

# The Single Euro Payments Area New Alliances Required to Tip the Market

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## List of Abbreviations

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<b>ATM</b>	Automated Teller Machine
<b>EACT</b>	European Association of Corporate Treasurers
<b>ECB</b>	European Central Bank
<b>EFTPOS</b>	Electronic Funds Transfer at the Point-of-Sale
<b>EADS</b>	European Aeronautic Defence and Space Company
<b>EPC</b>	European Payments Council
<b>ERP</b>	Enterprise Resource Planning
<b>ESCB</b>	European System of Central Banks
<b>EU</b>	European Union
<b>IT</b>	Information Technology
<b>MA-CUG</b>	Member Administered Close User Group
<b>MBP</b>	Multilateral Balancing Payments
<b>MIF</b>	Multilateral Interchange Fee
<b>POS</b>	Point of Sale
<b>PSD</b>	Payment Services Directive
<b>SCF</b>	SEPA Card Framework
<b>SCT</b>	SEPA Credit Transfer
<b>SDD</b>	SEPA Direct Debit
<b>SEPA</b>	Single Euro Payments Area
<b>SME</b>	Small and Medium Enterprises
<b>STP</b>	Straight-through-processing
<b>XML</b>	Extensible Markup Language

# The Single Euro Payments Area

## New Alliances Required to Tip the Market

ECRI Research Report No. 10/July 2009

Jürgen Bott

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### 1. Introduction

According to the EU Commission, the Single Euro Payments Area (SEPA) should make a significant contribution to making Europe the most competitive and dynamic knowledge-driven economy by 2010. SEPA should change the European payments business fundamentally. ‘Best of breed’ payment products should replace less efficient ones. Services such as e-invoicing should allow cost reductions in the payment processes of bank customers and should offer banks additional sources of revenue. The additional sources of revenue are supposed to compensate for the expected price erosion of ‘traditional’ payment services, due to increased competition among service providers. All national payments standards are supposed to disappear and be replaced by new SEPA standards, which should allow additional economies of scale and scope.

The European banking industry declared that it will create SEPA in a market-driven and self-regulated process. In June 2002, the EPC (European Payments Council) was established as the decision-making and coordination body of the European banking industry in relation to payments. The EPC developed new payments standards for SEPA.

One task of the EPC is to convince market participants to switch from ‘old’ national standards to the ‘new’ European standards. In order to achieve the migration from the national standards to the new standards in a market-driven process, it is necessary to prove that the new standards will bring significant economic advantages. In a network industry, cost reductions and/or additional revenues that can be realised by applying the new standards have to exceed the network effects currently realised with the old standard. Low introductory pricing, a common technique in switching to a network market, would cannibalise the revenue streams of services based on the ‘old’ national standards.

After six years of intensive work on developing SEPA, and roughly 18 months before SEPA was due to have been completed (end of 2010) it must be concluded that the SEPA process is in a crisis. The banks and their customers are rather reluctant to migrate to the new SEPA standards. Some of the banks and banking associations contributing to the work of the EPC can only partially identify the benefits the European Commission has attributed to SEPA.

In order to succeed in a self-regulated process, incentives are necessary to motivate service providers and users to change their current behaviour and to migrate to new service standards. There has to be a compelling business argument for service providers and service users to develop, to introduce and to apply ‘best of breed’ payment products.

However, with the business models currently applied by the majority of European banks, only a fraction of the expected benefits can be realised. In order to reap a larger share of SEPA’s benefits, banks would have to convert their currently applied payment strategies – mainly focused on domestic optimisation – to a true SEPA strategy.

The ‘old’ alliance of banks might currently not have the strength to change the nationally-oriented payment markets into a SEPA market. The formation of new alliances of banks (with a

clear commitment to SEPA) and non-banks (with opportunities to integrate payment services into their value chain) might be required before the national payments market can be induced to migrate to the new SEPA market. Unless these new alliances are established, EU regulators will have to continue to spur on the realisation of SEPA as they did the EC Regulation 2560/2001 on cross-border payments in euro, which eliminated the differences in price between cross-border and national payments, and clarify 'multilateral interchange fees' (MIF). It might also be necessary to set end-dates for the use of the 'old' national standards.

## **2. European Commission: Better prices and services needed**

The realisation of SEPA is a logical consequence of the promises of the euro. No that the euro has been introduced, it is indispensable to also harmonise the operations of non-cash transactions. The vision is to remove all technical, legal and commercial barriers between the domestic payments markets in Europe. SEPA is seen to be part of the Lisbon Agenda, which aims to make Europe the most competitive and dynamic knowledge-driven economy by 2010. Costs for providing and using payment services are supposed to be reduced significantly. The latest technologies should be used to deliver modern means of payment to European citizens and companies.

### **2.1 Strong commitment of the European Commission and the European Central Bank**

European Commissioner Charlie McCreevy considers payments the lifeblood of a modern economy. Without an efficient payments system it is not possible to build an efficient and properly functioning economy.

Today the European payments business is rather fragmented. European countries have historical reasons for using various payments instruments. Customer behaviour, the competitive environment and legal regulations of the payment business differ among the European countries. Therefore, the business models, technical models and operational models differ, too. Each country has optimised its domestic payment infrastructure in accordance with its specific conditions and requirements, resulting in a heterogeneous use of payment instruments, data formats, encryption standards and interbank arrangements (for example how to handle reversals).

In Europe, the business models of the retail payment industry are mainly oriented towards their heterogeneous national payment requirements. In the major European countries, roughly 95% of the retail payment transactions are purely domestic. Only 3% of the transactions are cross-border within the Single Euro Payments Area (SEPA). The rest belongs to cross-border transactions with countries outside SEPA.<sup>1</sup>

SEPA aims at enabling retail payments in euro to be made throughout the euro area under the same basic conditions from a single account, regardless of its location.<sup>2</sup> Within SEPA, there will be no distinction between domestic and cross-border payments in euro anymore. Consumers will be able to make euro payments throughout Europe from one single bank account using a single set of payment instruments as simply and securely as they currently make domestic payments. Business enterprises will also benefit from the uniform handling of payments in euro

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<sup>1</sup> Although percentages differ by banks, countries and statistical basis, the underlying message is consistent. Domestic payment transactions are far more numerous than cross-border transactions within SEPA.

<sup>2</sup> European Central Bank, *Eurosystem, Single Euro Payments Area (SEPA) from concept to reality*, Fifth Progress Report, July 2007, p. 4.

and will no longer have to hold accounts in several countries in order to remit and receive such payments.<sup>3</sup>

The objective of SEPA is not only to resolve the issue of cross-border payments, but also to harmonise the payments business in all of the domestic markets and to make the cross-border transactions between the national markets of SEPA equal to the domestic transactions. To only improve cross-border transactions between SEPA countries is not considered to be acceptable. The realisation of the SEPA, as intended by the European Commission and the Eurosystem (European System of Central banks; ESCB), requires – in its final consequence – that national infrastructures disappear. In all countries belonging to SEPA, a new Europe-wide harmonised infrastructure will replace the current national infrastructure. National markets within SEPA will merge into a new market.

SEPA will increase the competitiveness of European business and the financial sector, as well as bring about the integration of payment markets in the EU, which was identified in 2000 as one of the key measures to improve Europe's competitiveness, growth and employment under the Lisbon Agenda.<sup>4</sup>

The European Central Bank (ECB) and the members of the ESCB consider SEPA to be a major European objective.<sup>5</sup> According to Jean-Michel Godeffroy, Director General, Payment Systems and Market Infrastructure of the ECB, it is a prerequisite to allow Europe to become as efficient as the United States and to see national payment systems become discontinued or merged to form one bigger, more efficient system.<sup>6</sup>

According to the ECB, the major benefits of SEPA will materialise only if the project is future-oriented. SEPA should not be restricted to the translation of existing national procedures, infrastructures and standards into European ones. European actors should rethink what they have taken for granted so far. They should pay due attention to the new possibilities offered by progress in information technology. Innovative solutions have to be found to meet the technological challenges in the European payment landscape.<sup>7</sup>

SEPA could be re-enforced by legislation or by the direct participation of the Eurosystem. The disadvantage of the mandatory approach is that the legislature may decide on inferior standards. Already in November 2005, Mrs. Tumpel-Gugerell (Member of the Executive Board of the ECB) declared that the Eurosystem prefers to leave the processing of retail payments to the banking industry itself. She sees only two scenarios in which the national central banks may consider taking a more active role:

1. the banking industry fails to deliver the requested infrastructure for SEPA; or
2. the banking industry delivers only basic services that have to be complemented by the individual players.<sup>8</sup>

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<sup>3</sup> Elin Amundsen, "SEPA – Single Euro Payments Area", in Danmarks Nationalbank, *Monetary Review*, 1st Quarter 2007, p. 105.

