BANCA D'ITALIA
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Institutional Issues

SEPA and its impact on the Italian payment system

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1 The need for an integrated market for retail payments

The introduction of the euro led to a radical transformation of the payment systems in countries which had given up their national currencies; this process, with different procedures and timelines, involved the settlement systems for interbank transfers ("large-value" transactions) and those dealing with payments made by bank customers ("retail" transactions).[1]

In view of the adoption of the euro, the central banks of the Eurosystem set up an integrated payments system for monetary policy operations and the settlement of interbank transactions in euros (Trans-European Automated Real-Time Gross Settlement Express Transfer System – TARGET). By allowing the immediate and definitive transfer of money, the TARGET (and subsequently the TARGET2) system facilitated the immediate alignment of short-term interest rates on interbank loans and, in this way, the effective conduct of the single monetary policy.

Retail payment systems, instead, have continued to operate on a national basis: each country has maintained its rules, instruments, technical infrastructure and various operating payment schemes, originally planned to respond to the needs of the individual communities. The retail payments market has therefore been characterized by a heterogeneous set of systems, within which the increasing growth of cross-border transactions in the euro area could be settled only by means of bilateral agreements between intermediaries or, in the case of cards, by using consolidated international schemes. As a result, for a long time the provision of payment services to customers remained very similar to how it was before the introduction of the euro, without any cost reductions for cross-border transactions.

In response to this problem, a proposal from the European Commission led to a Regulation in 2001 requiring intermediaries to apply the same charges to retail cross-border payments in euros as for domestic payments.[2] Nevertheless, intervening exclusively on supply conditions and ignoring how the national infrastructures were organized led to the risk of an increase in the average price of services, without any efficiency gains.

For these reasons, and in view of the broader benefits related to full integration, the Commission and the European System of Central Banks (ESCB) promoted the Single Euro Payments Area (SEPA) project to change the structure of the payments market. SEPA applies common rules, operating procedures and market practices regarding the execution and receipt of payments in euros; it includes the twenty eight countries of the European Union and the three countries of the European Economic Space (Iceland, Norway and Lichtenstein), Switzerland, and the Principality of Monaco. The project fosters the development of electronic instruments with social costs that are lower than

1 The euro was adopted at the start of 1999 for transactions made on the money and financial markets and for the settlement of interbank transactions. Then, at the start of 2002 the euro was introduced for the excecution of retail payments and became legal tender as the single currency.

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

those for paper-based instruments (Table 1) and which are flexible enough to encourage integration through innovative channels for the sale of goods and services such as mobile shops and e-commerce.[3]

Table 1

COST OF PAYMENT SERVICES TO THE COMMUNITY (1)

(euros per transaction)

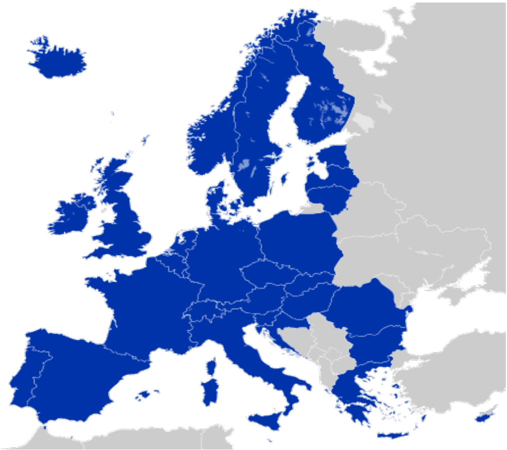
	Electronic instruments				Paper instruments	
	Debit cards	Credit cards	Electronic credit transfers	Direct debits	Cheques	Traditional credit transfers
Italy	0.74	1.91	0.82	0.94	3.54	2.21
Europe						
lowest	0.18	0.48	0.30	0.14	2.39	1.03
average	0.70	2.39	0.61	1.27	3.55	2.78
highest	3.40	8.65	0.98	2.49	6.10	12.07

Based on ECB data (European Central Bank, 2012).
(1) The costs to the community were calculated by summing the costs to the various parties involved in the production cycle and in the use of the payment services: banks, payment infrastructures and users. Basically, these are costs that the community bears because of the resources used by the various economic agents in the process of payment settlement. Any savings in social costs for payment services would release resources not only for the banks and payment infrastructures but also for the final users. The resources could be used to increase productivity, generate innovation and encourage the final consumption of goods and services.

The size of the potential user base and the volume of payments involved are immediate proof of the challenges to be addressed by the stakeholders involved: payment service providers, businesses, authorities, and consumers (see Figure 1).

Figure 1

SEPA IN FIGURES (IN 2012)



Countries: 33*
EU: 28
Euro area:17
European Economic Area: 3
Others: 2

Users: 520 million
Firms: 20 million
Citizens: 500 million
Financial intermediaries: 9,300

Number of transactions (*billions*)
Credit transfers: 26 (Euro Area: 17)
Direct debits: 23 (Euro Area:19)
Cards: 40 (Euro Area: 24)
Value of transactions (*trillions of euros*)
Credit Transfers: 230 (Euro Area: 121)
Direct Debits: 18 (Euro Area:17)
Cards: 2 (Euro Area: 1)

Source: ECB Statistical Data Warehouse, 2012.
* Updated to 2013.

3 In the context of the ESCB, a survey was conducted on the social costs of the most frequently used retail payment instruments in order to measure their relative efficiency. The aggregate results at European level were recently published by the European Central Bank (ECB 2012); the results from the exercise conducted with Italian data were published by the Bank of Italy (Banca d'Italia, 2013). These analyses confirm that electronic payments cost less than their paper equivalents, as discerned in previous studies (Humphrey et al. 2003, 2006 and Carbo Valverde et al. 2004).

2 SEPA and the reform of the payments market in Europe

2.1 Launching the project

SEPA was developed along two closely interconnected lines:

- SEPA for instruments - definition of payment schemes to be used in a uniform way throughout the entire area;
- SEPA for infrastructures - the adjustment of payment and settlement infrastructures with the aim of ensuring that all potential European counterparties are reachable (SEPA for infrastructures) (see the box "European service providers and reachability").

