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COMMISSION STAFF WORKING DOCUMENT

*Accompanying document to*

**the proposal for a Directive of the European Parliament and of the Council  
amending Directive 2000/46/EC on the taking up, pursuit of and prudential supervision  
of the business of electronic money institutions**

**IMPACT ASSESSMENT**

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***Disclaimer***

*This impact assessment report commits only the Commission's services involved in its preparation and the text is prepared as a basis for comment and does not prejudge the final form of any decision to be taken by the Commission.*

**1. INTRODUCTION**

Over the past three decades, the European financial sector has evolved and grown with incredible speed, spurred principally by four challenges: globalisation, European integration, financial and technological innovation.

Directive 2000/46/EC on the taking up, pursuit of and prudential supervision of the business of electronic money institutions (hereby referred as 'the EMD')<sup>1</sup> was adopted in response to some of the challenges highlighted above. The EMD represented a response to the emergence of new pre-paid electronic payment products, and was intended to create a clear legal framework designed to strengthen the Internal Market and stimulate competition whilst at the same time ensuring an adequate level of prudential supervision.

Electronic money is defined by the EMD, as 'monetary value as represented by a claim on the issuer which is: (i) stored on an electronic device; (ii) issued on receipt of funds of an amount not less in value than the monetary value issued; (iii) accepted as means of payment by undertakings other than the issuer'.

The EMD seeks to open the market for the issuance of E-money through the creation of Electronic Money Institutions (EMIs) regulated under a lighter prudential regime than that required of credit institutions.

The legal basis for this initiative is Articles 47(2) and 95 of the EC Treaty.

**2. PROCEDURAL ISSUES AND CONSULTATION OF INTERESTED PARTIES**

On the basis on the EMD's review clause (Article 11), the Commission launched, in January 2005, an evaluation exercise. Based on indications that the development of e-money

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<sup>1</sup> OJ L 275 of 27.10.2000, p. 39.

may have failed to live up to expectations, and that the original ambitions of the EMD may not have been achieved, the Commission decided to broaden the initial scope of the review<sup>2</sup>.

In July 2006 the Commission adopted a Staff working document on the review of the E-Money Directive (EMD)<sup>3</sup>. The report concluded that there was a need to revise the current directive, some provisions of which seemed to have hindered the take-up of the e money market. The report also suggested awaiting the final adoption of the Payment Services Directive (PSD) before taking further action, to permit completion of the complex negotiations on the PSD.

In order to prepare the present impact assessment, the following steps were taken:

- The evaluation of the directive, five years after its implementation, identified the main problems described in Section 3 and proposed recommendations regarding the future review of the EMD. The evaluation process included :
  - an external evaluation study<sup>4</sup>, launched in September 2005, focussing on evidence gathered by external consultants;
  - a public consultation of stakeholders on the evaluation of the E-money Directive launched in July 2005<sup>5</sup>.
- A public consultation of stakeholders on the application of the E-money Directive to mobile operators in 2005<sup>6</sup>.
- Regular discussions with Member States, the ECB, financial institutions, consumer organisations, mobile operators, merchants, notably through the existing consultative committees on retail payments: PSGEG<sup>7</sup> and PSMG<sup>8</sup> in 2007 and 2008.
- A specific meeting with the e-money industry, held on 25 January 2008.

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<sup>2</sup> The Commission services were requested to report on: the measures to protect the bearers of electronic money, and the possible need to introduce a guarantee scheme; capital requirements; waivers; and the possible need to prohibit interest being paid on funds received in exchange for electronic money.

<sup>3</sup> SEC(2006) 1049 of 19.7.2006, Commission staff working document on the Review of the E-Money Directive.

<sup>4</sup> Evaluation of the e-money directive (2000/46/EC), Final Report, [http://ec.europa.eu/internal\\_market/bank/docs/e-money/evaluation\\_en.pdf](http://ec.europa.eu/internal_market/bank/docs/e-money/evaluation_en.pdf).

<sup>5</sup> E-Money 003/2005 questionnaire on the EMD, public consultation document of the Commission services (Internal Market and Services DG).

<sup>6</sup> Application of the E-money Directive to mobile operators, Consultation paper of DG Internal Market, [http://ec.europa.eu/internal\\_market/bank/docs/e-money/2004-05-consultation\\_en.pdf](http://ec.europa.eu/internal_market/bank/docs/e-money/2004-05-consultation_en.pdf).

<sup>7</sup> The Payment Systems Government Experts Group (PSGEG) is a consultative body composed of government experts from Member States of the EEA, typically drawn from national finance ministries and national central banks as well as a representative from the European Central Bank members as observers, with expertise in the payments area with the objective of providing advice and guidance to the Commission.

<sup>8</sup> The Payment Systems Market Group (PSMG) is a consultative body composed of market experts, typically drawn from banks, corporates, retailers and associations representing interested stakeholders such as SMEs and consumers, telecom operators, banks, electronic money institutions, merchants with expertise in the payments area with the objective of providing advice and guidance to the Commission.

- An inter-service working group established in February 2008, with participation of the Secretariat-General and Competition DG, Information Society and Media DG, Economic and Financial Affairs DG, to discuss the impact assessment.
- A specific bilateral meeting held with the ECB on 30 April 2008.

The Impact Assessment Board expressed in its opinion that *'this impact assessment has benefited from thorough preparation, contains robust analysis and makes good use of the Commission's IA guidelines. In spite of the technical nature of the issue at hand, the impact assessment is accessible to non-expert readers.'* The main recommendations from the Impact Assessment Board which were taken into account were:

Recommendation 1 suggested to clarify reporting requirements and why they are maintained under package 4: Paragraph 6.2 and Annex 4 were modified to explain the administrative burden of existing reporting requirements and why they are maintained under Package 4. Paragraph 3.3.2.1 was modified to explain the existing application process for waivers.

Recommendation 2: suggested to describe demand-side issues affecting the e-money market. Paragraphs 6.1.3 and 6.1.4 have been adapted to reflect assumptions behind estimated market uptake and Paragraph 3.1.2.1 was adapted to clarify the relative success in some Member States.

Recommendation 3 suggested clarifying assumptions behind market uptake. Assumptions on market uptake have been reflected in paragraph 6.1.3. and in Annex 4.

Recommendation 4 suggested improving the risks affecting e-money institutions. Paragraph 6.1.3 was amended to reflect better the risks affecting e-money institutions. In addition, A glossary of terms has been added in Annex.

### 3. PROBLEM DEFINITION

The main problems identified by the evaluation and the consultation process can be grouped as follows:

- The **definition of electronic money and the scope of the directive are unclear**. This creates legal uncertainty as to whether the EMD applies to certain business models, hindering the development of new and innovative services.
- The **legal framework is inadequate**. The current prudential requirements are considered excessive with regard to the risk of the activity by the majority of industry participants. Moreover, the different use made by Member States of some options, regarding in particular waivers and passporting, has created an inconsistent legal framework. This overall legal inconsistency will increase once the Payment Services Directive is implemented (by November 2009), since some provisions of the latter are incompatible with the EMD.

These problems have resulted in a limited market uptake for electronic money in Europe, in terms of volume of e-money issued and in terms of number of market participants.

### 3.1. General background

#### 3.1.1. History and introduction

A well functioning market for electronic money services is important, since they offer an alternative to cash and contribute to the development of electronic commerce. After a slow start, electronic commerce has been growing steadily in recent years, and currently amount for 4.2 % of enterprise turnover<sup>9</sup> in the EU.

The first electronic money products launched in the early 1990s were electronic purses. These services, enabling consumers to store electronic money on a chip of a smart card, are used to replace low-value cash payments at the point of sale. They are known as '**cards based e-money**'. Examples of these schemes are Danmønt, Mondex, Proton or Primeur Card. They offer advantages over cash especially when small, exact amounts have to be paid at unstaffed locations such as vending, parking or ticketing machines. For banks, these services enable cost savings as they contribute to the increasing use of digital transactions in the EU, lowering the use of cash. They also enable cash-like transactions to be executed at a lower cost to the card issuer than credit or debit card payments since they do not require online authorisation.

New types of e-money services have been developed and offer a secure means to purchase and sell goods and services on the internet. These new types of money services are called '**server-based**', in the sense that funds are not stored locally on chip cards or computers, but kept at a 'central server' (e.g. at the issuer). The most successful and widely known server-based e-money schemes to date fall essentially into the category of pre-funded personalised online payment schemes, involving the transfer of funds stored on a personalised online account (not including traditional bank deposits). The most well known example of these services is PayPal. Accounts are typically accessible via internet browser, email, and/or in some cases via mobile text message (SMS), and allow transfers between private persons and between consumers and merchants.

For consumers, server based e-money services offer the possibility to purchase in a secure way on the internet without disclosing credit card details. For merchants they offer new, innovative and cheaper ways to sell goods via the internet. As they offer competition to other traditional payment instruments on the internet, such as credit cards and debit cards and represent lower fees for the merchant, they contribute to a well functioning and innovative payments market in the EU.

#### 3.1.2. Overview of the current e-money market

The 2006 evaluation report showed that the e-money market has developed more slowly than expected and has not become a widespread alternative for cash, far from its full potential. Only a limited number of EMIs have been created, and the most important market participant, PayPal, has recently adopted the status of a credit institution.

There are no comprehensive statistics available on the total amount of e-money in circulation in the EU. There are only statistics available for card-based e-money, as Member States are required to collect such data and report it to the ECB. In July 2007 the total amount of e-money circulated by banks amounted to EUR 658 million<sup>10</sup>. With regard to server-based e-

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<sup>9</sup> Annex 10 describes the evolution of electronic commerce in the EU.

<sup>10</sup> ECB Blue Book, January 2008.

money, neither the ECB nor national Central Banks currently publish data. Only some data are available from some Member States. As it is a small market with a limited number of players, data from individual industry players is not available. Based on data coming from the industry and some Member States, the estimated amount of e-money in circulation issued by electronic money institutions and waived entities amounts to EUR 395 million.

The estimated total value of outstanding-money in circulation in the EU as of July 2007 is therefore:

**Table 1:** Outstanding e-money in circulation in EU in million euro

Type of issuing institution	Outstanding e-money in circulation in 2005	Estimated outstanding e-money in circulation in July 2007	Increase (percentage)
Traditional credit institutions	450	658	46 %
EMIs and waived institutions	220	395	79 %
<b>Total</b>	<b>670</b>	<b>1 053</b>	<b>57 %</b>

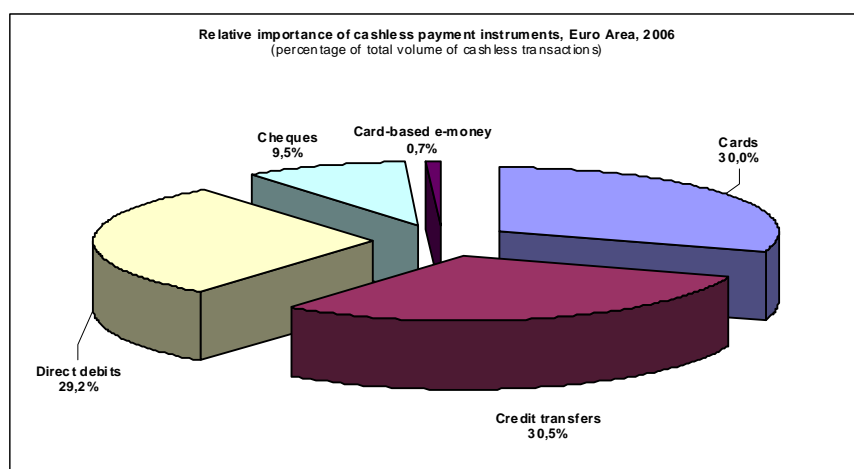
Source: ECB Bluebook & EMA (E-money Association), 2007

Regardless of the gradual increase that can be observed in the period 2005–2007, the total amount of electronic money in circulation remains low in comparison with the EUR 637 billion cash in circulation in the EU in August 2007, which is less than 1 %.

### 3.1.2.1. Card-based e-money

Statistics on the use of **card-based e-money** are available from the ECB's Blue Book on Payment and Securities Settlement Systems in the EU. They show a slight increase in the relative importance of e-money transactions, up from 0.4 % of all cashless transactions in the EU in 1999, to 0.7 % in 2006 as shown in Graph 1. The uptake of cards based electronic money therefore remains low.

**Graph 1:** Relative importance of cashless payments instruments in euro area, 2006



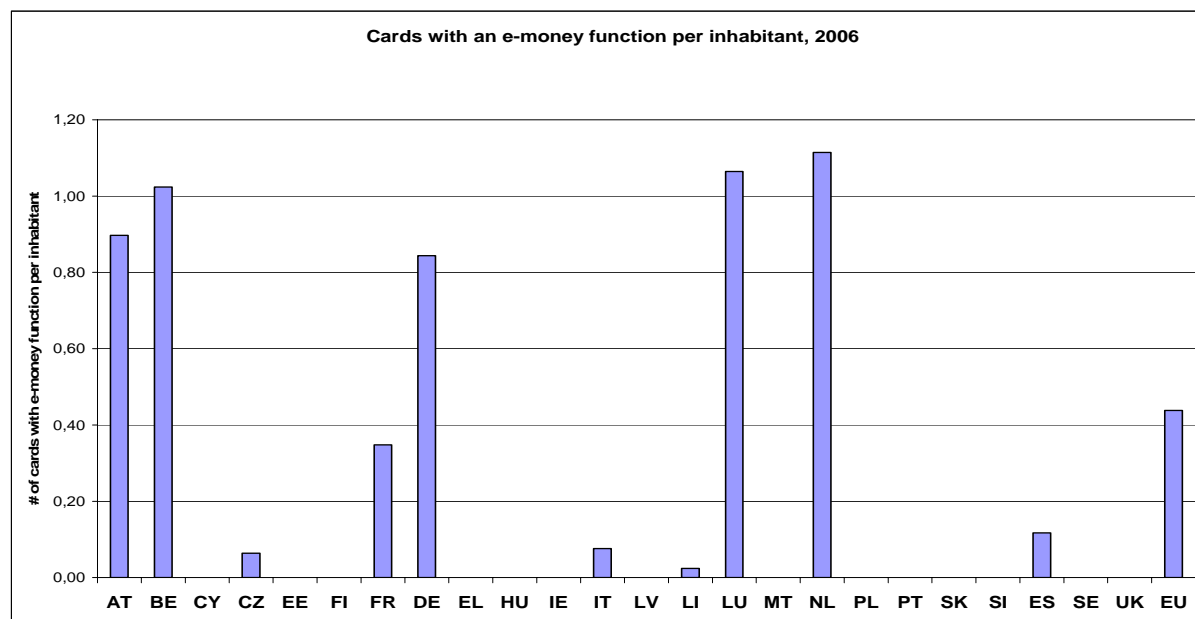
Source: ECB Blue Book, 2006

The development of cards based electronic money varies by country and has been most successful in the Benelux countries (where almost all debit cards are equipped with e-money



function) Germany and Austria where eight issued cards out of ten enable e-money services (Graph 2).

**Graph 2:** Cards with an e-money function per inhabitant, 2006



Source: ECB Blue Book, 2006

Some stakeholders interviewed during the evaluation attributed the relative success of e-purses in some countries partly to the existence of a 'killer application', i.e. a very specific use where an e-money card offers very clear advantages, or may even be strictly necessary to make a payment in specific circumstances. It was suggested that consumers only start to use e-money when they are practically 'forced to' in certain situations; once they have become used to e-money, this then sometimes encourages them to extend its usage to other areas. The mere availability of the e-money function on a debit card is usually not enough to convince most customers of its usefulness.

Examples of country-specific card-based e-money schemes of the Benelux countries:

**Proton (Belgium):** According to the ECB statistics, in 2003 this was the most widely used scheme in Europe. The scheme is currently operated by Atos Worldline, which has taken over BankSys which was a subsidiary of 34 Belgian banks who included the Proton application on their debit cards and issue the e-money. Approximately 10 million cards have the Proton function, and around 20 % of these are actively used. Proton has three 'dominant' applications: Canteens and vending machines in big companies; public telephones (initially Proton's 'killer application', but now decreasing), and general vending machines and parking meters.

**Chipknip (Netherlands):** The current Chipknip scheme is the result of the incorporation, in 2000, of the Chipper-scheme (launched in 1997) into the original Chipknip scheme (launched in 1996). There is currently a reloadable version, issued by banks and integrated into around 80 % of Dutch debit cards, as well as a disposable version called Prepaid Chipknip. Both kinds of cards are used mainly (90 %) for parking (said to be Chipknip's 'killer application' – many parking meters in the Netherlands today only accept payment via Chipknip), vending machines, and catering.

### 3.1.2.2. Server-based e-money

In recent years, a number of server-based products have emerged and met with relative success in catering to different 'niche' markets, including person-to-person internet transactions, online gaming, and as payment instruments for persons without access to bank accounts or credit cards, such as young people or immigrant communities.

There are currently no comprehensive statistical data on the use of server based e-money in the EU available from official sources. Data collected by the EMA<sup>11</sup> for January–June 2007 reported a monthly turnover of EUR 791 million, representing EUR 395 million of outstanding electronic money.

### 3.1.2.3. Number of electronic money issuers

The number of electronic money issuers in the EU has remained low but has been growing over the years. In total, 20 EMIs and 127 entities (in seven EU Member States) issuing e-money under a waiver were reported end 2007. Waived institutions are small EMIs, which have been authorised to operate in a given Member State without having to comply with all of the authorisation requirements of full blown EMIs. As shown in Annex 6, the majority of EMIs are operating in UK.

**Table 2:** Number of electronic money institutions and waived institutions

	2005	2007
EMIs	9	20
Waived institutions	72	127

Source: European Commission, Evaluation report EMD 2006; Member States survey in 2008

Most of the institutions operating under a waiver are operating in the UK and the Czech Republic. In the UK, 46 waivers ('small e-money issuer certificates') had been granted as of end 2007. In the Czech Republic, 54 waived institutions were reported in 2007, the majority of which were public transport providers.

### 3.1.3. *The current legal framework*

Traditionally, payment services were offered by banks regulated by the EU banking directives such as the so called 'Capital Requirements Directive' (hereby referred to as the 'CRD')<sup>12</sup>.

#### The Capital Requirements Directive and the E-money directive

Electronic money can be issued by electronic money institutions (which are considered as 'special purpose' credit institutions), regulated under the EMD. Credit institutions, regulated

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<sup>11</sup> The E-Money Association among its membership 17 companies, including most of the EMIs and a number of active small e-money issuers in the UK, plus one Norwegian EMI.

<sup>12</sup> The key Directives in the banking sector are the Capital Requirements Directives, which were amended in 2006: Directive 2006/48/EC of the European Parliament and of the Council of 14 June 2006 relating to the taking up and pursuit of the business of credit institutions (recast of directive 2000/12/EC); and Directive 2006/49/EC of the European Parliament and of the Council of 14 June 2006 on the capital adequacy of investment firms and credit institutions (recast of directive 93/6/EEC).

under the CRD, can issue electronic money within the framework of the EMD<sup>13</sup>. Operators wishing to issue e-money therefore have two options:

- to apply for a licence as an e-money institution under the EMD or
- to apply for a licence as a full blown credit institution.

The EMD created a special legal framework for EMI. This legal framework restricted the EMIs' activities to the issuance of electronic money and the provision of closely related financial and non-financial services, such as the administering of e-money and the issuing and administering of other means of payment. This implied that activities such as mobile telecommunications services or retailing could not be performed by EMIs. Companies engaged in these businesses and willing to issue electronic money therefore had to split up their activities in two separate entities. Granting any form of credit was also an excluded activity. The framework included a strict prudential regime for electronic institutions, which was designed with the CRD as main point of reference.

