



SEPA Migration

Impact Assessment

Executive Summary

The development of the Single Euro Payments Area (SEPA) and the migration to the SEPA credit transfer and direct debit schemes (SEPA migration) were decisive steps for the integration of electronic retail payments in Europe. SEPA was fully promoted and supported by the European System of Central Banks (ESCB). The European Commission provided the cornerstone by establishing a European legislative framework that set the ground for common rules on retail payment services and instruments.

The execution of credit transfers and direct debits in euro is now harmonised. Cross-border use of both the SEPA credit transfer and SEPA direct debit schemes is growing year on year and showing no sign of slowing. SEPA migration has provided the foundations for facilitating an interoperable, efficient and competitive payment network in the European Union.

The migration to the SEPA schemes was a long and challenging process, requiring the active involvement of all stakeholders, namely consumers, payment services providers (PSPs), companies, public administrations and market infrastructures.

Now that SEPA is a reality for credit transfers and direct debits, it is time to evaluate the SEPA migration process and its impact from the different stakeholders' perspectives. The ESCB therefore prepared qualitative questionnaires to gather the views of the relevant stakeholders in each national market. The objective was to gain an understanding of the market assessment of the SEPA migration process and its current view on the European retail payments landscape.

In general, stakeholders have a positive overall assessment of the outcome of SEPA migration, owing to faster and cheaper cross-border credit transfers, particularly for euro area counterparties. Increases in competition and efficiency were also identified as benefits of SEPA. However, despite such benefits, the implementation of the SEPA schemes proved to be a considerable challenge for stakeholders. Some considered SEPA migration to be expensive, requiring significant changes to IT systems and business processes.

Although SEPA migration was successful overall, post-migration challenges identified by stakeholders have been addressed by the Euro Retail Payments Board (ERPB) (for a brief description, see Section 4).

Overall, the migration to SEPA has led to innovation in payment services in the European Union and the creation of pan-European PSPs offering competitive services. It has facilitated the move towards global standards (ISO 20022) for

payment processing, with Europe now leading the way on global payment interoperability.

SEPA migration can thus be considered a success in terms both of completion, with all euro credit transfers and direct debits in the European Union now harmonised under a globally recognised standard, and of the quantitative and qualitative impact the migration has had on European payments users.

However, SEPA is not yet finalised; it is a work in progress. PSPs, businesses and consumers will continue to build on SEPA standards and schemes so as to further benefit from the integration this project has brought. The SEPA instant payments scheme can be seen as a prime example of this, with a substantial impact on the euro payments landscape. It is important that SEPA's achievements are maintained and enhanced, and that the ESCB keeps up the momentum to achieve full integration of European payments. This is especially important in the area of card payments. SEPA has not been achieved for cards: national card schemes attain pan-European reach only by making use of international card schemes. The vision of being able to pay with a domestic European card at any payment terminal across Europe needs to be brought to fruition.

1 Introduction

This report is an assessment by the Eurosystem of SEPA migration with regard to euro credit transfers and direct debits and reflects its views on the fulfilment of the SEPA vision. This vision is of an area in which consumers, companies and other economic players are able to make and receive payments in euro, whether across or within national boundaries, under the same basic conditions, rights and obligations, regardless of their location.

The launch of the euro in 1999, the cash changeover in the euro area countries in 2002 and the establishment of the central banks' large-value payment system, known as TARGET, in 1999 were the first moves towards an integrated European financial market. The completion of the integration of electronic retail payments was the next step. In this way, initially inspired by the efforts to upgrade cross-border payments, SEPA was born, with the support of the ESCB and the European Commission.

A cornerstone for the realisation of SEPA was the establishment of a European legislative framework¹, which paved the way for common rules for retail payment services and instruments, established the principle of equality of charges between correspondent cross-border and national payments in euro, and created the conditions for greater competition in the payment services offering (Regulation (EC) No 2560/2001²; Regulation (EC) No 924/2009³ and Directive 2007/64/EC⁴). This

¹ [Single euro payments area \(SEPA\)](#) under legal framework.

² Regulation (EC) No 2560/2001 of the European Parliament and of the Council of 19 December 2001 on cross-border payments in euro.

legislative framework is being constantly updated in the pursuit of greater competition, transparency, safety, efficiency and innovation for the European retail payments market.

In response to Regulation (EC) No 2560/2001, which imposed equality of charges for payments in euro made by payment cards and credit transfers, the European banks created the European Payments Council (EPC) in 2002. The EPC has been the governance entity in charge of the design and management of the new pan-European payment instruments (SEPA credit transfer (SCT) and SEPA direct debit (SDD)).

The implementation phase began when SCTs and SDDs for consumers and businesses were made available in the market, in 2008 and 2009 respectively. The launch of the SDD allowed European citizens to use direct debits at cross-border level for the first time. PSPs started to offer the new payment instruments alongside legacy ones, given the voluntary nature of the new instruments.

The ESCB worked to foster migration by defining and monitoring policy objectives, facilitating dialogue with the industry, monitoring take-up of the new instruments and explaining the objectives of the SEPA project in speeches, conferences and publications (including seven SEPA progress reports)⁵.

In 2010, the European Central Bank and the European Commission established the SEPA Council⁶, with the aim of streamlining the governance of SEPA migration and of involving all stakeholders and achieving consensus. Representatives of both the demand and supply sides, including public authorities, participated under the co-chairmanship of the European Central Bank and the European Commission.

Nevertheless, the adoption of SEPA schemes proceeded at a slow pace. Furthermore, migration was perceived as too expensive (to engage in voluntarily) and risky for first movers (which would have to keep old systems running in parallel). Allowing SEPA migration to continue indefinitely would have prevented stakeholders from reaping the benefits that a harmonised and integrated European payment market could bring.

Regulation (EU) No 260/2012⁷ entered into force on 31 March 2012, establishing technical and business requirements for credit transfers and direct debits in euro and setting the end date for migration to these harmonised standards.

³ Regulation (EC) No 924/2009 of the European Parliament and of the Council of 16 September 2009 on cross-border payments in the Community.

