SINGLE EURO PAYMENTS AREA (SEPA) – STRATEGIC VALUE ON THE HIGH DEGREE OF INTEROPERABILITY FOR ALL ACTIVE PARTICIPANTS IN THE FINANCIAL TRANSACTION MARKET

Laurențiu Dumitru Andrei, Ph.D. Student

University of Economic Studies, Bucharest, Romania, andrei_laurentiu@yahoo.com

Professor Petre Brezeanu, Ph.D.

Faculty of Finance, Insurance, Banking and Stock Exchange, University of Economic Studies, Bucharest, Romania, brezeanupetre@yahoo.com

(Received April 2014; accepted August 2014)

Abstract

The introduction of euro currency in 1999 paved the way for policymakers - EU governments, the European Parliament, the European Commission and the European Central Bank - to adopt the SEPA initiative. This is a complex process that aims to integrate the euro payments market, integration that also takes into account Romanian State Treasuries as payment service providers for local and central public administrations. In this context, premises were created for developing an integrated financial market that would allow a better use of capital and an accelerating economic development in the EU.

Key words: European integration, payment systems, scale economies, efficiency, competition, financial markets, Regulation, Single Euro Payments Area (SEPA), Payment Services Directive.

JEL Classification: E41; E42; G2; G28

Introduction

The SEPA vision and fundamentals are reflected in the targets set in the Lisbon Agenda 2000, which decided to make the EU *"the most competitive and dynamic knowledge-based economy in the world"* and to prepare the transition to a computerized economy.

The Single Euro Payments Area (SEPA) aims at extending the process of European integration in the field of small value payments in euro, by creating a single European market for euro payment instruments. By implementing SEPA, one seeks to ensure an appropriate level of efficiency and market competition, to stimulate significant economies of scale and to ensure a high level of competitiveness for the European economy.

It is an ambitious project covering a geographic area consisting of the 28 EU Member States plus Iceland, Liechtenstein, Norway (i.e. EEA - European Economic Area), plus other eligible countries and territories i.e. Switzerland, Monaco, San Marino, territories belonging to Member States), where over 500

million people and 20 million corporations and public authorities send or receive payments.

Initially, the SEPA project was performed by the European banking sector, led by the European Payments Council, industry supposed to support the request of policymakers to sustain a common currency by developing a framework and a common set of harmonized payment schemes, related to electronic payments in euro. This later became a political project directly involving the European and Member State authorities.

Specifically, SEPA is the area where citizens, businesses, public administrations and other key players in the economic environment can initiate and receive payments in euro in Europe, whether within or across national borders, under the same conditions and with the same rights and basic obligations, wherever they are. By implementing SEPA, there will be no distinction between national and crossborder payments in euro, meaning all euro payments are treated as domestic payments.

"As heavy users of payment instruments, corporate and public administrations stand to gain substantially from the efficiencies made possible by SEPA. They should therefore play an important role in the success of SEPA by being early adopters of SEPA instruments in a market-driven process avoiding deterioration in the price and performances characteristics compared with existing national payments instruments (Herbei & Dumiter, 2008, p. 57)."

1. Single Euro Payments Area Features

1.1. Single Euro Payments Area is achieved by:

- Adopting a single set of payment instruments for euro payments (i.e. credit transfer, direct debit and card payments etc.);
- implementing efficient processing infrastructures for euro payments (interoperational clearing and settlement mechanisms);
- Adopting common technical standards (i.e. ISO 20022 XML, ISO13616-IBAN, ISO 9362 - BIC, EMV etc.);
- adopting common commercial practices (i.e. SEPA framework: Rulebooks and implementation guidelines);
- creating a harmonized legal framework for payment services (i.e. Directive 2007/64/EC on payment services in the internal market, transposed into the Romanian legislation by GEO no. 113/12.10.2009 on payment services, Regulation (EC) no. 924/2009 on cross-border payments in the Community, Regulation EC no. 1781/2006 on information on the payer accompanying transfers of funds, Regulation no. 260/2012 establishing the technical and business requirements for credit transfers and direct debits in euros etc.);
- Continuously improving existing products and developing new tools and customer-oriented services (i.e. accelerating settlement, electronic invoicing, electronic reconciliation, internet banking, mobile payments etc.)