### The Payment Service Directive and the E-Money Directive

The Directive on Payment Services (PSD), adopted in November 2007, which provides the legal foundation for the creation of an EU-wide single market for payments, created additional complexity. The PSD aims at establishing a modern and comprehensive set of rules applicable to all payment services in the European Union. Member States will have to implement it at the latest by 1 November 2009. The PSD created a new type of institution, 'Payment Institutions', enjoying a specific prudential regime which is different from that of Electronic Money Institutions and Credit Institutions.

Some of the provisions of the EMD are not coherent with the PSD. For examples the respective licenses for becoming an 'Electronic Money Institution' or a 'Payment Institution' are not compatible with one another, as the range of activities authorised for payment institutions under Article 16 of the PSD would exceed the scope of activities permitted under Article 1(5) of the EMD. As a result, companies cannot hold both licenses, which will create problems for 'hybrid' service providers, offering both payment services and e-money services.

### **3.2. The lack of legal certainty and the scope of the directive hampers market development**

During the review process, stakeholders expressed concerns that the current directive lacks legal certainty. First of all the definition of electronic money is considered unclear. Second it is unclear for stakeholders whether or not it is applicable to certain business models such as certain prepaid payment from mobile network operators and electronic vouchers.

#### *3.2.1. The definition of e-money is unclear*

The definition of 'e-money' requires it to be 'stored on an electronic device'. This definition is therefore considered technically limited to one form of e-money (notably cards based electronic money) and does not encompass the various pre-paid products available in the market (e.g., 'server-based' e-money). The current definition also raises questions in cases

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<sup>13</sup> Provisions regarding definition of electronic money and redeemability apply to credit institutions, while the prudential regime only applies to electronic money institutions

where the value stored would be less than the amount actually paid to the issuer, disqualifying in principle such products from being defined as e-money. For example, a service where the consumer would pay EUR 20 to the issuer, but which would be only converted into EUR 15 of e-money, would in principle fall outside the definition of electronic money as contained in Article (1)(3)b of the EMD.

### 3.2.2. *The scope of the EMD prevents new market entrants*

The application of the directive to mobile operators and issuers of electronic vouchers would have a huge impact on the number of market participants and on the amount of electronic money in circulation as they would be enabled to design new services. According to the stakeholders consulted, the current lack of clarity prevents the development of these two markets.

#### 3.2.2.1. Mobile network operators' prepaid services

The European mobile market currently represents 553 million subscribers. 60.9 % of these subscribers use prepaid services, and 39.9 % receive a monthly bill (also referred to as 'postpaid'), as shown in Graph 3. There are approximately 100 mobile operators in the EU.

Many mobile operators offer to their customers the possibility to purchase third-party goods and services (in particular digital content such as ring tones, logos, games, etc.) using their prepaid funds or via their 'postpaid' monthly bill. Currently, only approximately 1 % of the total prepaid funds are used for third-party services, while the rest is spent on services offered by the mobile operator itself. According to Capgemini the European market for mobile payments will be worth EUR 913 million in 2008, and is expected to rise up to over EUR 8.7 billion in 2012<sup>14</sup>.

Currently, almost all Member States have de facto exempted these services from the application of the EMD, but the justifications vary.

After the transposition of the PSD, some similar payment services could, depending on the type of subscription (prepaid or postpaid), be regulated under different regimes: the EMD, for prepaid services and the PSD for postpaid. This is a potential confusing situation which needs to be addressed. For example, after the adoption of the PSD, the purchase of a movie ticket via a mobile phone: if paid for by the money stored on a prepaid card, it will be regulated under the EMD; if the same ticket is paid with a monthly bill, it will fall under the scope of the PSD. The extent to which such funds should be considered e-money, and therefore regulated under the EMD, was addressed by a Guidance note issued by the Commission in early 2005 in order to provide clarification on the conditions under which the EMD applies to prepaid products of mobile operators. This guidance note places the emphasis on the form of the direct payment relationship between a mobile customer and a third party vendor.<sup>15</sup> Despite

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<sup>14</sup> Capgemini, [http://www.capgemini.com/industries/media/insights2/mobile\\_payments/](http://www.capgemini.com/industries/media/insights2/mobile_payments/).

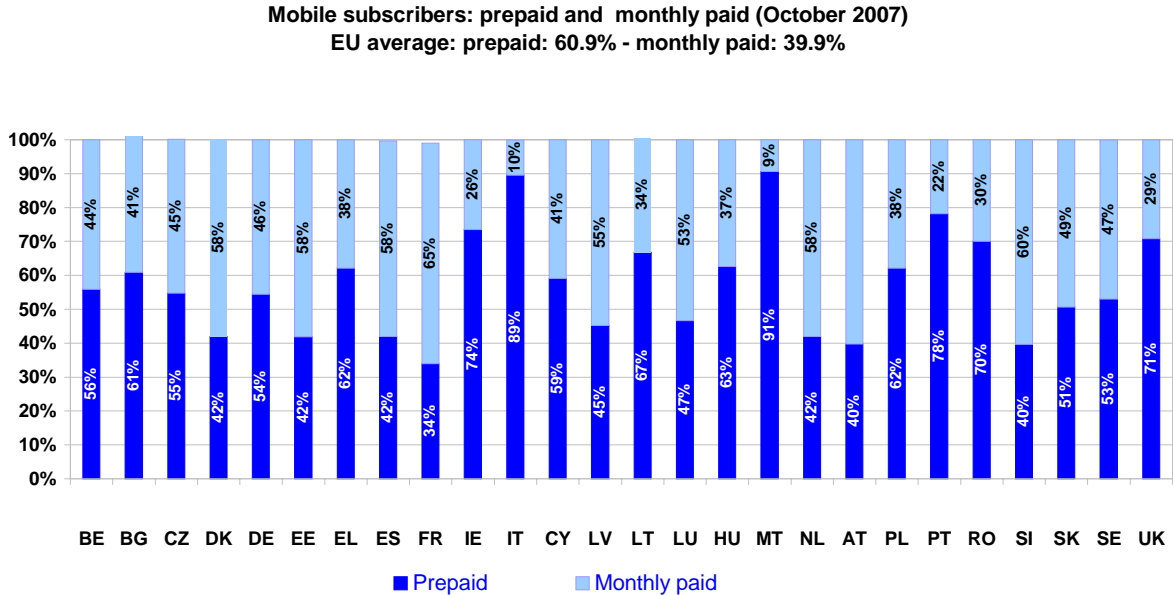
<sup>15</sup> Paragraph 14 Commission's Guidance note ([http://ec.europa.eu/internal\\_market/bank/docs/e-money/guidance\\_en.pdf](http://ec.europa.eu/internal_market/bank/docs/e-money/guidance_en.pdf)):

'The Commission services therefore suggest that when Member State authorities conduct an analysis of whether a mobile operator or other 'hybrid' institution is engaged in the issuance of e-money, they consider the form of direct payment relationship between a mobile customer and a third party vendor. This payment relationship may be established when either:

a) there is a direct transfer of e-value (as far as the Commission services understand, this may be technically feasible for mobile handsets); or

the guidance note, the e-money industry considers further clarification is needed to ensure that the same services carrying the same systemic and consumer risks are subject to the same rules.

**Graph 3: Mobile subscribers in EU: prepaid and monthly paid**



Source: European Commission, 2008<sup>16</sup>

3.2.2.2. Uncertainty as to the application of the EMD to electronic vouchers operators

Different issuers of paper vouchers (gift vouchers, meal vouchers, etc.) have expressed an interest in switching their products to an electronic format. In principle, such electronic vouchers would seem to fulfil all the criteria of the definition of e-money. However, operators such as the French Association of Service Voucher Issuers (APETDS) claim that the legal uncertainty created by the current regime has so far prevented its members from issuing electronic vouchers in Europe.

In 2007, the European market for service vouchers, such as meal and gift vouchers, was estimated at EUR 13 billion based on data provided by members of the APETDS<sup>17</sup>. Due to legal uncertainty regarding the application of the EMD, the digitalisation of these paper-based vouchers has not yet been materialised (data from APETDS show that currently only 3 % is dematerialised) and a large potential for digitalisation remains.

Applying the current directive to service vouchers would pose problems as some of the features of service vouchers products (like mobile payment products) are not compatible with certain provisions of the current E-Money Directive, such as the restriction of activities and the redeemability requirement.

b) the mobile operator acts as a facilitator (or intermediary) in the payment mechanism in such a way that customer and merchant would also have a direct debtor-creditor relationship.'

<sup>16</sup> Commission Staff Working Document, Accompanying the progress report on the Single European Electronic Communications Market 2007 (13<sup>th</sup> Report), Volume 1, SEC(2008) 356, p. 12.

<sup>17</sup> Members include: Accor Services, Sodexo and Groupe Cheque Déjeuner.

### *3.2.3. The activities of EMIs are too narrowly defined*

The activities of electronic money institutions are restricted under Article 1(4) of the EMD to issuing electronic money and closely related services. This restriction of activities, which was originally intended to ensure the financial stability and soundness of electronic money institutions, poses problems for the application of the directive to 'hybrid institutions' such as telecom operators and retailers. This is particularly true for business where prepaid payment services represent a small portion of their activities. Under an EMI license, they are not allowed to conduct any other business except for issuance of e-money and closely related services. As a result, they have to split up their business in different legal entities which can be costly and inefficient. This provision differs from the non-exclusivity approach of the PSD, where a payment institution can engage in non-payment services business (e.g. retailing or telecom activities).

### *3.2.4. Redeemability*

Article 3 of the EMD states that a bearer of electronic money may, during the period of validity, ask the issuer to redeem it at par value in coins and bank notes or by a transfer to an account free of charges other than those strictly necessary to carry out that operation. The contract may stipulate a minimum threshold for redemption. The threshold may not exceed EUR 10. Redeemability was inserted in the EMD for consumer protection reasons, to ensure that customers can get at all time their money back. Other important factors were monetary policy concerns, as redeemability at par value ensures control of the money supply in the EU.

Redeemability appears to pose a problem for Mobile Network Operators (MNOs) and electronic vouchers' issuers. Mobile operators are unable to split 'ex ante' customers' prepaid funds for mobile services and electronic money. The only way to apply this provision is to apply it to all the money stored on the prepaid card, whether or not it is used for prepaid payment services regulated under the EMD or for telecom services (voice calling, SMS and other telecom services) outside the scope of the EMD. This is one of the main reasons why, currently, their products remain outside the EMD. It is also unclear how funds which are never redeemed should be treated.

## **3.3. An inconsistent legal framework**

Although it is widely acknowledged that the EMD has provided non-banks with an opportunity to enter the e-money market-place, the review report showed that high capital requirements, as well as certain restrictions and requirements imposed by the EMD, have hindered the development of the e-money market. The adoption of the PSD, which is currently being transposed into national legislation, will increase the complexity and the inconsistency of the overall legal framework and eventually lead to an absence of level playing field between payment institutions and EMIs.

### *3.3.1. The prudential regime*

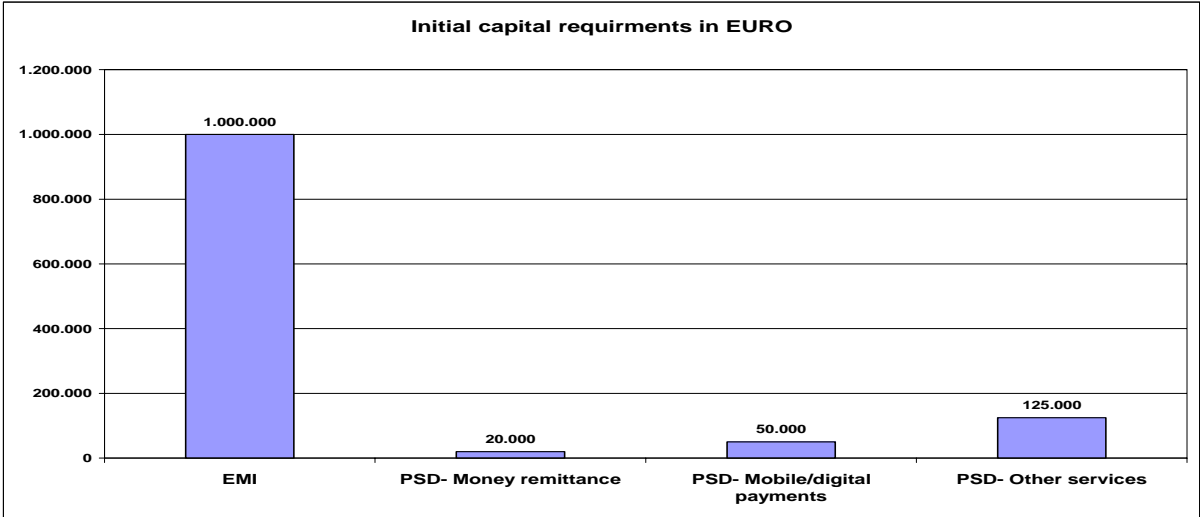
Prudential requirements have as objective to ensure sound and prudent operations of electronic money institutions. At the time of conception of the EMD in 2000, the main points of reference were the then existing capital requirements directives. The adoption of the PSD will allow payment institutions to conduct payment services under a lighter prudential regime than that of electronic money institutions under the EMD.

The review process provided evidence that certain requirements are disproportionate to the risks posed by EMIs. This evidence is reinforced if the cumulative effects of the overall regime are considered: initial capital, ongoing own funds and limitations on investments.

a) Initial capital

The current **initial capital requirement of EUR 1 million** is deemed by a number of stakeholders to be too high and disproportionate with regard to the risk of the service. This high initial capital is an obstacle for smaller firms wishing to apply for an EMI license.

**Graph 4:** Initial capital requirements EMD & PSD in euro



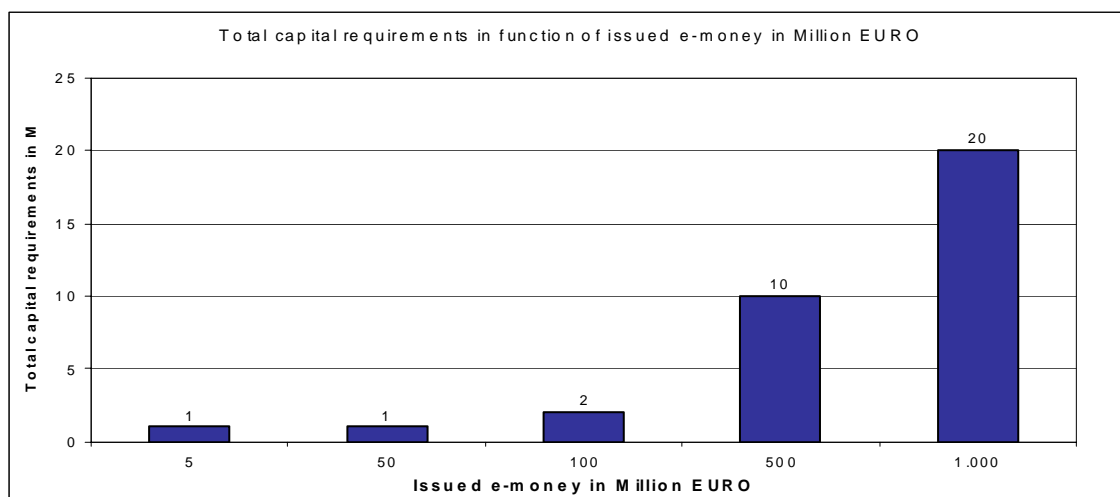
As shown in Graph 4, the initial capital requirement of EMIs is much higher in comparison with the equivalent requirements for payment institutions under the PSD (which vary from EUR 20 000 for money remittance, i.e. the sending of money to someone at a distance, up to EUR 125 000 for other payment services). As a result, smaller firms have difficulties to apply for an EMI license.

b) Ongoing own funds

On top of initial capital requirements, EMIs are also required to hold own funds which, at all times, should not be lower than the maximum between initial capital requirements and a ratio of 2 % of the issued electronic money.

The **2 % own funds requirement** does not in itself appear to have given rise to major difficulties for authorised EMIs, although its combination with other aspects of the EMD (e.g., initial capital, limitation of investments, restriction of activities) have led to complaints that the overall regime is excessive. As shown in Graph 5, this is especially the case for small operators, with e-money issued between EUR 5 million and EUR 50 million which have similar capital requirement of EUR 1 million, representing a capital requirement of respectively 20 % or 2 % capital. For large operators, capital requirements can go up, linear with the float of issued e-money, to EUR 20 million. Companies with issuance of electronic money of less than EUR 5 million can operate under a waiver and therefore can be exempted from this requirement.

**Graph 5:** Total capital requirements in function of issued e-money in euro



### c) Limitations on investments

EMIs are required to have investments which at least match their financial liabilities related to outstanding electronic money. The list of eligible investments is limited to the most liquid assets and fulfils an important function by protecting the float of electronic money issued. This **limitation of investments** reduces the opportunity for EMIs to earn money on the funds they receive in return for issuing e-money, and puts them at a competitive disadvantage with fully licensed credit institutions. Bank and credit card receivables are excluded from the list of eligible investments. As many customers fund their account with credit card or credit transfer, this has resulted in a funding gap for e-money business models which credit e-money immediately, but which must wait a number of days for receivables to be credited and accounted for under the float. Therefore EMIs need to hold additional funds which are higher than the initial and ongoing capital requirements. Based on data provided by some stakeholders, the own funds requirements increase therefore by more than 12 %. For one leading industry stakeholder, the ratio of own funds to risk weighted assets was 48 % while, under the regime applicable to credit institutions under the Capital Requirements Directive, the ratio would have been at the level of 12–14 %. This was one of the reasons why this stakeholder decided to change its regulatory status.

#### 3.3.2. *Inconsistent implementation of some provisions*

##### 3.3.2.1. Inconsistent application of waivers

Under the EMD, Member States are allowed to waive some or all of the authorisation requirements for small EMIs in order to facilitate market entry and innovation by new players without subjecting them to the full rigours of the authorisation framework.

Article 8 of the EMD stipulates that Member States may allow their competent authorities to waive the application of some or all of the provisions of the EMD and the application of Directive 2000/12/EC to EMIs in cases where at least one of three criteria<sup>18</sup> is met, and where

<sup>18</sup> The first criterion regards the maximum amount of outstanding electronic money which should normally not exceed EUR 5 million and never exceed EUR 6 million; the second criterion concerns the acceptance of the electronic money only by subsidiaries of the institution or the parent institution; the third criterion concerns the acceptance of the electronic money by only a limited number of undertakings, which can be distinguished by their location or close financial or business relationship with the issuing institution.



the electronic storage device at the disposal of bearers for the purpose of making payments is subject to a maximum storage amount of not more than EUR 150.

This option has been applied inconsistently between Member States. In some, the waiver is granted automatically, in others it is granted on a case-by-case basis, depending on waivers criteria which differ from one country. Some countries (4), as shown in Annex<sup>6</sup> have even not availed themselves of the possibility of granting waivers. Finally, the provisions of the directive that can be waived also differ from one country to the other (see Table 3 below)

The current situation might lead to competitive distortions within national borders. The 2006 evaluation report demonstrated that the differences between Member States that are most likely to have hindered the development of the e-money market are: the non-implementation or tightening of the waiver criterion (the maximum threshold of outstanding electronic money<sup>19</sup>) in some Member States; a burdensome or excessively complicated application process in some Member States; and procedures in some Member States whereby the regulatory authorities decide on a case-by case basis which provisions can be waived. Where waivers have been applied, they appear to have enabled new players to enter the market, as shown in the table below.