European service providers and reachability

The establishment of a network to facilitate the exchange of payments between European service providers was the most important commitment for the payment infrastructure managers. Various models were proposed to overcome national segmentation (European Central Bank, 2001): (i) a single European infrastructure - the Pan-European Automated Clearing House (PE-ACH) for national and cross-border traffic, set to replace national payment infrastructures; (ii) a PE-ACH for cross-border traffic, to collaborate with national infrastructures; (iii) the definition of interoperability agreements between national clearing houses for cross-border transactions; and (iv) correspondent banking. In line with these indications the European Payments Council (EPC) set the requirements for establishing the constitution of a PE-ACH, taken in reference to the EBA Clearing company to create in 2001 the European retail payment clearing and settlement system – Step2. However, the Eurosystem considered that a single PE-ACH was not enough to guarantee full integration of the European market ("the Eurosystem expects that banks, as users or as shareholders of the existing systems, will impose a SEPA choice. This may include the decision to close the system and to move to another infrastructure or to transform proven and efficient national arrangements into a PE-ACH-compliant system"; European Central Bank, 2004). The national payment infrastructures therefore proposed an alternative to the PE-ACH model, consisting of a network of interconnected systems, respecting the interoperability standards drawn up by the European Automated Clearing House Association (EACHA). As a result, the EPC updated the reference framework (the PE-ACH/CSM framework), proposing a mixed system combining the two originally-proposed models (i and iii).The Commission has recently established the interoperability requirement for infrastructures.

From the start, the project has been characterized by the interaction between policy indications and market responses, cooperation and regulatory interventions. The difficulty in coordinating the stakeholders (payment service providers, infrastructures, public sector, businesses and consumers) and the need for the authorities to intervene are factors inherent in the nature of payment system network economics, in which the positive externalities (using the system becomes more advantageous as the number of users grows) are associated with the negative ones (the risks perceived by individual stakeholders are fewer than the actual risks, which are amplified by the nature of the system).[4] The role of the various stakeholders and their contribution to SEPA is summarized in Table 2.

Table 2

THE ROLE OF THE DIFFERENT STAKEHOLDERS IN SEPA

	Market	Eurosystem		European Commission
Harmonization of procedures for processing European payments	Rulebook SCT/ SDD, 2006 PE-ACH/CSM framework, 2008 SEPA cards framework, 2009	SEPA for Cards, 2006 ToR for the SEPA compliance of infrastructures, 2008 www.ecb.europa.eu/paym/sepa/elements/compliance/html/index.en.html	Progress Reports (ECB 2000, 2003, 2004, 2006, 2007, 2008, 2010a) National migration plans www.ecb.europa.eu/paym/sepa/about/countries/html/index.en.html	SEPA incentives paper (CE 2006) SEPA: potential benefits at stake (Capgemini 2008)
Sharing on the part of users of the solutions they adopted	EACT standards BEUC position paper, 2009			
Harmonization of the legal framework				PSD, 2007 Reg. EC 924/2009

In June 2002, the European banking industry began to guide the project with the establishment of the European Payments Council (EPC), the decision-making and coordination body for the realization of SEPA.[5] The EPC has developed new standards, which are published in its Rulebooks, for the processing of SEPA credit transfers (SCTs) and SEPA direct debits (SDDs), and a framework for SEPA card payments. It has also drawn up a framework for European settlement infrastructures, proposing organizational models to facilitate financial intermediaries in ensuring reachability to and from all European counterparties.

In this phase, the Commission and the Eurosystem have played an active role in facilitating the market convergence process towards common standards, with each pursuing its own institutional aims: for the Commission, the strengthening of competition in the retail banking services market; for the Eurosystem, support to the promotion of a reliable and efficient payment system. The Commission has provided the market with guidelines and analyses of the economic impacts of SEPA; it has fostered occasions for the various stakeholders to meet (by participating in the work of the EPC and by organizing discussion fora); it has coordinated communication activities (at European and national level) and has promoted the dissemination of European payment instruments to businesses and the public sector. The Eurosystem has constantly followed the development of the project, verifying the state of progress of the initiative via the quantitative and qualitative indicators and guiding the market with the publication of periodical reports.

On numerous occasions (conferences, ad hoc speeches, and publications)[6] the Commission and the Eurosystem have informed the market of the main lines of

4 For an analysis of the economic theory of payment systems, see Tresoldi (2005) and ECB (2010b).

5 European Payments Council (2002).

6 For a full picture of the initiatives undertaken by the Commission and the Eurosystem, see:
- http://ec.europa.eu/internal_market/payments/sepa/role/index_en.htm;
- http://www.ecb.europa.eu/paym/sepa/stakeholders/eurosystem/html/index.en.html.

development of SEPA and the results achieved. In 2006, in particular, the EPC was invited to involve users (businesses and consumers) in the discussions and decisions regarding the new standards and to look for technologically innovative solutions.[7]

To prevent the use of SEPA schemes tightening or reducing the services offered in respect of national systems, it is possible for user groups to develop additional optional services (AOSs). While responding to the needs of small groups, the AOSs are consistent with SEPA schemes and can also be adopted easily by financial communities other than those that originated them. Therefore AOSs are an innovation that can facilitate the integration process (see the box "Additional optional services (AOSs): the SEPA-compliant Electronic Database Alignment (SEDA)").

Additional Optional Services (AOSs): the SEPA-compliant Electronic Database Alignment (SEDA)

The AOSs are additional features which complement the basic SEPA schemes, responding to the specific needs of the single financial communities. The choice to use an optional service does not prevent counterparties, which do not use it, from making payments. In order to improve the SEPA direct debit (SDD) service, at the request of firms, the Italian Banking Association promoted the SEPA-compliant Electronic Database Alignment (SEDA). SEDA has two mandates databases that mirror each other, one at the creditor firm (as foreseen by the SDD) and the other at the debtor's bank. SEDA allows the creditor firm to delegate the debtors' banks to collect, keep amend and cancel mandates. A link between the two databases allows the exchange of information on the mandates issued and before the first payment is made. The service can be used by Italian and foreign companies, as long as the reference bank, be it Italian or foreign, has joined the scheme. The activation of SEDA will be connected to the Advance Mandate Information (AMI), which was introduced as an option by the EPC. The list of AOSs, the proposing communities and their characteristics are published on the EPC's website. The services on offer include:

- ***Structured Remittance Information, Belgium**: facilitates the automatic reconciliation of remittances*
- ***SEPA Credit Transfer Reversal, France**: allows the automatic reversal of credit transfers if there is an error*
- ***SEPA CT acceptance date, Finland:** allows the inclusion of an "acceptance date" for a credit transfer*
- ***SEPA CT invoicing, Finland**: facilitates the automatic reconciliation of invoices and credit notes*
- ***Greek alphabet, Greece**:uses the Greek alphabet in SCT messages*
- ***SEPA Credit Transfer Routing, Italy**: facilitates a change of account when moving to another bank*

7 European Commission/European Central Bank (2006).

The harmonization of the legal framework of the internal payments market, a precondition for full integration, advanced decisively in 2007 with the approval of the Payment Services Directive (PSD), which established harmonized rules for the execution of all payments. This directive provides the legal framework for SEPA with which it shares two fundamental objectives: innovation in the provision of payment services and an increase in the competition in the market.[8]

In 2009 the Commission drew up a timeline for SEPA initiatives, focusing attention on the role of public authorities.[9] The document outlined the following objectives:

- to minimize the period of co-existence between national and pan-European formats;
- to raise awareness of SEPA products among all stakeholders;
- to define the various stages and timings of the project clearly and precisely;
- to promote the use of the internet and mobile phones to make payments and encourage the use of electronic invoices;
- to ensure levels of standardization, interoperability and security consistent with the development of the project;
- to define efficient governance structures for SEPA.

In order to implement the above, in 2010 the SEPA Council was established, co-chaired by representatives of the European Commission and the European Central Bank, with the joint participation of members representing demand (consumers and business) and supply (banks and other payment service providers).

2.2 *The regulatory phase*

The adoption of SEPA standards has not however been entirely satisfactory, mainly because of two factors. On the one hand, the critical phase of the SEPA project coincided with the worsening of the financial crisis, which reduced the resources available for investment in reconversion and innovation of stakeholders' lines of activity. On the other hand, the pre-existing structure has maintained its role: the national infrastructures are still fully operational; SCTs and SDDs have rarely been used. At the end of 2011

8 The Payment Services Directive – PSD (2007/64/EC) defined a common legal framework for the member states of the European Union, obliging countries to modify their own legal rules in order to a) make payment services uniform and b) broaden the range of payment service providers. As regards the first point, the Directive gives definite and standard times for the execution of a payment transaction; transparency is increased by banning forms of implicit charging (through "value dates" for example); it reinforces protection for users, but helps them to be more informed in their relations with financial intermediaries; the direct responsibility of service providers to their clients is increased. As regards the second point, the Directive introduces a new kind of financial intermediary specialized in payment services – "payment institutions" – which are subject to an ad hoc prudential regime and allowed to carry out non-financial activities as well (mixed business).

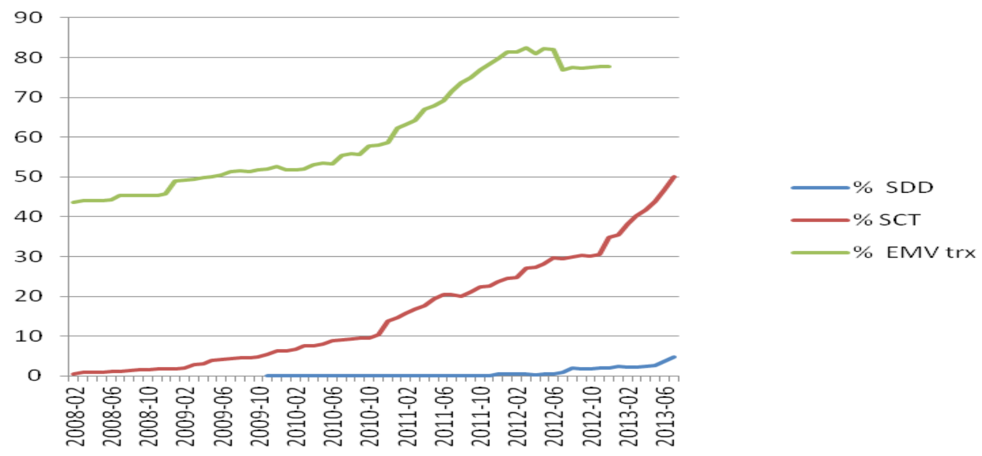
9 The Commission maintained that "to make the Single Euro Payments Area (SEPA) a success, strong commitment by all the actors concerned is required" and that "while SEPA is primarily market driven, some uncertainty can only be resolved with the aid of the public authorities. Action is needed now on the part of all stakeholders" (European Commission 2009, p.4).

the SEPA indicators published periodically by the Eurosystem showed a long delay in migration (only 20 per cent of credit transfers and a negligible percentage of direct debits); the situation was better as regards migration to microchip cards, as established by the SEPA cards framework (see Figure 2).

Figure 2

SEPA IN FIGURES

(percentage of SEPA transactions on the total)



Source: ECB, SEPA indicators.
Legend: SDD – SEPA direct debit SEPA; SCT – SEPA credit transfer; EMV trx: transactions with microchip cards.

The definition of agreements and alliances between the parties operating on the supply side was held back by the difficulty in identifying fora, at European level, for representatives of the various interested parties, not only limited to banks but also extended to the payment institutions referred to in the PSD and providers of technological and network services (amongst which telecommunications operators), called to perform an important role in a broad and more technologically advanced market.[10]

In this situation, the European Commission, supported by the majority of the stakeholders and in agreement with the Eurosystem, set a deadline (1 February 2014 for the euro-area countries and 31 October 2016 for the others) for the migration of national products, marking the passage of SEPA from being a market-driven project to one led by the institutions. The Regulation that sets the end date for migration to SEPA[11] defines:

- the technical requirements of European credit transfers and direct debits (see Table 3);

- the reachability obligation for payment service providers;[12]

10 An analysis of the market reasons that hindered the realization of SEPA is given in Bott (2009).

11 Regulation (EU) No. 260/2012 of the European Parliament and of the Council of 14 March 2012.

12 Payment service providers must ensure that payments from a payer (in the case of a credit transfer) or a beneficiary (in the case of a direct debit) by means of another provider in any member state can reach their customers.

- the interoperability requirement for retail payment systems dealing with European instruments;[13]
- the designation by each member state of the “competent authorities” responsible for compliance with the Regulation, with the necessary powers for the fulfilment of their functions.

The approval of the European Regulation imposes a redefinition of the competencies and characteristics of the project’s governance bodies, both because the migration requirements have now been defined by law and also because the national authorities responsible for the process have been identified.