<sup>4</sup> Charlie McCreevy, "Making the best of SEPA", National Payments Conference 2008, Dublin, 18 May 2008 (<http://www.europa-nu.nl/9353000/1/j9vvh6nf08temv0/vhu6jimyfryn?ctx=vhbildwc2kc9>).

<sup>5</sup> European Central Bank, "Towards a Single Euro Payments Area, objectives and deadlines", Fourth Progress Report, February 2006, p. 4.

<sup>6</sup> Jean-Michel Godeffroy, "SEPA for cards – a great opportunity for Europe", ZKA (Central Credit Committee) information session, Berlin, 15 January 2008.

<sup>7</sup> European Central Bank, Fourth Progress Report, op. cit., p. 8.

<sup>8</sup> Gertrude Tumpel-Gugerell, "SEPA: Making the dream become a reality", speech held on 15 November 2005, EU/US Retail Banking Forum, Brussels.

The ECB and the Eurosystem play the role of facilitator. The process of realising SEPA is conveyed in progress reports and the speeches of ECB representatives and representatives of National Central Banks of the Eurosystem. Furthermore, the ECB acts as mediator between the diverse interests of the different stakeholders in the SEPA process.

## 2.2 Expectations of policy-makers: Impressive gains

The European Commission expects that SEPA will result in tremendous gains and potential savings for the general public and that it will bring benefits to all stakeholders. In a consultation paper on SEPA incentives, the European Commission (Directorate-General for Internal Market & Service) monetises the related financial benefits at about €122 billion per year.<sup>9</sup> The biggest part of the expected benefits (some €100 billion) stem from new services such as e-invoicing. Increased use of electronic payments will benefit Europe by €5.3 billion. Product standardisation and infrastructure consolidation are expected to contribute €10 billion and fees unification will contribute €6.7 billion.

Accordingly, the potential the EU Commission has identified as stemming from scale and scope economies – combined with effective competition – add up to €22 billion. Much more substantial are the gains that will arise if SEPA is used as a catalyst to launch the next generation of e-payments, for example e-invoicing. According to the European Commission's report of 2006, a conservative estimate of the saving potential of e-invoicing easily exceeds €100 billion every year.

The Commission bases its calculations on studies performed by the European Association of Corporate Treasurers (EACT) and the experiences in some member states (especially from the Nordic and Baltic countries). EACT estimates that the volume of European invoices exceeds €27 billion per year. More than 50% of the invoices are exchanged between enterprises (business to business) or between enterprises and governments (business to government). EACT calculates the current costs of manually processing an invoice at €30 to €80 per invoice and the cost-saving from electronic processing between 60-90%. In an electronic system there is no need to re-key in details of the transactions for example; they only need to be approved. Order and invoice reconciliation could be automated and bookkeeping and accounting records electronically updated.

The productivity gains are available from straight-through-processing (STP). Customers access banks' payment services through a variety of gateways. Payment processes are strongly linked to other applications of the banks and bank customers' IT environments. Smoothing interruptions at each of these many interfaces, especially avoiding manual interference, contributes to error and cost reductions.

Automation also results in better cash flow and lower risk as senders can invoice more frequently without causing costs to their customers. EACT estimates a saving potential of €243 billion per year. The Commission assumes that only portions of the transactions can be processed as e-invoices and calculates more moderate savings per invoice. On the basis of a more conservative approach than that of EACT, the Commission estimates cost savings of €100 billion per year.<sup>10</sup>

More recently published studies estimate a much lower – but still impressive – market potential of realising SEPA. In a study published in 2007, Capgemini sees a market potential of up to

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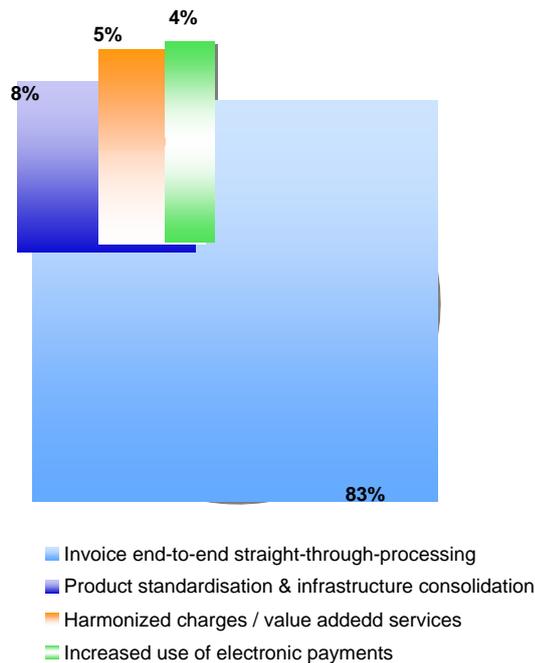
<sup>9</sup> European Commission, Internal Market and Services DG, Consultative paper on SEPA incentives, 13 February 2006, Brussels, p. 41f.

<sup>10</sup> Ibid., p. 42.

€123 billion – cumulative over six years.<sup>11</sup> E-invoicing would bring an additional net effect of €238 billion (cumulative over six years).<sup>12</sup>

Most European banks do not participate in the e-invoicing business yet. However, Capgemini sees banks well-positioned to offer services in the e-invoicing market, creating a potential extra revenue flow to banks of up to €3.4 billion per year. Even bigger benefits are expected on the demand side (from bank customers) with potential cost savings of up to 0.8% of the GDP of most European countries per year on invoice-related processes.<sup>13</sup>

Figure 1. Estimated benefits of SEPA



Source: European Commission, Internal Market.

The momentum to improve Europe’s payment landscape opens a window of opportunity for a technological and procedural leap. This opportunity should be used for visionary solutions. Service providers should look beyond the borders of the traditional payment services sector.<sup>14</sup>

### 2.3 European banks’ promise to create SEPA

The European banks intend to create SEPA in a self-regulated process, driven by market forces. In 2002, the European banking industry declared in a White Paper<sup>15</sup> its intention to create SEPA

<sup>11</sup> Capgemini Consulting, “SEPA: potential benefits as stake, Researching the impact of SEPA on the payments market and its stakeholders”, Utrecht, 2007, p. 4.

<sup>12</sup> Ibid., p. 29.

<sup>13</sup> Ibid., p. 5.

<sup>14</sup> European Commission, Internal Market and Services DG, Consultative paper on SEPA incentives, Brussels, 13 February 2006, p. 20.

by 2010. They founded the European Payments Council (EPC). Members of the EPC are European banks and banking associations from Europe. The EPC has so far focused on establishing new rules & regulations, creating new standards for processing payments in SEPA. They published 'rule books' for a SEPA Credit Transfer (SCT), a SEPA Direct Debit (SDD) and a framework for card transactions in SEPA (SEPA Card Framework; SCF). The EPC has decided that payment messages in SEPA must be based on international standards (UNIFI, ISO 20022; Extensible Markup Language, XML).

In the early years especially, the SEPA project only made limited progress. On several occasions, the ECB and the Commission expressed concern about the project. In its third progress report the ECB wrote: "The Eurosystem is concerned that the EPC has been significantly delayed in implementing its objective".<sup>16</sup>

Although the ECB and the Commission emphasised that they could take on a more active role, if the process was not speeded up, it would be left to the banking community to deliver SEPA as promised in a self-regulated process, driven by market forces. A self-regulated process driven by market forces requires an environment where market forces can work, where competitive forces achieve convergence, and where innovations are honoured.