The waiver procedure is not considered to be burdensome and complicated in all Member States, but only in some of them. It was indeed reported to the Commission (and reflected in the 2006 evaluation report) that, in some countries, the application procedure is onerous, since applicants have to fill in a very long form.

**Table 3:** Overview of application of waivers by Member States in terms of waivers criteria, application process and directive's 'waivable' provisions

Country	Waivers criteria			Application process	'Waivable directive provisions'
	(a)	(b)	(c)		
Austria	–	–	–	N/A	N/A
Belgium	✓	✓	✓	Not automatic	Case-by-case
Bulgaria	–	–	–	No information	No information
Cyprus	✓	✓	✓	Not automatic	No information
Czech Republic	✓	✓	✓	Not automatic	All
Denmark	✓	✓	✓	Automatic	All
Estonia	–	✓	✓	Not automatic	Some
Finland		✓	✓	Not automatic	All
France	✓	✓	✓	Not automatic	Case-by-case
Germany	✓	✓	✓	Not automatic	Some
Greece	✓	✓	✓	Not automatic	Case-by-case
Hungary	–	–	–	N/A	N/A
Ireland	✓	✓	✓	Not automatic	Case-by-case

<sup>19</sup> Article 8(1)(a) of EMD:  
 '...the total business activities of the type referred to in Article 1(3)(a) of this Directive of the institution generate a total amount of financial liabilities related to outstanding electronic money that normally does not exceed EUR 5 million and never exceeds EUR 6 million.'

Italy	✓	✓	✓	Not automatic	Case-by case
Latvia	✓	–	–	Automatic	Some
Lithuania	–	–	–	N/A	N/A
Luxembourg	✓	✓	✓	Not automatic	Case-by-case
Malta	✓	✓	✓	Not automatic	Case-by-case
Netherlands	✓	✓	✓	Automatic	All
Poland	–	–	✓*	Not automatic	Some
Portugal	–	–	–	N/A	N/A
Romania	–	–	–	No information	No information
Slovakia	–	–	–	N/A	N/A
Slovenia	–	–	–	N/A	N/A
Spain	–	✓	–	Not automatic	All
Sweden	✓*	✓	✓	Not automatic	All
UK	✓*	✓*	✓*	Not automatic	All

Source: Evaluation report on the review of the EMD, February 2006

### 3.3.2.2. Passporting

The passporting regime allows EMIs to go cross border and conduct the same business in host Member States as they are entitled to conduct in their home Member State under the EMI licence, without additional hindrances. However, Article 2 of the EMD refers to certain articles in the CRD providing for the authorisation of branches in other Member States and setting out the scope of permitted activities. According to some stakeholders, additional requirements imposed in some Member States increase the complexity and eventually hinder EMIs to set up branches in other Member States.

### 3.3.2.3. Anti-Money Laundering Rules

According to some members of the payments industry, the requirements aimed at countering money laundering and terrorist financing pose a particular challenge in the case of electronic money, and have been highlighted by a number of respondents as being a key concern. In view of the low average amounts involved in electronic money transactions, full application of identification and record keeping requirements could render such systems uneconomic.

The EMD contains no specific provisions covering anti-money laundering. However Directive 2005/60/EC on anti money laundering(AML) does introduce a simplified customer due diligence regime which applies to e-money, and a similar regime has been inserted in Article 3 of Regulation (EC) No 1781/2006 on information on the payer accompanying transfers of funds. Member States may, for e-money services, decide not to apply customer due diligence if the device cannot be recharged or if the maximum amount stored in the device is no more than EUR 150. If the device can be recharged, a limit of EUR 2 500 is imposed on the total amount transacted in a calendar year, except when an amount of EUR 1 000 or more is redeemed in that same calendar year. If the services provided exceed these thresholds, full customer due diligence is required. From a consumer's point of view, these 'Know Your Customer' (KYC) requirements prove to be cumbersome and impractical. For example, after two transactions, the consumer has to undergo full KYC identification procedures before the next online payment can be effected. The identify card verification

(often by sending a copy of the ID card by postal services) procedures may take days or weeks, thereby adding to the consumer's inconvenience. From a business point of view, these requirements, and the costs associated with addressing them, might pose a significant challenge to the business case for this type of services.

### 3.4. Summary of problems impact on stakeholders

The following table summarises which stakeholders are affected by the identified problems.

**Table 4:** Screening of problems affecting different stakeholders

Problem	Stakeholders						
	Consumers	Enterprises				Credit institutions	Public authorities
		EMIs	Waived institutions	Hybrid institutions (such as MNOs)	Service voucher operators		
<b>Unclear scope &amp; definition hampers market development</b>							
Unclear definition of electronic money		✓	✓	✓	✓	✓	✓
Unclear scope of EMD		✓	✓	✓	✓	✓	✓
Too narrow defined activities of EMIs		✓	✓	✓	✓		
Application of redeemability by some business models	✓			✓	✓		
<b>Inconsistent legal framework</b>							
High prudential requirements in terms of initial capital, ongoing capital and limitations of investments		✓	✓	✓	✓	✓	✓
Inconsistent provisions in terms of waivers, passporting	✓		✓				✓
To stringent AML rules	✓	✓	✓	✓	✓		
<b>Main effects of existing situation</b>							
	Limited availability of services	Unclear definition & Prudential regime prevent	Absence of incentive to become EMI	Unclear prevents the development of prepaid payment services	Unclear prevents from development of dematerialised	Limited competition for banks	Supervision of institutions

		develop ment			services		
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### 3.5. Is action necessary at EU level?

According to the principle of subsidiarity, action at Community level should be taken only when the aims envisaged cannot be achieved sufficiently by Member States alone. A Community-wide approach is appropriate because the applicable rules and principles have to be the same in all Member States in order to achieve legal certainty and a level playing field for all market participants. The proposal therefore complies with the subsidiarity principle. The approach is consistent with the policies of the Financial Services Action Plan, contributing to the creation of a true internal market for financial services. It is consistent with the Lisbon agenda, to promote technological innovation and contributes to growth and jobs.

## 4. THE OBJECTIVES

### 4.1. General and specific policy objectives

The following policy objectives are identified:

#### General objective

- Promote the emergence of a true single market for electronic money services in Europe. Contribute to the design and implementation of new, innovative and secure electronic money services. Provide market access to new players and real and effective competition between all market participants, thereby generating significant benefits to the wider European economy.

#### Specific objectives

- To enhance legal certainty for all service providers
- To create a harmonised legal framework
- To promote the development of new and innovative services

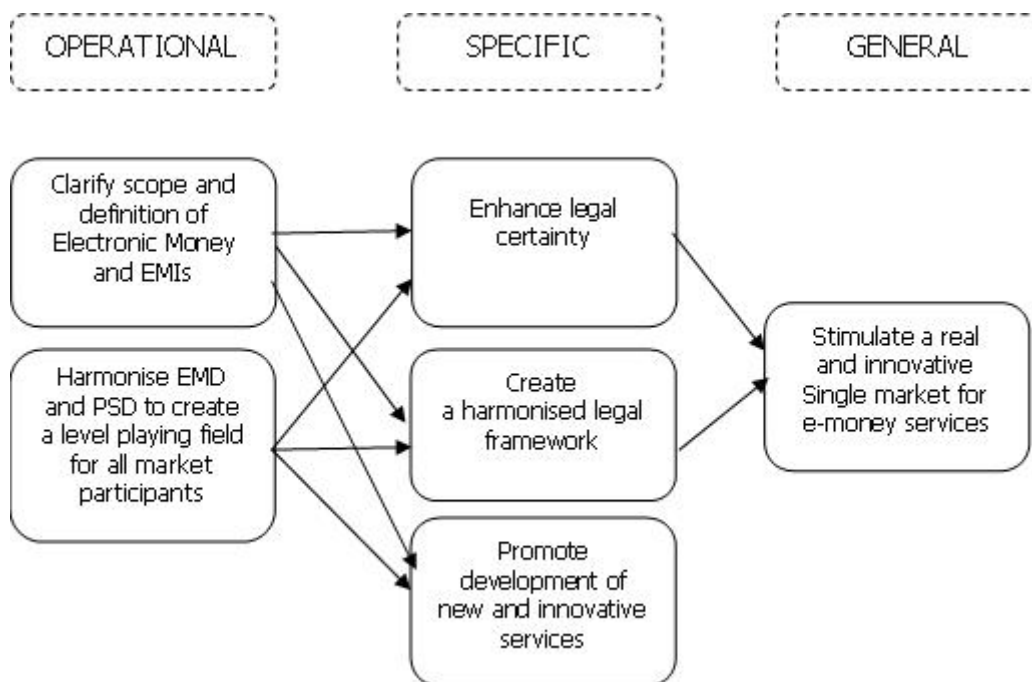
#### Operational objectives

The specific objectives are translated in following operational objectives:

- To clarify the definition and scope of electronic money services and electronic money institutions.
- To ensure consistency with the PSD, creating a true level playing field for all market participants.

The various levels of objectives, together with how they relate to each other, are presented in Graph 6 below.

**Graph 6:** The policy objectives and the relationships among them



#### 4.2. Consistency of the objectives with other EU policies

The objectives outlined above are consistent with the policies and objectives of the European Commission. Indeed, their main aim is to further improve the functioning of European market for financial services, by promoting the development of new and innovative financial services such as e-money services. Ultimately, this should contribute to the attainment of the objectives of the Lisbon Agenda, i.e. higher competitiveness, faster economic growth and more job creation. The objectives are consistent with the Financial Services Action Plan and in line with the initiative to create a Single Euro Payments Area (SEPA).

### 5. THE POLICY OPTIONS AND THE POLICY INSTRUMENTS

Based on the initial screening of the different options described in Annex 2 the options have been grouped in five 'packages'.

#### 5.1. The policy options and their scope

A wide range of solutions have been considered to address the problems affecting e-money services and meet the objectives that have been defined. The two main problems are caused by issues related to:

1. The definition of e-money and scope of the EMD (first problem strand)
2. Inadequacies in the legal framework (three problem strands relating to the prudential regime, waivers and anti-money laundering).

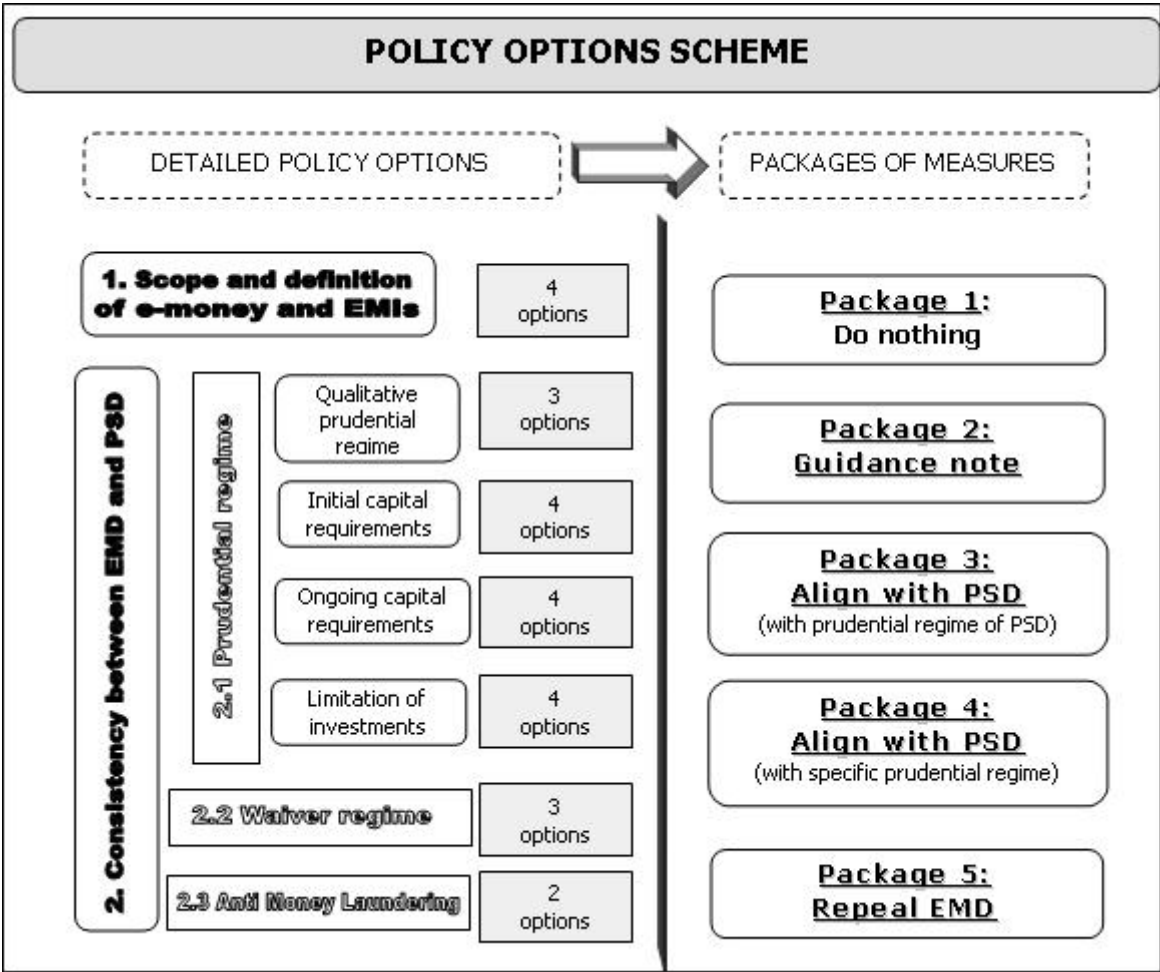
Some potential options were discarded fairly quickly. There is no real indication from the problem statement that more stringent legislation i.e. a Regulation could be required; nor would it appear that a new Directive is called for – if changes to legislation are needed, they should be achievable within the current legislative framework. Since the current problems are

not really within the control of the various stakeholders, various soft-law options e.g. code of conduct, would also not be suitable.

To address the issues around definition and scope, the most effective policy instruments would be tools appropriate to providing clarification e.g. guidance notes, Communication or to changing existing legislation e.g. amending Directive, repeal of Directive. Tools relating to changing existing legislation would also be effective in solving the problems with the legal framework.

For the four main problem strands identified<sup>20</sup>, as shown in Graph 7, four sets of options were identified and in total, over 20 options were retained for further consideration. These options are presented in detail in Annex 1. For each of the two main problems<sup>21</sup>, an outline of the 'broad' range of options proposed is given below.

**Graph 7:** The policy options and the packages of measures



Firstly, in terms of addressing the issues raised in relation to the definition of e-money and the scope of the EMD the actions foreseen can be summarised as:

- a) Do nothing;

<sup>20</sup> Graph 7: 1. Scope and definition, 2.1 prudential regime, 2.2 waivers regime and 2.3 anti money laundering.

<sup>21</sup> Graph 7: 1) Scope and definition and 2) Inconsistency between EMD and PSD.

- b) Provide further guidance, clarifying what falls under the EMD, the PSD and the CRD;
- c) Amend the EMD or PSD; and
- d) Repeal the relevant provisions of the EMD.

Secondly, to address the issues relating to the three problem strands identified within the current legal framework, the solutions considered would all affect the existing legislation. Whilst the exact details of the option would depend on the problem strand being addressed e.g. issues relating to the prudential regime, the 'broad' solutions can be summarised as:

- a) Do nothing
- b) Align with PSD, applying principles/methods proposed in the PSD
- c) Align with PSD, introducing new principles/methods designed specifically for e-money services
- d) Repeal the relevant provisions of the EMD.

Based on an initial screening of these options against the policy objectives (see Annex 2 packages containing a selection of activities that could be taken were identified. Rather than assessing individual options, the impacts of these packages will be evaluated later on in this report. The relationship between the different policy options and the packages identified is shown in Graph 7.

## 5.2. The policy options grouped in packages of measures

Based on an initial screening of the different policy options against the policy objectives, as described in Annex 2, the policy options have been grouped in concrete packages which are a selection of initiatives that can be taken. The following table summarises the packages which will be evaluated further:

**Table 5:** Overview of packages

	Package 1: Do nothing	Package 2: Guidance note	Package 3: Align with PSD applying prudential regime of PSD to EMIs	Package 4: Align with PSD, with specific prudential regime for EMIs	Package 5: Repeal EMD
Definition & scope	Definition of electronic money remains  Scope of activities EMIs remains  2 licences necessary: EMI vs. Payment	Definition of electronic money is clarified for Prepaid Mobile Payments & Service Vouchers.  Scope of activities EMIs	New definition of electronic money is clarified for Prepaid Mobile Payments & Service Vouchers  Scope of activities extended to all activities of payment	Idem to Package 3	Definition of electronic money repealed  Scope of activities EMIs repealed  Payment Institutions license or

	Institutions  Redeemability requirements do not change	remains.  2 licences necessary: EMI vs. Payment Institutions  Redeemability requirements do not change	institutions and issuance of electronic money.  1 licences for e-money & payment services  Redeemability requirements modified		Credit Institution license  Redeemability requirements repealed
Prudential requirements	Qualitative prudential requirements linked to CRD  EUR 1 million initial capital  2 % ongoing capital requirements  Bank and Credit cards receivables excluded from eligible investments	Qualitative prudential requirements linked to CRD  EUR 1 million initial capital  2 % ongoing capital requirements  Bank and Credit cards receivables excluded from eligible investments	Qualitative prudential requirements equal to PSD  EUR 0.125 million initial capital  Ongoing capital based on methods from PSD  Safeguarding requirements of payment institutions under the PSD	Qualitative prudential requirements equal to PSD  EUR 0.125–0.250 million initial capital  Degressive ongoing capital requirements  Safeguarding requirements of payment institutions under the PSD	Prudential requirements EMIs repealed.
Waivers regime	EUR 5 million threshold for waived institutions	EUR 5 million threshold for waived institutions	Waivers regime PSD: EUR 3 million threshold for waived institutions	Idem Package 3	Waivers regime repealed
Passporting	Passporting requirements linked to CRD	Passporting requirements linked to CRD	Passporting requirements PSD	Idem Package 3	Passporting requirements repealed
AML requirements	Maintain current AML thresholds for KYC requirements:  EUR 150 maximum storage on device  EUR 2 500 maximum yearly usage	Maintain current AML thresholds for KYC requirements:  EUR 150 maximum storage on device  EUR 2 500 maximum yearly usage	Increase of AML thresholds to  EUR 500 maximum storage on device  EUR 3 000 maximum yearly usage	Idem Package 3	Maintain current AML thresholds for KYC requirements:  EUR 150 maximum storage on device  EUR 2 500 maximum yearly usage

- **Package 1: Keep the EMD as it is ('do nothing' approach)**



This is the so-called 'baseline scenario'. In this option there would be no legislative proposal (see Options 1.1, 2.1, 2.4, 2.8, 2.12, 3.1 and 4.1 in Annex 1).

- **Package 2: Issue a guidance note on the scope and definition of electronic money**

Under this non-legally binding option a guidance note would be issued to clarify the current definition and scope of electronic money institutions (see Option 1.2 in Annex 1). The prudential regime, the waivers and AML requirements would remain unchanged (see option 2.1, 2.4, 2.8, 2.12, 3.1 and 4.1 in Annex 1) as they cannot be modified by a guidance note.