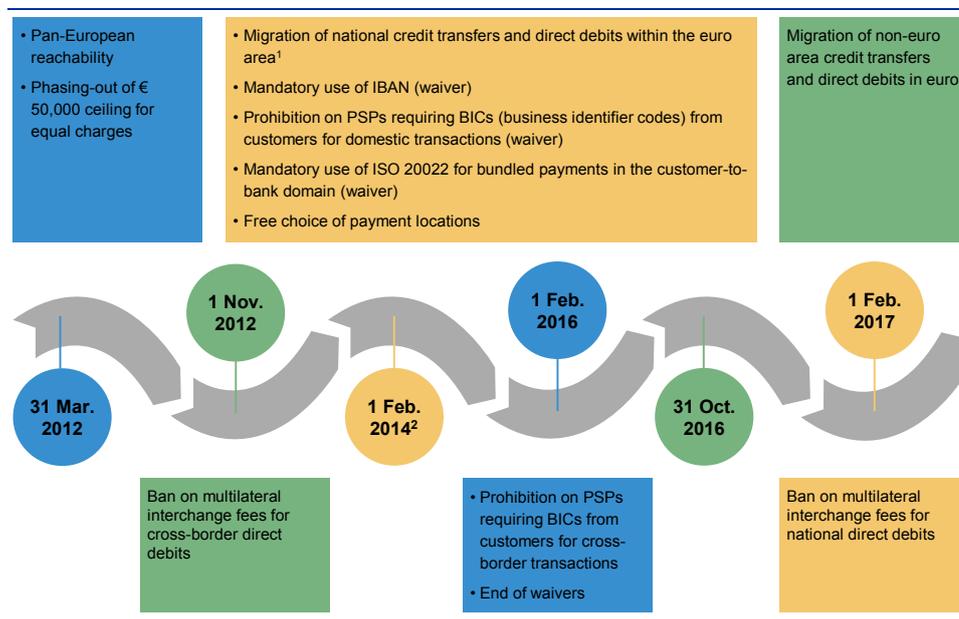
⁴ Directive 2007/64/EC of the European Parliament and of the Council of 13 November 2007 on payment services in the internal market (PSD).

⁵ [Complete list of retail payments-related publications and links.](#)

⁶ Following the completion of SEPA migration and in order continue the development of an integrated, innovative and competitive euro retail payments market, the Euro Retail Payments Board (ERPB) was created in 2013, replacing the SEPA Council.

⁷ Regulation (EU) No 260/2012 of the European Parliament and of the Council establishing technical and business requirements for credit transfers and direct debits in euro and amending Regulation (EC) No 924/2009.

Figure 1
Timeline of SCT and SDD migration



1) Waiver for niche products with a market share below 10% and one-off direct debits at point of sale.
2) Later postponed to 1 August 2014.

Box 1

Evolution of cashless payments in the European Union (2009-17)

Since the introduction of the SCT and SDDs, total non-cash payments in the European Union, comprising all types of payment services, have increased at an average annual rate of 6.4% to 134 billion per year.

In 2009, card payments accounted for 39% of all transactions, credit transfers for 28%, direct debits for 26% and cheques for 6.6%.

Between 2009 and 2017, the number of credit transfers within the European Union increased at an average annual rate of 4.5% to 32.1 billion, and the number of direct debits by an average of 2.2% per year to 25.1 billion. Card payments rose by 10.3% per year to 69.2 billion, while cheque use decreased significantly, falling by 8.4% per year to 2.7 billion. By 2017, card payments accounted for 51.6% of all transactions, credit transfers for 24.0%, direct debits for 19% and cheques for 2.0%.

In the euro area, approximately 48% of all cashless payments are attributed to fully harmonised SEPA schemes (i.e. SCT and SDD).

The ESCB monitored the post-regulation migration phase through quantitative and qualitative indicators collected by national central banks (NCBs). These indicators included the percentage of credit transfers and direct debits that had migrated to SCT and SDD standards and a qualitative assessment of the migration status. The

ESCB provided information on migration progress in two SEPA migration reports (March⁸ and October⁹ 2013).

Post-migration, the ESCB has continued to collect annual statistics on transactions processed in each retail payment system operating in the EU market (including a breakdown between domestic and cross-border transactions), allowing for permanent monitoring of the impact that SEPA migration is having on European integration.

The migration of credit transfers and direct debits for the euro currency was completed on 1 August 2014 for euro area countries and on 31 October 2016 for those outside the euro area.

Harmonised credit transfers and direct debits are now available in euro across the 34 SEPA European countries¹⁰.

This report is divided into three sections. The first reviews previously published literature on the impacts of SEPA migration. The second details the actual impacts that adoption of the SEPA schemes has had, including the views of relevant stakeholders based on the feedback collected in all euro countries. The third provides a more detailed look at the areas that still need to be addressed. Finally, the main conclusions are summarised.

2 SEPA implementation reports

2.1 European Commission's report

In November 2017, in accordance with the SEPA Regulation, the European Commission published the SEPA implementation report¹¹. Addressed to the European Parliament and the Council, the report concluded that, overall, the SEPA Regulation was correctly applied across the European Union and there was no need for a follow-up legislative proposal. This outcome was based on the Member States' responses that nearly all credit transfers and direct debits in euro were processed in compliance with the SCT and SDD standards and that transitional options, although actively used by most Member States during the SEPA migration, were deactivated in due time.

However, the report singled out IBAN discrimination as a barrier to the smooth functioning of SEPA, thus undermining its benefits, i.e. the freedom to pay from anywhere within the European Union and the freedom to use only one bank account.

⁸ [SEPA Migration Report \(March 2013\)](#).

⁹ [Second SEPA Migration Report \(October 2013\)](#).

¹⁰ [European Payments Council List of SEPA Scheme Countries](#).

¹¹ "Report from the Commission to the European Parliament and the Council on the application of Regulation (EU) No 260/2012 establishing technical and business requirements for credit transfers and direct debits in euro and amending Regulation (EC) No 924/2009", COM(2017) 683 final, 23 November 2017.

The European Commission understands the term IBAN discrimination as meaning practices applied by some SDD and SCT payees requiring payers to pay from an account located in a specific country. The European Commission concluded that in most cases IBAN discrimination was due to a lack of knowledge of the legal requirements among payment services users or limitations in legacy processes that do not allow foreign IBANs to be used. A lack of a clear mandate for some national competent authorities in respect of payment services users also prevented the authorities from concentrating on resolving IBAN discrimination cases.

Finally, the European Commission acknowledged the key role of the national SEPA committees in governing and monitoring the implementation. Following successful SEPA migration, some of these committees transformed their mandates and continued steering new challenges, such as the take-up of instant payments and the implementation of the revised directive on payment services (PSD2)¹².

2.2 The report on the costs and benefits of migration to ISO 20022 in SEPA

Implementation of ISO 20022 XML by PSPs, companies and public administrations is one of the technical requirements set by Regulation (EU) No 260/2012 and is considered the cornerstone of SEPA. The European Union was the first region in the world to deploy the ISO 20022 XML message standards for retail payments. A comprehensive account of what ISO 20022 XML means in terms of costs and benefits in seven EU Member States¹³ can be found in the report commissioned by the UK Payment Systems Regulator in 2016¹⁴. The analysis covered migration costs, indirect costs, benefits and the implementation process.