However, operational bankers do not have a reputation for extensive innovative powers. Banks are creative in developing new financial products and derivative financial products. However, when it comes to innovations in operational services, banks are quite 'unobtrusive', despite customer demands for improved operational processes. In her opening speech at the SIBOS S.W.I.F.T. conference in Atlanta in October 2004, Heidi Miller (Treasury & Securities Services Executive, JPMorgan Chase & Co) remarked:

Customers tell us they need to achieve substantial improvements in their own efficiency and productivity. They want us to help them re-engineer their supply chains, speed their order-to-pay cycles, free working capital, and integrate seamlessly with their internal transaction and information systems. They want it in real time, across all borders. And of course, they want more value at lower cost. "[...]"customers cannot understand why an overnight delivery service can tell them exactly where a package is from the second it leaves their premises to the moment it arrives at its destination, but banks can not tell them exactly where a cross-border payment is as it moves through the process.<sup>17</sup>

European banks and banking associations have concentrated on the development of new standards for 'traditional' service offers. At the end of 2008 no path-breaking products had been announced on the basis of the work of the EPC, which started in 2002.

Customers expect more value from SEPA and not just new standards. The new standards have to be transformed into new service offers, which make payments faster, more secure or increase user-interface efficiency and make the interface between banks and their customers more user-friendly.

The Commission and the ECB have said on several occasions that SEPA products must not be developed to the lowest denominator of existing national service levels. Mrs. Tumpel-Gugerell

<sup>15</sup> European Payments Council, "Euroland: Our Single Payments Area", see the EPC website ([www.europeanpaymentscouncil.eu](http://www.europeanpaymentscouncil.eu)) under "EPC Documents".

<sup>16</sup> European Central Bank, "Towards a Single Euro Payments Area", Third Progress Report, December 2004, p. 9.

<sup>17</sup> Heidi Miller, Keynote speech, Opening plenary SIBOS 2004 ([http://www.swift.com/index.cfm?item\\_id=43378](http://www.swift.com/index.cfm?item_id=43378)).

remarked in 2005 that the aim must be to replace existing national schemes with a future-oriented scheme that is at least as efficient as the best national schemes to date; a scheme based on common standards that could also be used as a platform for services that the euro area will have in the future.<sup>18</sup>

In early 2006, the European Commission identified gaps between its interpretation of SEPA and the work in the EPC, which was set up to drive the self-regulatory process towards SEPA.<sup>19</sup> Examples are:

- The self-regulatory process cannot be considered successful if it does not include effective consultation of all stakeholders.
- Governance of the self-regulatory process cannot be in the hands of an exclusive club – non-banks need to be involved.

According to the Commission, the requests from enterprises and private consumers for new and better payment services should be implemented more effectively in the work of the EPC. A self-regulatory process should not be exclusively led by banks.

European banks introduced the new standard for credit transfers SCT on 28 January 2008. The first benefits of SEPA have since materialised. In September 2008, seven million SCT transactions were processed, accounting for 1.5% of the total credit transfer volume.<sup>20</sup>

Regarding the service level currently offered to customers, the SCT does not improve on the existing national service levels. However, SCT is a standardised payment scheme across borders and it is XML-based. This might support the further standardisation of banks' customer interface and it might ease the inclusion of additional data into the payment message and facilitate end-to-end automation and automated reconciliation.

The new standard for direct debits SDD is scheduled to start on 1 November 2009 with basic functionality. At the end of the year 2008, however, there were still many uncertainties, which may prevent a timely and successful launch of the SDD. At the end of September 2008 the French banking industry froze its investments in relation to the SDD, and they received official support from the Portuguese Banking Community and the European Association of Co-operative banks.

The German Savings Banks Association (Deutscher Sparkassen und Giroverband or DSGV) is going even further. DSGV will investigate whether the development of the SDD should be suspended and has frozen the development of SEPA value-added services in the meantime. Already in July 2007, the DSGV refused a proposal of the Deutsche Bundesbank (German national bank) to agree on a fixed end-date for the national systems, i.e. migration from national credit transfers to SCT in 2010 and from national direct debit to SDD in 2014.<sup>21</sup>

In November 2008 several banks had not yet finalised their operational preparation for the mass processing of SCT transactions, and processing still requires manual intervention. According to surveys conducted in 2007 and 2008 by the ECB, the main source of information regarding

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<sup>18</sup> Gertrude Tumpel-Gugerell, speech at the first EU-US retail banking forum, Brussels, 15 February 2005, p. 6f.

<sup>19</sup> European Commission, *op. cit.*, p. 14ff.

<sup>20</sup> European Central Bank, "Eurosystem, Single Euro Payments Area", Sixth progress report, November 2008, p. 13.

<sup>21</sup> Kora Krause, Sparkassen sperren sich gegen neues EU-System, Handelsblatt, 11 July 2008.

SEPA remains the press, rather than banks. In the ECB's view, bank information did not reflect a full appreciation of the impact of SEPA.<sup>22</sup>

Analysis of banks' publicly available information on SEPA demonstrates that banks very often limit their SEPA information on the material to general political statements and explanations of what is written in the rule books for SCT and SDD and SCF. Banks do not emphasise the opportunity to innovate European payment services. In his keynote speech at the European Transaction Banking Conference – Euro Finance Week in Frankfurt, Charlie McCreevy, European Commissioner for Internal Market and Services, complained: “sadly too often I feel SEPA is only seen as an expensive, politically-hatched, cross-border payment system, rather than as a golden opportunity to modernise and integrate the whole payments market.”<sup>23</sup>

Conservatism among bank representatives might be better understood by recalling that the good functioning of payment services depends on a harmonised fit of several dimensions (technology, process design, legal and business models).

The banking communities in Europe apply different business models to their payment services. And until the Payment Services Directive (PSD) is implemented, the legal fundamentals of the payment business will be rather heterogeneous in the different European countries. Adaptations to technology and processes have to go hand in hand with changing the national legal bases and the national economic models of the payment business. All dimensions of the national payment business have to be converted and optimised almost simultaneously towards SEPA.

### 3. New standards benefit the network industry

The SEPA project is in a critical phase. The Eurosystem has observed that motivation for the SEPA project has been fading away among market participants, and that the constructive spirit of the preparation phase has turned into a downbeat attitude.<sup>24</sup> Quick implementation of measures to strengthen the innovative power in the SEPA project and to re-stimulate the motivation is needed.

Certainly the differences between the expectations and the deliverables seen at the end of 2008 cannot be ignored. After six years of intensive work on the SEPA building site and roughly two years before SEPA originally should have been completed (in 2010), it must be concluded that the vision of theoretical benefits has not yet provided enough stimulus to change the industry. Too many market players in strategic positions did not consider this story convincing; they hardly see advantages in migrating from the old national standards to the new SEPA standards.

Nevertheless, the ECB, ESCB and the Commission trust that the EPC has delivered sterling work. Indeed we have seen impressive results; keeping in mind the magnitude of the task creating the envisaged SEPA and the complexity of bringing competing organisations together to formulate the strategic fundamentals of such an important business for the next decades.

It is important to bear in mind that the payment industry is a network industry. In network industries, it can be burdensome and costly to introduce a new standard. The new SEPA standards have to replace all currently used national standards. In network industries a large installed base of network facilities has an inherent advantage over new technologies. New technologies – even with objective advantages – which are however not compatible with the

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<sup>22</sup> European Central Bank, op. cit., Sixth progress report, p. 13.

<sup>23</sup> Charlie McCreevy, “The Single Euro Payments Area (SEPA)”, European Transaction Banking Conference – Euro Finance Week, Frankfurt, 17 November 2008.

<sup>24</sup> European Central Bank, op. cit., Sixth progress report, p. 5.

installed base of network facilities have a competitive disadvantage entering the market.<sup>25</sup> Therefore, it is necessary to have a look at the competitive aspects in the network industry first before analysing the costs and benefits of SEPA in more detail.

### 3.1 Established alliances in the European payment industry

The payment industry is a network industry similar to telephone or email services. An important characteristic of a network service is that the value a user gets from the service increases the more it is consumed. In network industries, the standards a service provider delivers will depend on the standards delivered by other service providers.<sup>26</sup>

#### 3.1.1 Competition aspects of network industries

In network industries there is the phenomenon that the value of a product or service depends on the number of users. The more people can be reached via email, the more value users of email services can draw from this service. The surplus from additional users who consume the service – not compensated for in the price – is commonly known as ‘positive demand-side network externalities’.