1.2. Single Euro Payments Area Benefits:

• being able to choose any payment services provider in Europe, depending on their own requirements for quality of service, their content and the costs involved;

• possibility of paying in euros from a single bank account opened in Europe (=> fewer relationships with the banks and fewer bank accounts);

• a range of the best quality services due to the possibility of creating additional services, meant for targeted groups of consumers;

• new business opportunities as well as efficiency gains, due to a stronger integration of business and financial cycles;

• simplified payments and cash management and simplified payment modules: standardizing banking formats, automation (STP) etc.;

• Innovation – developing new products or additional services (e-invoicing, e-reconciliation, internet banking etc.);

1.3. The Impact of Single Euro Payments Area

SEPA has a significant impact on all stakeholders, creating both opportunities and challenges. Increased choice of service providers, coupled with economies of scale will ensure future customers a wider range of competitive payment solutions. In addition, SEPA will provide the following benefits:

For consumers:

• they will only need one bank account to initiate credit transfers and direct debits in euros anywhere in the euro area, in the same conditions as at national level;

• use of cards will become more efficient, as consumers will be able to use the same card for all euro payments (the need to have cash will decrease) anywhere in the Eurozone, in the same conditions as at national level, without any additional fees;

• Innovative services can be offered to consumers regardless of state boundaries. These services include electronic invoicing, initiating payments via mobile phone or the internet, electronic plane ticket payment, credit notifications or electronic reconciliation. As a result, consumers will spend less time making payments;

• Improvement and harmonization of consumer protection regarding payment services.

• For merchants:

• in the SEPA context, merchants will be able to choose any compliant bank in the Eurozone for processing card payments, which will lead to increased competition and lower costs;

• POS terminals in the euro area will become more and more standardized. Therefore, there will be a wider range of terminal providers and merchants will be able to accept more types of cards using the same terminal. Increased competition between card schemes will also lead to lower fees;

• For companies:

• companies will be able to perform all financial transactions in euros through a single bank account using SEPA payment instruments, regardless of how many points of service they have in the EU;

• value-added services, such as e-invoicing and electronic reconciliation, will help companies to further optimize payments management;

• Through more effective cash management, companies can reduce costs to finance current activities in the banking market. Basically, corporations will be able to consolidate their payments and cash management in one place;

• Reduced IT costs because software installation and maintenance from several banks used for managing accounts and making payments is no longer required.

• For banks:

• banks will be able to expand their business and compete in the Eurozone, as any bank will be able to offer its services to any person in the euro area;

• banks can diversify their portfolio by offering their customers value-added services built on top of SEPA products;

• in order to adapt to the new changes, banks have to make efforts to increase efficiency and transparency, leading to lower fees;

✤ For infrastructure providers:

• they will no longer be constrained by state borders, being able to offer their services in support of SEPA instruments throughout the euro area;

• interoperability or interconnection of various infrastructure providers will become possible through a common set of technical standards;

• Card processors will be able to serve different card schemes and compliant banks throughout the euro area.

The European Commission anticipates that SEPA will have an impact beyond the payments sector and the related public services. SEPA will be the platform on which future solutions will be developed for public administrations (e-government), such as electronic invoicing (e-invoicing), electronic procurement (e-procurement), electronic payments (e-payments), electronic signatures (e-signatures) and electronic services (e-services) in tax, social security and customs, many of which are totally consistent with the objectives of the European Commission Communication - "Digital Agenda for Europe" (2010). According to the latest research study commissioned by the European Commission*, the main findings identified during the analysis highlighted the following key data:

• Potential annual savings for all stakeholders of about \notin 21.9 billion – a recurring annual benefit resulting from the convergence of prices and the effectiveness of new payment processes;