Table 3

TECHNICAL REQUIREMENTS FOR SEPA CREDIT TRANSFERS AND DIRECT DEBITS

Payment account identifier	IBAN
Messaging standard	ISO 20022 XML
Remittance data field	140 characters
Data transmission	In full and without alteration (straight through processing - STP)
Amount	Different from zero, unlimited (conventionally no more than € 999,999,999. 99)

In Italy the role of competent authority has been entrusted to the Bank of Italy, for the tasks attributed to it under the Consolidated Law on Banking as payment system oversight authority.[14] The Bank of Italy has issued provisions listing useful indications for those involved in managing the migration, concentrating in one document the necessary instructions for applying the new rules (see the box “Migration in Italy”). The provisions, adopted on 12 February 2013, detail in practical terms where the Regulation applies and identifies the payment services for which migration has been postponed to 1 February 2016 (niche products). In the provisions, the Bank of Italy describes SEPA as a point not of arrival but of departure for developing the payments market. Payment service providers are therefore required to identify, including through their associations and in collaboration with users, “possible lines of intervention to rationalize collections and payment services”; indeed it may be possible to bring most of the products still processed domestically (so called “out of scope products”) under the new standards in order to avoid any fragmentation.

At the same time the provisions were issued – and to complete the initiatives already launched by the National Migration Committee, chaired jointly with the Italian Banking Association – the Bank of Italy began a far-reaching communication campaign, making use of its own branch network. The characteristics of SEPA and the problems with migration were discussed at local meetings in the presence of representatives from the public administration, payment service providers and users.

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13 The manager or, in case of absence, the retail payment system participants shall guarantee the technical interoperability with the other payment systems in the European Union; they cannot impose business rules that limit interoperability.

14 The designation of the Bank of Italy was notified to the Commission on 18 May 2012. The situation in Europe varies: in 12 countries the central bank is the only competent authority (Italy, Bulgaria, the Czech Republic, Ireland, Greece, Spain, Lithuania, Hungary, Malta, Romania, Slovenia and Slovakia); in 4 countries the central bank shares the role with another authority (France, Croatia, Cyprus and the Netherlands); the supervisory authority is the only competent authority in 5 countries (Germany, Latvia, Luxembourg, Austria and the United Kingdom), whereas in Denmark, Estonia and Finland the central bank shares this role with the antitrust and consumer protection authority.

Migration in Italy

As of 1 February 2014, national credit transfers and direct debits have been replaced, respectively, by the SEPA Credit Transfer and the SEPA Direct Debit (Core and Business-to-Business). The account to be debited or credited must be identified by an International Bank Account Number (IBAN). The ISO 20022 XML standard must be used, except for credit transfers and direct debits sent or received in aggregate form. Until 1 February 2016, it will be possible to use financial direct debits (called "RID finanziari", used for example to make regular payments into a savings or private pension scheme) and fixed amount direct debits (called "RID a importo fisso", used for example for regular payments of a preauthorized amount). However, cheques, bank and postal payment orders, and some other forms of domestic transactions will remain outside the SEPA perimeter [1]. The Bank of Italy's provisions list some specific obligations for:

- *managers of retail payment systems, which must publish information on their active links for exchanging and settling payments with other infrastructures within the European Union on their own websites;*
- *payment service providers, which must inform their customers of the necessary contractual changes in view of the deadline for migration and provide firms with all the necessary information for the correct execution of SEPA direct debits;*
- *the payees of direct debit services (e.g. businesses), which must inform their customers of the changeover to SEPA and make arrangements to manage the storage of the debit authorization mandates independently or through third parties.*

1 *For example, MAV - Pagamento mediante avviso, RAV – Riscossione mediante avviso, and RIBA – Ricevuta bancaria, electronic bank receipt.*

3 The impact of SEPA on the Italian market

3.1 The payments services market in Italy

Looking at two indicators - the number of payment transactions per capita and their share of all payments – it is possible to assess the impact of SEPA by analysing the degree of take-up and the growth of payment instruments other than cash in Italy and in the other European countries. The first indicator captures the level of take-up of payment instruments other than cash, while the second indicator gives the relative importance of payment instruments within each country.

In terms of the Eurosystem, Italy makes limited use of payment instruments: only 71 transactions (per capita per year) against the European average of 187 (euro area = 194, see Table 4). This result must be read alongside that for the use of cash: in Italy 83 per cent of all transactions are in cash against the European average of 65 per cent (European Central Bank, 2012). Following the implementation of SEPA, if Italy matched the European average for payment instrument use, the Italian market would increase by about 4 billion electronic transactions per year.

Table 4

ANNUAL NUMBER OF TRANSACTIONS PER CAPITA WITH PAYMENT INSTRUMENTS OTHER THAN CASH IN 2012

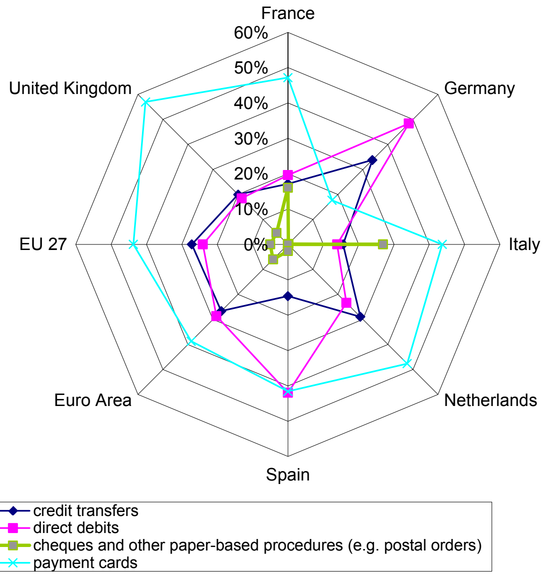
Countries	Total	Cheques and other instruments excluded from SEPA	Credit transfers	Direct debits	Payment card transactions
France	276.13	44.33	47.33	54.15	130.32
Germany	222.38	0.42	75.13	107.57	39.26
Italy	71.2	19.12	11.12	9.90	31.06
Netherlands	349.45	-	101.14	81.70	166.61
Spain	125.85	2.35	18.38	52.79	52.33
Euro Area	**194.43**	**11.58**	**51.85**	**55.71**	**75.29**
EU 27	**187.45**	**9.38**	**50.96**	**45.12**	**81.99**
United Kingdom	**292.56**	**13.41**	**58.39**	**54.02**	**166.75**

Source: Based on ECB data (Statistical Data Warehouse, 2012).