The report found that of two migration strategies – i.e. updating internal systems or using conversion services – the former was significantly more common. Around two-thirds of PSPs, as well larger companies and public administrations, typically updated their internal systems for both SCT and SDD. However, many smaller entities made use of conversion services, and indeed continue to do so.

The total cost of transition to SEPA payment schemes across SEPA was estimated at GBP 10.2 billion, of which 90% was estimated to have been incurred by PSPs, whereas the payment service users incurred only 10% of the total costs. The migration to SDD (GBP 7.1 billion) was more expensive both for PSPs and for companies and public administrations than the migration to SCT (GBP 3.1 billion). ISO 20022 XML was found to be the most significant cost driver connected with the SEPA Regulation, generating two-thirds of the total costs. However, handling of SDD

¹² Directive (EU) 2015/2366 of the European Parliament and of the Council of 25 November 2015 on payment services in the internal market.

¹³ Five euro area countries (Belgium, Finland, France, Ireland and the Netherlands) and two non-euro area countries (Denmark and the United Kingdom).

¹⁴ "Costs and benefits of migration to ISO 20022 in SEPA", Europe Economics, Final report, November 2016.

mandates was also a relatively significant cost driver for larger companies and public administrations.

While acknowledging that ISO 20022 XML has contributed to greater standardisation, the report points out the national “flavours” of ISO 20022 XML, in particular in bank account reporting and R-transactions¹⁵, and notes that lack of interoperability remains a challenge.

The report also refers to a couple of fundamental issues applicable to any major standardisation project. First, SEPA apparently monopolised a significant proportion of the change capacity available to stakeholders at any given time, perhaps leaving other changes postponed to the next period (average migration times were around 24 months). Second, the adoption of any common standard leads to a technological lock-in that could, in theory, make it more difficult to move to a functionally superior common standard in the future.

In terms of benefits, it was cautiously noted that many of the anticipated benefits may not yet have manifested. Nonetheless, the report highlights the improved efficiency of financial transactions due to lower transaction fees for cross-border transactions in the euro area and to payment information being passed in full and without alteration. These benefits are available to large corporates and small and medium-sized enterprises (SMEs) alike, enabling them to fully exploit the Single Market opportunities¹⁶. There was also moderate evidence of improved liquidity management and of an increase in competition at all levels of the value chain.

2.3 Other reports

A number of other sources echo the main messages outlined in the above-mentioned reports: a trade-off between flexibility of technical standards and wider harmonisation; non-harmonised use of R-transactions; and IBAN discrimination. In the winter 2014 edition of the ISO 20022 Newsletter, the Chair of the EPC voiced a concern that relinquishing all the SEPA options, technical exceptions, exemptions and variations is not a decision that the EPC could take unilaterally. Other commentators, referring to flexible implementation of SEPA standards, acknowledged that striving for absolute standardisation would be difficult, if feasible at all, due to a competitive push for a differentiation.

The consulting firm Accenture pointed out the IBAN discrimination issue in its 2014 report¹⁷, albeit from a different angle. Rather than SDD issues, the authors referred

¹⁵ R = return, reject, refusal, reversal, request for cancellation, revocation.

¹⁶ In December 2010, the European Commission published a staff working paper (SEC(2010) 1584 final) accompanying the proposal for Regulation (EU) No 260/2012, noting that the results of “a comprehensive study into the costs and benefits of SEPA migration carried out by CapGemini Consulting indicate that the potential benefits of a rapid migration from national payment instruments to SEPA instruments were around EUR 300 billion over a six-year period (2007-12) for the EU economy as a whole. This estimate was based on the assumption of swift and comprehensive migration on both the supply and demand sides. In contrast, the study shows that protracted migration has a significant negative impact.” [Commission Staff Working Document](#).

¹⁷ [SEPA Payments - Further challenges to come and further opportunities](#).

to the requirement of public administrations (e.g. states' tax or social security authorities) to hold a domestic euro account, thus limiting the potential for cross-border competition. The report also noted that the complexity of the implementation of SEPA was not accompanied by a structured communication forum within which the relevant industry bodies and PSPs could share information and best practices.

3 Impact of migration to the SCT and SDD schemes

In addition to the quantitative indicators collected by the ESCB, qualitative questionnaires were prepared to gather the views of the relevant stakeholders in each national market. The objective was to gain an understanding from the market of its assessment of the SEPA migration process and its current view on the European retail payments landscape. The ESCB drafted five questionnaires directed at consumers, payment services providers, companies, public administrations and market infrastructures. A specific questionnaire was also addressed to the EPC. The questionnaires were disseminated by the NCB in each national market, mainly by contacting the members of the national SEPA fora, payments committees, trade bodies, consumer associations and national entities responsible for receiving and treating consumer complaints concerning payments.

The answers received made reference to issues relating not only strictly to SEPA, but also to the legal framework underpinning payment instruments in general in the European Union.

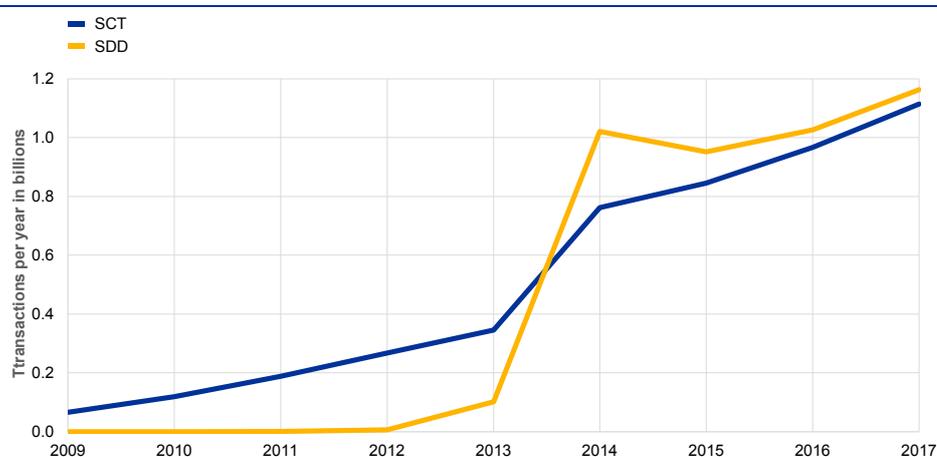
The following sections detail both the quantitative effects (from the analysis of EU payment statistics) and qualitative effects (from the results of the questionnaires) that SEPA migration has had and is still having on the European payments market.