- **Package 3: Align with PSD, applying the prudential regime of Payment Institutions to EMIs**

This option would mean the design a legal framework which is consistent with the PSD (see Options 1.3, 2.2, 2.5, 2.9, 2.13, 3.2 and 4.2 in Annex 1), applying the prudential requirements of Payment Institutions to EMI. This could be implemented by amending the EMD or the PSD.

- **Package 4: Align with the PSD, but with specific prudential regime for EMIs (degressive ongoing capital requirements).**

Package 4 is almost the same as Package 3 except that Options 2.6 and 2.10 would apply instead of Options 2.5 and 2.9. This could be implemented by amending the EMD or the PSD

- **Package 5: Repeal the EMD directive**

Under this package, the EMD directive would be repealed (see Options 1.4, 2.3, 2.7, 2.11, 2.14 and 3.3 in Annex 1).

## **6. ANALYSIS OF IMPACTS AND CHOICE OF PREFERRED OPTION(S)**

All options were first analysed in view of their potential of achieving the policy objectives which is described in Annex 2. Based on this initial screening, packages were designed. The packages are expected not to have an environmental impact. Only anecdotal evidence exists on a positive impact of Packages 3 and 4 on social inclusion and employment. In the next section, the economic impact is assessed.

### **6.1. Impact of the packages**

#### *6.1.1. Impact of Package 1– Keeping the current EMD as it is*

Under this scenario, no changes would be made to the EMD. As from November 2009, EMD and PSD will start to co-exist. The problems described in Sections 3.2 and 3.3 would remain unaddressed (legal uncertainty, incompatibility between EMI and payment institution licence, inconsistency between prudential requirements for EMIs regulated under the EMD and payment institutions regulated under the PSD, diverging application of waivers by Member States etc.).

Under this scenario, we can expect that the development of electronic money services in the EU would remain slow, and that the development of new and innovative services would be hindered in the EU. The number of EMIs and waived institutions would be expected to

stabilise at a range of [20–25] and [127–150] respectively and the total amount of electronic money in circulation would be estimated in the range EUR [1.2–1.5] billion by 2012.

Under package 1 none of the operational objectives would be achieved.

#### *6.1.2. Impact of Package 2 – Issue a guidance note on the scope and definition of electronic money institutions*

Based on the experience of the previous guidance note on the applicability of the EMD to Mobile Network Operators issued by the Commission in 2005, this option is expected to generate limited impact on legal certainty.

Prudential requirements can not be modified by a guidance note. The absence of a true level playing field between all market participants would persist. The estimated number of institutions and issued electronic money in circulation would be similar to Package 1.

#### *6.1.3. Impact of Package 3 – Align with PSD and application of the PSD prudential regime to EMIs*

##### *Impact of the new definition and scope*

The main impact of having a clear definition of electronic money, a clear scope of the directive and of modifying the redeemability provision would be to bring more legal certainty. In combination with allowing for a wider range of activities under an EMI license, this would incentivise new enterprises to enter the market, and would contribute to an increase of electronic money in circulation.

The underlying assumptions in Option 3 are that, the proposed modifications to the directive would determine new operators to enter the e-money market (supply side), offering new products adapted to people's needs (demand side). In particular, we have credible expectations that, should the directive be cleared and less stringent as regards capital and activities, mobile network operators, service vouchers providers ('titres-services', 'chèques cadeaux' etc...) and other new entrants would enter the market.

Since there are currently 100 mobile network operators in the EU, 3 large service vouchers providers and 127 waived institutions, an increase of 20 to 125 licenced e-money institutions could be expected.

- For mobile operators, the total mobile payments market is estimated at EUR 8 billion by 2012 (source: Capgemini). This includes both 'postpaid' and 'prepaid' payment services. Since 60.9 % of mobile subscribers are 'prepaid customers', the total potential of issued electronic money is estimated at EUR 1–6 billion.
- The market for service vouchers currently represents EUR 13 billion, including 'paper vouchers' and electronic vouchers. Current market penetration of electronic vouchers is estimated at 3 % and could increase up to 30 % or more by 2012, according to the association of meal vouchers EAPTDS. This would represent additional electronic money in the range of EUR 1 to 4 billion.

Concerning new entrants and existing waived institutions applying for a full licence, the medium uptake scenario assumes a growth from EUR 1 to 2 billion. This assumption is based on the existing market which represents EUR 1 billion.

**Table 6:** Estimated impact of Package 3 in terms of institutions and issued electronic money

	Current situation	Estimation for 2012			
		Mobile operators	Electronic vouchers	Other new entrants	Total impact
Number of institutions	20	20–100	3–5	5–25	20–125
Issued electronic money	EUR 1 billion	EUR 1–6 billion	EUR 1–4 billion	EUR 1–2 billion	EUR 3–12 billion

Source: Internal Market and Services DG, elaboration based on data from ECB, e-money association (EMA), APETDS and Capgemini<sup>22</sup>

Under the new definition, an electronic money institution shall cease to be considered a credit institution. Funds would not be considered deposits and would remain redeemable. E-money institutions can only receive funds from consumers, transforming it into e-money and are not allowed to grant credit from funds received by consumers. Therefore, the total amount of money in circulation remains equal and e-money does not compromise monetary policy.

#### *Impact of using the PSD prudential requirements*

The qualitative risk analysis (described in Annex 3) comparing EMIs, credit institutions and payment institutions, shows that the risk presented by electronic money institutions' activities is much closely linked to the risks of payment institutions than to those of credit institutions. As the high initial capital represented an entry barrier, resulting in only 20 EMIs operating in a limited number of countries in the EU, a full and relevant statistical risk analysis could not be conducted.

As electronic money held by consumers is usually lower than EUR 150 (EUR 8 on average) and is used for low value transactions (EUR 40 on average), the risks related to the funds held by EMIs are not at all comparable with the risks faced by credit institutions for holding deposits. An insolvent bank might undermine the stability and integrity of the wider economy and of the financial system. An insolvent EMI would not have any comparable impact. This supports a lowering of the prudential requirements in line with the PSD's. The main risk for consumers is that (unused) electronic money stored at an EMI is lost when an EMI becomes insolvent. In view of the low amounts that consumers held at EMIs as described above and the direct link with executing payments (consumers only store electronic money in view of conducting payment transactions within a limited timeframe) this risks and potential impact remains limited and currently no such cases have been reported to the Commission services.

Lowering the initial capital requirement to EUR 125 000 would remove a significant entry barrier and enable smaller entities, with outstanding electronic money up to EUR 10 million (as shown in Table 7), to enter the market and apply for an EMI license. The initial capital which is currently in the range of [10–33 %] of own funds would be lowered to [3.3–4.2 %]. The potential impact would be that the 127 currently waived institutions as well as new enterprises could apply for an e-money license.

<sup>22</sup> Source Capgemini: <http://www.capgemini.com/industries/media/consulting/solutions/mobile-payments/>.

**Table 7:** Comparison of total capital requirements

Issued e-money in million euro	Current method		Method B PSD	
	%	million euro	%	million euro
3	33 %	1.0	4.2 %	0.125
5	20 %	1.0	4.0 %	0.200
10	10 %	1.0	3.3 %	0.325
50	2 %	1.0	1.5 %	0.7
100	2 %	2.0	1.2 %	1.2
250	2 %	5.0	1.1 %	2.7
350	2 %	7.0	0.9 %	3.2

Simulations of the application of the PSD methods for ongoing capital requirements show that this would lead to a decrease in ongoing funds requirements for EMIs.

However, as shown in Annex 2, doing our simulation, we found no direct correlation between the issuance of electronic money and the PSD methods. Only Method B of the PSD could be of indirect relevance (Annex 10) since it is based on payment volume, as consumers store electronic money in view of payment transactions. Therefore, it would be up to the competent authorities to determine the appropriate ongoing capital requirements method for EMIs if the PSD methods were to be applied to EMIs.

The specific safeguarding requirements of the PSD<sup>23</sup> would ensure adequate safeguarding, replacing the current provisions on limitations of investments.

#### *Impact of applying the PSD's waiver regime*

Any changes in the waiver regime should be seen in the context of lowering the overall capital requirements. Lowering the waiver's threshold from EUR 5 million of issued electronic money to EUR 3 million would have an impact on smaller entities, which would have the incentive to apply for an EMI license. A EUR 3 million threshold would mean a decrease in customers concerned to the range of 20 000 to 60 000, depending on whether they hold, in average, EUR 150 or EUR 50 (see table below).

**Table 8:** Comparison of thresholds for waived institutions

	Threshold	Number of customers (average EUR 150/customer)	Number of customer (average EUR 50/customer)
Current situation	5 million and never	33 333	99 999

<sup>23</sup> Funds received, 'shall be deposited in a separate account in a credit institution or invested in secure, liquid low-risk assets as defined by the competent authorities of the home Member State' or shall be 'insulated in accordance with national law in the interest of the payment service users against the claims of other creditors of the payment institution, in particular in the event of insolvency.'

	higher then 6 million in terms of issued electronic money		
Proposal	3 million of higher of issued electronic money or payment volume	20 000	60 000

#### Impact of Anti Money Laundering rules

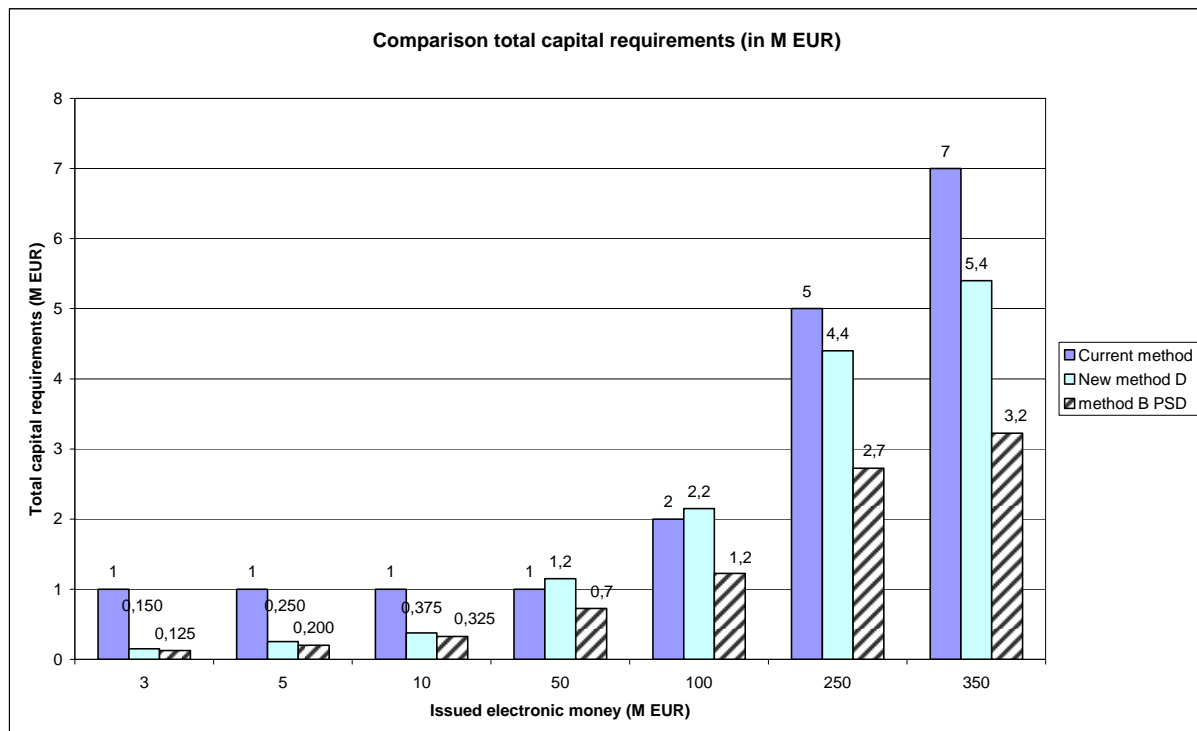
If anti money laundering rules are maintained and thresholds are increased to EUR 500, less online products would need to conduct the know-your-customer (KYC) procedure, which would be more convenient for customers and less costly for businesses. As a result, the uptake of new and innovative online services would be promoted, which could lead to new entrants as described above.

#### 6.1.4. Impact of Package 4 – Align with PSD and apply EMI-specific prudential regime

Only the prudential requirements would differ from Package 3. The impact of all other changes would be the same as for Package 3. Assumptions of market uptake are therefore similar to Package 3

- Initial prudential requirements would be lowered from EUR 1 million to a number in the range of EUR 125 000–250 000.
- For ongoing capital requirements, a new Method D would be designed, under which the own funds would follow a 'degressive' formula, based on the issued electronic money (described in Annex 3).

**Graph 8:** Comparison of total capital requirements in million euros



The graph above shows a comparison of the impact of three different methods regarding initial and ongoing capital requirements: the current EMD, the new Method D, and Method B from the PSD.

Under the new Method D, the total capital follows a curve, starting from the initial EUR [125 000/250 000] and growing with the electronic money issued. The simulation shows that this new method would give capital requirements which would be lower than those respected by EMIs today, but still more stringent than those deriving from the PSD.

The total capital requirements for EMIs would remain low for small players, issuing electronic money up to EUR 10 million. However, mainly for larger players (with outstanding electronic money in the range EUR [100–350] million, the new method would be more stringent than the methods for payment institutions under the PSD.

Capital requirements under the new Method D are calculated based on estimations of payment volume (PV) and issued electronic money (EM). As shown in Annex 10, this ensures that capital requirements under the EMD would remain at least as restrictive as those calculated under Method B of the PSD. It would also enable institutions engaged partly in payment services and partly in issuance of electronic money services to take into account the total payment volume to determine their capital requirements. Therefore, businesses engaged only in a minor part in issuance of electronic money and a larger part in other payments transactions would find it easier to comply with the requirements of the EMD. This would facilitate hybrid institutions, such as mobile operators, to apply ongoing capital requirements to their business model.

This package option appears to be better linked to the risks of issuance of electronic money as there would remain a direct link between capital requirements and issuance of electronic money. It would also ensure that capital requirements remain higher than these from payment institutions. The potential impact is estimated similar to Package 3: [20–125] EMIs and issued electronic money EUR [3–12] billion by 2012.

#### *6.1.5. Impact of Package 5 – Repeal the EMD*

This option would lead to an increase of legal uncertainty and create a legal vacuum. A lack of harmonised framework would hinder market access of new service providers and the uptake of new and innovative electronic money services within the EU. The electronic money market would stabilise at the level of Package 1.

None of the operational objectives would be achieved.

## **6.2. Impact on administrative burden**

The administrative burden of the different packages has been determined in Annex 4 and a comparison table is described in Section 7. The main impacts concerning administrative burden are due to the existence of reporting requirements for EMIs as they are currently considered 'special purpose credit institutions' and therefore have to comply with relevant reporting requirements as specified by Article 6 of the existing EMD, which requests that competent authorities verify that EMIs comply with capital requirements and limitations on investments not less than twice each year. Maintaining existing twice-a-year reporting requirements ensures that competent authorities can verify compliance of electronic money institutions and entities with the prudential requirements on initial and ongoing capital. It would equally facilitate the follow up of market development of electronic money in the EU.

If the market were to develop, the total cost would increase in line with the evolution of the number of EMIs. Existing reporting (and thus administrative burden) would disappear if the corresponding PSD provisions would be applied to EMIs, as the PSD does not request reporting requirements by payment institutions.

## 7. COMPARISON OF THE PACKAGES

This section compares the impacts of the different packages analysed.

### 7.1. Comparison on achievement of the specific objectives

The table below summarises the ability of the packages to achieve the specific objectives.

**Table 9:** Comparison of the packages

Objective/ package	Legal certainty	Consistent legal framework	Promote the development of new and innovative services
Keep the EMD as is	0	xxx	0
Issue a guidance note	0/✓	xxx	0
Align with PSD, applying the prudential regime of the PSD to EMIs	✓✓✓	✓✓	✓
Align with PSD, applying a specific prudential regime for EMIs	✓✓✓	✓✓✓	✓
Repeal the EMD	x	✓	0/x

Contribution to objectives compared to the situation today, before transposition of the PSD.

✓✓✓ (Strong) – ✓✓ (Moderate) – ✓ (Weak) positive contribution

xxx (Strong) – xx (Moderate) – x (Weak) negative contribution – 0 neutral contribution

### 7.2. Comparison of the impact of the packages

The table below summarises and compares the impact of the packages.

**Table 10:** Impact of packages

	Package 1: Do nothing	Package 2: Guidance note	Package 3: Align with PSD applying prudential regime of PSD to EMIs	Package 4: Align with PSD, with specific prudential regime for EMIs	Package 5: Repeal EMD
Estimated institutions in 2012	EMIs: [20–25]  Waived: [127– 150]	EMIs: [20– 25]  Waived: [127–150]	EMIs: [125–300]  Waived: [300– 750]	EMIs: [125–300]  Waived: [300– 750]	EMIs: [20–25]  Waived: [127– 150]
Issued electronic	EUR [1.2–	EUR [1.2–	EUR [2–	EUR [2–	EUR [1.2–1.5

money in 2012	1.5 billion]	1.5 billion]	10 billion]	10 billion]	billion]
Definition & scope	<p>Low uptake remains in terms of issued electronic money and number of institutions</p> <p>2 licenses necessary = administrative burden</p> <p>MNOs prepaid services and electronic vouchers development are hindered</p>	<p>Low uptake remains in terms of issued electronic money and number of institutions</p> <p>2 licenses necessary = administrative burden</p> <p>MNOs prepaid services and electronic vouchers development are hindered</p>	<p>↑ in issued e-money up to EUR 12 billion</p> <p>↑ in number of institutions with ≈ 50–100</p> <p>↓ administrative burden as 1 license sufficient &amp; no need to split up business</p>	Idem Package 4	Low uptake or decrease due to legal vacuum
Prudential requirements	Absence of level playing field between EMIs and PIs	Absence of level playing field between EMIs and PIs	<p>Creation of level playing field between EMIs and PIs</p> <p>Solution for hybrid institutions</p> <p>Same system for Payment Institutions and EMIS: more easy application</p>	<p>Creation of level playing field between EMIs and PIs</p> <p>Solution for hybrid institutions</p> <p>Different system for Payment Institutions and EMIs: More complicated application</p>	Absence of specific prudential requirements for EMIs: only higher requirements for Credit Institutions available
Waivers regime	No incentive for waived institutions to become EMI	No incentive for waived institutions to become EMI	Incentive for waived institutions to become EMI	Incentive for waived institutions to become EMI	Waivers regime disappears. Unclearly for current waived institutions
Passporting	EMIs hindered in setting up branches	EMIs hindered in setting up branches	Passporting requirements PSD	Passporting requirements PSD	Passporting of credit institutions or Payment Institutions
AML requirements	Cumbersome procedure for customers and costly for business hinders take up of new	Cumbersome procedure for customers and costly for business hinders take	More convenient procedure for consumers and less costly for business due to increase of	More convenient procedure for consumers and less costly for business due to increase of	Cumbersome procedure for customers and costly for business hinders take up



	services	up of new services	threshold to EUR 500	threshold to EUR 500	of new services
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### 7.3. Comparison of the impact on the stakeholders

Following table summarises the impact of the different packages on the different stakeholders

**Table 11:** Screening of problems affecting different stakeholders

Problem	Stakeholders						
	Consumers	Enterprises				Credit institutions	Competent public authority/supervisor
		EMIs	Waived institutions	Hybrid institutions (such as MNOs)	Service voucher operators		
Package 1: Do nothing	xx Low market uptake	x	x	xxx	xxx	0	0
Package 2: Guidance note	xx Low market uptake	x	x	xxx	xxx	0	0
Package 3: Align with PSD applying prudential regime of PSD to EMIs	✓✓ Increased choice	✓✓	✓✓✓	✓✓	✓✓	x	✓
Package 4: Align with PSD, with specific prudential regime for EMIs	✓✓	✓✓	✓✓✓	✓✓	✓✓	x	✓✓
Package 5: Repeal EMD	xx	xx	xx	xxx	xxx	0	0

Impact to stakeholders in comparison with the situation today, before transposition of the PSD

✓✓✓ (Strong) – ✓✓ (Moderate) – ✓ (Weak) positive impact

xxx (Strong) – xx (Moderate) – x (Weak) negative impact – 0 Neutral impact

### 7.4. Comparison of the administrative burden

In the table below, an overview is given of the administrative burden of the different packages. A detailed estimation of the impact on administrative burden can be found in Annex 4.