^{*} PricewaterhouseCoopers - Economic Analysis of SEPA - Benefits and opportunities ready to be unlocked by stakeholders (January 2014) - <u>http://www.pwc.com/gx/en/audit-services/corporate-treasury-solutions/cts-publications/sepa-benefits-and-opportunities-ready-to-be-unlocked-by-stakeholders.jhtml</u>;

• A cutback of up to 9 million bank accounts, resulting in a much more efficient management of the existing euro cash in corporate infrastructures;

• Issuance of cash and credit lines whose value can be up to \notin 227 billion, resulted from improving the funds distribution strategy (cash pooling) and their more efficient compensation;

• About 16.5 million enterprises and more than 6,000 banks and clearing houses in the Member States of the EU-16¹ will unlock current activities estimated at up to 973,000 working years on various phases of the payment and reconciliation process, as a result of information being more transparent and standardized, and also due to the infrastructure rationalization of corporate bank accounts;

• Additional indirect benefits arising, for example, from the extensive use of the ISO20022 XML standard, the adoption of electronic invoicing, large scale use of payment factories and banking products developed "in-house" by companies, a SEPA framework for cards, mobile payments, the creation of alternative sources by companies and consumers due to redefining the Eurozone as a domestic/national financial market (SEPA 2.0).

• In 2012, about 88.6 billion transactions were processed by the payments industry in the EU-16 (see Chart 1 - Volumes of transactions in the EU-16 and their distribution by type of payment instrument).

Self-regulation and Regulation in Single Euro Payments Area The Costs of Adopting Single Euro Payments Area

Although this project was initiated a few years ago (i.e. on January 28th, 2008, the first euro payment instrument - SEPA Credit Transfer - was officially launched and then SEPA Direct Debit on November 2nd, 2009), the stage and implementation duration of the SEPA project conducted by the banking community has been evaluated by industry experts as being a slow one, beneath expectations. The main reason suggests the lack of a business model that central banks could have implemented as a starting point or at least as a source of inspiration. On the other hand, investments in infrastructure that system participants are required to achieve are significant and part of the processors (banks in particular) required a clarification of the legal details, related to finalizing the technical and business requirements for all schemes so that, if one considers that it is more efficient to replace their entire IT system, then this should be done in the lowest number of stages and with the lowest costs possible, without affecting the current activity in any way. Another point considered unsatisfactory is linked to lack of information on this subject. Awareness among customers is low, they don't know what to do or even worse, they don't even know what it means.

¹ UE16 - Member States considered in this study as representative for the euro area and the European market as a whole; there were chosen countries like: France, Germany, Netherlands, Spain, Italy, Belgium, Finland, Austria, Portugal, Luxembourg, Ireland, Slovenia, Greece (euro area) and UK, Poland, Sweden (non-euro);



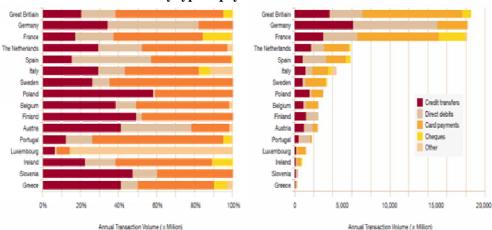


Chart 1 - Volumes of transactions in the EU-16 and their distribution by type of payment instrument

Source: PwC – Study on the economic analysis of SEPA (January 2014)

According to the conclusions set out in another report prepared by PricewaterhouseCoopers – "SEPA Readiness Thermometer – corporate treasury"², which identifies the reasons and causes that led to lower the involvement of corporates in the implementation of SEPA, the following aspects have been highlighted:

- 1 of 4 companies has a plan for migrating to SEPA;
- Most companies have planned migrating to SEPA for the 4th quarter of 2013;
- Most companies have not properly estimated the SEPA migration effort and implications;

• Companies lag behind and do not invest because they expect banks to offer them conversion services and/or authorities to postpone the deadline of February 1st, 2014;