3.1 Cross-border SCT and SDD transactions

An important indicator of the success of SEPA is cross-border use of the SCT and SDD schemes. SEPA migration focused on the migration of national schemes to a standard that allowed for seamless cross-border use for both euro credit transfers and direct debits. It was envisaged that PSPs, consumers and businesses would be able to benefit from the increased competition, harmonisation and consolidation that cross-border functionality would bring (e.g. access to euro clearing with a single account, irrespective of the location).

Chart 1

Evolution of cross-border SCT and SDD transactions in STEP2



Notes: Data courtesy of EBA Clearing, whose STEP2 platform provides pan-European clearing services for the SEPA schemes in all SEPA countries. The numbers indicated do not represent the absolute total number of cross-border SCTs and SDDs as other providers can offer pan-European services.

The above graph shows the number of cross-border payments processed by the pan-European automated clearing house (ACH) STEP2¹⁸ since the inception of the SCT and SDD schemes. It includes the migration period from 2012 to 2014, when a “Big Bang” migration took place for domestic direct debits. It clearly shows a significant increase in the number of cross-border payments, from 2009 for SCTs and from 2012 for SDDs.

SCTs

The average annual growth rate in cross-border SCTs between 2009 and 2017 was 42.4%, i.e. more than nine times the increase recorded for all credit transfers in the European Union¹⁹. Nevertheless, cross-border SCTs still only account for about 3.5% of total credit transfers in the European Union. All in all, the increase in cross-border credit transfers and particularly the acceleration in 2013-14 confirm that the migration to the SCT scheme is opening up new opportunities for both consumers and businesses when sending and receiving credit transfers in the European Union. The year-on-year increase is more or less continuous and shows no sign of coming to an end. This may be indicative of a gradual departure from the traditional national approach to payments towards a more European one, thus confirming the achievement of the goals of the SEPA migration project: to break down national barriers, facilitate competition and enable true consolidation of treasury operations for European companies.

¹⁸ STEP2 is a pan-European automated clearing house processing payments in euro. The platform is the main pan-European clearing and settlement mechanism in the Single Euro Payments Area (SEPA).

¹⁹ Data on the overall year-on-year increase in credit transfers computed from the [ECB's Statistical Data Warehouse](#) and compared with STEP2's cross-border data.

SDDs

The increase in cross-border SDDs is even more pronounced. Unlike for credit transfers, no real cross-border solutions for direct debits existed before the launch of the SDD scheme. It is therefore remarkable to see that by 2017 the number of SDDs had increased to well over 1 billion transactions, even exceeding the number of SCTs. Again, it should be noted that cross-border SDDs still only account for only 4.6% of all SDDs in the European Union.

It can be concluded that this pronounced increase was due to companies choosing more competitive PSPs and commercial partners in other SEPA jurisdictions and pan-European companies consolidating their direct debit processing in a single country. The speed of this unexpected rise clearly shows the success of the SEPA direct debit scheme in increasing competition and its ability to unlock the benefits of the Single Market. The ongoing year-on-year increase since 2015 appears to represent a steady state and also reflects increased use of the scheme by consumers opting for a single payment account for all their direct debits. Migration to the SEPA direct debit scheme was considered an extremely costly and complex implementation, with many players questioning the predicted benefits. The increase in cross-border SDDs clearly shows the value and importance of the migration to the SDD scheme.

SCT and SDD scheme use is growing year on year and is showing no sign of slowing. More and more euro payments are now made between countries of the European Union. SEPA migration has provided the foundations for facilitating an interoperable, efficient and competitive payment network in the European Union.

3.2 Consumers

In general, consumers have suggested that they have benefited from SEPA for EU cross-border payments, even though cross-border transactions are still only a small part of all payments. The speed of cross-border payments under SEPA is perceived as the most widespread benefit.

IBAN discrimination (see Section 4 on IBAN discrimination) was highlighted as the main issue relating to SEPA migration for consumers. That said, using the IBAN to identify an account is not generally an issue for consumers, even though some respondents stated that the length of the IBAN can make it difficult to remember.

Regulation (EU) No 260/2012 gives consumers additional protection for direct debits. These measures include, for example, limiting the amount, blocking certain payees and defining periodicity. Consumer awareness of these protection measures appears to be low. The unconditional eight-week refund right for SDDs could be a reason for the low awareness and use of the above-mentioned consumer protection measures. The refund right may be perceived by consumers as the only protection measure needed.

Sending payments to or receiving payments from other SEPA countries is generally working well for consumers. However, there are some reasons why consumers may be reluctant to make or receive cross-border payments. These issues may not be strictly related to the SEPA schemes, but they have the potential to inhibit the full realisation of the SEPA vision:

- higher and less transparent costs of transactions from/to non-euro SEPA countries²⁰;
- amendment/cancellation fees in the event of erroneous transactions in other countries;
- hesitation linked to foreign language and national legislation concerns.

3.3 Companies

In general businesses, mainly big companies, had a positive overall assessment of the outcome of SEPA migration, due to faster and cheaper cross-border credit transfers, in particular for euro area counterparties. Companies from outside the euro area, however, mainly stressed the better terms (e.g. execution times, non-alteration of amount) rather than the fees. To this end, on 28 March 2018, the European Commission presented a proposal to amend Regulation (EU) No 924/2009, bringing the benefits of the Regulation to people and businesses in Member States outside the euro area.

Many companies emphasised the harmonisation of domestic and EU cross-border payments brought by SEPA and efficiency gains due to the upgrading of back-office procedures (ERPs²¹ and IT interfaces). This enabled “payments factories” to be established and gains to be made in terms of IT licences, maintenance, processes and auditing costs. Smaller companies often still rely on conversion tools, which may tie them to particular providers.

Some of the respondents made a link between the SEPA migration and upcoming innovative payment solutions. In these cases, they most often referred to instant payments (SCTinst) and e-invoicing payment schemes as the next logical steps for the SEPA vision.

However, for those companies that are more focused on national markets or that still use more labour-intensive processes, the impact of SEPA was considered, at best,

²⁰ This issue is being addressed in a proposal for a Regulation of the European parliament and of the Council amending Regulation (EC) No 924/2009 as regards certain charges on cross-border payments in the Union and currency conversion charges. This proposal aims to equalise the fees for national and cross-border payments in euro to/from non-euro countries and introduce more transparency and competition to currency conversion services when consumers buy goods and services in a currency other than their own.