If the owner of the network or an important service provider in the network can generate revenues from the network effects (for instance, by raising the prices), the effects are internalised. It has to be distinguished between direct network effects – which are an immediate result of other users adopting the same system – and indirect network effects – which are caused as a secondary result, for instance when complementary goods are less expensive or more widely available when more people use the same system.

As an illustration, consider the following example of a direct network effect. The more people use a specific credit or debit card and the more merchants accept that card, the higher is the value of that card for the cardholders and the merchants. An example for an indirect network value is the following situation: If we had similar standards for POS terminals in Europe (that is, the interface used at point of sale, which are also known as Electronic Funds Transfer at Point of Sale, EFTPOS), the cost for providing terminal hardware and software might be less than in today’s fragmented environment.

However, there are also negative network effects such as ‘provider complacency’. Reasons for this effect include:

- 1) The absence of viable competitors in a successful network.
- 2) ‘Resource limits’ which cause capacity shortages when adding new users or new services to the network. With the next user, the value of the network begins to decrease.

As long as the netting of positive and negative network effects results in a surplus, network effects generate increasing returns. This builds up entrance barriers for new standards.

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<sup>25</sup> James J. McAndrews, “Network Issues and Payment Systems”, *Federal Reserve Bank of Philadelphia Business Review*, December 1997, p. 19.

<sup>26</sup> *Ibid.*, p. 15.

*Box 1. Consequences of network effects*

Several consequences of network effects have to be kept in mind when analysing the motivation for migrating to new payment standards.

- The new standard has to overcome the direct network effects: the effects on the value of the products that link users with a network.

Example: As long as there is no broad acceptance for a new payment card, consumers are less willing to grant the new card a slot in their wallet. As long as only a limited group of consumers has the new card available at point of sale, merchants are reluctant to sign new contracts or change internal payment processes allowing them to accept the new cards.

- The advantages of the new standard also have to compensate the indirect network effects generated by the availability of powerful complementary products that are built with some time-lag using the currently dominating standard.

Example: Generally, software companies engaged in programming payment applications or interfaces to payment networks will base their developments on the most common standards. As long as it is not clear that new SEPA standards will replace the dominant national payment standards, complementary products will mainly be built on the 'old' national standards. Also innovations in complementary products might be based on the most common instead of the most modern standard.

- The additional advantages of the new standard have to be big enough to compensate for the costs of migration (switching costs). Migrating from national payment standards to new SEPA standards will require hardware and software investments as well as efforts to build up know-how on the side of the service providers and users.

To successfully introduce a new standard, it is not sufficient to prove that the new standard has objective advantages in direct comparison with the old standard. The advantages of the new standard have to be so convincing that they exceed the network effects currently realisable with the old standard. It is at least necessary to convince the market participants that the new standard can produce network effects similar to those of the old standard.

A SEPA migration process – driven by market forces – should be built on standards that allow the development of services that provide significant additional advantages. They have to be so impressive to overwhelm the positive net surplus of network effects of the currently used standard. These advantages could materialise in higher efficiency (reduced costs), reduced risk, increased revenues or more convenience. Consequently, bank customers will continue to invest in the old national standards unless it is obvious that the old standards will disappear within the time-period of an investment cycle.

In a well-established network, dominant service providers can influence the market's choice of new technologies by limiting the ability of competitors to introduce complementary 'value-added services'. There are for example self-regulated boards (staffed with employees from the dominant service providers) that licence the introduction of new POS terminals or chip-technology on payments cards. Via licence-policies the dominant network providers can gain an advantage for their own complementary service – which may be inferior to those sponsored by competitors.<sup>27</sup>

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<sup>27</sup> Ibid., p. 21.

The dominant stakeholders in the already established markets constitute ‘old’ alliances. They could have a tendency to maintain (to protect) existing networks as their stability helps to protect existing market distributions.

### **3.1.2 *Technique to switch a network market***

A common technique to switch a network market from old to new standards is low introductory pricing. In such a strategy, payment services based on the new SEPA standards would be offered for a very low price – for an interim period even below production costs – to build a large base of users quickly. However, such a strategy would cannibalise the revenue streams of the services based on the ‘old’ national standards. How far an established service provider would be damaged by such a cannibalisation effect depends on its market shares. The larger the market share, the bigger the cannibalisation effect.

A low introductory pricing strategy might be more suitable for powerful newcomers than for service providers that already have dominant market shares in the payment markets and that would be strongly effected by cannibalisation. The formation of new alliances with members that are more positively than negatively affected by the introduction of the new SEPA standards might be necessary to tip the market.

An alliance that created expectations that it would work hard to quickly build a large user base for the new standards would seem to be more convincing than an alliance of market players who are uncertain whether the new standard would cause them to lose or to gain market shares. The new alliances could be formed for example between banks – with a credible strategy to enter new markets – and non-banks – with a plausible interest to integrate payment services into their value chain.

### **3.1.3 *Payment services have ‘cross-selling’ potential for banks and non-banks***

Payment services are known to offer excellent ‘cross-selling’ opportunities for banks. Once having accessed the customer via payment services, banks can easily sell additional account-related products (like credit lines for overdrafts). Payment services allow banks to generate additional revenues with interest or additional fees (for example, for payment card services). This allows some banks to ‘cross-subsidise’ the costs of payments services with the additional revenues earned from customers tied to a bank due to the payment services offered.

From a procedural point of view, payment services could also be linked with the value chain of other industries, for example retailers. With the implementation of the Payment Services Directive (PSD), it will be easier for non-banks to enter the payments business. The ‘cross-subsidisation’ potential of these potential market entrees could be even higher than the remaining ‘cross-subsidisation’ potential of banks already established in the national payment markets.

## **3.2 Realisation of economies of scale and scope**

Management in operational banking very often focuses on cost-reduction strategies. European banks successfully realised economies of scale on a national level by consolidating their national market infrastructures over the past decades. They invested in rationalisation and automation of their national payment infrastructure and utilised economies of scale and scope on a national level. According to that experience, several managers initially assumed that they can easily apply their national strategies to SEPA and a similar evolution should apply to the euro area level.

### 3.2.1 Theoretical expectations

SEPA creates a new market. Operating on a larger scale will allow service providers to utilise cost savings in the purchasing process (bulk buying), at the managerial level (increasing specialisation), financially (better market conditions) and in marketing (spreading the cost of advertising over a greater range of output). Each of these factors reduces the average cost of production. This effect is commonly known as the realisation of ‘economies of scale’ and describes the decrease per unit cost as output increases.

Theoretically the lowest unit costs can be utilised for bulk payments when the employed information technology is running on its maximum capacity. The more transactions a service provider can run on its machines the lower its unit costs will be. Established European-wide payment processors (for example, the company Equens) bundle payment transactions from different European countries on their machines. They can reduce their unit costs by utilising economies of scale at the European level.

Small- and medium-sized banks and other payment service providers can benefit from economies-of-scale effects via ‘outsourcing’ strategies. Once harmonised payments standards are commonly implemented in SEPA, banks can follow a European-wide sourcing strategy.

Conceptually similar to ‘economies of scale’ are the ‘economies of scope’. Whereas ‘economies of scale’ primarily refer to efficiencies associated with increased scale of a single product type, the latter occurs when there are cost savings arising from by-products in the production process. Economies of scope describe synergies between different products and can be realised when two or several products/services are produced jointly at lower unit costs than with separate production.

#### *Box 2. The French vs the German approach to liquidity collection*

French banks distinguish between the service for collecting liquidity on a regular basis in longer-lasting business relations (for example collecting payments for electricity companies from private households) and the collection of payments stemming from occasional purchases paid with a payment card at POS. The first service is processed as an ‘ordinary’ direct debit. For the second service, the collection of card transactions, the French banks design a separate service, the ‘card direct debit’.

French banks have centralised the infrastructure for processing ‘card direct debit’. By bundling all the French ‘card direct debits’ on one platform, French banks can utilise economies of scale on a national level.

German banks have not designed a specific ‘card direct debit’. They process in their current national design both types of services for liquidity collection with quite similar processes. They produce collections for payment card transactions together with all the other direct debits stemming from all kinds of business transactions. With this set-up German banks generate synergies between different types of services (economies of scope).

However, German banks have not fully centralised the clearing and settlement of payment transactions. They run similar payment infrastructures in parallel in each banking sector. Thereby German banks are not completely utilising their potentials for economies of scale.