• Perceptions of SEPA are different in various countries; even banks give different messages regarding SEPA;

• Possible solutions include imposing penalties or improving communication about SEPA;

• The possible causes of the non-involvement of the corporations were generated by:

- budget restrictions - companies, especially those acting exclusively at national level, don't see the benefits of SEPA, they only look at the costs;

² The PWC report was prepared in January 2013 - <u>http://www.pwc.com/en_GX/gx/audit-services/corporate-treasury-solutions/assets/pwc-sepa-readiness-thermometer-state-of-play-with-one-year-to-go.pdf</u>

⁶

- a state of confusion in corporations, partly generated by being used to having relationships with multiple banks that implement different solutions - the ideal solution would be that all banks implement a single solution;

- corporations expect banks to solve the migration problem; there are corporations that negotiate with banks for conversion services and this has become a commercial argument;

- different rules existing in different countries and different specifications implemented by banks create problems for corporations, a possible solution being a centralized multi-banking solution and a centralized testing instrument (SEPA boot camp);

- application providers are not ready, there is a great lack of specialized human resources for SEPA, which has generated a great competition on SEPA resources in the euro area (specialists move from one company to another on 50% increase in salary).

After various analyses and surveys, the European Central Bank (ECB) noted that many parties involved in the implementation of the SEPA project, including public administrations and businesses "still take caution". To overcome this approach of expectation, the ECB has considered it necessary to set a deadline for the migration, after which there will only be European payment instruments. The European Parliament supported this position and asked the European Commission to establish a "clear, appropriate and mandatory end-date" for migrating to SEPA products.

2.2. Single Euro Payments Area Regulation

The European Commission considered that setting an end-date would be a strong signal to all stakeholders about the irreversibility of the SEPA migration process and would give them the needed certainty of adopting a SEPA strategy and planning investment required over the next years, so it shortly presented to the European Parliament and the Council its normative act proposal – Regulation no. 260/2012 – establishing technical and business requirements for credit transfers and direct debits in euro, that was adopted on March 14th, 2012 (SEPA Regulation).

This normative act establishes, among others, the deadlines³ for conforming to the provisions specified in the SEPA Regulation on the technical and commercial requirements for settlements in euro made in eligible territories, as follows:

- February 1st, 2014, for countries in the euro area*
- October 31st, 2016, for countries in the non-euro area.

³ The full schedule imposed by SEPA Regulation can be found in Chart 2;

^{*} According to a Regulation Draft on its way to be approved and promulgated, the deadline for using the old standards has been extended to August 1st, 2014, so that up to this date, a transition period will be allowed, in which payments will be available both formatted according to the old standards and the new ones (SEPA);

The deadlines' calendar according to Regulation no. 260/2012 for establishing technical and business requirements for Credit Transfers (CT) and Direct Debits (DD) in euro	
March 31st 2012	Effectiveness date of Regulation no. 260/2012; Pan-European accessibility; Elimination of the EUR 50,000 threshold for applying equal fees;
November 1st 2012	Prohibition of MIF (Multilateral Interchange Fee) for cross-border DD;
February 1st 2013	Communicating applicable exemptions to the European Commission and competent authorities; establishing applicable penalties for violating the Regulation;
February 1st 2014	Deadline for migration to SCT and SDD in the euro area; Elimination of users obligation to communicate BIC for national payments; Deadline for interoperability of payment systems in the Eurozone;
February 1st 2016	Elimination of users obligation to communicate BIC codes in cross-border or national payments (if they have requested exemption); Elimination of BBAN - IBAN conversion services; Deadline for using ISO20022 XML in the client-bank relationship; Expiry date of the transitional period for niche products or payment operations into and from a payment account, generated by using a card;
October 31st 2016	Deadline for migration to SCT and SDD in the non-euro area*;
February 1st 2017	Prohibition of MIF for national DD;

Chart 2 - Deadlines calendar according to Regulation no.260/2012

* or 1 year since joining the Eurozone

Source: Regulation no. 260/2012, own processing

More precisely, this means that, starting on these dates, existing national schemes for credit transfers and direct debits in euros are being replaced by the new European schemes, enabling SEPA-compliant payment tools - SEPA Credit Transfer (SCT) and SEPA Direct Debit (SDD). Thus, in the euro area, the migration process has already experienced a significant increase immediately after the deadline in February 2014 for the new standards to become mandatory for this area (Chart 3).