**Table 12:** Impact of packages on administrative burden after transposition of PSD in 2009

	Package 1: Do nothing	Package 2: Guidance note	Package 3: Align with PSD, applying prudential	Package 4: Align with EMD, applying	Package 5: Repeal EMD

			requirements of PSD	specific prudential requirements	
Member States	2 prudential regimes to support as from November 2009	Idem Package 1	Same prudential regime for PI & EMI	Specific prudential regime for EMIs	1 prudential regime is removed
EMIs	2 prudential regimes	Idem Package 1	1 prudential regime No reporting requirements	1 prudential regime Single reporting requirements	Comply with 1 prudential regime: PI or CRD Single reporting requirements
Hybrid institutions	Idem EMIs Split up business	Idem Package 1	1 prudential regime No reporting requirements	1 prudential regime Single reporting requirements	Single reporting requirements
Member States with institutions	9	9	9–15	9–15	9–15
EMIs	20	20	125–300	125–300	20
Waived institutions	127	127	300–750	300–750	127
Yearly administrative burden	EUR 4–5 million	EUR 4–5 million	0	EUR 11–26 million	EUR 3–6 million
Initial investment and compliance cost	EUR 16 million	EUR 16 million	0	EUR 46–105 million	3.1 million

Under Packages 1 and 2, reporting requirements for EMIs would remain as they are. Therefore, as the market uptake would remain as it is, the administrative burden would remain around EUR 4–5 million.

Under Packages 3 and 4, EMIs would be able to issue electronic money and perform all payment services. Under Package 3, where the prudential regime of the PSD is applied mutatis mutandis to electronic money institutions, no specific reporting requirements would be required for EMIs. Under Package 4, the existing reporting requirements would be maintained for electronic money institutions. This facilitates a follow up of the market evolution and ensures follow up by competent authorities the compliance of electronic money institutions with the prudential requirements, improving the credibility of electronic money services. As under this scenario a medium to high market uptake is expected, the administrative burden is expected to increase accordingly, up to EUR 11–26 million in recurring costs and EUR 46–105 million in initial investment costs. Administrative burden goes up under Package 4 as the number of countries with institutions as well as the number of

institutions increase. The total yearly administrative burden for an individual institution (EMI + waived institutions) remains stable under Package 4, at of EUR 28 000 per institution.

Under Package 5 EMIs would have to apply for a license of a credit institution and therefore be subject to reporting requirements. As the reporting requirements for credit institutions are higher than for electronic money institutions, it can be assumed that the overall administrative burden would be in the range of EUR 3–6 million.

## 8. CONCLUSIONS

Based on the evaluation of the packages, we consider that an alignment with the PSD, as suggested in **Package 3** and **Package 4**, is the most appropriate way forward.

The main advantages of Package 4 are the availability of a specific prudential regime commensurate with the risks posed by electronic money institutions and the maintenance of the existing reporting requirements for EMIs to ensure market monitoring. The disadvantage is a higher administrative burden, which remains however proportionate to its objective.

Package 3, applying the prudential requirements of payment institutions would have the advantage that it would lower the administrative burden as no reporting would be required. The main disadvantage is that this complicates market monitoring. In addition its prudential regime is only indirectly linked to the risks of electronic money institutions.

Package 1, 'do nothing' or Package 2, 'guidance note' would maintain the complexity of the legal framework after the transposition of the PSD in 2009 and would hinder further market development. Package 5, 'repeal of the directive' would create legal uncertainty and hindering the development of new electronic money services.

## 9. EVALUATION AND MONITORING

A first intermediate evaluation could be performed on the moment of the first review of the PSD, three years after its transposition. Second, no later than five years after implementation, the Commission services will present an evaluation report on the legislative initiative. Thus, the forthcoming legislation will be subject to a complete evaluation in order to assess, among other things, how effective and efficient it has been in terms of achieving the objectives presented in this impact assessment and to decide whether new measures or amendments are needed. It will also consider the integration of the Directive into the payment services directive.

The main indicators that could be used during the evaluation are the amount of electronic money in circulation, the amount of e-money purchase transactions and the average value per transaction, as this reflects the usage of the services by consumers. This could be compared with the amount of cash in circulation and the number of cashless payment transactions by other instruments to determine their relative importance. The number of electronic money institutions and waived institutions operating in the EU would be monitored. To facilitate the monitoring and evaluation, a reporting from competent authorities on the above indicators could be required twice a year.

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## GLOSSARY

AML	Anti Money Laundering
CRD	The key Directives in the banking sector are the Capital Requirements Directives (CRD), which were amended in 2006: Directive 2006/48/EC of the European Parliament and of the Council of 14 June 2006 relating to the taking up and pursuit of the business of credit institutions (recast of directive 2000/12/EC); and Directive 2006/49/EC of the European Parliament and of the Council of 14 June 2006 on the capital adequacy of investment firms and credit institutions (recast of directive 93/6/EEC)
Credit card	A credit card is a payment instrument that allows purchases within a certain credit limit. The balance is settled in full by the end of a specified period. Alternatively, it is partly settled. The remaining balance is taken as extended credit on which the cardholder must pay interest.
Credit transfer	A payment initiated by the payer. The payer sends a payment instruction to his/her bank. The bank moves the funds to the receiver's bank. This can happen via several intermediaries.
Debit card	a debit card is a payment instrument that allows the cardholder to charge purchases directly and individually to an account.
Direct debit	A transfer initiated by the receiver via his/her bank. Direct debits are often used for recurring payments, such as for utilities. They require a pre-authorisation ('mandate') by the payer. Direct debits are also used for one-off payments. There, the payer authorises an individual payment.
ECB	The European Central Bank
EMD	Directive 2000/46/EC of the European Parliament and of the Council of 18 September 2000 on the taking up, pursuit of and prudential supervision of the business of electronic money institutions.
EMI	'electronic money institution' means an undertaking or any other legal person, other than a credit institution as defined in Article 1(1)(a) of Directive 2000/12/EC which issues means of payment in the form of electronic money (regulated under directive 2000/46/EC, the e-money directive).
KYC	'Know Your Customer'. 'KYC' requirements in the framework of anti money laundering aim to identify the identity of a customer and to gather enough information about the customer to assess whether the transactions through their account or in relation to a policy are ordinary or suspicious.
MNO	Mobile network operator
Money remittance	Money remittance is a simple payment service that is usually based on cash provided by a payer to a payment service provider, which remits the corresponding amount, for example via communication network, to a

	payee or to another payment service provider acting on behalf of the payee.
Passporting	The right for electronic money institutions to operate cross border and conduct the same business in host Member States as they are entitled to conduct in their home Member State under the EMI licence, without additional hindrances.
PI	A 'payment institution' means a legal person that has been granted authorisation in accordance with Article 10 of Directive 2007/64/EC to provide and execute payment services throughout the Community;
PSD	The Directive on Payment Services (PSD) provides the legal foundation for the creation of an EU-wide single market for payments. The PSD aims at establishing a modern and comprehensive set of rules applicable to all payment services in the European Union.
PSGEG	The Payment Systems Government Experts Group (PSGEG) is a consultative body composed of government experts from Member States of the EEA, typically drawn from national finance ministries and national central banks as well as a representative from the European Central Bank members as observers, with expertise in the payments area with the objective of providing advice and guidance to the Commission.
PSMG	The Payment Systems Market Group (PSMG) is a consultative body composed of market experts, typically drawn from banks, enterprises, retailers and associations representing interested stakeholders such as SMEs and consumers, with expertise in the payments area with the objective of providing advice and guidance to the Commission.
SEPA	The Single Euro Payments Area (SEPA) is an initiative of the European banking industry, strongly supported by the European Commission, that will make all electronic payments across the euro area – e.g. by credit card, debit card, bank transfer or direct debit – as easy as domestic payments within one country are now
Waivers regime	The possibility for Member States to allow their competent authorities to waive the application of all or part of the procedures and conditions set out in some provisions of the directive.

## ANNEX 1

### The policy options and their scope

#### **(1) Policy options regarding scope and definition of electronic money and scope of activities of electronic money institutions**

- **Option 1.1:** Keep the existing provisions of the EMD concerning: 1) the definition of electronic money; 2) the scope of activities of electronic money institutions and 3) the redeemability ('do nothing').

Under this option the current definition of electronic money is maintained and the activities of electronic money institutions remain restricted to issuance of electronic money and closely related services. Provisions on redeemability are maintained as they are.

- **Option 1.2:** Issue a 'guidance note' to clarify the definition of electronic money, the scope of activities and redeemability.

Under this option a guidance note would be issued by the Commission services. It would clarify that both 'cards based' electronic money and 'server based' electronic money fall under the directive and stress the 'prepaid' aspects of the services regulated. This guidance note would also clarify which services can be offered under a electronic money institution license regulated under the EMD and which services fall under the license of payment institution regulated under the PSD. It would clarify the frontier between prepaid payment services and postpaid payment services. The guidance note would confirm that electronic vouchers fall under the EMD. Finally, the guidance note would clarify, for the benefit of mobile operators and issuers of gift vouchers, how to apply the provisions on redeemability to their services.

- **Option 1.3:** Issue a new definition of electronic money and electronic money institutions, extend the scope of activities authorised to electronic money institutions, modify redeemability requirements. This can be implemented by Amending the EMD or PSD.

The new definition, which would have to be technologically neutral, would clarify that e-money institutions can issue electronic money and all other services that payment institutions can provide under the PSD. This would enable hybrid operators such as mobile network operators to operate with one single license. The new definition would clarify that electronic vouchers fall in the scope. EMIs would also be allowed to grant credit (in the same conditions as payment institutions are, under the PSD). The amendment would also clarify how redeemability can be applied to prepaid mobile payment services and electronic vouchers. Extending the scope of activities of electronic money institutions would also imply that companies engaged in other activities than issuing e-money apply the same safeguarding requirements as payment institutions which conduct the same activities.

- **Option 1.4:** Repeal the relevant provisions of the directive.

Under this option, the current legal provisions defining electronic money and electronic money institutions would disappear.

Existing electronic money institutions would have to apply either for a license of payment institution under the PSD or for a license of credit institution. This option would equally repeal the redeemability provisions. To avoid the creation of a legal vacuum, the payment

services directive or the capital requirements directive would have to be amended, in order to ensure that existing businesses can continue to operate.

**(2) Policy options to ensure consistency between the EMD and the PSD so as to contribute to the creation of a true level playing field between all market participants**

- (a) Policy options regarding the prudential regime

*A first set of options concerning the application of qualitative prudential measures*

- **Option 2.1:** Maintain the current provisions of the EMD ('do nothing').

Under this option, the current prudential regime, which is based on the CRD, would be maintained.

- **Option 2.2:** Align with the PSD applying qualitative prudential requirements of payment institutions to EMIs to ensure equal treatment between EMIs and payment institutions.

In order to facilitate the possible future integration of the EMD provisions into the PSD and given the close interrelationship between electronic money and electronic payments, the current qualitative requirements of the EMD would be replaced by the qualitative requirements applicable to payment institutions under the PSD (Articles 5, 10–15 and 17–25 under Title II of Directive 2007/64/EC).

- **Option 2.3:** Repeal the relevant EMD provisions.

Existing electronic money institutions would have to apply either for a license of payment institution under the PSD or for a license of credit institution. Depending on their choice, the corresponding qualitative prudential requirements would be either those of the PSD or those of the CRD.

*A second set of options concerning the application of quantitative prudential measures on initial capital requirements*

- **Option 2.4:** Maintain current initial capital requirements of the EMD i.e. EUR 1 000 000 ('do nothing').
- **Option 2.5:** Apply the highest initial capital requirement under the PSD i.e. EUR 125 000.
- **Option 2.6:** Consider e-money as a specific payment service with a specific risk profile and create an additional initial capital requirement [EUR 125 000–250 000].
- **Option 2.7:** Repeal the relevant EMD provisions.

Under this option existing EMIs would have to apply either for a credit institution license (with initial capital requirements of EUR 5 000 000) or for a payment institution license (with initial capital requirements of EUR 125 000).

*A third set of options concerning the application of quantitative prudential measures on ongoing capital requirements*



- **Option 2.8:** Maintain the current approach for ongoing capital requirements of the EMD: 2 % of the total amount of financial liabilities related to outstanding electronic money ('do nothing').
- **Option 2.9:** Consider that EMIs, like payment institutions, do not pose a systemic risk to the financial system. Therefore, the same three methods of calculation of own funds proposed under Article 8 of the PSD<sup>24</sup> would apply mutatis mutandis to EMIs.
- **Option 2.10:** Consider e-money as a specific payment service with a specific risk profile and propose an additional method to the three proposed by the PSD for calculating ongoing capital requirement (Method D, described in Annex 9).

Under this method, own funds would be calculated in function of the highest of the outstanding electronic money and payments volume. This would ensure that capital requirements would be higher than Method C of the PSD, but lower than those resulting from the current linear method of the EMD. By taking into account the total payments volume, it would ensure that institutions issuing electronic money and other payment services of the PSD can be regulated with only one formula. Method D would be 'degressive' in line with the approach for payment institutions under the PSD (Method C).

- **Option 2.11:** Repeal the relevant EMD provisions.

Under this option, the ongoing capital requirements for EMIs would be repealed. Existing EMIs would have to apply either for a credit institution license or for a payment institution license, and comply with their respective ongoing capital requirements.

#### *Policy options regarding the limitation of investments*

- **Option 2.12:** Keep current investment limitations ('do nothing').

This option implies that only the most liquid assets would comply as eligible investments.

- **Option 2.13:** Apply the safeguarding requirements of the PSD and therefore extend the current limitations of investments to bank and credit card receivables.

Under this option, some liquid assets such as bank and credit card receivables would be added to the list of eligible investments. For EMIs this would decrease the 'funding gap' considerably.

- **Option 2.14:** Repeal the relevant EMD provisions.

Existing EMIs would have to apply either for a credit institution license or for a payment institution license, and comply with their respective safeguarding prudential requirements.

#### (b) Policy options regarding the waiver and passporting regime

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<sup>24</sup> According to Article 8 of the PSD, the competent authorities of Member States may choose between one of three methods: Method A: 10% of fixed overheads (admin expenses, rent, salaries, etc), Method B: Degressive percentage (from 4% to 0.25%) of amount of monthly payment transactions in previous year or Method C: Degressive percentage (from 10% to 1.5%) of sum of relevant indicator (sum of interest income, interest expense, commissions & fees, other operating income)

- **Option 3.1:** Maintain the current waiver regime and passporting regime of the EMD ('do nothing').

Under this option Member States could continue to apply waivers up to a threshold of EUR 5 000 000 of issued e-money. Existing passporting requirements are maintained.

- **Option 3.2:** Align the electronic money waiver regime and passporting with the provisions of the PSD.

The maximum threshold for the application of waivers would be decreased to EUR 3 000 000 of the highest of outstanding e-money and monthly payments volume. The relationship between outstanding e-money and monthly payment volume is explained in Annex 10.

This would ensure that the total risk of the activity is taken into account by the waiver regime. This option implies also that the waiver regime would become more stringent than it is today. This change should be seen in view of a lighter prudential regime for fully licensed electronic money institutions. Therefore, waived institutions would have an increased incentive to apply for a full license.

Under this option the passporting requirements for payment institutions under the PSD are applied to EMIs.

- **Option 3.3:** Repeal the relevant EMD provisions.

Under this option the waiver regime of the current EMD would be repealed. Presumably, the entire directive would be repealed. Waived institutions would not, therefore, be able to become full-licensed EMIs. Existing waived institutions would therefore have to apply either for a credit institution license or for a Payment institution license. Under this option the passporting provisions of EMIs would be repealed.

(c) Policy options regarding Anti Money Laundering

- **Option 4.1:** Do not adapt AML thresholds for e-money services ('do nothing').
- **Option 4.2:** Amend the Directive 2005/60/EC to take into account the thresholds used in Articles 34 and 53 of the PSD as well as economic developments.

The amounts of the thresholds in Article 11(5)(d) of Directive 2005/60/EC would be increased from EUR 150 to EUR 500 for the maximum amount stored on the device, and from EUR 2 500 to EUR 3 000 for the total amount of transactions in a calendar year.

The current thresholds would be relaxed regarding the ability of Member States to exempt EMIs from full due diligence requirements. This would enable EMIs to design products with larger amount stored and enable consumers to use the products more intensively without cumbersome due diligence requirements. For EMIs this would lower also the costs of complying with the due diligence requirement.

**ANNEX 2**  
**Initial screening of options**

– **Screening of options regarding the definition of electronic money and scope of activities of electronic money institutions**

Under Option 1.1 scenario, no changes are made to the EMD and as from November 2009, EMD and PSD will start to co-exist.

First, the current 'legal uncertainty' will remain and hinder the further development of e-money services. The unclarity regarding definition of electronic money and scope of activities of EMIs regulated under the EMD, in comparison with scope of activities of payment institutions regulated under the PSD, is not addressed. The incompatibility between an electronic money institution license and payment institution licence will not be addressed. Therefore, hybrid institutions, having multiple activities (For example, MNOs' prepaid and postpaid services offering payments), will be forced to split up their business in different entities to ensure they can develop prepaid payment services and other services to comply with the current inconsistencies between the current EMD and the PSD after transposition. Redeemability of funds is not addressed and this will continue to pose problems for application of the EMD to mobile operators and service vouchers.

Under Option 1.2 the Commission services issue a guidance note on the scope and definition of electronic money and electronic money institutions. The guidance note will clarify how the provisions of the EMD have to be applied in view of the newly adopted PSD. For business willing to offer electronic money services and payment services, it should clarify how to operate under the two licenses (electronic money institutions and payment institutions). The guidance note could clarify how to apply the redeemability requirement more flexible to MNO and service vouchers.

Based on the experience of the previous guidance note on the applicability of the EMD to MNOs, this option might generate limited impact on legal certainty. According to the majority of the stakeholders, the previous guidance note had limited impact on legal certainty. Stakeholders expect that individual interpretation of the guidance note by Member States will undermine legal certainty. Member States will be free to apply the recommendations on application of redeemability to mobile operators and service vouchers. This uncertainty will continue to hinder the development of new services.

Under Option 1.3 the current 'definition of electronic money' will be amended, to ensure that cards based electronic money and server based electronic money is taken into account and stresses the 'prepaid' character of electronic money services.

Under this option, the 'scope of activities' of electronic money institutions will be extend, aligned with the scope of activities and its related safeguarding requirements of payment institutions under the PSD. Electronic money institutions will be enabled to issue electronic money as well as all activities that payment institutions can conduct with a single license of an EMI. This would ensure that hybrid institutions can be accommodated under the EMD.