Banks expect that prices and their revenues for traditional payment services will decline between 3% and 10%.<sup>28</sup> In addition to the expected price reduction for payment services, SEPA could bring positive synergy effects to help enterprises and consumers to reduce the number of their payment processes. Currently enterprises have to set up separate payment processes in each of the SEPA countries in order to cope with the different national payment standards.

Once payment standards are harmonised in SEPA, the companies and banks can apply the same standards all over SEPA and thereby reduce the number of different processes. If SEPA becomes a reality, it will enlarge the acceptance network for all payment instruments. Payment processes of shopping around in Europe – physically or virtually via the internet – will be more convenient, more secure and less expensive.

Card payments provide good examples. Technology and processes at POS (point of sale) should be harmonised in SEPA. Card holders and merchants might then enjoy the benefits of a single entry point at POS. In SEPA, suppliers (of Terminals for Electronic Funds Transfer and Point of Sales) can produce on a larger scale and consequently merchants can buy hardware and software for supporting payment processes at POS for lower prices.

Furthermore, SEPA can help to realise economies of scale and scope in innovation, in marketing and sales for payment services and in equipment used to support payment services. This will bring the advantages of a broader range of services earlier to bank customers, and will lower unit costs.

Customisation for specific demands of different payment situations (for example, shopping on the internet or liquidity management along the supply chain of international companies) can be performed more efficiently with the modern technology recommended for the new SEPA standards than with today's technology applied. Payment services can be combined more efficiently with additional functionalities (for example, loyalty card programmes or financing). New service features (such as card-to-card payments) can be provided faster and more effectively.

### **3.2.2 Limitations on the synergy effects under SEPA**

However, analyses at the level of individual banks or national banking sectors showed that within the current procedural models, the (net) potential of realising economies of scope and scale are moderate. Harmonised rule books for SCT and direct debits SDD are only single steps on a long road which leads at its end to the realisation of the synergy potential of SEPA.

Banks in Europe serve heterogeneous markets. They have adopted different business models and have designed their infrastructure accordingly. Therefore, European banks cannot just simply merge transactions on a European level in order to reduce unit costs. Rearrangements of process designs and business models – sometimes combined with disinvestments – are indispensable prerequisites before economies of scale and scope can be realised on a broader dimension.

Before significant cost savings can be utilised, investments are required to adjust the currently used technical architecture. In addition to the costs of technical adjustments, new contracts (for example outsourcing contracts on a European level) are necessary in order to bundle payment transactions on a European level, on a higher scale.

TowerGroup expects that European banks have to spend roughly €10 billion to introduce the new SEPA standards and PSE Consulting estimates that additional €6 billion are necessary to

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<sup>28</sup> Heiko Schmiedel, *The economic impact of the Single Euro Payment Area*, European Central Bank, Eurosystem, Occasional Paper Series, No. 71, August 2007, p. 16.

make European banks compliant with the new European payments law, given in the Payment Services Directive (PSD).<sup>29</sup>

Higher aggregation of payment transactions requires consolidation, which will go along with the closing down of payment engines that only can process national standards. Extraordinary depreciation of the recent investments in these engines would be necessary. Just a few years ago, banks all over Europe invested in their payment engines in order to cope with the introduction of the euro and to get their IT compliant with the year 2000 (Y2K) requirements. Banks, which have to close down their nationally oriented payment systems, have to set off the potential economies of scale promised by SEPA against the unavoidable depreciation in relocating their payment transactions to a new payment platform that aggregates transactions on European scale.

Sometimes economies of scope will have to be sacrificed before more economies of scale can be realised.

For example, as described in Box 2, French banks process the liquidity transfer resulting from card transactions between issuing and acquiring bank via a specific 'card direct debit infrastructure'. They utilise economies of scale on a national level as all French banks use that joint platform. By contrast, German banks process this liquidity transfer between issuing and acquiring banks as an 'ordinary' direct debit, together with the transactions stemming from all other direct debits and thereby realise economies of scope.

One European strategy could be, that the German banks design a 'card direct debit' similar to the French 'card direct debit'. French and German banks would process their card transactions jointly on a centralised platform. Following this strategy, the economies of scope that French banks first realised on a national level could then be utilised on a cross-border level.

In this scenario the German banks would have to bear the costs of developing and introducing a 'new service line': a 'card direct debit' (preferably similar to the French design). Then they would have to transfer their direct debit transactions from their current transaction platform to a specific 'card direct debit' machine, which is jointly used with the French banks. That would reduce the number of transactions on their current payment engines for all the other direct debits. Consequently the unit costs for the remaining direct debits would rise.

In an alternative scenario, the French bankers could (theoretically) sacrifice their arguments for a specific 'card direct debit'. If (legally, contractually and strategically) possible, they could process direct debits stemming from debit card transactions as 'ordinary' direct debits in the way German banks do. In this scenario, all direct debits – from different types of transactions – could be processed on a jointly used centralised 'clearing engine'. Then French and German banks could (theoretically) utilise economies of scope and scale on a joint level.

However, in this purely theoretical scenario, French bankers would have to depreciate their 'card direct debit' infrastructure and abandon all the good arguments for a specific infrastructure for 'card direct debits'.

Synergies that can be utilised European-wide without disinvestments and within a few years (until end of 2010) are rather limited. They might not be attractive enough to generate the momentum to sufficiently change the nationally oriented European payments industry into a European-oriented industry.

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<sup>29</sup> Reported by EurActiv, "Banks foresee higher costs for SEPA than PSD", 24 July 2008 (<http://www.euractiv.com/en/financial-services/banks-foresee-higher-costs-sepa-psd/article-174454>).

Mrs. Tumpel-Gugerell, Member of the Executive Board of the ECB, speaking at the first EU-US Retail Banking Forum in 2005, cited the views of international consulting companies that SEPA will not come about at zero costs for the payment industry. Besides the necessary investments to build the new SEPA infrastructure, it was feared that increased competition might cause an overall decrease in revenue of between €3 billion and €9 billion (minus 30-60%, measured against a 2010 baseline scenario without the SEPA of the revenues of the traditional service offers).<sup>30</sup>

The costs of switching to the new standards are not limited to the banking sector (the service providers). Users too face immense migration costs as suggested in the following.

[German insurance companies] calculate €3.5 billion only for getting the infrastructure ready for managing the mandates required by the SDD. Including costs for interruptions in the payments process during migration (for example loss of interest due to delayed payments in the interim period), managing irritated customers, follow-up and back-up procedures, the German insurance industry calculates altogether €4.8 billion for the introduction of the SDD (as proposed by the EPC in summer 2008).<sup>31</sup>

These are only the costs for one new SEPA product, in one European country and for one market segment. Simple projections of the total costs of all users in SEPA should give a good explanation why it is not an easy task to convince market participants to leave a (fairly) well-functioning infrastructure and to invest in a European vision.

### 3.3 From new standards to new business models

Setting common technical standards is only part of the work. It is more problematic to transform the opportunities of new standards into new business models. Intensive reorganisation and disinvestments will be necessary to build new working environments in SEPA. The cost of depreciation and reconstruction – which can be calculated quite precisely in many cases – will reduce the imagined synergies that are eventually realised in SEPA. The net effect of theoretical cost-saving potential minus the cost of obvious reorganisation requirements is the decision-making basis for SEPA.

#### 3.3.1 *International banks probably cannot tip the national markets*

The payments industry is a network industry, as stated above. Key strategic decisions have to be made almost simultaneously in organisations that are in competition with each other, follow different strategies and have different abilities to innovate or prepare for an industry change. Only if consensus on a new business model can be reached – among stakeholders who represent significant market shares and hold key positions in the industry – will it be possible to generate the synergies promised by SEPA.

As already described, the cross-border business within SEPA represents only a small share of the payments market. The dominant national standards, which all would have to be replaced by the new SEPA standards, are built around national market requirements.

International banks (for example, Deutsche Bank) have separate organisational units in several European countries that run their own national payments engines. They maintain different payment infrastructures in Europe. Modifications in response to new compliance requirements (for example, money laundering or new requirements of the PSD) create several similar projects

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<sup>30</sup> Gertrude Tumpel-Gugerell, op. cit., p. 5.