In Italy, moreover, among the payment instruments other than cash, the more costly ones tend to be used, such as cheques and other instruments excluded from SEPA. Although card transactions are fairly widespread in Italy (about 40 per cent of the total), credit transfers and direct debits only account for 15-17 per cent of the total, which is below the European average of 30 per cent (see Figure 3).

Figure 3

SHARE OF PAYMENT INSTRUMENTS OTHER THAN CASH ON ALL TRANSACTIONS



Source: Based on ECB data (Statistical Data Warehouse, 2012).

The data analysed confirm the importance for Italy of fully implementing SEPA and, more generally, of modernizing the payments system, with the aim of reducing the use of cash, increasing the use of electronic payments, and cutting the costs of payment services for all.

This could have positive effects on the economy overall[15] and would be in line with European and Italian policies aimed at encouraging wider use of technology by the general public (see the box "The digital agenda in Europe and in Italy"). Moreover, people's confidence could be increased by the proposed revision of the PSD (the "PSD2") which intends to increase transparency in favour of users and to deal with the legislative fragmentation which still exists in Europe and in the e-payment and mobile payment sectors.

The "Digital Agenda" in Europe and in Italy

The European Commission has initiated a programme called the "European Digital Agenda" that contains new objectives of growth, employment, productivity and social cohesion. The European Digital Agenda proposes operational action plans grouped into different macro sectors, among which the most important aim to: i) promote fast and ultra-fast internet access at competitive rates, strengthening the network infrastructure to reduce the digital divide between Europeans, ii) increase users' confidence and safety on the Internet, strengthening policies to combat cyber crime and breach of privacy and personal data (cyber security), iii) facilitating electronic invoicing and payments, increasing interoperability of devices, applications, databases, services and networks. The objectives set at the European level have been implemented in Italy with the establishment of the Agenda Digitale Italiana (ADI). The Decree establishing the ADI states that digitization is an important tool, in terms of saving time and money for the State, which could lead to employment growth and increased productivity and competitiveness. The ADI provides that the digitization process will operate in different areas: network infrastructure, integration of the public administration's ICT systems, digitization of relations between the public administration and businesses and citizens, consolidation of information systems and interoperability, computer literacy of the population (for example, through the spread of electronic payment instruments). The objectives include the electronic identity card, electronic access to health services, public and private investment in the ICT sector to facilitate cloud computing and the uptake of open data products.

3.2 SEPA services

For banks and other payment service providers, technology suppliers and payment infrastructures, the migration to SEPA brings additional costs because of the necessary investment, but it can also provide an opportunity for organizational review. The opening up of the market and changes in the legal framework call for strategic solutions consistent with the new competitive scenario.

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15 There is a positive correlation between, on the one hand, the development of electronic payments and, on the other, output and income growth, partly thanks to firms' accessing new markets, e.g. with e-commerce. On the relationship between economic growth and the take-up of payment instruments, see Bank of Finland (2012).

3.2.1 Changes for the banks

For the banks the provision of payment instruments and services is an important productive sector, both as regards the profit and loss account (15 per cent of total operating costs),[16] and as a way of encouraging customer loyalty. The European scenario will introduce a wider area in which to provide services (with possible economies of scale) and, further, standardization will make it easier to provide innovative payment products, integrated with modern communication tools (e.g. smartphones and tablets).

These opportunities will nevertheless be evaluated in a regulatory context that squeezes earnings as a result of: the reduction of interbank settlement times;[17] the elimination of multilateral interchange fees (MIFs);[18] precise deadlines for the crediting and debiting of customers' accounts.[19] This is in addition to the competition that banks face from new market entrants (payment and electronic money institutions), which are active above all in providing non-traditional products and services.

To comply with the SEPA schemes and the regulatory framework established by the PSD, the banks have made some changes to their operating systems and to how they manage their administration and information systems. They have defined their plans for the migration of their single activities (adjustment of information systems, communication with customers, definition of new contracts, managing the co-existence of the old and new systems, and the timing of the migration to SEPA instruments). The plans aim to guarantee business continuity and to contain the risks connected with migration (technical, reputational, legal and financial). In some cases, the plans have also provided the opportunity to design products for customers to assist them with the migration, to meet the new needs and reinforce customer loyalty.

The definition of the migration plans has involved all the business structures in the field of payments (provision of products, marketing, organization and IT), besides the legal functions related to compliance and risk management and the structures responsible for training and communication.

The most complex part of migration relates to the provision to firms of the SEPA direct debit service (SDDs), mainly used by the large utility companies for the processing

16 See Banca d'Italia (2012).

17 The PSD established the maximum deadline for interbank settlements as the working day following the day the payment order was received by the payment service provider. See Ruttemberg (2012) on the benefits for consumers and business from faster processing of payment orders.

18 The MIF is an interbank fee paid by the bank - that manages funds going to the invoicing firm (e.g. in the case of a direct debit to pay a utility bill) or funds to the merchant accepting payment cards - to the bank holding the payer's account or issuing the payment instrument. This fee allows the costs and earnings to be divided between the two banks involved in the transaction, reducing the charge to be paid by the payment instrument holder (user or holder of the card) at the time it is used. However, this mechanism, which incentivizes the use of payment instruments, does not have a very transparent charging system. This can restrict competition, with negative effects on final prices. For direct debits, the MIF is being gradually eliminated thanks to the "end date" Regulation; for cards, in 2013 the Commission drew up a proposal for a regulation on interchange fees for card-based payment transactions. On the subject of MIFs, see European Commission (2012) and European Central Bank (2011).

19 Before the PSD, banks could benefit from the "float", i.e. financial returns from the discretionary application by each bank of value dates that did not coincide with the actual dates when payments or withdrawals were taking place on/from customers' accounts. The PSD establishes, instead, detailed timings for the use of the value date in payment transactions and for the effective availability of funds in their customers' accounts. In general on the subject of the float in retail payment services, see McAndrews and Roberds (2000).

of their customers' payments. The capacity of SDDs to satisfy the needs of Italian firms has, since the start, been a critical factor of SEPA, including in consideration of the service levels offered by the mainly used domestic scheme. In particular, the introduction of the SDD has affected the relationship between banks and firms[20] and encouraged the search for cooperative solutions to minimize risks for the system by means of the automatic alignment of the databases (see the box "Additional optional services (AOSs): the SEPA-compliant Electronic Database Alignment (SEDA)").