²¹ Enterprise resource planning (ERP) is business process management software that allows an organisation to use a system of integrated applications to manage the business and automate many back-office functions relating to technology, services and human resources.

to be neutral. This effect was to some extent a result of higher administrative burdens (e.g. for SDD mandate and collection management).

Moreover, various national business rules (e.g. additional optional services²²) or administrative requirements, applicable in some markets, prevented full-scale harmonisation. The availability of certain value-added services, such as domestic credit scoring and guarantee schemes for direct debits, also sometimes hindered further convergence. This shows that certain aspects of SEPA go beyond the harmonisation of payment technical standards and business rules and touch on other areas of financial services harmonisation in the European Union.

Companies were divided over the non-harmonisation of account statements. For the vast majority, bank/country-specific account statements were not an issue. Others, however, considered that the full benefit of SEPA could materialise with the end-to-end harmonisation of the whole payment chain (from initiation to reconciliation and booking). Without this harmonisation, establishing payment factories and changing PSPs can be complex and restrict competition.

Some companies also reported the need to extend the remittance information, which now allows for a maximum of 140 characters of structured or unstructured information.

The migration to fully standardised, pan-European schemes brought the possibility of cross-border direct debits. However, some companies pointed to the lack of eID solutions, e-mandate solutions and mandate validation services to support cross-border direct debits. Moreover, risk management measures implemented by companies make creditworthiness checks necessary when offering some payment solutions to customers. These checks are not always possible for consumers living in other EU countries because, unlike with other payment methods, the beneficiary of a direct debit does not obtain any payment guarantee from the payment service provider. Appropriate credit analysis under roughly equivalent conditions is also not feasible in all EU countries. This could lead to a situation where certain payment methods are not offered to all customers.

Respondents highlighted some practical issues preventing them from using a single payment account:

- KYC/AML requirements;
- language barriers;
- different settlement cycles in the market infrastructures;
- payment of tax and customs fees.

All in all, from the perspective of corporates and businesses, the standardisation delivered with SEPA has indeed contributed to increasing efficiency but does not yet allow larger businesses to fully centralise their treasury operations.

²² [European Payments Council SEPA Credit Transfer Additional Optional Services](#).

3.4 Public administrations

Overall, public administrations migrated successfully and on time to SEPA. This was the result of intensive national SEPA migration projects and huge investment in the modernisation of their administrations and payment engines.

The main results that public administrations have attributed to SEPA migration are the streamlining and modernisation of their payment processes, with clear benefits arising from the (i) centralisation of treasury functions; (ii) centralised management of direct debit mandates and simplified processes for validating direct debit mandates; and (iii) reduction in payment error through the use of IBANs.

Public administrations also see the benefits of SEPA in terms of competition. The majority of respondents reported a decrease in the cost of cross-border payments, with the overall service level improving. Due to the mandatory common data elements, the majority of public authorities noted that reconciling payments became easier, processing faster, data quality better and payer identification easier, and that the standardisation of R-transactions was more informative.

A specific point of attention for public administrations is the maximum of 140 characters of structured or unstructured remittance information in a SEPA payment message. This remittance information is sometimes too short.

3.5 Credit institutions and other PSPs

In general, PSPs have a positive view of the migration to SEPA and the dynamism that it has created in the European payments market. They note, however, that SEPA migration was expensive and required significant changes to IT systems and business processes. The EPC – the SEPA schemes' owner – emphasised the wide reachability of SEPA schemes, the large-scale adoption of ISO standards (e.g. IBAN, ISO 20022), the new possibility for cross-border collection via direct debits, the increased competition among PSPs and the new models for payment processing (e.g. via payment factories) as direct benefits of the migration.

One of the main challenges identified by PSPs was their great responsibility in relation to migration vis-à-vis their customers' migration as well as ensuring contingency measures for latecomers. While some PSPs cited the nationwide project management structures and communication platforms as critical factors for successful migration, others felt that too much of the migration burden was placed on PSPs to migrate their customers.

A somewhat contradictory stance on timing was observed: the period of self-regulation was considered too long, but conversely the mandatory deadlines were considered too short. An alignment of the migration period with typical IT investment cycles (e.g. 3-4 years) could have provided better buy-in for PSPs as well as ensuring the availability of IT resources.

To support the IBAN-only rule, where payers only need to use the payee's IBAN to initiate a payment, most PSPs decided to rely on third-party providers to derive the BIC code²³ needed to route the payment in the interbank space. After initial adjustments and updates, these third-party services and the associated IBAN to BIC derivation directories have reached acceptable quality levels. Most PSPs consider that BIC derivation functions well, even though in some countries BIC derivation services can still produce ambiguous results, preventing straight through processing (STP) of the affected payment. Moreover, it takes some time for directories to be updated following mergers and acquisitions.

Many PSPs agreed that under certain conditions multilateral interchange fees (MIFs) for R-transactions could contribute to efficient organisation of the SEPA SDD scheme. For the debtor banks, the processing of R-transactions – at least for some specific types – still requires manual intervention, and this intervention can be costly. A fee paid by the creditor bank to the debtor bank could cover part of these costs and, if passed on to creditors, could serve as an incentive for proper handling of collections. In practice, however, setting MIFs was seen by PSPs as a challenge in terms of both reaching agreement on the level of fees and the acceptance of these fees by end users.

Overall, PSPs' view of SEPA migration and of the future of SEPA is positive. They underlined the continued improvement of the existing SEPA schemes via updates to the EPC's scheme rulebooks, implementation of instant payments and P2P mobile payments, the possibility of pan-European electronic invoice presentment and payment (EIPP) services, and other standardisation initiatives.

3.6 Market infrastructures

Market infrastructures²⁴ observed that harmonisation in the processing of retail payments in euro has been substantially achieved through SEPA migration.

The main impacts of SEPA migration on market infrastructures' positioning in the European market were higher cross-border compatibility and the rise of economies of scale, due to the underlying harmonisation of payment instruments based on the common SCT and SDD schemes. These schemes have laid the foundations for pan-European market infrastructure providers and have ensured a level playing field where they can compete. Infrastructures thus have the ability to expand their reach and offer competitive services in other jurisdictions. That said, only a few market infrastructures actually offer services at pan-European level, and many PSPs connect through separate infrastructures to facilitate domestic and pan-European reach. Multiple access routes to ensure reachability are not ideal and may increase costs for PSPs. As such, interoperability of retail payment infrastructures is perceived

²³ ISO 9362 defines a standard format of business identifier code (BIC) approved by the International Organization for Standardization (ISO). It is a unique identification code for both financial and non-financial institutions.

