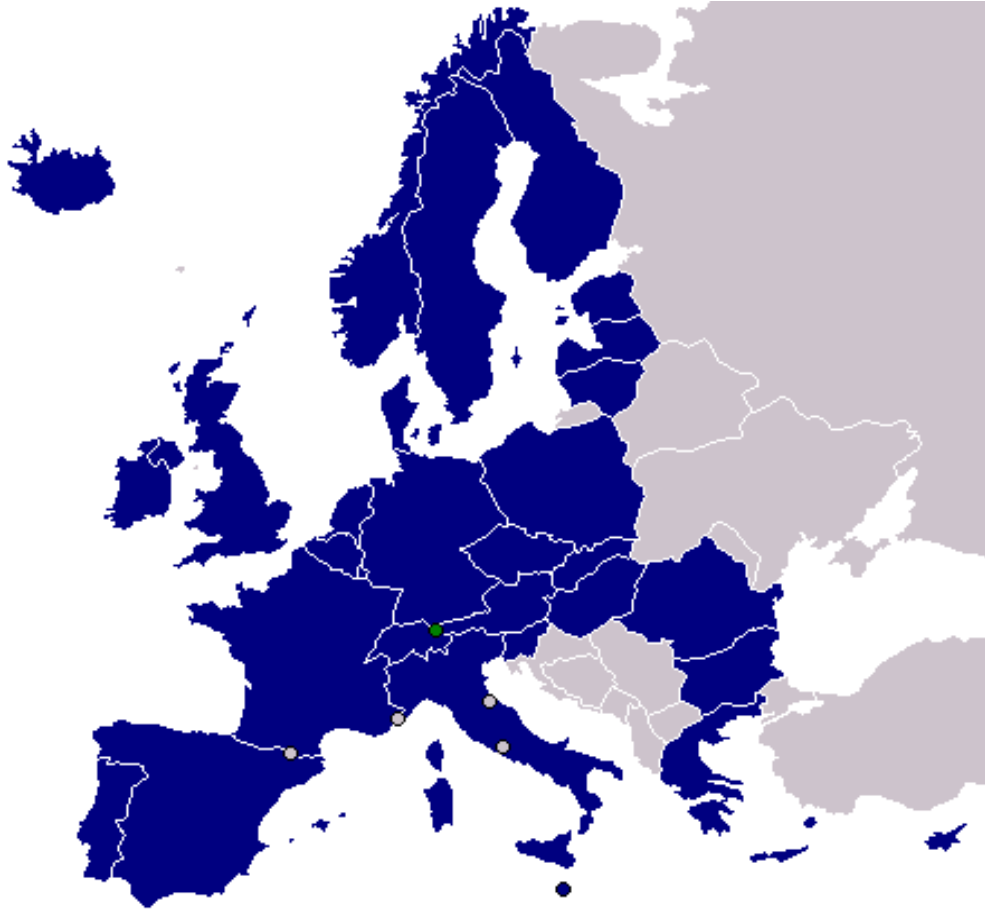
Who is in SEPA?

SEPA consists of 32 European Countries and 10 Territories

- 16 Euro Zone members
- 11 EU members (non-EUR countries)
- 3 EEA members
- Monaco and Switzerland
- 10 Treaty of Rome Territories

	Euro 16	SEPA 32
Population	326m	470m
Corporates	17m	25m
Banks	7-8k	9k
ACH Schemes	10+	20+
Card Schemes	14+	18+
POS	4.5m	6.2m
ATMs	238k	326k
Electronic Transactions	50bn+	73bn*

* Includes non-€ traffic
k=thousand, m=million, bn=billion



Who is in SEPA?

SEPA Zone has close to USD 20 Trillion in total GDP and a population of over 500 million

- 16 Euro Zone members
 - *Austria, Belgium, Cyprus, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, the Netherlands, Portugal, Slovakia, Slovenia and Spain*
- 11 EU members (non-EUR countries)
 - *Denmark, Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Sweden and the United Kingdom*
- 3 EEA members
 - *Iceland, Liechtenstein and Norway*
- 2 Non-EU/EEA Countries
 - *Monaco and Switzerland*
- 10 Treaty of Rome Territories
 - *Martinique, Guadeloupe, French Guiana, Reunion, Gibraltar, Azores, Madeira, Canary Islands, Ceuta and Melilla and Åland Islands*

Andorra, Kosovo, Montenegro, San Marino and Vatican City are not in SEPA zone even though they adopted EUR as domestic currency

What are the goals of SEPA?