'Redeemability' of funds by customers will remain at par value and the threshold, to take into account monetary policy considerations the maximum threshold for redemption is remained at EUR 10 to ensure consumer protection. In order to accommodate mobile operators and electronic service vouchers, the modalities for redemption should be left to contractual

freedom and the contract between the issuer and the holder shall clearly state the conditions of redeemability.

As a result of these amendments prepaid 3rd party payment services by MNOs are covered by the EMD. It would equally ensure that electronic service vouchers are covered by the directive. The improved legal certainty would also simulate enterprises to enter the market. The most material impact would be that these services will have legal certainty and can pursue development and as a result, the potential amount of electronic money in circulation could increase highly, up to EUR 12 billion as demonstrated the table below. As 60.9 % of mobile subscribers are prepaid, and mobile payments are expected to generate EUR 8 billion by 2012, we can estimate that a major part would fall under the scope of the amended EMD. The market for service vouchers will further dematerialise and electronic vouchers can increase from 3 % today to 30 % or more by 2012 with the appropriate legal framework in place according to service voucher issuers. New entrants could generate EUR [1–2] billion additional electronic money in circulation.

**Table 1:** Impact of the new scope and definition on the number of EMIs and issued electronic money in circulation by 2012

	Current situation	Estimation for 2012			
		Mobile operators	Electronic vouchers	Other new entrants	Total impact
Number of institutions	20	20–100	3–5	5–25	20–125
Issued electronic money	EUR 1 billion	EUR 1–6 billion	EUR 1–4 billion	EUR 1–2 billion	EUR 3–12 billion

Source: Internal Market and Services DG, elaboration based on data from ECB, e-money association (EMA), APETDS and Capgemini<sup>25</sup>

Under Option 1.4 the directive is repealed. This option would lead to 'an increase of legal uncertainty' concerning the accommodation of current electronic money institutions with the framework of the PSD, as the activity of issuance of electronic money is explicitly excluded from the PSD. Repealing the directive will create a legal vacuum, with as implication that national regulators will be free to impose national requirements. Therefore a guidance note should be issued to clarify how existing electronic money institutions should be accommodated by the payment services directive or the capital requirements directive. As the EMD is repealed, the existing overall legal framework in place would be simplified as only two regulatory frameworks (the PSD & CRD) will be in place, with the risk that Member States start to impose national requirements.

EMIs have the option to apply for a license as a payment institution under the PSD or to become a credit institution. Under the PSD, it is unclear if they will be able to continue their current activities. If they choose to become a credit institution, they will have to comply with more stringent capital requirements from credit institutions. We can expect this will hinder

<sup>25</sup> Source Capgemini: <http://www.capgemini.com/industries/media/consulting/solutions/mobile-payments/>

market access of new service providers and the uptake of new and innovative electronic money services within the EU.

A stabilisation or a decrease in market can be expected in terms of the number of institutions and the amount of electronic money issued if the directive is repealed.

Evaluation of the options contribution to the objectives:

**Table 2:** Screening of policy options on scope and definition

Scope and definition	Legal certainty	Create a consistent legal framework	Promote the development of new and innovative services
Option 1.1 Do nothing	xxx	xx	xx
Option 1.2 Guidance note	xx	x	xx
Option 1.3 Amend definition of e-money and scope of activities of EMIs	✓✓✓	✓✓✓	✓
Option 1.4 Repeal EMD	xx	✓	x

Contribution to objectives in comparison with the situation today, before transposition of the PSD:

✓✓✓ (Strong) – ✓✓ (Moderate) – ✓ (Weak) positive contribution

xxx (Strong) – xx (Moderate) – x (Weak) negative contribution

– **Screening of policy options regarding the harmonisation of the EMD and the PSD with objective to create a true level playing field between all market participants**

(1) Screening of policy options regarding qualitative prudential requirements

Under Option 2.1 the qualitative prudential requirements remain linked to the capital requirements directive. This does not lead to any legal uncertainty. However, with the transposition of the PSD as from November 2009, new qualitative prudential requirements will come into force for payment institutions, and this leads to inconsistent overall framework. The combination of two different qualitative prudential requirements (one for payment institutions under the PSD and one for electronic money institutions under the EMD) will add complexity for hybrid institutions, such as Mobile operators, willing to apply for both licenses which will be subject to different prudential requirements. A complex qualitative prudential framework therefore will not contribute to the development of new services in the EU.

Under Option 2.2, the current qualitative requirements which are closely related to the CRD are replaced by qualitative requirements for payment institutions under Title II of the PSD: Articles 5, 10–15 and 17–25 of Directive 2007/64/EC will apply to electronic money institutions. This has a positive impact on legal certainty ensuring there are only two types of qualitative prudential requirements: those for banks under the CRD and those for EMIs and payment institutions which would be equal under the amended EMD and the PSD. This will facilitate a possible future integration of the EMD provisions into the PSD and contribute to

the harmonisation of the overall legal framework. As the overall complexity will decrease we can expect a positive impact on the development of new services in the EU.

Under Option 2.3, the existing electronic money institutions should apply for a license of payment institution under the PSD or apply for a license of a full blown credit institution and corresponding qualitative prudential requirements will apply. In the short terms this might lead to some legal uncertainty for existing electronic money institutions as they have to choose between one of the two licenses and apply the qualitative prudential requirements of the chosen regime. Under this option the overall qualitative prudential requirement framework will be simplified as only the PSD and the CRD will be in force. If existing EMIs have to become a credit institution to continue their operations, this more stringent qualitative rules for credit institutions will have a negative impact on the development of new services.

**Table 3:** Screening of policy options on qualitative prudential requirements

Qualitative prudential requirements	Legal certainty	Create a consistent legal framework	Promote the development of new and innovative services
Option 2.1 Do nothing Maintain qualitative prudential requirements of EMD	✓	xx	x
Option 2.2 Align with PSD and apply qualitative requirements with reference to Title II of the PSD to EMIs	✓	✓✓✓	✓
Option 2.3 Repeal EMD	✓	✓	x

Contribution to objectives in comparison with the situation today, before transposition of the PSD:  
 ✓✓✓ (Strong) – ✓✓ (Moderate) – ✓ (Weak) positive contribution  
 xxx (Strong) – xx (Moderate) – x (Weak) negative contribution

(2) Screening of policy options regarding initial capital requirements

Under Option 2.4, the current initial capital is maintained at EUR 1 million. This implies that for small entities the relative capital requirement is high: if an amount of EUR 3 million is issued this represents a capital requirement of 33 % and if an amount of EUR 5 million is issued this represents a capital requirement of 20 %. This is a blocking factor for small entities to apply for an electronic money license. If compared with payment institutions regulated under the PSD, where initial capital required is maximum EUR 125 000, this represents an initial capital requirement of 4 % in case of EUR 3 million and 2.5 % in the case of EUR 5 million issued electronic money. Under the PSD, small entities are therefore not blocked to apply for a license of payment institution. In view of the difference between initial capital for electronic money institutions and payment institutions under the PSD, maintaining the current EUR 1 million thresholds for initial capital leads to an inconsistent framework. Maintaining initial capital as is will therefore prevent the development of new and innovative services.

Under Option 2.5 the threshold for electronic money institutions is lowered to EUR 125 000, and therefore issuance of electronic money is considered as 'other payment services activities' for which this threshold applies under the PSD. This will enable smaller entities to apply for a license and brings more coherence between EMD and PSD and therefore contributes to the development of new and innovative services. It brings e-money institutions at the same level as 'other payment services activities' regulated under the PSD.

Under Option 2.6 the threshold for electronic money institutions is lowered to the range of EUR 125 000–1 000 000, considering that electronic money institutions have a specific risk profile and therefore apply a specific initial capital equal or higher than this for payment institutions under the PSD, however lower than the current EUR 1 million which blocks market entrance of small entities. This approach brings a coherent prudential regime in place as e-money institutions will have a prudential regime more stringent than payment institutions, however lower than credit institutions. A lower initial capital threshold will encourage new entities to apply for a license and promote the development of new and innovative services.

Under Option 2.7 the EMD is repealed. This will imply EMIs will have to apply for a license of a credit institution to maintain their current activities, or apply for a license as payment institution of the PSD, which will not enable them to continue existing services. This implies that, to continue their activities, the initial capital of credit institutions will be applied which amounts to EUR 5 million. This higher initial capital will block the development of new services in the EU, and is inconsistent with the much lower initial capital requirements for payment services under the PSD.

**Table 4:** Screening of policy options on prudential requirements: initial capital

Quantitative prudential requirements: initial capital	Legal certainty	Create a consistent legal framework	Promote the development of new and innovative services
Option 2.4 Do nothing Maintain EUR 1 000 000 initial capital	✓	xxx	xxx
Option 2.5 Align with PSD applying initial capital requirements of PSD for 'other service': EUR 125 000 to EMIs	✓	✓✓	✓✓✓
Option 2.6 Align with PSD, and apply initial capital in the range of EUR 125 000–250 000 to EMIs	✓	✓✓✓	✓✓
Option 2.7 Repeal EMD	✓	x	xx

Contribution to objectives in comparison with the situation today, before transposition of the PSD:

✓✓✓ (Strong) – ✓✓ (Moderate) – ✓ (Weak) positive contribution

xxx (Strong) – xx (Moderate) – x (Weak) negative contribution

(3) Screening of policy options regarding ongoing capital requirements

The ongoing capital requirements should be considered in view of the lower initial capital requirements. Under Option 2.8 the current linear approach is maintained. For small amount of issuance of electronic money, this could imply that ongoing capital requirement would be lower than the capital requirements under the PSD, therefore we consider it less consistent with the approach that prudential requirements should be at least as stringent as these of payment institutions. In combination with lower initial capital maintaining the current own funds requirements would contribute to the development of new services as total capital.

**Table 5:** Comparison total capital requirements (initial + ongoing capital requirements)

Issued e-money million euro	Current method		Lowering initial capital only		New Method D		Method B PSD	
	%	million euro	%	million euro	%	million euro	%	million euro
3	33	1.0	4	0.125	5.0	0.150	4.0	0.125
5	20	1.0	3	0.125	5.0	0.250	4.0	0.200
10	10	1.0	2	0.200	3.8	0.375	2.5	0.325
50	2	1.0	2	1.0	2.3	1.15	1.0	0.725
100	2	2.0	2	2.0	2.2	2.15	1.0	1.225
250	2	5.0	2	5.0	1.8	4.40	1.0	2.725
350	2	7.0	2	7.0	1.5	5.4	0.5	3.225
1 000	2	20.0	2	20.0	1.2	11.9	0.3	4.850

Application of the current methods A–B–C from the payment services directive as proposed in Option 2.9, could be applied to electronic money institutions. As shown in Annex 3, which compares the risks of EMIs, credit institutions and payment institutions, the risk of activities of electronic money institutions is much closer linked to the risks of payment institutions under the PSD in comparison with the risks of Credit Institutions. However, as shown in Annex 11, where the three methods were applied to exiting EMIs, we found no correlation between the three PSD methods for electronic money institutions. Therefore, it is up to the competent authorities to determine the appropriate ongoing capital requirements method for EMIs. Overall the consistency of the system will be improved and electronic money institutions will be subject to prudential requirements of payment institutions. The overall lower capital requirement will contribute to the development of new services.

Under Option 2.10 total capital requirements will follow a degressive curve. Starting from the new lower initial capital requirement, for small companies, ongoing capital requirements will be slightly higher than the under the linear method, and for larger enterprises, ongoing capital requirements will be lower than the current one. Capital requirements under the new method are calculated under the higher of payment volume and issued electronic money. Both PV & EM are determined as the higher of the current or the calculated as average of the preceding six months. This ensures that capital requirements under the EMD remain at least as restrictive as capital requirements under Method B of the PSD. It also enables for institutions engaged partly in payment services and partly in issuance of electronic money services, to take into account the total payment volume to determine capital requirements. Therefore, businesses engaged only in a minor part in issuance of electronic money and a larger part in other payments transactions will be facilitated to comply with the requirements of EMD. The new Method D ensures a consistent legal framework as it ensure more stringent prudential



requirements for electronic money institutions then payment institutions, maintaining them lower than credit institutions which can provide a much larger area of activities. The overall lower capital requirements will contribute to the development of new services.

Under Option 2.11 the EMD is repealed. Therefore electronic money institutions will not continue to exist and businesses will have to apply for a banking license with higher initial capital requirements and ongoing capital requirements. This will overall ensure legal certainty however; the high total capital requirements will not improve the overall consistency in view of the lower capital requirements (initial + ongoing) capital requirements from payment institutions of the PSD. This prudential framework is expected to hamper the further development of the market.

**Table 6:** Screening of policy options on prudential requirements: ongoing capital

Quantitative prudential requirements: ongoing capital	Legal certainty	Create a consistent legal framework	Promote the development of new and innovative services
Option 2.8 Do nothing Maintain 2 % own funds requirements	✓	✗	✓
Option 2.9 Align with PSD, apply own funds requirements of PSD (Method A, B, C) to EMIs	✓	✓	✓
Option 2.10 Align with PSD, apply specific own funds method D for EMIs	✓	✓✓	✓
Option 2.11 Repeal EMD	✓	✗	✗✗

Contribution to objectives in comparison with the situation today, before transposition of the PSD:

✓✓✓ (Strong) – ✓✓ (Moderate) – ✓ (Weak) positive contribution

✗✗✗ (Strong) – ✗✗ (Moderate) – ✗ (Weak) negative contribution

#### (4) Screening of policy options regarding limitations on investments

Under Option 2.12 existing limitations on investments are maintained. EMIs are requested to have investments no less than their financial liabilities regarding issued electronic money. The list of eligible investments is limited to the most liquid assets and fulfils an important function of protecting the float of issued electronic money. Debit and credit card receivables are continued to be excluded from eligible investments. As shown in Annex 12 this leads for electronic money institutions to the obligation to hold additional capital which could become more stringent than if they would operate under a license of a credit institution. Therefore maintaining these requirements does not contribute to the consistency of the legal framework and the higher additional capital hinders the growth and development of new and innovative services.

Under Option 2.13, safeguarding requirements under the PSD are applied. According to those requirements, the funds that have been received, 'shall be deposited in a separate account in a credit institution or invested in secure, liquid low-risk assets as defined by the competent authorities of the home Member State' or shall be 'insulated in accordance with national law in the interest of the payment service users against the claims of other creditors of the payment institution, in particular in the event of insolvency'. This ensures adequate safeguarding replacing the current provisions on limitations of investments. Under Option 2.13, the consistency of the framework is improved and the growth and development of new services will not be hindered.

Under Option 2.14, the directive is repealed. Therefore electronic money institutions will not continue to exist and businesses will have to apply for a banking license to continue issuance of electronic money and apply according safeguarding requirements for funds hold, which are in the range of 12–14 %. As overall initial capital under this option will be EUR 5 million, the development of new services will be hindered. If EMIs apply for a license of payment institution under the PSD, safeguarding requirements of the PSD will be applied.

**Table 7:** Screening of policy options on prudential requirements: limitations on investments

Quantitative prudential requirements: limitations on investments	Legal certainty	Create a consistent legal framework	Promote the development of new and innovative services
Option 2.12 Do nothing Maintain existing limitations on investments	✓	✗	✗
Option 2.13 align with PSD Apply safeguarding requirements of PSD	✓	✓	✓
Option 2.14 Repeal EMD	✓	✓	✗

Contribution to objectives in comparison with the situation today, before transposition of the PSD:

✓✓✓ (Strong) – ✓✓ (Moderate) – ✓ (Weak) positive contribution

✗✗✗ (Strong) – ✗✗ (Moderate) – ✗ (Weak) negative contribution

#### (5) Screening of policy options regarding waivers and passporting regime

Under Option 3.1 the existing waivers regime under the EMD is maintained. After the transposition of the PSD in November 2009, two waivers regimes will exist: a waivers regime under the PSD and a waivers regime under the EMD. Both waivers regime have different thresholds and therefore the waivers regimes will lead to an increasing complexity and an overall inconsistent legal framework. Existing passporting regime is maintained and will continue to hinder setting up of branches.

Under Option 3.2 the waivers and passporting regime for payment institutions is applied to electronic money institutions. This will simplify the overall legal framework and ensure consistency. A simplified legal framework will contribute to the development of new services.

Under Option 3.3 the current waivers and passporting regime is repealed. Therefore existing waived institutions will have to apply for a license of credit institutions and comply with according capital requirements or apply for a waiver under the PSD. For existing waived institutions this creates legal uncertainty as it is unsure if they will be enabled to issue electronic money under a waiver from the PSD. Overall the consistency of the current framework is slightly improved as only two legal frameworks will be in place: a framework for credit institutions and a framework for payment institutions. However, the development of new services by small entities issuing electronic money is expected to be hindered.

**Table 8:** Screening of policy options on waivers and passporting regime

Waivers and passporting regime	Legal certainty	Create a consistent legal framework	Promote the development of new and innovative services
Option 3.1 Do nothing Maintain existing waivers regime	✓	✗	✓
Option 3.2 Align with PSD: Apply waivers regime of PSD	✓	✓	✓
Option 3.3 Repeal EMD	✗	✓	✗

Contribution to objectives in comparison with the situation today, before transposition of the PSD:

✓✓✓ (Strong) – ✓✓ (Moderate) – ✓ (Weak) positive contribution

✗✗✗ (Strong) – ✗✗ (Moderate) – ✗ (Weak) negative contribution

#### (6) Screening of policy options regarding anti money laundering requirements

Under Option 4.1 current thresholds for AML requirements are maintained. Hereby, Member States may for e-money services decide not to apply customer due diligence if the device cannot be recharged or if the maximum amount stored in the device is no more than EUR 150, or if the device can be recharged, a limit of EUR 2 500 is imposed on the total amount transacted in a calendar year, except when an amount of EUR 1 000 or more is redeemed in that same calendar year. As applying the KYC requirements are considered cumbersome for consumers and costly to implement for business, this does not contribute to the promotion of new and innovative services. Legal certainty and consistency remain as is.

Under Option 4.2 Directive 2005/60/EC is amended to take into account the thresholds used in Articles 34 and 53 of the PSD as well as economic developments and, therefore, increase the amounts of the thresholds in Article 11(5)(d) of Directive 2005/60/EC from EUR 150 to EUR 500 for the maximum amount stored on the device, and EUR 2 500 to EUR 3 000 for the total amount of transactions in a calendar year. This will increase consistency in the legal framework, aligning the EMD and the PSD and the higher thresholds will enable the development of more services which do not need to comply with KYC requirements. This is expected to promote the development of new services.