3. Single Euro Payments Area Process Management

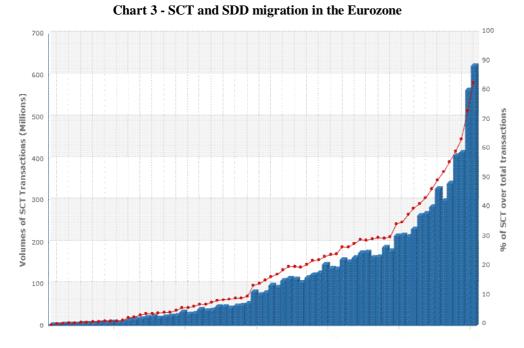
3.1. European Organization

In terms of involvement and participation in this project, as previously stated, SEPA is an initiative of the European banking industry represented by the EPC^4 , strongly supported by the European Commission and the European Central Bank.

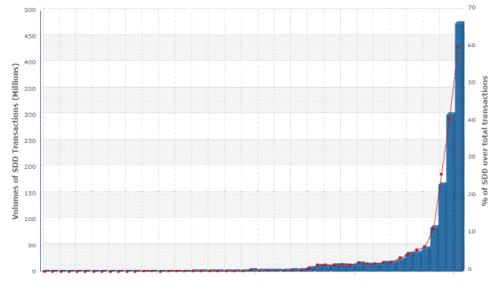
Over time, to avoid inconveniences on the addressability of new tools or sensitive matters that fall within the scope regulated by antitrust and competition laws, solutions were sought in the implementation and governance of the project so that they involve both entities that represent demand (i.e. consumers, large retailers,

⁴ EPC - European Payment Council

corporations, public administrations etch), as well as supply (payment service providers, solution vendors etc.).



SCT transactions from the total credit transfers in euro - 83.13% (Source European Central Bank - February 2014)



SDD transactions from the total direct debits in euro - 60.23% (Source European Central Bank - February 2014)

Thus, the SEPA Council was founded in 2010, a body aimed to establish a suitable governance structure involving all the stakeholders at European level. It promotes the execution of an integrated market for retail payments in euro, by ensuring the involvement of all parties and promoting consensus on the next steps to be taken to achieve SEPA.

The SEPA Council is co-chaired by representatives of the European Commission and the European Central Bank and it is composed of representatives of both payment services providers and users.

The SEPA Council has been recently replaced (in December 2013) by a new governing body - the Euro Retail Payments Board ($ERPB^5$).

The ERPB objective is to help and facilitate the development of an integrated, innovative and competitive market for small value payments in euros in the EU by:

- identifying and analyzing technical, behavioral and legal restrictions on (but without limiting to) (i) credit transfer payments, (ii) direct debit payments, (iii) card payments, (iv) online payments, (v) mobile payments and (vi) issues related to payments (i.e. issues related to standards, fraud and security);
- identifying and pursuing ways to address these restrictions;
- Identifying and tracking methods to encourage innovation, competition and integration in small value payments in euros within the EU.

In terms of organization, this body is chaired by senior representatives of the European Central Bank and brings together all stakeholders in the payments market, as follows:

- On the *supply* side of the market (seven members) four representatives of the banking community, two representatives of payment institutions, and one representative of e-money institutions;
- On the *demand* side of the market (seven members) two consumer representatives and one representative for each of the following categories: i) retailers with physical presence, ii) online retailers, iii) corporations, iv) SMEs and v) national public administrations;
- In addition to the members, also attending ERPB meetings by rotation are five representatives of national banks representing the Eurosystem plus one representative of the national banks outside the Eurozone;
- The European Commission participates as an observer.