²⁴ Market infrastructures are systems used for the trading, clearing and settlement of payments, securities or derivatives.

as an area that can still be improved further. In general, transaction volumes processed via the links established between market infrastructures in the European Union have increased. However, some market infrastructure business rules and procedures still need to be updated to facilitate interoperability. Other issues reported by market infrastructures deal with the difficulty of implementing “interoperability by design” of new solutions (e.g. mobile payments, e-invoicing solutions) given that domestic solutions are developed within the national context and focused on local habits and user preferences.

4 Post-SEPA migration challenges

As noted above, market stakeholders have reported that the impact of SEPA migration has been positive and the migration to the SCT and SDD schemes has been successfully accomplished. Post-migration challenges identified by stakeholders have been addressed through ERPB recommendations²⁵.

4.1 IBAN discrimination

One of the main objectives of SEPA is for citizens and enterprises to be able to pay in euro with a single payment account and one set of harmonised payment instruments, anywhere in the European Union. However, after migration to SEPA in 2014, consumers and businesses were confronted with the phenomenon of IBAN discrimination. IBAN discrimination is where an IBAN from another EU country is not accepted by either the payer or the payee for a direct debit or a credit transfer payment. Multiple reasons have been given as to why this practice still exists today, despite being prohibited under Article 9 of EU Regulation No 260/2012²⁶.

- Payers/payees being unaware of their obligations to accept payments from other European Member States.
- Legacy business IT software. This is especially evident in paper and internet forms, which tend to hardcode a particular IBAN country code.
- Businesses being unable to check the creditworthiness of consumers living in another European Member State and hesitant to start complex, possibly expensive cross-border legal procedures in the event of incorrect direct debit refunds or non-payments.
- Lack of widely available electronic identification schemes recognised at cross-border level.

²⁵ [ERPB recommendations on SEPA post-migration challenges](#)

²⁶ Article 9 of EU Regulation No 260/2012 states that a payer/payee shall not specify the Member State in which that payment account is to be located.

- National specificities, especially as they relate to public administrations, may impose obstacles to using non-domestic IBANs, by requiring the use of national IBANs in specific payments such as taxes or customs fees.
- Lack of harmonisation of SEPA payment messages in the consumer-to-business (C2B) space. Some businesses still use conversion services to convert their bulk payment files to the SEPA XML ISO 20022 format. These conversions might only accept domestic IBANs.

IBAN discrimination is not a new problem and, within their respective competences, the ERPB, the European Commission and the national competent authorities have already addressed the issue²⁷. This has resulted in the resolution of many outstanding IBAN discrimination cases.

Most Member States now have measures in place to address the issue, including appropriate sanction regimes. The ERPB relaunched awareness campaigns about the obligation for creditors to accept foreign IBANs. Members of the ERPB have taken the issue to national SEPA/retail payments fora and in most countries have sent letters to relevant stakeholder groups raising awareness by emphasising the importance of both the spirit and the letter of the relevant SEPA legal requirements. Similarly, the European Association of Corporate Treasurers and the representatives of public administrations have followed up by sending letters to their constituencies highlighting the legal requirements in relation to IBAN discrimination and the importance of complying with Regulation (EU) No 260/2012.

The issue may also be important in the light of Regulation (EU) No 2018/302 on addressing unjustified geo-blocking, which states that “a trader shall not, within the range of means of payment accepted by the trader, apply, for reasons related to a customer’s nationality, place of residence or place of establishment, the location of the payment account, the place of establishment of the payment service provider or the place of issue of the payment instrument within the Union, different conditions for a payment transaction.”

4.2 Pan-European SEPA direct debit electronic mandates

The SEPA direct debit is a popular payment instrument in the majority of euro area countries. It is used primarily for recurring payments but can also be used for one-off transactions at the point of sale. The SDD replaced legacy local direct debit schemes in 2014 and now facilitates full European reach and allows payees to collect domestic and cross-border direct debits within the European Union. The SDD requires preauthorisation by means of a (paper or electronic) mandate signed (physically or electronically) by the payer.

The SDD payment scheme developed by the EPC depicts the e-mandate process as an optional feature complementing the scheme. To foster the efficiency of the SDD

²⁷ The European Commission has mandated Member States to designate competent authorities to enforce Article 9 of Regulation (EU) No 260/2012.

scheme and to reduce the cost to businesses that would like to collect payments across national borders, the ERPB investigated the pan-European use of electronic mandates for the SDD scheme. The ERPB consequently issued several recommendations (ERPB/2014/rec21-27)²⁸ in both the business and technical domains on harmonising cross-border electronic mandates.

Further improvement of the situation depends on national payments committees encouraging SDD creditors to use harmonised cross-border electronic mandates.

4.3 SDD R-transactions

For PSPs and payees, it is important to know why a direct debit is returned. The SDD scheme rulebook²⁹ defines clear reason codes to be used when the payer's bank returns a direct debit. However, it seems that there are different interpretations of the applicable reason codes, and due to privacy rules the use of certain reason codes is restricted in some countries. This reduces PSPs' ability to process direct debit R-transactions in an STP manner and increases costs due to manual intervention. The ERPB recommended that the EPC monitor the use of R-transactions and act if issues are detected. Subsequently, the EPC recently produced a clarification paper on SDD R-transaction reason codes³⁰. To date the EPC has received no complaints or further information regarding potential misuse of R-transaction codes.

That said, the issue of certain reason codes being restricted from use due to country-specific privacy laws remains unresolved. The EU Forum of National SEPA Coordination Committees and European Commission Expert Group on Banking, Payments and Insurance have addressed this issue in their meetings, where Member States confirmed that the restrictions on communicating information relating to payers' accounts and the use of a "miscellaneous" R-transaction reason code are linked to national laws on data protection. It was noted that both the Data Protection Directive and the General Data Protection Regulation (GDPR) are horizontal in nature and do not provide for tailored solutions for any one sector of the economy. However, account data relating to R-transaction codes can be transmitted between banks as long as there is a legal ground (e.g. a contract, national or EU law or legitimate interest on the part of the controller) for the processing of the data for a specific purpose. The application of the GDPR will reduce the existing fragmentation of data protection law and could therefore contribute to overcoming the current obstacles to personal data sharing between banks for SDD R-transaction purposes.