**Table 9:** Screening of policy options on anti money laundering requirements

Anti money laundering requirements	Legal certainty	Create a consistent legal framework	Promote the development of new and innovative services
Option 4.1 Do nothing Maintain existing AML thresholds	✓	✓	✗
Option 4.2 Increase threshold of AML requirements	✓	✓	✓

Contribution to objectives in comparison with the situation today, before transposition of the PSD:

✓✓✓ (Strong) – ✓✓ (Moderate) – ✓ (Weak) positive contribution

✗✗✗ (Strong) – ✗✗ (Moderate) – ✗ (Weak) negative contribution

**ANNEX 3**  
**Screening of risk profiles**

Business activity	Credit institutions: Deposit taking + payment service provision
Systemically importance in the market (size, number of providers)	<p>Credit institutions as deposit taking institutions undertake a wide range of financial activities, of which the provision of payment services may be only a small part, and have commensurate range of skills and infrastructure. They also pursue comprehensive risk management policies designed to ensure fundamentally, that depositors can be confident of withdrawing their funds in full on demand. In contrast payment institutions provide more specialised activities and generate risks that are much narrower and easier to monitor and control than those across the spectrum of activities of a deposit-taking institution.</p> <p>The systemic importance of credit institutions payment operations for the payment system is illustrated by the enormous number of transactions running through banks payment systems and balances held by banks. Banks handle 231 billion transactions per year with a total value of EUR 52 trillion. The funds held by banks on customer bank/payment accounts amount to a total of EUR 3 165 billion.</p>
Deposit taking and related risks	The nature of deposit taking as an activity, where banks take depositors' money offering a promise of repayment on demand and subsequently invest this money in assets less liquid than this promise to repay (for example making loans to consumers and businesses), and the systemic importance of banks to the wider economy is reflected in the regulatory regime applied to them.
Credit risk Operational risk (technical failure, fraud, etc.)	<p>Capital requirements have been introduced for credit institutions to protect depositors of the credit and operation risk credit institutions run.</p> <p>Capital charges shall ensure the viability of the single institution and ultimately the financial system whereby the capital charges reflect the risk exposure of the credit institution and shall prevent them from failure.</p>
Financial soundness/Risk of bankruptcy	<p>The operational risk model used for the revised (BASEL II) solvency requirements for credit institutions, for example the 18 % capital charge for payment and settlement services reflects the operational risk run by credit institutions. According to BASEL II, the losses incurred by credit institutions from payment and settlement services merits an 18 % capital charge.</p> <p>This 18 % capital charge has been developed on the basis of a modelling exercise of the loss data of banks collected by the BASEL Committee. Therefore this ratio is only relevant to the particular risk profile of credit institutions and only where the 'standardised approach' is applied. It describes the substantial risk banks face in payments, clearing and settlement of payments and securities.</p>
Money laundering and terrorist financing	Credit institutions like other financial or payment service providers handle the flow of funds and are therefore exposed to the risk of money laundering and terrorist financing.

Business activity	Electronic money institutions
Systemically importance in the market (size, number of providers)	<p>EMIs have a very limited market importance. Only 20 enterprises have an EMI license and 137 companies operate under a waiver. The total transactions of EMIs represent less than 1 % of the non-cash related payments in the EU.</p> <p>In comparison with banks, individual consumers hold only a limited number of electronic money at EMIs. Because users only use this products to perform payments the average amount stores is on average less than EUR 100 and for waived institutions the maximum</p>

	amount is limited to EUR 150.
Deposit taking and related risks	<p>Issuance of electronic money does not constitute deposits. However, they are allowed to hold prepaid funds. Electronic money institutions are requested to have investments of an amount of no less than their financial liabilities related to outstanding money, in qualified liquid assets. In comparison with credit institutions, EMIs are not allowed to invest money in assets less liquid such as consumer or business loans.</p> <p>As consumers only hold much smaller amount of e-money institutions usually lower than EUR 150, and only hold funds at the e-money institutions if they are willing to perform transactions, the risks in relation to the funds held by EMIs is not comparable with the risk related to deposits held at a credit institution, where deposits can represent large amounts for a longer timeframe.</p> <p>In contrast to an insolvent bank which might undermine the stability and integrity of the wider economy and the financial system, an insolvent EMI would not have any comparable impact. An insolvent EMI would not have the capacity to damage the wider financial system.</p>
Credit risk Operational risk (technical failure, fraud, etc.)	<p>Capital requirements have been introduced for EMIs to protect the float of outstanding electronic money, and therefore protect the operational risk EMIs run.</p> <p>Due to high initial capital requirements, small EMIs, with issued electronic money of EUR 5 million have a capital requirement of 20 % which is higher than the 18 % for credit institutions. This regardless of the limitations of investments.</p> <p>Next to this, electronic money institutions shall have investments of an amount of no less than their financial liabilities related to outstanding money, in qualified liquid assets. Debit and Credit card receivables are thereby excluded from qualified liquid assets.</p> <p>As the majority of consumers use debit cards and credit cards to add money to their account at EMIs, this poses additional capital requirements for EMIs which are forced to hold more capital (for one industry stakeholder up to 40 %) in comparison with the 18 % for credit institutions on deposits.</p>
Financial soundness/Risk of bankruptcy	<p>In order to ensure sound and prudent operations for EMIs are required to hold sufficient capital. They are equally required to have sound and prudent management, accounting procedures and adequate internal control measures.</p> <p>Since the introduction of the EMD no problems regarding financial soundness of EMIs nor from waived institutions have been reported by Member States.</p>
Money laundering and terrorist financing	EMIs handle mainly low value payments and have therefore a limited exposure to the risk of money laundering (ML) and terrorist financing (TF). The e-money industry has however developed a detailed typologies for ML and TF as well as industry guidance for ML and TF. These have been in place for the 5 <sup>th</sup> consecutive year.

Business activity	Payment institutions
Systemically importance in the market (size, number of providers)	<p>The adoption of the PSD will create a new institutions, payment institutions, covering the following payment activities:</p> <ol style="list-style-type: none"> <li>1. Services enabling cash to be placed on a payment account as well as all the operations required for operating a payment account.</li> <li>2. Services enabling cash withdrawals from a payment account as well as all the operations required for operating a payment account.</li> <li>3. Execution of payment transactions, including transfers of funds on a payment account with the user's payment service provider or with another payment service provider:</li> </ol>

	<ul style="list-style-type: none"> <li>- execution of direct debits, including one-off direct debits,</li> <li>- execution of payment transactions through a payment card or a similar device,</li> <li>- execution of credit transfers, including standing orders.</li> </ul> <p>4. Issuing and/or acquiring of payment instruments. 5. Money remittance. 6. Execution of payment transactions where the consent of the payer to execute a payment transaction is given by means of any telecommunication, digital or IT device and the payment is made to the telecommunication, IT system or network operator, acting only as an intermediary between the payment service user and the supplier of the goods and services. It covers all types of payment services except from issuance of electronic money. Hybrid institutions, offering payment services and other non-payment services are equally covered.</p>
Deposit taking and related risks	Payment institutions are prohibited to accept deposits and are only permitted to use funds accepted from users for rendering payment services so that customer funds will not be used or mixed with funds for other business activities.
Credit risk Operational risk (technical failure, fraud, etc.)	<p>Payment institutions run operational risks for the well-functioning of their systems, internal controls, administrative procedures etc.</p> <p>The prudential regime for payment institutions makes a differentiation regarding the type of activity of payment institutions. A distinction is made based on the risks of the activity, between Money remittance, Mobile services, and all other payment services, with respectively EUR 20 000, 50 000 and 125 000 initial capital requested. Competent Authorities can choose the ongoing capital requirement for payment institutions out of three methods.</p>
Financial soundness/Risk of bankruptcy	Risks of payment institutions are highly different and lower than consumer deposits at credit institutions.
Money laundering and terrorist financing	Payment Institutions will handle mainly low value payments and have therefore a limited exposure to the risk of money laundering and terrorist financing. Payment institutions are subject to the Third Money Laundering Directive and will have to put in place the same provisions as credit institutions and electronic money institutions, applied on a risk basis. They will have to address the risks of money laundering and terrorist financing.

Business activity	Mobile operators
Systemically importance in the market (size, number of providers)	<p>The European mobile market represents 553.46 million subscribers of which 60 % of subscribers are prepaid and 40 % receive a monthly bill (also referred to as 'postpaid'), and approximately 100 mobile operators are operational in the EU.</p> <p>Telecom operators 'core' business is the provision of mobile voice and digital content/data services (90 % of total services).</p> <p>Many mobile operators offer their customers the possibility to purchase third-party goods and services (in particular digital content such as ring tones, logos, games, etc.) using their prepaid funds or via their 'postpaid' monthly bill. After the transposition of the PSD, some similar payment services, will, depending on the type of subscription (prepaid versus postpaid) will be regulated under different regimes: the EMD, for prepaid services, or the PSD for postpaid.</p> <p>Currently, only approximately 1 % of the total prepaid funds are used for third-party services, while the rest is spent on services offered by the mobile operator itself. According to Capgemini the European market for mobile payments will be worth</p>



	EUR 913 million in 2008, and are expect to rise up to over EUR 8.7 billion in 2012.
Deposit taking and related risks	Telecom operators are not entitled to take deposits. Under the current scope of an e-money license as defined in Directive 2000/46/EC authorised telecoms might accept prepaid funds from their customers in exchange for e-money which can be used for payments. Comprehensive prudential rules are laid down for this case. Telecoms might offer remittance services which are not connected to deposit taking. In this case telecom operators would be faced with a risk similar to money remitters.
Credit risk	Telecoms might offer post-paid payment services, allowing customers to purchase products and service via mobile phone and e.g. invoice the amount to the customers via their regular phone bill. In this case mobile operators would be faced with a credit risk. However, there is no risk for the user of mobile payment services to lose money. Given the low amounts per transaction the credit risk for providers is marginal, in particular compared to the credit risks already managed today by telecom operators for their millions of customers without being subjected to solvency (capital) requirements.
Operational risk (technical failure, fraud, etc.)	Telecoms run, just as payment institutions, operational risks for the well-functioning of their systems, internal controls, administrative procedures (e.g. billing, fraud) etc. Telecoms are already today dealing with. all these risk and are subject to the relevant legislation for telecommunication operators
Financial soundness/Risk of bankruptcy	Due to the marginal size of payment operations run by telecoms operators is seems inappropriate to require particular financial soundness provisions. However, in most cases where telecom operators have started to offer payment services they were fully compliant with either the e-Money Directive or the Banking Directive.
Money laundering and terrorist financing	The risks of money laundering and terrorist financing are only relevant for the payments activities of an operator not for his other activities.

Business activity	<b>SERVICE VOUCHERS OPERATORS</b>
Systemically importance in payments market (size, number of providers)	<p>The total market for services vouchers in EU was worth EUR 13 billion, of which 97 % were paper based vouchers, and 3 % electronic vouchers. The market is mainly dominated by a limited number (3) of companies who have a consolidated market share of more then 70 % in the EU. Electronic Vouchers are considered 'prepaid' products, where value is stored on a card.</p> <p>The majority of the products issued by services vouchers are meal vouchers, representing 80 % of total turnover in 2007. New services which are currently emerging are gift vouchers.</p>
Deposit taking and related risks	Service vouchers are not allowed to take deposits.
Credit risk Operational risk (technical failure, fraud, etc.)	Service Voucher Operators run, just as payment institutions, operational risks for the well-functioning of their systems, internal controls, administrative procedures etc. Service Vouchers are already today dealing with these risks for their paper-based products.
Financial soundness/Risk of bankruptcy	Currently, for paper-based products no capital requirements are made to service vouchers operators. Therefore, it seems inappropriate to install high capital requirements for the same products in an electronic version.
Money laundering and terrorist	Service vouchers operators are handle financial transactions, usually from low value and have therefore a limited exposure to the risk of money laundering and terrorist financing.



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Business activity	Money remittance
Systemically importance in payments market (size, number of providers)	<p>Money remittance systems are classified as systemically not important payment systems<sup>26</sup>. A two tier structure of the money remittance sector can generally be found in most Member States: consisting of officially registered larger internationally operating remitters and a majority of small remitters operating without license. These small remitters operate in most cases in a limited network of friends and families (often immigrants or socially underprivileged groups with no access to the banking system) and provide remittance services as a non-for-profit or low profit activity associated with other businesses (e.g. related activities such as bureaux de change, travel agencies and import-export businesses, or unrelated activities such as shops or taxi companies). The number of officially operating money remitters in Member States (a range of five in some Member States to 1 435 in the UK) depends largely on the type of prudential regime adopted. Member States with a registration regime, focussing mainly on prevention of money laundering have a higher number of registered providers than countries which generally demand a banking license. At European level, the total number of money remitters seems to be represented by 2000 of actors (most of them small remitters). A Commission study based on Member States records shows some EUR 17 billion flowing from the EU to non-EU countries. This figure highlights the core role money remitter's play in facilitating cross-border payments in particular to developing countries (remittance flows are the second largest financial flow to developing countries after foreign direct investment, more than double the size of net official finance) – a market segment only insufficiently served by banks.</p>
Deposit taking and related risks	<p>In contrast to deposit taking or issuing e-money, money remitters offer a straight remittance service that involves taking in money to pay out to a named beneficiary usually within 24 hours. The threat of a 'bank run' – deposit makers requesting their funds back at the same time and the bank having inadequate capital reserves to comply – is not applicable to money remitters. The remitter does not invest the remittance in between receiving it and paying it out, and usually makes the funds available for collection within approximately 20 minutes of being entered onto the accounting system. The average transactions going through money remittance systems are of relatively low value (average EUR 200–400 depending on country). If an individual money remitter were to become insolvent and unable to pay out remittances, consumers would stand to loose comparatively small amounts of money. In contrast to an insolvent bank which might undermine the stability and integrity of the wider economy and the financial system, an insolvent money remitter would not have any comparable impact. An insolvent money remitter would not have the capacity to damage the wider financial system.</p>
Credit risk	<p>Money remitters do not face a credit risk, as the customer will make the funds available before the transfer takes place. Customers face a short-term credit risk during the time they have handed over funds and until the transfer is completed, which is almost instantaneously. This credit risk is in no ways different from the credit risk present everyday in the economy where all transactions which are not settled in a payment versus delivery mode are subject to a short-term credit risk. It is deemed inappropriate to impose on all economic actors therefore solvency requirements. The same rationale should apply on the business of money remitters where first payment takes place and shortly afterwards delivery. Settlement risks are very short-termed as most of the transactions are settled immediately. Settlement obligations to others regularly do not exist as money remittance systems are usually closed systems. Where they do exist it is only as intra-system credit (credit towards agents) or exceptionally as a participant in a clearing and settlement system, which usually should be addressed by system-internal and adequate risk</p>

<sup>26</sup> Based on the G10 standards entitled 'Core Principles for Systemically Important Payment Systems (Core Principles)', which were adopted by the Governing Council of the ECB in January 2001.

	management procedures.
Operational risk (technical failure, fraud, etc.)	Money remitters face like other payment service providers operational risks depending on the size of their operations due to technical failure of systems (own IT systems are mostly used by large but not by small remitters), legal compliance, fraud, etc. Money remitter's operational risk is however, very narrow as the systems are usually closed systems (no other parties involved) and it therefore does not create counterparty risks or chain effects. This is in stark contrast to the banks payment system, which is embedded in a multilateral network, and creates substantial counterparty risk and chain effects which could potentially destabilise the financial system.
Financial soundness/Risk of bankruptcy	Available evidence and reports from money remitters suggest that money remitter employ sufficient capital to provide payment services with an adequate level of reliability and financial soundness and to cover both their risk towards customers and their operational risk. Different examples show that in a comparison with the revised banking capital requirements money remitters' actual capital stands far above 100 %. It implies that money remitters devote to payment services a capital higher than banks under the banking capital requirements. Insolvency records of Member States show that so far there were no cases of bankruptcy of money remitters reported including any negative consequences for the stability of the financial system.
Money laundering and terrorist financing	Money remitters are dealing with the transfers of funds and risk therefore to be used for money laundering or terrorist financing purposes.

**ANNEX 4**  
**Screening of administrative burden**

Article 6 of the existing EMD states that competent authorities shall verify that EMIs comply with capital requirements and limitations on investments 'not less than twice each year'. The 2006 review report showed that most Member States have kept the minimum frequency of the EMD, while several others require EMIs to report more often. In one case (Poland), the National authorities reported that EMIs would have to report only once a year. The following table explains the reporting requirements in the different Member States:

Country	Reporting requirements	Country	Reporting requirements
Austria	Quarterly	Latvia	Twice a year
Belgium	Twice a year	Lithuania	Quarterly
Bulgaria	No information available	Luxembourg	Twice a year
Cyprus	Twice a year	Malta	Monthly
Czech Republic	Twice a year	Netherlands	Monthly/Quarterly
Denmark	Twice a year	Poland	Once a year
Estonia	Not specified	Portugal	Twice a year
Finland	Twice a year	Romania	No information available
France	Twice a year	Slovakia	Quarterly
Germany	Monthly	Slovenia	Twice a year
Greece	Twice a year	Spain	Not yet specified
Hungary	Twice a year	Sweden	Twice a year
Ireland	Twice a year	UK	Twice a year

Source: European Commission, Evaluation report EMD, 2006<sup>27</sup>

Calculation of the administrative burden of the e-money directive, in relation to the different policy options is based on following assumptions:

- Number of current EMIs and waived institutions (based on data provide from Member States), is estimated at 20 EMIs and 127 waived institutions currently operating in the EU.
- The main drivers of administrative burden for EMIs are the authorisation procedures, reporting requirements.

<sup>27</sup> In 2008 no EMIs were reported in Poland.

- Reporting costs for EMIs are based on a bi-yearly reporting requirement which was observed during the 2006 review as the average reporting requirement in the majority of the Member States<sup>28</sup>.

### ***Administrative burden for public authorities in Member States***

Cost of reporting requirements for public authorities in Member States are estimated on the basis of an on an investment cost of adaptation of the reporting system of EUR 0.75 million for small Member States and EUR 1 million for large Member States and a yearly depreciation of 15 % and a maintenance cost of 10 % of investment corresponding in a yearly recurring cost of EUR 187 000 or EUR 250 000. Only Member States which EMIs or waived institutions (currently 9) are assumed to invest in the adaptation of reporting systems, for other Member States, no costs were taken into account.

Treatment of reporting of individual businesses is assumed to consume 7 hours by a civil servant per institution (both for EMIs and waived institutions). This includes receive of data (1 hour), treatment and adjustment of data (3 hours), analysis of history (1 hour), draft of status report (1 hour), filling of report (1 hour).

### ***Administrative burden for EMIs and waived institutions***

Hourly costs of reporting for businesses are based on average hourly wages of financial intermediaries as approximation for accountants or bookkeepers, who will presumably do the reporting. However, it could be reasonably expected that junior employees undertake most of the activities. There is thus a risk of overestimation in hourly tariffs, for some Member States, as in some instances the hourly wage of a junior employee could be half of the national average.

It has been estimated that EMIs and waived institutions need to allocate a financially qualified employee (e.g. a junior accountant) for one working day (7.5 hours) to obtain the requested information. This activity is conducted twice a year to comply with the bi-annual reporting requirement.

This 7.5-hour estimate comprises the following main types of action:

- (1) familiarising with the information obligation (1.0 hours);
- (2) retrieving information from existing data (2.5 hours);
- (3) adjusting existing data (1.5 hours);
- (4) filling forms (1.0 hours);
- (5) holding internal meeting to verify submission (1.0 hours); and
- (6) submitting information and filing (0.5 hours).

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<sup>28</sup> Some Member States requested more frequent reporting, which is usually based on the rationale to keep reporting requirements in line with those of traditional credit institutions. For example, Austria requests a quarterly reporting to the Financial Markets Supervisory Authority and the Austrian National Bank. In the Netherlands EMIs have to submit their balance sheets monthly and have to report on more specific issues quarterly.

To comply with reporting requirements, EMIs are expected to invest in a new reporting system or adapt their existing reporting system. Investment cost of adaptation of reporting systems is estimated at EUR 150 000 for EMIs and EUR 50 000 for waived institutions, this is a fraction of a balance of payment reporting system from banks which is estimated at EUR 500 000. Annual depreciation of capital is estimated at 15 % and maintenance cost 10 % of initial investment, leading to a yearly recurring cost of EUR 37 500 for EMIs and EUR 12 500 for waived institutions

### *Estimated market uptake*

To determine the impact of the reviewed directive assumptions were made regarding the potential uptake as shown in the table below. Current market uptake is consider low, with 20 EMIs and 127 waived entities operating in only nine countries. A scenario of medium market uptake extends the number of EMIs to 125 and waived institutions to 250, operating in a total of 15 Member States. Under this scenario, mobile telecom operators and vouchers operators are expected to apply for an EMI license to offer prepaid mobile payment services and a license for payment institution for their postpaid service. A high market uptake scenario considers that 300 EMIs and 750 waived institutions would be operating in all Member States of the EU.