In the medium term, the banking system will be able to exploit the opportunity offered by SEPA to reduce the operating costs through greater automation; this is important given that in Italy three quarters of the cost to banks of providing payment services are connected to the hands-on management of cash and to the use of less efficient payment instruments, for example cheques (see section 3.1 above).[21]

3.2.2 The payment infrastructures market

Some of the phases of the payment transaction cycle are carried out centrally by the payment and settlement systems. The systems affected by the SEPA changes are those that are usually referred to as retail systems because they deal with low-value transactions (see Section 1 above); they generally involve: i) receiving of orders; ii) bilateral or multilateral clearing of the positions; iii) sending them for settlement to the central bank accounts or to the banks' correspondent accounts. In order to function properly, a payment system depends on some essential elements: access and exclusion rules, smooth running, technical standards for communicating with the participants and systems linked in, and sanctions for participants which do not observe the rules.

The use of uniform payment schemes in the euro area has removed national barriers, which constituted monopolies or almost de facto monopolies in payment service provision. It has also encouraged system managers to form alliances and partnerships in order to achieve economies of scale and to reduce unit costs for the services, sharing the processing platforms. In addition, solutions had to be found to facilitate the participating banks in respecting the reachability requirement within Europe (see Sections 2.1 and 2.2 above and the box "European service providers and reachability". At the same time, SEPA offers payment system managers the possibility of increasing their customer base to include not only national intermediaries but also those in all the European countries that have joined SEPA.

There are 20 SEPA systems on the official list of the European Payments Council;[22] in 2012 these systems settled 32.244 billion transactions, equal to 43 per

20 The direct debit scheme most commonly used at the domestic level gave the debtor's bank the responsibility of acquiring, keeping and updating the mandates received from its customers for recurrent payments (e.g. utility bills). However, under the SDDs it is the firm who must be responsible for this activity. The new scheme thus imposes a change of perspective for firms which are now responsible for managing the mandates. The "end date" Regulation allows them to delegate this activity to third parties (Article 5(3)(a); the third parties can also be banks.

21 See Banca d'Italia (2012).

22 RPS/Deutsche Bundesbank (Germany); STEP2 (PE-ACH); Equens (Germany/Netherlands); Eurogiro (Denmark); Iberpay (Spain); Interbanking Systems (DIAS) (Greece); KIR S.A (Poland); ICBPI - SIA – BI-COMP (Banca d'Italia) (Italy); GSA - ONB (Oesterreichische Nationalbank) (Austria); SIBS (Portugal); Stet (France); Transfond (Romania); VocaLink (United Kingdom); Borica (Bulgaria); Bankart (Slovenia); ACH (Finland); Latvia Banka (Latvia).

cent of all payments exchanged within the area;[23] 41.5 per cent of these transactions will migrate from the domestic to the European format. Therefore, for the European payment infrastructures, the SEPA area will encompass around 14 billion transactions.

The Eurosystem hopes that, in the medium term, payment services will be concentrated as a result of the consolidation of the existing platforms. For the managers there is the possibility of grouping together to increase the critical mass of payments processed and of the supply of value-added products, which are complementary to the SEPA clearing and settlement services (for example, confirmation of payments sent and correction of errors). [24]

3.3 The demand for SEPA services

A structural change in the provision of payment services should, in the first place, satisfy the needs of the final users: households, firms and the public administration.[25] The benefits of SEPA for users are mainly to be found in the reduction of prices thanks to greater competition in the payments market, in cost cutting made possible by harmonizing the formats and processes, and in the greater flexibility of payment procedures.

3.3.1 SEPA and business

SEPA also impacts business organization (see Table 5): the cycle of the buying and selling of goods and services generates a two-way flow of payments that are recorded in company accounts. The timings and the ways in which the various financial flows are ordered, settled and reconciled influence the working and the efficiency of the process and, more generally, business organization.

Table 5

INNOVATIONS FOR BUSINESS

Before SEPA	After SEPA/PSD
– multiple current accounts to manage flows with abroad	– possibility of comparing payment service provision on a European scale
– difficulties in making cross-border payments because of multiple infrastructures and fragmented regulatory situation	– possibility of managing payments in Europe with one current account
– lack of international direct debit procedures	– standard and certain payment and refund times/ procedures in the different European countries
– reduced economies of scale because of a lack of standardization and little automation of some procedures	– provision of European basic services, including for recurrent payments
	– economies of scale in managing the payment sector; increased automation

23 Retail payments that are not processed through the retail systems are settled through correspondent banking mechanisms (where most card payments converge) and in the gross settlement systems such as TARGET2 which, originally designed for large-value interbank transactions, gradually came to be used for low-value payments as well.

24 This is an important business profile in Italy where the provision of exchange, clearing and settlement services prior to SEPA included a series of extra services that do not appear at all in the SEPA universe.

25 See European Commission (2012).

In the pre-SEPA context, firms with many intra-European commercial exchanges had to hold bank accounts in each state in which they conducted business; the immediate benefit of SEPA is the possible reduction of the number of bank accounts held. The standardization imposed by SEPA, furthermore, allows financial reporting to be centralized thereby eliminating the need for invoices to be reconciled separately. The possible savings can be evaluated considering that Italian firms' import/export activities with other European countries generates payments (incoming and outgoing credit transfers and direct debits) for a value of about €2 trillion, in addition to domestic payments (more than a billion transactions a year for a value of €5 trillion).

The use for SEPA payment messages of a standard that can be integrated with management software (ISO 20022 XML, see Table 3) produces a twofold advantage for firms, independently of their activities in Europe: on the one hand, a payment order can proceed unaided through the whole process (from firm to bank, from bank to bank, from bank to firm), reducing the risk of error; on the other hand, it is possible to integrate the commercial and the monetary cycles by developing greater automation from the time of authorization to that of reconciliation of the payment. In larger firms, centralizing these processes could even make it worth dematerializing the entire process (from the issuing/receiving of an invoice to its reconciliation).[26] The centralization of invoice and payment information could lead to the more efficient management of financial resources spread across the different markets. In this scenario, it is important not to underestimate the costs that firms will have to bear, in terms of IT and organization, and in adapting the various parts of their business structure, i.e.:

- the treasury management– adapting the procedures for payment reconciliation;
- the sales sector – which has to send out the necessary communications to customers;
- the internal administration – adapting the collection procedures and personal details of their counterparties;
- the legal area – revising contracts and payment order forms, and ensuring compliance with customer communication obligations;
- the internal auditing – for processes to be incorporated in the authorization and internal control systems.[27]

The capacity for process innovation, reducing the operational burden when the system is running normally, is essential in order to benefit from the above-mentioned opportunities, to which can be added the benefits of greater competition on the payment service provision market (see Table 5).