3.2. Single Euro Payments Area Management in Romania⁶

At national level, the SEPA implementation project is coordinated by the Romanian Banking Association – the body representing the national banking community in the European Payments Council. In Romania, the SEPA project is carried out in compliance with the National Plan for Implementation and Migration

⁵ ERPB - Euro Retail Payments Board

⁶ http://www.bnr.ro/Single-Euro-Payments-Area-(SEPA)--3308.aspx

¹⁰

to SEPA. This plan includes the strategy designed and adopted by the national community for SEPA implementation and migration to the use of new payment instruments (the organizational model of SEPA at national level, elements related to planning, organizing and managing the project, as well as commitments and deadlines undertaken by all parties involved in order to complete the migration process).

In October 2009, the latest version (v3.0) of the SEPA National Implementation and Migration Plan was completed and approved by the SEPA National Committee, and the official document was also published on the website of the European Central Bank.

The governance structure of the SEPA project at national level is the following:

• The SEPA National Committee, a decision-making body responsible for establishing the strategy and coordinating the SEPA implementation process across the national community, established in March 2008 with the participation of the Romanian Banking Association, the Ministry of Public Finance and TRANSFOND S.A. This Committee is also responsible for National Plan for Implementation and Migration to SEPA. The National Bank of Romania is permanently involved and it participates in committee meetings as an observer.

• The SEPA Commission, established at the Romanian Banking Association level, responsible for debating implementation issues of SEPA at the national level;

• The SEPA project team, established at the Romanian Banking Association level and having a structure similar to that of the European Payments Council, with responsibilities on the SEPA project development at the national level and, in particular, on the development of the National Implementation Plan and Migration to SEPA.

4. Single Euro Payments Area Implementation in Romania

4.1. Adoption of Single Euro Payments Area Schemes

Regarding the SEPA implementation stage in Romania, according to data provided by the RBA based on information gathered from member credit institutions operating locally in February 2014, it results that for:

- SEPA Credit Transfer (SCT)
- 25 credit institutions, 7 bank branches from EU Member States and 1 payment institution adhered;
- the SCT migration rate 27.24% (source NBR July 2013);
- *SEPA Direct Debit (SDD)* 2 credit institutions joined the SEPA Core DD scheme;
- SEPA cards (debit, credit)
- cards converted to EMV 97.77% (of the total 11,872,147 debit cards + 1,657,607 credit cards);
- POS devices converted to EMV 98.44% (of the total 126,816);
- ATM devices converted to EMV 100% (of the total 10,842).



4.2. Interoperability with National Systems

Regarding the clearing and settlement infrastructure, Transfond SA – the system administrator for small value payments (SENT), in anticipation of the transition to the single currency and based on the requirements of the RBA, initiated the SEPA Program which aims to implement a clearing system compliant with SEPA EPC regulations, by transforming the present infrastructure into a "Clearing and Settlement Mechanism", able to process, for Romanian banks, payments in the national currency and in euros.

So far, the program has been implemented in two main phases, as follows:

1. SEPA-RON (RON payments in SEPA format), which implies the adoption of SEPA standards for credit transfers made in RON.

The effectiveness date of the SCT-RON facilities system was November 2nd, 2012.

This new infrastructure for payment processing in the national currency can be used both for non-SEPA payment operations, as well as for those compliant with SEPA standards, Transfond providing conversion services between the two standards.

2. *SEPA-EUR (euro payments)* – the system will simultaneously process payments in RON and euro, with settlement in TARGET2.

The effectiveness date of the SCT-EUR system was December 13th, 2013.

Currently, at the STFD Transford SA level, other projects implemented with the support of the banking community in Romania are underway, as follows:

- Implementation of SEPA direct debit schemes, both the basic (SDD) and the one tailored for the business community (SDD B2B) for transactions in lei;
- Implementation of the Single Mandates Registry (RUM) and of the centralized management service for e-Mandates associated to direct debits.