R-transaction fees were also highlighted as an ongoing issue, as there are no harmonised practices for fee collection by debtor banks. Most banks agree that under certain conditions MIFs for R-transactions contribute to efficient organisation

²⁸ [Report on the Pan-European Use of Electronic Mandates for SEPA Direct Debit - Issues and the Way Forward.](#)

²⁹ [SEPA Direct Debit Core rulebook and implementation guidelines.](#)

³⁰ [European Payments Council Guidance on Reason Codes for SDD R-Transactions.](#)

of the SDD scheme, as processing return R-transactions, at least for some specific types, still requires manual intervention and may be costly. The interchange fee paid by the creditor bank to the debtor bank covers part of these costs and, if passed on to creditors, can serve as an incentive to handle collections better and make more efficient use of the SDD scheme. However, these fees are not always transparent³¹ and tend to vary across the European Union. To this end, it would be beneficial if debtor PSPs were more transparent towards creditor PSPs concerning the level of fees they impose for processing R-transactions.

4.4 Remittance information

Some corporates reported the need to extend the remittance information (both unstructured and structured information) to allow the automated transmission of all the information with the payment message, thus enabling end-to-end STP of payments (from order to reconciliation).

Those corporates pointed to the need for: i) multiple occurrence of structured remittance information (one payment referring to multiple invoices or credit notes); ii) both structured and unstructured remittance information, to allow payees with different reconciliation capabilities to operate within the same payment message structure; iii) more characters in the unstructured remittance information, which is used by consumers to communicate the details of their payments.

Extension of the remittance information is being currently considered as part of the ongoing change management cycle of the EPC rulebooks, as an optional feature of the SCT scheme. Under this scenario, participants wishing to offer the rulebook extension of the remittance information option would have to formally declare their intention to the EPC and support this option, at least in the role of beneficiary bank.

5 Conclusion

The euro became the single currency for the euro area in 1999, with euro notes and coins being introduced in 2002. This provided consumers with the ability to pay, in cash, across borders in a single currency. Seamless electronic cross-border payments in euro were only achieved after the completion in August 2014 of one of the biggest payment integration projects in the world: the SEPA migration project for euro credit transfers and direct debits for euro area countries. This report has outlined why this migration was necessary, the details of how the migration was made possible and the impact the migration has had on the retail payments market.

The number of cross-border SCTs has been steadily increasing since the inception of the SEPA schemes in 2008/09. This is a clear sign that SEPA is dismantling national barriers in the European payments market. The growing volumes of cross-

³¹ Regulation (EU) No 260/2012, which notes that interchange fee for R-transactions should cover the cost of processing only.

border SDDs clearly show that companies and consumers are using PSPs in other jurisdictions for direct debits and thus benefiting from SEPA. The qualitative results gathered from the Eurosystem's survey of all players in the payment chain clearly show a positive view of the impact of SEPA migration, with most noting streamlining of back-office procedures and significantly enhanced measures to protect consumers.

The migration has led to the creation of pan-European PSPs offering competitive services and has facilitated the move towards global standards (ISO 20022) for payment processing, with Europe now leading the way on global payment interoperability.

The SEPA migration project can thus be considered a success, both in terms of project completion, with all euro credit transfers and direct debits in the European Union now harmonised to a globally recognised standard, and in terms of the quantitative and qualitative impact the migration has had on European payments users.

There is now no distinction between national and cross-border credit transfers and direct debits in euro, and companies have a choice when selecting their PSP partners and are no longer restricted to national players.

PSPs and businesses can leverage the significant payment standardisation brought by SEPA to drive further competition, process automation and ease of payment within and across EU Member States.

European consumers can use the same payment account for all transactions in euro across the European Union, shifting their mindset from domestic to European and opening up scope for competitive pan-European PSPs that reduce payment and banking costs.

Following SEPA migration, public administrations have improved payment STP, centralising their bank account structures. This has resulted in more efficient cash pooling structures and lower payment fees.

However, while noting the success of the project, the following post-migration challenges were identified by stakeholders:

- eliminating IBAN discrimination;
- developing interoperable electronic mandate solutions for SDD;
- increasing transparency for SDD R-transaction fees;
- facilitating more structured remittance information.

The ERPB has issued recommendations to address these challenges and these recommendations are currently being followed up by the European payments industry and European institutions.

It must be noted that the full benefits of SEPA migration and the opportunities it will bring are still to be realised in their entirety. It will take time for PSPs, businesses and consumers to adapt the whole of their processes, structures and IT systems to reap the full benefits of SEPA and the new opportunities it affords. SEPA is not yet finalised, but is a work in progress. It is important that its achievements are maintained and enhanced.

After successfully completing the migration phase, it is important that the European payments industry keeps up the momentum to achieve full integration of the European payments market. In fact, SEPA migration has also laid the foundations for successful payment innovations that can now be based on harmonised payment schemes for euro payments. Opportunities to start payment innovation on a pan-European scale now exist and are being exploited.

For example, the development of pan-European instant payments in euro throughout the European Union via the SCT instant payments scheme would not have been possible without SEPA migration. Instant payments are already available in the market and will open the door to new or significantly improved payment services. These services will include enhanced person-to-person mobile payments, new possibilities to pay at the point of sale and interlinking with payment initiation services³² to remove costly payment guarantees.

In the context of growing technical complexity of payment services in Europe, one of the lessons that can be learnt from the SEPA project is that technical standardisation and/or scheme development is ideally completed before the inception of legislation to mandate its use. Regulation (EU) No 260/2012 benefited from the efforts made by market players to identify and develop new rules and standards, enabling regulators to legislate for existing schemes.

However, while SEPA has led to a fully integrated market for credit transfers and direct debits, the card payments market in Europe remains significantly fragmented. National card schemes cannot be used in other EU jurisdictions. SEPA for cards has not been achieved, with European consumers fully reliant on international schemes to provide European reachability. Additionally, international schemes are the only card payment solution in some EU countries.

Given that cards are the single most important electronic payment method in Europe, a European approach to governance, moving away from the current national focus, would ensure all parties reap the benefits of SEPA in the cards domain.

The ESCB is maintaining its commitment to supporting market initiatives aimed at achieving interoperability of national card schemes. However, these initiatives need to show tangible results and enable the vision of being able to pay with any domestic European card at any payment terminal across Europe to be realised. It is thus vitally important that SEPA is fully completed.

³² A payment initiation service is an online service that accesses a user's payment account to initiate the transfer of funds on their behalf with the user's consent and authentication.

Annex

Complaints about IBAN discrimination should be addressed to the respective competent authorities responsible for ensuring compliance (see **Table 1**).