The Italian market is characterized by the presence of small and medium-sized enterprises, in general with less incentive to invest in innovative technologies, especially as they are not very active on foreign markets.[28] It is precisely in this sector that SEPA

26 On the subject of the setting up of "payment factories" within firms, see Dado et al. (2010). This process is encouraged by the harmonization of the electronic invoicing rules (Directive 2010/45/EU, adopted in Italy under Law 228/2012).

27 Particular attention has to be paid to respecting the security conditions for managing and storing information, to checking for exceptions, and to dealing with anomalies in the process.

28 See Banca d'Italia (2010).

could act to facilitate the expansion of the outlet markets, including by means of the greater use of transnational technologies (for example, e-commerce) and the automation of internal processes, in addition facilitating the search for group solutions given the introduction of uniform standards.

3.3.2 SEPA and consumers

Generally speaking, SEPA offers the consumer the possibility of: using one bank account to send or receive funds through credit transfers or direct debits in euros in 33 countries (see Section 1 above); carrying out payment transactions using the new, increasingly common technological tools (e.g. smartphones, tablets, personal computers, which are currently not used much for this purpose; see Table 6); benefiting from the service cost reductions made possible by greater competition on the supply side. Moreover, SEPA expands the range of possibilities for citizens both for domestic payments to the public administration (see Section 3.3.3 below), and for cross-border transactions (payment of fees or rent in other European countries, tourism services, and e-commerce).

Table 6

HOUSEHOLD PAYMENTS IN ITALY IN 2012

	Total (millions of transactions)	Of which: via Internet (millions of transactions)	% share via Internet
Credit transfers	222	76	34.5
Cards	1,795	163	9.1
Direct debits	553	-	-
Cheques	171	-	-

Source: Bank of Italy, statistics reported by financial intermediaries..

The changes introduced under the PSD, complementary to the SEPA project, are important as regards the relationship between consumers and payment service providers. Consumers will benefit from greater transparency in terms of their own rights and obligations and those of the payment service providers they use. In addition, in the case of errors, there are new and more efficient protection measures (such as, for example, out-of-court complaint and redress procedures).[29] The Directive established different levels of protection for users with particular attention to the consumer.

29 The payment service provider's responsibility extends over the entire money transfer cycle, until the amount is credited to the payee's account. To prevent any form of implicit charging, there is a ban on anticipating the value date of debiting of the payer's account and on postponing the value date of the amount credited to the payee's account. Time limits are also set, with the sum being paid into the payee's account no later than the end of the business day following the day the order was received. Customers are further protected in the case of unauthorized or inexact payment transactions. The client has the right to an immediate refund for an unauthorized transaction, if he informs, without delay, the service provider of the occurrence within 13 months of the credit or debit. The onus is on the provider to prove that the transaction had been authorized. The customer has the right to a refund of direct debit transactions or those effected by the payee, as long as a request is made within 8 weeks and two conditions are met, namely: 1) at the time it was given, the authorization did not specify the amount; 2) the amount of the transaction exceeded that which the payer could have reasonably expected on the basis of his spending pattern. These conditions can, furthermore, not apply to direct debits whenever this is agreed in the framework contract between the customer and the payment service provider. The provider must refund the amount within 10 days of the request or provide an explanation for any refusal to do so. In the face of greater rigour being exacted from providers in carrying out payment services, users have the obligation to behave diligently: for example by keeping their personal payment instrument security features safely, notifying promptly the loss, theft or unauthorized use of them.

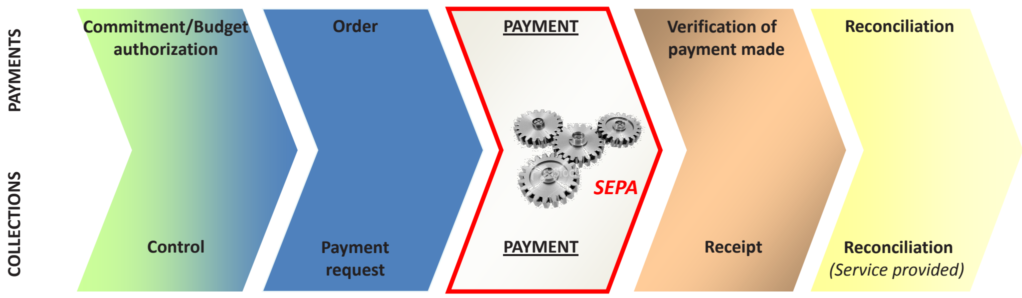
To complete the framework set out in the PSD, the "end date" Regulation introduces further measures to protect direct debits: consumers can give specific instructions on the processing of requests by creating lists of undesirable creditors ("negative lists") or desirable ones ("positive lists"), establishing maximum amounts to be debited, specifying pre-determined payment periodicity and, if necessary, blocking all direct debits on one's account.

3.3.3 SEPA and the public administration

The establishment of SEPA provides an important opportunity for innovation, including for the Italian public sector. Making and receiving payments are part of a complex process for the public administration (see Figure 4); the use of advanced standards can have positive effects on the automation of internal processes and, ultimately, on the overall level of efficiency. To evaluate the impact, it is worth noting that the public administration is responsible for a large volume of payment transactions: in 2012 almost 180 million payments were made and about 245 million payments received.

Figure 4

THE VALUE CHAIN FOR PUBLIC PAYMENTS AND COLLECTIONS



The modernization of the public payments system resulting from greater recourse to electronic instruments will be able to boost the efficiency level of the public administration, thanks to the automation of administrative processes for accounting and spending procedures. The experience of the more developed countries, moreover, shows that efficient e-government mechanisms encourage the uptake of payment instruments other than cash, including those cases that do not involve transactions between the public administration and the citizen.[30]

The public administration's adjustment to SEPA standards has followed a complex route because of both the number of parties involved and the specific characteristics of the sector. Providers of treasury services have played an important role, i.e. the Bank of Italy for the state's central and peripheral government; and the commercial banks for local government and other public administration agencies.