<sup>31</sup> Heinz-Werner Richter, “SEPA-Industriestandards zum Nachteil der Kunden?“, *Handelsblatt Jahrestagung*, IT für Versicherungen, 16-17 September 2008, München, p. 14.

in parallel (for each of the IT systems designed for the specific national requirements). These international banks have rather easily identifiable advantages of a new common SEPA standard. They could centralise major parts of their maintenance work and thereby reduce their respective costs.

We find a quite different situation for banks running payment infrastructure in only one European country. They do not have the costs of similar simultaneous IT projects in several European countries. From this group of banks the obvious advantages – regarding IT maintenance costs – of a common SEPA standard are (at first glance) limited to their rather small portion of cross-border transactions within SEPA.

Let us consider for example the German market: Deutsche Bank's market share in the domestic retail payment business is less than 10%, whereas the mainly domestic-oriented banks (saving banks and cooperative banks) hold roughly 2/3 of the national market, which dominates the German payments business. Accordingly, the international banks, which might have the most obvious stimulus resulting from synergies on the cost side, are by no means in the position to tip the domestic market, i.e. to be a standard-setter. Banking groups, which are strong in the national markets in Europe, have less obvious advantages – with respect to cost-reducing synergies.

### **3.3.2 Dominant banks and their strong national focus**

Usually the formation of a strong and capable group of market participants (an alliance) is necessary in order to switch the markets from old to new standards (i.e. to tip the market). Members of the alliance necessary for tipping the European payments markets towards the new SEPA standards have to identify the economic advantages SEPA might bring to their specific business model. They have to have a common understanding of how to share and distribute the overall impressive benefits of SEPA. Finally, they need a convincing story to explain their strategy of how to tip the market to the market participants and to the regulators. Otherwise, they will not get sufficient support from these stakeholders.

Currently the alliances necessary to develop and maintain the rules and regulations (including the technical and operational standards) of the payments business are formed in each country around the 'dominating' part of the payments business, which is in general domestic. The members of the EPC (representatives of European banks and banking associations of Europe) are almost identical with the people who have to manage and maintain the current national infrastructure.

Some of the stakeholders in the European banking industry do not appreciate the impressive economic benefits described by the Commission. They question the economic benefits expected and criticise the project for being launched without having first been closely analysed for the strong interaction between technical, legal, and economical issues. They argue that moving too fast without having solved discrepancies among countries will create huge distortions in the payments market, to the detriment of end users.

Economic uncertainties would hold back the momentum needed to replace domestic instruments by European ones. Without sustainable business cases for the new standards, banks and users will be unable to commit the requisite technical and commercial investments.<sup>32</sup>

Being intensively engaged in the national infrastructure, it might be difficult to see, how innovations in the European payments industry could significantly contribute to make the EU

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<sup>32</sup> Eurofi, "Single Euro Payment Area (SEPA): Refocusing the aim to achieve genuine across-the-board involvement", Paris, 6 June 2006, p. 2.

the most competitive and dynamic knowledge-driven economy. From the perspective of some payment managers in charge, bank customers already receive satisfying payment services. “European consumers are broadly content with their domestic payment instruments at the moment.”<sup>33</sup> In their opinion, only marginal improvements are necessary to make customers completely satisfied. They believe that with the offers already in the market, nothing of real importance is missing. They reject the argument that improved payment services could provide significant additional advantages to the customers, which would make the customers willing to pay for ‘value added service’ delivered on the road to SEPA. The developments they consider to be valuable can be provided almost regardless of SEPA.

According to their business understanding, the expectations attached to SEPA should be lowered significantly. In their minds, bank contributions to SEPA should be limited to ensure a smooth technical interoperability between the well functioning national payment systems. In this model of thinking, the best SEPA strategy is to achieve technical interoperability between the domestic systems with the lowest possible investments.

#### **4. Commitment to the vision of SEPA**

A self-regulated process that is driven by market forces needs alliances of people who are strongly committed to the vision of SEPA and are motivated to change the industry instead of preserving it. The members of the alliances needed for SEPA must clearly see that the future of SEPA is brighter than the present. Any alliance this is able to fulfil the promise of SEPA and significantly contribute to the Lisbon Agenda will have to be committed to innovation and the entrepreneurial spirit. Bankers with a clear SEPA mindset will have to consider the following questions:

- How long can they wait for SEPA to be realised (for how long can their banks carry redundant costs)?
- Can they find sufficient arguments to convince the more nationally oriented bankers, which often dominate the national markets, that SEPA brings a strong positive net effect also for them?
- Or must they look for alternative partners (new alliances) that are strong enough to tip the national markets?

European banks will have to go through a sequence of steps, before they are ready to realise economies of scale and scope in SEPA. Preliminary work has to be done on at least three layers both industry wide and with the individual organisations: i) operational strategy, ii) technical and procedural readiness and iii) organisational behaviour.

##### **4.1 Operational strategy**

Drawing significant benefits out of SEPA has to be recognised on the individual stakeholder’s level as a realistic option. The dimension of the realistic benefits has to be big enough to justify the disinvestments and costs for rebuilding operational infrastructure.

The opportunities SEPA can offer to the different stakeholders have to rank very high in comparison to alternative business opportunities. During the last few years, bank managers devoted more of their innovative power to investment banking than to payment services. Keeping in mind the financial crisis, the trade-off between potential synergies, and the obvious depreciations and cost for amendments are certainly an obstacle in the way towards SEPA. In

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<sup>33</sup> Ibid., p. 4.

the current situation most banks have only limited financial resources left to invest in payment services. Additionally, they have limited power for investments with a high degree of uncertainty.

To identify and utilise the potential of SEPA, a new business understanding is necessary. A strategy of “doing more and better of the same” is not sufficient. Operational bankers will have to rethink – and to innovate – their traditional business models, which were nationally oriented. They will have to accept that traditional sources of revenues will dry up.

Motivation for the innovations – requested by the Lisbon Agenda – will have to come from additional revenues, demonstrated in convincing new business models. Additional revenues can stem from new service offers suitable to fulfil customer needs not completely satisfied with current offers. If banks are not ready to provide the needed value-added service, others will do so.

#### **4.1.1 Additional sources of revenues for service providers**

The more regionally oriented – and often smaller – banks hardly see how SEPA could help them to improve their competitiveness. Looking into other industries, however, we can see there are several smaller and medium-sized enterprises that are very successful in international competition. They sometimes outperform their bigger competitors. For example, in the automotive industry, Porsche and BMW belong to the smaller producers, but they are at the same time the most profitable ones. There are several smaller banks in Europe with a return on equity exceeding those of bigger banks. There are at least two good reasons for this phenomenon: i) product differentiation and ii) flexibility.

If customers’ preferences are highly differentiated, there will be opportunities to gain higher prices for products or services fulfilling specific customer needs. Under specific market conditions, prices can be set so high that they over-compensate higher unit costs due to diseconomies of scale.

Those who believe that customers are already fully satisfied with banks’ current offers in payment services should consider that buying and payment behaviour of consumers has changed considerably in recent years. There are examples that strongly indicate that bank customers are not fully satisfied with the ‘classical’ means of payment. PayPal was successful because ‘classical’ means of payment are inadequate for the payment requirements in the internet auctions of eBay.

In a position paper entitled “Creating a Pan-European Payments Area (SEPA)” published in January 2006,<sup>34</sup> the Federation of German Industries stated: “The present-day processing of payments... does not meet the expectations of non-banks concerning a pan-European, STP-compliant and efficient payment system...” Over four pages they list the shortcomings of today’s offers for international payment services, including the following:

- Enterprises request real ‘end-to-end integration’ of their financial processes. They have solved most of their intra-company communications and interoperability problems. Now they are focusing on external communications and processes with their suppliers, including financial service suppliers.
- Corporate treasurers are looking for overall efficiency of all financial transactions and not just an interface for sending credit transfers or direct debits and receiving account statements electronically.

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<sup>34</sup> Bundesverband deutscher Industrie (BDI), “Creating a Pan-European Payments Area”, Position Paper, 31 January 2006.

- Small and large organisations use standardised web-based technology that allows low-cost, secure, real-time information exchange. They request flexible and modular inter-operable solutions with a high degree of automation (for instance, single input of data) which can be used globally.