Table 1

Competent authorities responsible for ensuring compliance – Article 10 of Regulation (EU) NO. 260/2012

Member State	Name of organisation	Web address
Belgium	The National Bank of Belgium	www.nbb.be
	The Federal Public Service Economy, SMEs, Self-employed and Energy	www.economie.fgov.be
Bulgaria	Bulgarian National Bank	www.bnb.bg
Czech Republic	Czech National Bank – Česká národní banka	www.cnb.cz
Denmark	Danish FSA (Finanstilsynet)	www.dfsa.dk
	Danish Competition and Consumer Authority (Konkurrence- og Forbrugerstyrelsen)	www.kfst.dk
Germany	Federal Financial Supervisory Authority – Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin)	http://www.bafin.de/EN/Verbraucher/BeschwerdenAnsprechpartner/beschwerdenansprechpartner_node_en.html#doc7858_222bodyText5
	Bundesamt für Justiz	https://www.bundesjustizamt.de/DE/Themen/Buergerdienste/Verbraucherschutz/Liste-qualifizierter-E/ListeQE_node.html
Estonia	Financial Supervision Authority (FSA)	www.fi.ee
	Estonian Consumer Protection Board (CPB) (only for Article 8)	http://www.tarbijakaitseamet.ee/
Ireland	Central Bank of Ireland	www.centralbank.ie/about-us/Pages/ComplaintsagainstFinancialServiceProviders.aspx
	Competition and Consumer Protection Commission	http://ccpc.ie/get-touch
Greece	Bank of Greece	www.bankofgreece.gr
Spain	Banco de España	www.bde.es E-mail: paymentsystem@bde.es
	Agencia Española de Consumo, Seguridad Alimentaria y Nutrición (AECOSAN)	http://www.aecosan.msssi.gob.es/en/AECOSAN/web/home/aecosan_inicio.shtml or http://aesan.msssi.gob.es/SIAC-WEB/contacto.do?reqCode=newSearch
		Post: Subdirección General de Coordinación, Calidad y Cooperación en Consumo AECOSAN Príncipe de Vergara, 54. 28006. Madrid
France	Ministère de l'Economie et des Finances - Direction générale de la concurrence, de la consommation et de la répression des fraudes (DGCCRF)	http://www.economie.gouv.fr/dgccrf
	Autorité de contrôle prudentiel (ACP)	http://www.acp.banque-france.fr/accueil.html
	Banque de France	http://www.banque-france.fr
Croatia	Croatian National Bank	http://www.hnb.hr/
	Ministry of Finance (Financial Inspectorate - compliance with Article 9 of the Regulation 260/2012)	http://www.mfin.hr/en

Italy	Banca d'Italia	www.bancaditalia.it Post: Bank of Italy Markets and Payments System Supervisory Service Division for Retail Payment Instruments and Services Via Nazionale 91 I-00184 Rome Certified e-mail: smp@pec.bancaditalia.it or bancaditalia@pec.bancaditalia.it Conventional e-mail: SMP201@bancaditalia.it or email@bancaditalia.it
	Autorità Garante della Concorrenza e del Mercato (AGCM)	http://www.agcm.it/en/ Post: Directorate General for Consumer Protection Directorate B, Communications, Finance and Insurance, Posts and Real Estate Tel.: (+39)0685821865 Certified e-mail: protocollo.agcm@pec.agcm.it Complaints web page (prior registration required): http://www.agcm.it/component/users/?view=login&return=L2ludmlhLXNlZ25hbGF6aW9uZS1vbmhpbmUuaHRtbA== (accessible via the "Segnala on line" link at the top right of the home page).
Cyprus	Central Bank of Cyprus	www.centralbank.gov.cy
	Competent Authority for complaints concerning payment services users	Interministerial Committee (Ministry of Finance) as per the procedures set out under Article 15 of the national law http://mof.gov.cy/assets/modules/wnp/articles/201707/314/docs/lopoiisis_eniai_ou_xoro.pdf Post: Chair of Interministerial Committee Michael Karaoli & Gregori Afxentiou 1439 Nicosia Cyprus
Latvia	Financial and Capital Market Commission	www.fktk.lv
	Consumer Rights Protection Centre (PTAC)	http://www.ptac.gov.lv/en/content/contacts
Lithuania	Bank of Lithuania	http://www.lb.lt/ E-mail: sepa@lb.lt Tel: +370 5 268 0806
Luxembourg	Commission de Surveillance du Secteur Financier (CSSF)	http://www.cssf.lu/consommateur/reclamations/ or http://www.cssf.lu/fileadmin/files/Formulaires/Reclamation_24_0615_FR.pdf
Hungary	National Bank of Hungary - Magyar Nemzeti Bank	http://www.mnb.hu/
Malta	Central Bank of Malta	https://www.centralbankmalta.org/the-sepa
Netherlands	The Dutch Central Bank (for Articles 3,4,5,6,9)	www.dnb.nl
	Authority for Consumers and Markets (ACM) (for Article 8)	http://www.acm.nl/
Austria	Österreichische Finanzmarktaufsichtsbehörde – FMA	http://www.fma.gv.at/
Poland	KNF - Polish Financial Supervision Authority	http://www.knf.gov.pl
Portugal	Banco de Portugal	www.bportugal.pt
	Autoridade da Concorrên	www.concorrenca.pt
Romania	National Bank of Romania	www.bnro.ro
Slovenia	the Bank of Slovenia	www.bsi.si
Slovakia	National Bank of Slovakia (for complaints concerning most Payment Services Providers)	www.nbs.sk or https://www.nbs.sk/en/consumer E-mail: info@nbs.sk Tel: +421-2-5787-1111
	Ministry of Justice (for complaints concerning the National Bank of Slovakia, public authorities, local government authorities, municipalities and higher territorial units)	www.justice.gov.sk or https://www.justice.gov.sk/Stranky/Informacie/Poskytovanie-informacii.aspx Tel: +421-2-8889-1111

	Slovak Trade Inspectorate (for complaints concerning payment services users)	www.soi.sk info@soi.sk + 421-2-5827-2132 (Consumer Protection Department)
Finland	Financial Supervisory Authority Finnish Consumer Agency / Ombudsman	www.fin-fsa.fi www.kkv.fi
Sweden	FSA - Finansinspektionen	http://www.fi.se
United Kingdom	Financial Services Authority	www.fsa.gov.uk

Notes: The information provided for in this table is based on the notifications received from Member States (since June 2016). No notifications so far for the EEA countries Iceland, Liechtenstein, Norway.

© European Central Bank, 2019

Postal address 60640 Frankfurt am Main, Germany
Telephone +49 69 1344 0
Website www.ecb.europa.eu

All rights reserved. Reproduction for educational and non-commercial purposes is permitted provided that the source is acknowledged.

For specific terminology please refer to the [ECB glossary](#).