The implementation of these projects is in various development stages, but it is expected to be completed by the end of 2014.

4.3. Single Euro Payments Area: SEPA RON Payment Schemes

In the context of the infrastructure developed by STFD Transfond SA compliant with SEPA standards becoming live, the Romanian Banking Association has started the process of documentation and signing of the *Convention of selfregulation for national payment schemes* by banks that are members of the Electronic Payment System. This document together with other related ones (i.e. SEPA schemes in RON for CT and DD) represent the regulatory framework for entities that adhere to the standards and principles of SEPA.

This document includes, among others, the commitment of the participants to adhere to the rules and settlement processes defined for each payment scheme (i.e. SEPA RON Credit Transfer Scheme, SEPA RON Basic Direct Debit Scheme, SEPA RON B2B Direct Debits Scheme), for national currency denominated transactions made in Romania. SEPA schemes tailored for payments in RON have been created starting from the most recent version developed by the European Payments Council for euro payments, but with some changes related to accommodating to the reality and specificity of the payment industry in Romania.

The Romanian Banking Association, as an administrator of payment schemes developed so far, sent for approval the Interbank Convention project, and the National Bank of Romania (NBR) expressed its official position by emitting notices.

In accordance with the *Convention on the national payment schemes*, and the notices received from NBR, the RBA has taken responsibility for the administration process of these schemes, namely the governance process of payments in compliance with the Eurosystem regulations, related to the management and monitoring of the self-regulation function in payments, at the banking community level in Romania.

This activity implies managing the adhering processes of credit institutions and of other authorized entities to SEPA RON schemes, monitoring the compliance of the participants to the schemes, as well as managing any changes made to these as a result of the evolution of the payment processes and of the changes implemented at European level.

4.4. Treasury Interoperability with SEPA Schemes

Although not signatory to this convention of self-regulation, it should be noted that the Ministry of Public Finance has implemented many of the technical requirements of SEPA (i.e. IBAN, ISO and ISO20022 XML standard for financial messages) and also complies with the system rules imposed by the technical administrator – STFD Transfond SA, being among the pioneers of the payments industry in Romania who had the capacity, starting from November 2nd, 2012, to send/receive to/from other participants in SEPA instructions for credit transfers in RON (SCT RON) compliant with SEPA standards. This success places the Romanian Government among the few, if not even the first countries in the noneuro area, who adopted and uses this standard in interbank day to day operations in national currency.

Also, on the regulatory framework for payments (in the area where it exists), it was decided for the State Treasury to comply to the normative acts issued by the National Bank of Romania, and where the field is poorly regulated or not regulated at all, the Ministry of Public Finance is to promote their interests so that they can smoothly fulfill the prerogatives conferred by law.

In this way, the Romanian State Treasury is a major supporter that promotes and implements the SEPA standard in Romania, thus joining the priority directions of SEPA 2009-2012 issued by the European Commission on the active role the government should play in adopting this standard.

Conclusion

In this context, the Ministry of Public Finance of Romania aims to be a powerful engine for developing the payments industry in Romania, acknowledging the need for direct involvement in the analysis on how to strengthen and enhance the efficiency of activities of the public authorities, in defining and providing competitive services to access fund transfers for individual taxpayers in the Member States of the European Union. Strictly from the technical point of view, the Romanian State Treasury payment system is ready for both gross and net settlement on Euro, as regulated by the European Central Bank respectively the European Payments Council.

Building end to end automation for the funds transfer operations will lead to:

- costs savings
- shorter time to credit the beneficiary account
- Improvement of the mutual trust and limiting the systemic risk.

Last but not least, from a treasurer perspective, it will enable my team to competitively manage the public liquidity and the public debt transactions. We have the technical scalability and business knowhow; we might need some good luck to see these happen in the near future, not only to our profit but, if this model is validated in practice, to larger group of sovereign treasurers.