30 The World Bank issued guidelines for public sector modernization programmes, recognizing that this could significantly encourage innovation (World Bank 2012).

In agreement with the Bank of Italy, the central public administration organized the migration to SEPA starting in 2008: payments of salaries and pensions by the Treasury Ministry (about 21 million transactions annually) have been made under SEPA since April 2013. Migration to the new standards on the part of local government and other public agencies has been more complex because of the numbers of agencies involved and the fact that not all of them were open to change. The guiding role was taken by the treasury banks, which tried to soften the impact of the changes on their customers. An important means of adjustment has been the use of the "local electronic mandate", which is a standard that complies with SEPA,[31] which the treasury banks use to interface with customer agencies to manage payment and collection mandates.

Using the ISO 20022 XML format in preparing and making payments has also helped the public administration to integrate its internal accounting procedures, encouraging efficiency gains. At a more general level, SEPA-led standardization is in line with the interventions already made to rationalize and modernize the public administration through greater recourse to technology (re-use of software, simplification of IT architecture, and open-source licenses). Adjusting to SEPA can provide an opportunity to renew applications and procedures which, as often happens within public administration offices, are updated infrequently and therefore subject to rapid obsolescence.

By using SEPA credit transfers and direct debits in their dealings with the public administration, citizens will be able to bypass the need to use segmented payment channels. In Italy the reform of Article 5 of the Digital Administration Code[32], which improves interactions between the public administration and the citizen, moves in this direction by broadening the payment channels and introducing standard procedures for reconciliation, crucial to improving the quality and timeliness of public services to users (see the box "Electronic payments to the public administration").

Electronic payments to the public administration

Article 5 of the Digital Administration Code, as amended by Decree Law 179/2012, requires public authorities to accept electronic payments. The reform extends the types of payment that can be made to government bodies, which must publish on their websites the IBAN codes for their bank accounts so that the public can make payments directly. The Agenzia per l'Italia Digitale has recently published, for public consultation, its "Linee guida per l'effettuazione dei pagamenti a favore delle pubbliche amministrazioni e dei gestori dei pubblici servizi" (Guidelines for the making of payments in favour of the public administration and managers of public services) and its "Specifiche attuative dei codici identificativi di versamento, riversamento e rendicontazione" (Specifications for the implementation of the identifier codes for payments, repayments and reporting). These specifications, drawn up in consultation with the Bank of Italy, are consistent with the standards being developed

31 The development of guidelines for the adoption of the electronic mandate is led by the Agenzia per l'Italia Digitale with the collaboration of the Italian Banking Association (ABI).

32 Reference is made, in particular, to Article 15 of Decree Law 179/2012, ratified with amendments as Law 221/2012.

at European level. The standard code to identify a payment ("Identificativo Unico di Versamento") will allow the public administration to reconcile payments received and could also be adopted by firms for trade and/or consumer relations. Through specific agreements with payment service providers, the public administration will also be able to accept payment by credit, debit and prepaid cards or other electronic payment instruments. The massive input of the public administration to the electronic payments market could reduce the cost of building the infrastructure thanks to economies of scale. The innovations introduced by Article 5 of the Digital Administration Code are complementary to the use of SEPA instruments: standardized procedures for the transmission of payment information (used for reconciliation) produce benefits both for those making a payment, with a wider choice of payment methods and channels, and for the receiving authority, which can streamline its back office processes. A platform developed by the Agenzia per l'Italia Digitale ("Nodo dei pagamenti" – SPC) will allow interactions and information exchange between payment service providers (or the platforms they use) and the public administration [1].

1 The platform was introduced by Law 148/2011 and is a component of the Sistema Pubblico di Connettività, SPC (Public Connectivity System). It is composed of a set of rules, standards, structures and infrastructures that govern the methods to make payments in favour of the public administration.

4 Conclusions and future prospects

SEPA is an important step in completing the process of European integration. It is an ambitious project: it does not end with the introduction of a standard for making payments but leads to citizens changing their habits and to companies and the public administration changing their organization and procedures. Banks and SEPA payment infrastructure managers are required to rethink their activity models and to manage customer relations differently.

Following a phase in which the project was market-led, at the start of 2012 the European Commission imposed a regulatory change, necessitated by accumulated delays; the "competent authorities" designated by each Government were to preside over the establishment of SEPA at national level.

The Bank of Italy, as the "competent authority", took action to encourage an orderly passage of the Italian community to the new scenario - a passage that does not constitute a point of arrival but provides an opportunity to rethink the payments market with a push towards innovation. This development is all the more important for Italy which, compared with the other European countries, is characterized by a low level of electronic payment instruments, which are less costly and more secure than paper transactions (for example, cheques), and by the high volume of cash payments.

For banks, other payment service providers and business, SEPA necessitates adjustment costs (organizational, technical-procedural, and training), and increasing competition must be addressed. SEPA does, however, offer some advantages and opportunities even in the short period thanks to the possibility of economies of scale and scope. Firms will benefit from integrating payment flows and internally managed flows and, thanks to the introduction of electronic invoicing, from a reduction in material costs.

A segment of the system that is heavily involved in SEPA is that of the payment infrastructures. The elimination of national monopolies in service provision means that current managers will have to look for alliances at a pan-European level. The payment infrastructures must provide their users with efficient and reliable conditions and procedures to achieve reachability by all potential European counterparties.

For citizens, the benefits of SEPA basically derive from greater flexibility in the choice and use of electronic instruments, whose development is encouraged by SEPA, from the removal of national barriers and from price flexibility as a result of greater competition. Looking ahead, European credit transfers and direct debits could be used for Internet payments, as an alternative to cards. Similar solutions can also be envisaged for mobile and tablet payments. Citizens and firms could use credit transfers and direct debits for public administration payments as well: this requires, however, that the collecting agencies are able to manage, in a standardized way, all the necessary information for payment reconciliation.

The path described above has been signposted and is part of the framework of a wider process of digitalization planned in Italy and in Europe; in this sense, SEPA is one of the steps through which the digitalization objectives will be realized in the national and European sphere. The challenge this represents should be taken as an opportunity for growth towards the future.

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