SEPA aims to break down national barrier and reduce overall cost of moving capital within Europe

- European Commission (EC) estimates that the cost of making payments between the existing fragmented systems in Europe is between 2% and 3% of GDP (~ €40 Billion per year)
- EC aims to eliminate the concept of “cross border” EURO payments and enable the free flow of capital within Europe
- Standardize Euro payments: equal time limits, equal fraud levels, equal processes, all-electronic straight through processing, no differences between national and international payments in the SEPA area; strengthening trust and reliability on a pan-European basis
- Increase competition in respect to higher number of competitors, fewer niches or special fields or incompatibilities through standardization.
- Increasing surveillance of (electronic) money flow particularly regarding money laundering and terrorism funding

What are the requirements for SEPA?

SEPA will re-shape the European payments landscape

- SEPA is the standard for Euro cross border and domestic Credit Transfers and Direct Debits
- SEPA will become the standard for all € domestic clearing in all Euro zone countries by 2012-2015
- It is expected that a number of domestic ACH systems will be switched off as a consequence
- All domestic AND cross border ACH payments are treated the same and will use International Bank Account Number (IBAN) and Bank Identifier Code (BIC) for routing

Business needs:

- Update systems to capture and store IBAN and BIC
 - Validate that the new IBAN and BIC data is correct
- Convert legacy data to IBAN and BIC format
- Identify the good data from the invalid data
- Actions to address the invalid data
- Confidence in business continuity

The Business Implications

- New IBAN formats / complexities
- Payment routing information required – BICs
- Old versus New data
- Timescales for change

Getting it wrong will cost you money!

Getting it right will save you money!



International Bank Account Numbers (IBAN)

International framework (ISO 13616)

- Country of origin
- Integrity check

Standard format

Goal of increased efficiency through consistency

Country code

Bank

GB 12 NWBK 0892 9965 0449 91

Check digit

Bank Code and Account number

The problem with IBANs

Take an IBAN

DE08 3701 0222 2610 7260 80

- IBAN passes integrity check
- Meets rules for German IBANs

... convert to German domestic account:

37010222 2610726080

Bank is valid – **is Bank X in Köln**

- Modulus check has failed
- Invalid account number

The problem with BBANs

Different formats and structures

Sort Code, Account Number

Bank Code, Branch Code, Account Number

Bank Code, Branch Code, Account Number, Check Digit

Are they valid?

Modulus Check against the rules for the bank (128 for Germany)

Legacy Account Numbers are valid BUT need to be transposed
(standardised)

Only valid and transposed BBANs should be converted to IBAN

The problem with BBANs

Take a BBAN to convert to IBAN...

C-06160-02800-60387.00 (Italy)

BBAN is valid BUT account is legacy and requires transposing

Account number should be...

000060387C00

The correct IBAN is...

IT96 C061 6002 8000 0006 0387 C00

Not..

IT96 C061 6002 8000 0006 0387 000

Bank Identifier Codes (BICs)

Used to route payments

Issued by SWIFT

- Not every branch has its own BIC
- Not every BIC is linked to the SWIFT network
- Linked to National ID codes

BIC directories required for bank look up

Deutsche Bank

Frankfurt

DEUTDEFF500

Germany

Branch

Validation Requirements

Need to separate good records from the bad records

- **Is BBAN correct?**
- **Can the BBAN be converted into IBAN?**
- **Is there a BIC for the IBAN?**

Validation Requirements

Need to separate good records from the bad records

- **Bank account number Rules and Logic**
 - **Modulus Rules**
 - **Account Transposition Rules**
 - **Built in Intelligence**
- **Bank and branch data**
 - **BIC look up**
 - **BIC return against BBAN or IBAN**

The Implications

- Data conversion

- Clients need to convert their domestic data from BBAN legacy format to IBAN and BIC
- Clients' data has inherent error rate and is dated
- Experian service identifies problems and then converts the good data enabling clients to handle the exceptions

- Data validation

- Clients need to prevent errors entering their business systems
- Experian provides software that:
 - Checks account details at point of capture
 - Converts where necessary to IBAN and BIC

BBAN to IBAN conversion services

- Certainty and Stability
- Known position for businesses from an unknown position
 - Identify the good data from the bad data
 - Update into new IBAN and BIC format
 - Detail actions required to address the bad data
- One stop shop data conversion service



The Solution



CHECK IT



CLEANSE IT



CONVERT IT



MAINTAIN IT

Complete BBAN to IBAN conversion service for the cost of a couple of postage stamps

Summary

- **The SEPA clock is ticking**
- **Opportunities are significant**
- **Additional complexities to consider**
- **Getting it wrong can be costly**
- **Getting it right can be easy**



Experian's track record



“The service we received from Experian was excellent and was way beyond our expectations”
Stephan Haas, SVB



Questions & Answers

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