References

- 1. Bartelt, N. 2007. Potential Benefits of SEPA for SMEs, accessed at <u>http://www.ueapme.com/docs/various/2007/forumcoopbanks/Bartel.pdf;</u>
- 2. Bergman, Mats, Gabriela Guibourg and Bjorn Segendorf. 2007. The Costs of Paying—Private and Social Costs of Cash and Card Payments, Sveriges Riksbank Working Paper No 212.
- 3. Bolt, W., D. Humphrey and R. Uittenbogaard. 2008. The effect of transaction pricing on the adoption of electronic payments: A cross-country comparison, International Journal of Central Banking, DNB Working Paper 2005/71, De Nederlandsche Bank.
- 4. Bolt, W. and D. Humphrey. 2008. Reducing payment processing costs: .Scale economies and SEPA, Journal of Payment Strategy and Systems
- 5. Bolt, W., and S. Chakravorti. 2012. Pricing in retail payment systems: A public policy perspective on pricing of payment cards, in: Payment Systems: Design, Governance and Oversight, B. Summers (ed.),
- Brits, H., and C. Winder. 2005. Payments Are No Free Lunch, De Nederlandsche Bank, Occasional Studies, Vol. 3/Nr. 2 (preliminary version published as: De Nederlandsche Bank (2004), The Costs of Payments: Survey on the Costs Involved in POS Payment Products, Working Group on Costs of POS Payment Products, March);
- Cheney, J. 2006. Supply and Demand-Side Developments Influencing Growth in the Debit Market, Payment Cards Center Discussion Paper, Federal Reserve Bank of Philadelphia;



- European Association of Craft, Small and Medium-sized Enterprises. 2008. Area - SEPA: Needs, Opportunities and threats for Crafts and SMEs, accessed at <u>http://www.ueapme.com/docs/pos_papers/2007/070424_SEPA_final.pdf</u> The Voice of SMEs in Europe;
- 9. European Central Bank (various years). Payment and Securities Settlement Systems in the European Union, Later editions of the Blue Book, Frankfurt am Main
- 10. European Central Bank .2009. Eurosystem SEPA Expectation, accessed at http://www.ecb.int/pub/pdf/other/eurosystemsepaexpectations200903en.pdf;
- 11. European Central Bank. 2009. The Single Euro Payments Area (SEPA): an integrated retail payments market, Frankfurt am Main
- 12. European Central Bank. 2009. Eurosystem SEPA Expectations, Frankfurt am Main
- 13. European Central Bank. 2012. Financial integrations in Europe, Frankfurt am Main
- 14. Government Accountability Office. 2008. "Credit and Debit Cards. Federal Entities Are Taking Actions to Limit Their Interchange Fees, but Additional Revenue Collection Cost Savings May Exist, GAO-08-558
- 15. Garcia-Swartz, D., R. Hahn, and A. Layne-Farrar. 2006. The Move Toward a Cashless Society: A Closer Look at Payment Instrument Economics, Review of Network Economics.
- 16. Herbei, M. and Dumiter, F. 2008. The Single Euro Payments Area (SEPA) the Pan – European market for the European integration, Journal Finance – Challenges of the Future, Year VII, No.8/2008, pp. 56 – 61.
- 17. PricewaterhouseCoopers Economic Analysis of SEPA Benefits and opportunities ready to be unlocked by stakeholders (January 2014) <u>http://www.pwc.com/gx/en/audit-services/corporate-treasury-solutions/cts-publications/sepa-benefits-and-opportunities-ready-to-be-unlocked-by-stakeholders.jhtml</u>
- 18. The PricewaterhouseCoopers report was prepared in January 2013 http://www.pwc.com/en_GX/gx/audit-services/corporate-treasurysolutions/assets/pwc-sepa-readiness-thermometer-state-of-play-with-one-yearto-go.pdf
- 19. Van Eetvelt, K. .2006. Blessing or Curse for SMEs, accessed at http://www.gtnews.com/article/6558.cfm;
- 20. Zago, C. . 2007. SMEs Perspective on SEPA, accessed at <u>http://www.gtnews.com/feature/167.cfm</u>.