Some of the companies help themselves: BASF built its own ‘payment factory’ and EADS (European Aeronautic Defence and Space Company) uses a small SWIFT Service Bureau to run several Member Administered Close User Group (MA-CUG) arrangements with different banks. This arrangement allows EADS to act almost like a bank in its own ‘correspondent banking network’. The costs for building and managing this multi-MA-CUG network with intensive use of SWIFT services are almost marginal in comparison to the advantages EADS gains in treasury management.

Before EADS made the decision to build its own network, EADS managers unsuccessfully requested service improvements from several European and non-European banks. Similarly, BASF first tried to optimise its payment processes with the help of banks. Finally, they decided for a ‘self-help approach’.

There are also calls from SMEs, retailers and their respective associations requesting improved payment services at the national and international level. The key message is: There are unsatisfied customer needs. Not all of them can be rejected on grounds of network externalities. Service providers do have chances to differentiate (more) via service offers and to ‘earn extra money’ with ‘value-added services’.

In comparison to the ‘old’ payment standards, the new payment services built on XML standards will make it easier to efficiently combine ‘sub-processes’ with customised solutions for specific market segments. Banks can react more flexibly with regard to customer requests and have more freedom to differentiate via service offers. XML opens up more possibilities to compete on service levels.

Differentiation on functionality and quality provides banks with opportunities to react to the expected price erosion for ‘classical’ payment services with higher-priced ‘customised services’ or additional revenues for ‘value-added services’ designed for certain groups of customers willing to pay for the extra service.

#### **4.1.2 The means of payments impact on the purchasing process**

The definition of a product or service includes a large number of variables: shape, packaging, brand, guarantee and financial elements. Means of payment is one of the financial variables that define a product. Changes in payment habits, new instruments and new communication channels open a number of alternative payment systems that impact the purchasing process.

New payment services can also help bank customers (such as retailers or online shops) to increase their turnover. Credit cards foster spontaneous purchases. Retailers accepting credit cards build on such effects. Research from PayPal shows that “adequate means of payment” can help online shops (e-commerce) to increase sales by 5 to 20%.<sup>35</sup>

Convenience can also be a source of additional revenue. For instance, the effort needed to fill out a form or to enter static data can make a difference. In PayPal, customers have to enter account or card information only once. They can use this data for all their internet transactions when paying with PayPal. According to a study from Jupiter Research (published 5 January 2006), adults in the United States who use credit cards online consider the convenience function

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<sup>35</sup> D. Schatt, “Cents and Sensibility: The Marriage of Online Micropayments and Digital Commerce”, Celent Communications, September 2005, p. 13.

to enter card data only once to be the most important criterion when deciding which payment medium to use. This form of convenience was ranked higher than reward programmes or online security.<sup>36</sup>

With ‘Base plus Google payments’, anyone can sell goods and services on the Internet. Shoppers can buy without ever leaving Google’s site. With its new payment services Google can offer merchants a bundle of services that includes both paid search and transaction processing. Merchants only pay when a sale is completed. ‘Pay for purchase’ could be a more appealing model for merchants than Google’s current approach ‘pay per click’.<sup>37</sup>

The Payment Services Directive (PSD) will make it easier for non-banks to enter deeper into the payments value chain. The example of Google demonstrates that payment services have cross-selling potential not only for banks. They can be implemented into the business models of non-banks and will help non-banks to redesign their financial processes – which might make them more independent from banking services.

Payment services implemented in the business model of non-banks could lead to new business cases for payment services, which could be more applicable than the current business cases for payment services in the traditional business models of banks.

Non-bank service providers could become one of the driving forces of the SEPA process. They are not represented extensively in the EPC. If they drive the SEPA process, it is quite likely that they will not apply the measures of the EPC. Perhaps they will even not apply the standards published by the European banks and their associations.

Alternatively, the non-bank service providers could ally with banks to complement their payment operations with financing and depository products of European and non-European banks.

## 4.2 Technical and procedural readiness for SEPA

Payment processes are strongly interwoven with other financial processes of banks, the processes of technical service providers (for example, computer centres or network service providers) and the financial processes of enterprises (such as direct debit services or cash management applications). Today, synergies are generated within an individual banking organisation or within a specific banking group (saving banks, cooperative banks or private banks) or within a financial market. In order to generate synergies, extensive parts of the payment value chain are brought into one ‘business unit’ to become nearly ‘monolithic blocks’.

Information technology architecture is optimised for the current internal requirements of a bank, a banking group or a national financial market. It is procedurally and even more politically complex to break off such well-functioning local optimisation for the sake of the vision of an even better optimisation in a still somewhat vague SEPA. Disputed standards, rules and regulations for SEPA make it difficult to identify these parts of the payment process that are suitable for the realisation of economies of scope in European outsourcing strategies.

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<sup>36</sup> A. Buchner, “Credit Cards Online”, Jupiter Research, 5 January 2006, Figure 3. Secondary source from Th. Eisenmann and L. Barley, *PayPal Merchant Services*, HBS Case No. 9-806-188, Boston: Harvard Business School Publishing, 2007, p. 23.

<sup>37</sup> Th. Eisenmann and L. Barley, *PayPal Merchant Services*, HBS Case No. 9-806-188, Boston: Harvard Business School Publishing, 2007, p. 11.

### **4.2.1 Modularity of payment sub-processes**

Bank payment processes will need to be re-designed. New technology can help to design European payments processes so that they can be split up into smaller independent sub-processes. Most of the sub-processes will be common to the different market needs in SEPA and common to the different payment instruments used. Small sub-processes can more easily be re-arranged between different service providers in Europe than today's 'monolithic' processes.

Modular process design with small sub-processes will enable a new dimension of sourcing opportunities. Harry Leinonen from the Bank of Finland combines these growing opportunities for outsourcing with the sustained decline in costs for information technology hardware and software in recent years and concludes that the cost of payments could become marginal and comparable to sending emails.<sup>38</sup>

Following his reasoning, we would have to conclude that the key success factor for realising significant cost savings is innovation in process design. Payment processes will have to be progressively divided into standardised sub-processes, which can be supported by common programme libraries and perhaps even freeware solutions.<sup>39</sup> In comparison, bundling the European payments transaction into one of the payment engines following traditional process design might bring only limited advantages.

In several European countries there are standards and procedures in place, which were designed decades ago. In comparison to these traditional standards, the technology proposed by the EPC for SEPA (XML; Extensible Markup Language) allows a more effective design of new means of payments or an easier customisation of offers for specific needs of certain market segments.

### **4.2.2 Extended value chains with XML technology**

In comparison with the currently applied technology, the telecommunications standard XML – which is promoted by the EPC – makes it easier to enlarge the current service offers of banks. XML might help banks to enlarge the banks' value chain. Electronic invoicing is one example leading the thinking in this direction. In the current business understanding of payment services offered by banks, bank payments services start with receiving credit transfers or direct debit orders. In this understanding the service ends with sending account statements and information on received or executed payment transactions to the customer.

From the perspective of the customer, the payments value chain is longer. A customer has to perform several tasks to produce credit transfers or direct debits before he can send payment instructions to his bank. When the customer receives the account statements from his bank, reconciliation and accounting tasks are necessary before the payment process is complete. An enlarged payment service understanding of banks could start with a purchasing order of the customer and could end with booking entries in the financial accounting system of the customer.

Electronic invoicing networks allow sending invoices and receiving payments electronically in a standardised way by all participants in a commercial supply chain. All process steps in the value chain between sending an invoice and making the account entries for the received payments follow standards. In electronic invoicing networks, banks – so far limited to the traditional business understanding – could offer new services along the supply chain in an efficient way (such as reconciliation services).

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<sup>38</sup> H. Leinonen, *Payment habits and trends in the changing e-landscape 2010+*, Helsinki, 2008, p. 111.

<sup>39</sup> *Ibid.*, p. 123.

Innovations such as substituting manual paper-based processes with e-invoicing would be fostered in particular in the sector of small- and medium-sized enterprises (SMEs). Linking these organisations electronically in their supply chains would contribute to efficiency improvements at the individual and at the overall level.

E-invoicing by the Danish government saves an estimated €100 to €134 million per year in public sector procurement. The Finnish Federation of Industry has estimated that the potential for cost savings of e-invoicing in the business-to-business area is €2.8 billion per annum.<sup>40</sup> The European Association of Corporate Treasurers has indicated in its Corporate Action on Standards project that e-invoicing has a savings potential of more than €243 billion a year in business-to-business across Europe.<sup>41</sup>

In addition to the gained process efficiency, e-invoicing, provided by a trusted third party (bank), might reduce the operational risk of the SME, which otherwise could not afford to apply similar process quality. SMEs could benefit from economies of scale and scope by outsourcing their internal services to the banks.

Being enrolled electronically in the standardised exchange of financial data along the whole supply chain might help financial institutions to improve their financing processes. As a consequence, financing can be provided more effectively and therefore more cost-efficiently for the enterprises. Payment infrastructure could be built up to an 'electronic sales channel' for financing and cash-management products.

### 4.3 Organisational behaviour

The vision of SEPA and the commitment to achieve its benefits has to be anchored in the mind of the managers driving the process. Members of the teams setting and implementing the SEPA standards have to recognise the benefits that SEPA will bring for their employers' strategy and that SEPA will contribute to their own careers.

It also has to be recognised that the idea of SEPA might meet with resistance. Reaping economies of scale in an industry with limited growth often requires mergers or the ousting of market players from their position. In general, people rarely seek organisational changes for they imply discontinuity and destruction of familiar arrangements and relationships. Differences in technology and process design are helpful in protecting markets and initial preliminary consideration helps to secure jobs.

The resistance is even stronger when the members of the organisation do not understand the reasoning behind the change or why the changes will bring improvements. Personal values ultimately determine which changes are welcomed, promoted and successful, and which will fail. Each (important) stakeholder in the payments process needs a purpose, a story to believe in why SEPA will improve the current situation.

### 4.4 New alliances are necessary to create SEPA

No service provider in Europe currently holds a strong enough position to quickly build a broad user base for new standards. Alliances are necessary to tip the European payments markets towards the new SEPA standards.

The (old) alliances that developed and maintained the standards currently applied are formed in each country around the 'dominant' part of the payments business, which is in general domestic. Organisations – i.e. the people working for those organisations – that fear that SEPA might

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<sup>40</sup> EC Expert Group, European Electronic Invoicing (EEI) Interim Report, April 2007, p. 8f.

<sup>41</sup> Ibid., p. 9.

overall bring more negative than positive effects might be inclined to drive the process of creating SEPA very cautiously.

The members of the new alliances have to identify the economic advantages SEPA might bring to their specific business models. They have to have a common understanding of how to share and distribute the overall impressive benefits of SEPA.

Gaining broad support for SEPA requires perseverance and patience. Payment experts have to be trained to think in European terms. Their support is necessary to develop and to apply new SEPA standards, qualified to design new business models for SEPA.

The new business models have to demonstrate how the own organisation can participate in the benefits proclaimed for SEPA. The SEPA business models have to be more profitable than the current domestic ones. The SEPA strategies have to be convincing enough to justify the investments to migrate to the new standards.

It will not be sufficient if banks limit their contribution to the process of creating SEPA to simply substituting existing payment standards with new standards without changing the underlying business models. Participation in the exploration of the impressive benefits of SEPA requires a new understanding of the payments business in SEPA.

The alliances capable of tipping the market should consist of more than just bankers and bank associations. The economic interests of enterprises, consumers, public administrations and banks have to stimulate the development of and the migration to new payment standards. The European Commission otherwise, the cooperative process could lead to solutions that are sub-optimal from a wider economy perspective.<sup>42</sup>

An alliance of important market players is necessary. The members of that alliance have to have an interest in changing the current distribution of the market shares significantly and they have to agree on a strategy of differentiation. Stakeholders, already involved in the payments value chain, might broaden their contributions to the overall payment process and thereby change the traditional business models. They have to deliver advantages to the payment service customers, which the customers do not receive with the current business design.

The main success factors of the new alliances are:

**Support along the value chain.** It is necessary for the alliance to have support along the value chain. Banks, which intend to tip the market, have to ally with important players of different business sectors and geographical regions. They need support from major customers (merchants, enterprises, public organisations) and suppliers (such as network service providers, clearing organisations and schemes).

**Expectation management.** Customers, suppliers and producers of complementary products have to be convinced that the new alliances will succeed. Besides creating and communicating the vision, (new) organisations have to be empowered to act upon that vision. Among other routes, this can be reached by establishing 'innovative companies' (for example as payment institutes or clearing houses with the ability to extend their service offers). The empowered companies have to create 'short-term wins', such as gaining international partners for clearing services.

**Market lead.** Improvements have to be consolidated to produce further change. Cooperation between innovative banks and key customers should be established with a clear commitment to service differentiation. New ways of customer access – bypassing traditional sales challenges which prove to be resistant to the SEPA idea – have to be established. The customer base of the

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<sup>42</sup> European Commission, op. cit., p. 14.

cooperating partners and the way the new payments business design attracts additional business should provide confidence for success at an early stage. For example, international retailers could ally with rebate card organisation and banks to issue payment cards – perhaps in co-branding with an international payment cards scheme – which combine rebate services and payment functionalities on a SEPA-wide scale.

Organisations participating in these forms of cooperation have to be ready for short innovation cycles. A single innovative payment service could be diffused very quickly. To make a difference, it is important to demonstrate the willingness and ability for a continuous lead. Once the competition on innovation is started, new payment services – which provide valuable advantages to the customers in their target segments – have to be delivered in short intervals. The new approach to running the payments business in SEPA has to be institutionalised.

**Success sharing.** Intelligent solutions are necessary to distribute the generated value among the partners in the alliance. In the old alliances, multilateral interchange fees (MIF) and multilateral balanced payments (MBP) ensured revenue distribution between issuing banks and acquiring banks. Decisions of DG Competition will limit future use of such arrangements. Most of these arrangements will have to be substituted by new business and pricing models that are not in violation of EC Treaty rules on restrictive business practices.

Smart profit-sharing policies are especially required for securing influence over the providers of complementary products (for example, PoS terminals or software, enterprise resource planning systems).

**Compatibility with existing services and standards.** An interface with the existing domestic standards should also be provided. It would be a disruptive element in a market-driven process, if competing companies commonly set an end-date for serving the old standard. However, that might be another necessary intervention of European regulators to spur on the creation of the SEPA.

## 5. Conclusions

The payment industry is a network industry. None of the current European service providers has the power to tip the market on its own. It will be necessary for them to form new alliances among members who are strongly convinced that SEPA will improve significantly their own economics. The ‘old’ alliances, which build and maintain the actual payment infrastructure, are not sufficiently motivated to create SEPA in a self-regulated process purely driven by market forces.

The creation of SEPA will first lead to higher costs to set up new payment infrastructures and to run old and new infrastructures in parallel. During the initial phase of running parallel infrastructure, SEPA’s potential on the revenue side is vulnerable to the effects of cannibalisation. For the foreseeable future, the net effects between the potential cost savings – mainly due to realisation of economies of scope and scale – and the costs of closing down existing national infrastructure will not be fully convincing to all important stakeholders of the European payment industry.

SEPA’s cost savings and revenue potential are unevenly distributed among European banks. Banks with an international operational infrastructure identify positive synergies more easily than banks with a purely domestic strategy and infrastructure. The ability to establish new strategies to explore additional sources of revenue in the payments business depends on the individual bank’s innovative strength in the field of transaction business. Operational and strategic readiness for e-business (e-SEPA), a prerequisite to utilise the cost savings and revenue potential for example of e-invoicing, is not yet recognised among all European bankers.

There are differences between banks' deliverables to realise SEPA and the expectations of 'innovative' service, requested in the speeches of the European Commission and ECB officials. More effort is needed to bring service improvements significantly above the lowest denominator of existing national service levels.

As explained by examples, certain market segments in Europe's payments business are not fully satisfied with current service offers. Some of these customers might align themselves with banks, which are fully committed to the potential and the expected innovations of SEPA. These new alliances of 'innovative' banks and non-banking institutions will look for payment products that will serve their needs better than the current ones.

Until the new alliances are formed, the Commission and the ECB will have to continue to promote the SEPA process. Regulations are necessary to facilitate the launch of SEPA products and to ensure European-wide reachability with the new SEPA standards. It will even be necessary to regulate the existing business models (for example by providing clear guidance with respect to 'multilateral interchange fees') to help the banking industry to come forward with business models suitable for SEPA.

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