**Table 1:** Estimated market uptake of electronic money institutions in the EU

	Current situation (Low market uptake)	Medium market uptake	High market uptake
Number of countries with EMIs or waived institutions	9	15	27
Number of EMIs	20	125	300
Number of waived institutions	127	250	750

### *Administrative burden*

Based on the assumptions above, the current administrative burden of the e-money directive is estimated at EUR 4.2 million, which is a yearly recurring cost for public authorities in Member States and businesses. As the actual costs may vary among Member States, we estimate the realistic range of the **current administrative burden is EUR 4–5 million**<sup>29</sup>.

**Table 2:** Estimate yearly administrative burden of the e-money directive in 2007

Country	Number of institutions (2007)		Estimated yearly administrative burden (EUR)			
	EMIs	Waivers	Total	MS	EMIs	Waived institutions

<sup>29</sup> For small Member States such as Cyprus, this way of calculating might have overestimated the cost for the Member States as investment costs for adapting the reporting system might have been underestimated and for larger Member States, such as UK with a large adoption of EMIs and waived institution, the administrative costs might have been underestimated.

Belgium	0	5	255 546	191 282	0	64 265
Cyprus	1	0	226 029	187 986	38 044	0
Czech Republic	0	54	879 845	199 326	0	680 519
Denmark	0	7	280 561	191 292	0	89 269
Germany	1	7	320 242	192 362	38 547	89 333
Italy	3	0	306 031	190 345	115 686	0
Netherlands	1	5	294 701	191 918	38 737	64 046
Sweden	0	3	207 269	187 500	0	19 769
UK	14	46	1 413 337	287 554	539 155	586 627
<b>Total EU</b>	<b>20</b>	<b>127</b>	<b>4 183 561</b>	<b>1 819 564</b>	<b>770 169</b>	<b>1 593 828</b>
Norway	3	1	233 922	188 403	26 011	19 508

Under a scenario of **medium market uptake**, with EMIs and waived institutions operating in 15 Member States, total overall yearly administrative burden would increase up to **EUR 11 million**. This is the medium take up scenario in the table below. Under a scenario of a **high market uptake**, 300 EMIs and 750 waived institutions operating and market presence in all the Member States of the EU would lead to a yearly administrative burden of **EUR 26 million**.

**Table 3:** Estimate yearly administrative burden of the e-money directive depending on market uptake

	Current situation (million euro)	Medium (million euro)	High (million euro)
<b>Total administrative burden EU</b>	<b>4.2</b>	<b>11.0</b>	<b>26.8</b>
Member States public authorities	1.8	3.0	5.7
EMIs	0.8	4.8	11.6
Waived institutions	1.6	3.2	9.5

Next to this yearly recurring administrative burden, the initial investment cost to set up the prudential regime for EMIs is estimate at EUR 16.6 million. This set up costs includes the setting up an execution of application process to obtain a license as EMI or to become a waived institution. Another element of the set-up cost is the investment linked to the adaptations of reporting systems by Member States and businesses. This investment cost should be considered as a 'sunk cost', as this it has been incurred to set up the existing system in Member States with electronic money institutions.

**Table 4:** Estimated initial investment cost to comply with e-money directive by Member State

Country	Number of institutions 2007		Estimated initial investment cost (EUR)			
	EMIs	Waivers	Total	MS	EMIs	Waived institutions
Belgium	0	5	1 012 824	755 042	0	257 782
Cyprus	1	0	902 629	750 486	152 144	0
Czech Republic	0	54	3 520 794	765 768	0	2 755 026
Denmark	0	7	1 114 447	755 055	0	359 392
Germany	1	7	1 268 345	756 171	152 647	359 527
Italy	3	0	1 210 831	752 845	457 986	0
Netherlands	1	5	1 165 673	755 523	152 837	257 314
Sweden	0	3	831 330	751 747	0	79 583
UK	14	46	5 544 131	1 045 860	2 136 555	2 361 716
<b>Total EU</b>	<b>20</b>	<b>127</b>	<b>16 571 004</b>	<b>7 088 496</b>	<b>3 052 169</b>	<b>6 430 339</b>
Norway	3	1	1 086 378	752 203	307 833	26 342

Under a scenario of medium market take up, initial investment could reach up to EUR 43.4 million in November 2009. Under a more aggressive scenario of a high market take up with electronic money institutions operating in all Member States, estimated investment cost would amount up to EUR 105 million.

**Table 5:** Estimated initial investment cost to comply with e-money directive depending on market uptake

Million euro	Current situation (million euro)	Medium (million euro)	High (million euro)
<b>Initial investment cost</b>	<b>16.6</b>	<b>43.4</b>	<b>105.2</b>
Member States	7.1	11.5	21.0
EMIs	3.1	19.1	45.8
Waived institutions	6.4	12.8	38.5

In the table below, an overview is given of the impact of administrative burden of the different packages.

**Table 6:** Impact of packages on administrative burden after transposition of PSD in 2009

	Package 1: Do nothing	Package 2: Guidance note	Package 3: Align with PSD applying prudential	Package 4: Align with PSD, with specific	Package 5: Repeal EMD

			regime of PSD to EMIs	prudential regime for EMIs	
Member States	2 prudential regimes to support as from November 2009	Idem Package 1	Same prudential regime for PI & EMI	Specific prudential regime for EMIs	1 prudential regime is removed
EMIs	2 prudential regimes	Idem Package 1	1 prudential regime, No reporting requirements	1 prudential regime, Single reporting requirements	Comply with 1 prudential regime: PI or CRD Single reporting requirements
Hybrid institutions	Idem EMIs Split up business	Idem Package 1	1 prudential regime, No reporting requirements	1 prudential regime Single reporting requirements	Single reporting requirements
Member States with institutions	9	9	15–27	15–27	9–15
EMIs	20	20	125–300	125–300	20
Waived institutions	127	127	300–750	300–750	127
Yearly administrative burden	EUR 4–5 million	EUR 4–5 million	0	EUR 11–26 million	EUR 3–6 million
Initial investment and compliance cost	EUR 16 million	EUR 16 million	0	EUR 46–105 million	EUR 3.1 million

As from November 2009, in the 'Do nothing' and 'Guidance note' packages, EMIs will be requested to become payment institutions and therefore have a double license. Under this scenario, reporting requirements for EMIs will remain as is as there are no additional reporting requirements for payment institutions. Therefore, as the market uptake will remain as is, the administrative burden will remain at EUR 4–5 million.

Under Packages 3 and 4, only a single license is requested for EMIs, as they would be able to conduct issuance of electronic money and all payment services. This will avoid that EMIs would need to apply for a second license. Under Package 3, where the prudential regime of the PSD is applied to electronic money institutions, EMIs. As under the PSD no reporting requirements are requested, the administrative burden would be reduced to a strict minimum. The disadvantage of this approach is that central banks would be hindered in monitoring the evolution of the electronic money market. Under the specific regime of Package 4, reporting requirements would be maintained for electronic money institutions. Maintaining existing twice a year reporting requirements ensures that competent authorities can verify compliance of electronic money institutions and entities with the prudential requirements on initial and



ongoing capital, improving the credibility of electronic money services. It would equally facilitate the follow up of market development of electronic money in the EU. As under this scenario a medium of high market uptake is expected, increasing the EMIs and waived institutions operating in an increasing number of Member States, the administrative burden is expected to increase accordingly up to EUR 11–26 million in recurring cost and EUR 46–105 million in initial investment cost.

Under Package 5, repealing the EMD, EMIs would have to apply for a license of a credit institution and therefore be subject to reporting requirements. Under this scenario, the market uptake is expected to be stabilising. For Member States only the reporting and authorisation system for credit institutions would be in place, but reporting tasks would maintain. As the reporting requirements for credit institutions are higher than for electronic money institutions, we estimate that the overall administrative burden will be in the range of EUR 3–6 million.

**ANNEX 5**  
**Overview of consultative work**

Date	Item
May 2004	A consultation paper on the treatment of mobile operators under the E-money Directive 2000/46/EC was published, 60 contributions were received
January 2005	A Guidance note was issued on the application of the E-Money Directive 2000/46/EC to mobile operators
July 2005	Public consultation on the review of the e-money directive was launched, and 58 contributions were received.
January 2006	Final report of the external study on the review of the e-money directive was published
July 2006	Commission Staff working document, SEC(2006)1049, on the Review of the E-Money Directive 2000/46/EC was published
December 2007	The intentions on the Commission services on the review of the e-money directive were discussed with the Member States (PSGEG), payments industry (PSMG), ECB and within the Commission
January 2008	Meeting with the e-money industry to discuss the way forward on the review of the e-money directive
February 2008	An inter-service working group was established, with participation of the Secretariat-General and Competition DG, Information Society and Media DG, Economic and Financial Affairs DG, to discuss the impact assessment.
March 2008	The draft provisions on the review of the EMD were discussed with the Member States (PSGEG) <sup>30</sup> , payments industry (PSMG) <sup>31</sup> and ECB
April 2008	A specific bilateral meeting was held with the ECB

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<sup>30</sup> The Payment Systems Government Experts Group (PSGEG) is a consultative body composed of government experts, typically drawn from national finance ministries and national central banks as well as a representative from the European Central Bank as an observer, with expertise in the payments area with the objective of providing advice and guidance to the Commission.

<sup>31</sup> The Payment Systems Market Group (PSMG) is a consultative body composed of market experts, typically drawn from banks, corporates, retailers and associations representing interested stakeholders such as SMEs and consumers, with expertise in the payments area with the objective of providing advice and guidance to the Commission.

**ANNEX 6**  
**Number of electronic money issuers in EU**

**Table 1:** Number of electronic money issuers as of end 2005 and end 2007

f	2005		2007	
	EMIs	Waivers	EMIs	Waivers
Country ELMs Waivers	EMIs	Waivers	EMIs	Waivers
Austria	0	N/A	0	N/A
Belgium	0	0	0	5
Bulgaria	N/A	N/A	0	0
Cyprus	0	0	1	0
Czech Republic	0	24	0	54
Denmark	1*	at least 3	0	7
Estonia	0	0	0	0
Finland	0	0	0	0
France	0	0	–	–
Germany	1	4	1	7
Greece	0	0	0	0
Hungary	0	0	–	–
Ireland	0	0	0	0
Italy	2**	0	3	0
Latvia	0	2	–	–
Lithuania	0	N/A	0	0
Luxembourg	0	0	0	0
Malta	0	0	–	–
Netherlands	1	at least 5	1	5
Poland	0	0	0	0
Portugal	0	N/A	0	N/A
Romania	N/A	N/A	0	0
Slovakia	0	N/A	0	N/A
Slovenia	0	N/A	0	N/A

f	2005		2007	
Country ELMIs Waivers	EMIs	Waivers	EMIs	Waivers
Spain	0	0	0	0
Sweden	0	1	0	3
UK	4	33	14	46
<b>Total EU</b>	<b>9</b>	<b>72</b>	<b>20</b>	<b>127</b>
Norway	3	1	3	1

Source: Evaluation of the E-money Directive, Final report 2006, Responses from Member States in April 2008.

Notes:

\* The Danish ELMI (PBS Danmønt) closed down at the end of 2005

\*\* Although licenses have been granted, the Italian ELMIs were not yet active end 2005

\*\*\* N/A denotes 'not applicable' because the country has no waiver regime

\*\*\*\* Romania and Bulgaria were not yet EU member end 2005

\*\*\*\*\* From France, Malta and Latvia, no data were received in 2008

**ANNEX 7**  
**List of licensed EMI end 2007**

**Table 1:** List of licensed e-money institutions end 2007

Company name	Country
CSC24Seven.com Limited	Cyprus
NCS Mobile Payment Bank GmbH	Germany
CARTALIS IMEL SPA	Italy
IMEL.EU SPA	Italy
MOBILMAT IMEL SPA	Italy
Interpay elektronische geldinstelling B.V	NL
APS Financial Limited (21/06/07)	UK
Blackhawk Network (UK) Ltd (09/07/07)	UK
Citadel Commerce UK Ltd (30/11/06)	UK
ClickandBuy (Europe) Ltd (19/11/06)	UK
Costa Card ELMI Limited (12/10/07)	UK
FirePay UK Ltd (19/12/06)	UK
Google Payment Limited (19/03/07)	UK
G-T-P financial Services Ltd (11/09/07)	UK
Moneybookers Limited (05/02/03)	UK
Neteller (UK) Ltd (20/10/04)	UK
PrePay Technologies Limited (20/03/03)	UK
Smart Voucher Limited (24/07/06)	UK
Starbucks Card Europe Ltd (19/09/06)	UK
Vincento Payment Solutions Limited (07/03/08)	UK

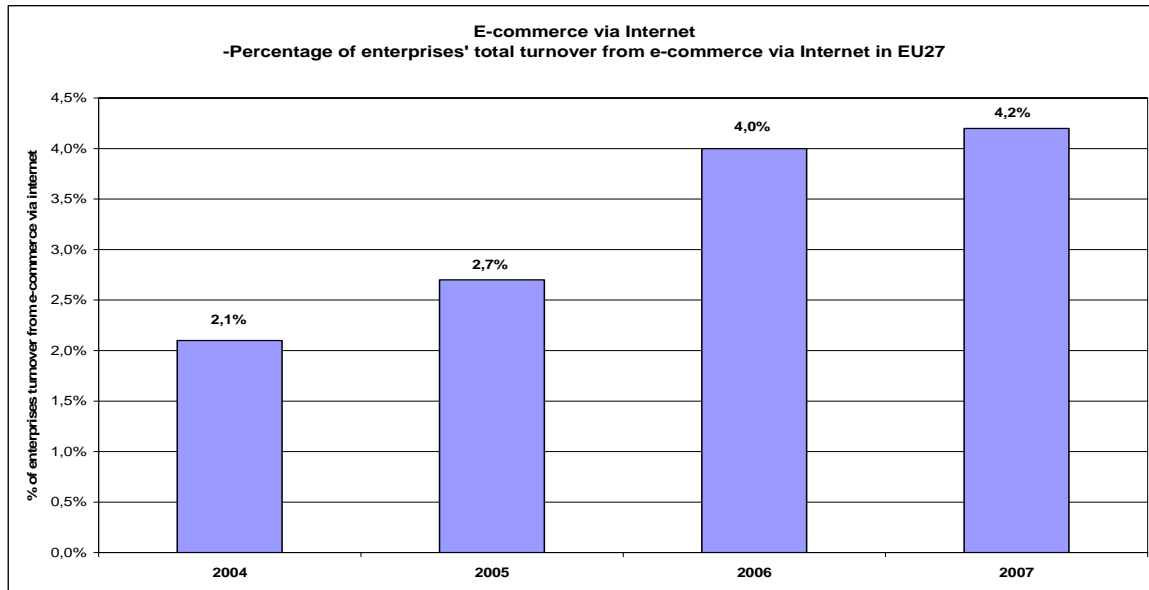
Source: Data provided by Member States' public authorities, 2008

## ANNEX 8

### Evolution of Electronic Commerce and Cards based electronic money in EU

The graph shows that electronic commerce has been growing steadily the last years and currently amounts to 4.2 % of turnover of enterprises in the EU. As new types of server-based electronic money is used as an alternative to credit cards and credit transfers to purchase via the internet, this gives a reference for the potential market take-up for server based electronic money.

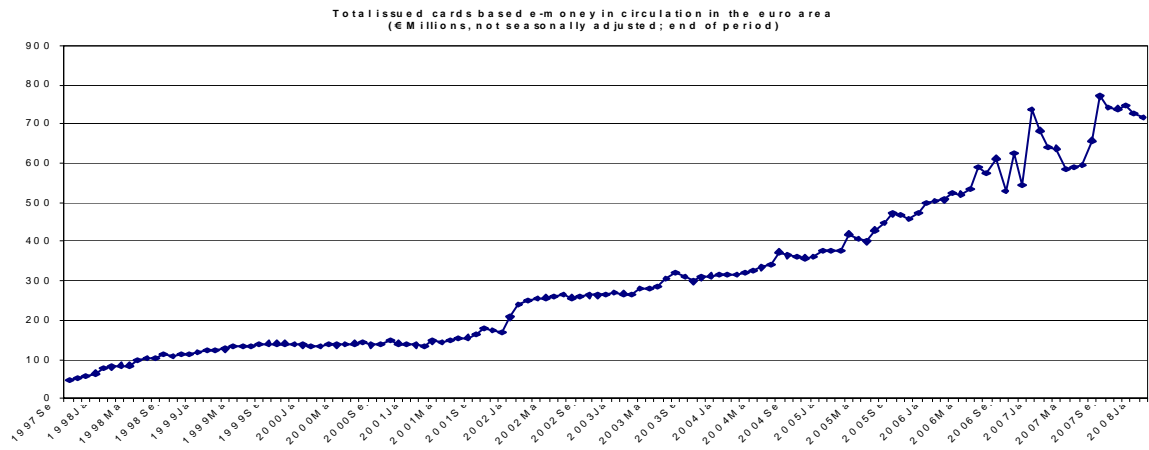
**Graph 1:** E-commerce via internet – percentage of enterprises total turnover from e-commerce in EU 27



Source: Eurostat 2008

The graph below shows the evolution of card based e-money in circulation issued by credit institutions. The data show an annual increase of approximately 20 % during the last 3 years although growth seems to slow down in 2007. Although the growth is relative high in percentage, the total issued electronic money in circulation issued by banks remains low in comparison with the EUR 637 billion cash in circulation in EU in August 2007. Beginning of 2008, the total issued electronic money in circulation was EUR 717 million.

**Graph 2:** E-money issued by credit institutions in circulation in the euro area



Source: ECB Blue Book 2008

## ANNEX 9

### Method D for calculation of own funds for electronic money institutions

Under the new method D, electronic money institution's own funds shall amount to at least to the sum of the following elements

- (a) 5 % of the slice of electronic money up to EUR 5 million, plus
- (b) 2.5 % of the slice of electronic money above EUR 5 million up to EUR 10 million, plus
- (c) 2 % of the slice of electronic money above EUR 10 million up to EUR 100 million, plus
- (d) 1.5 % of the slice of electronic money above EUR 100 million up to EUR 250 million, plus
- (e) 1 % of the slice of electronic money above EUR 250 million,

where electronic money represents the higher of outstanding electronic money and payment volume defined as following:

Outstanding electronic money means the monthly average of the preceding 12 months' financial liabilities related to outstanding electronic money

Payment volume means the monthly average payment volume of the preceding 12 months;



## ANNEX 10

### Relationship between payment volume and issued electronic money

It the relationship between electronic money (EM) and payment volume (PV) is based on the (monthly) turnover of electronic money as shown in the table below

**Table 1:** Relation issued electronic money and payment volume

	Turnover of electronic money	Impact	Example		
			Turnover of EM	EM (million euro)	PV (million euro)
Low	<1	EM>PV	0.5	1	0.5
Medium	1	EM=PV	1	1	1
High	>1	EM<PV	10	1	10

If the monthly turnover of electronic money is low, the monthly outstanding electronic money is higher than payment volume. In this situation, the outstanding electronic money is the more relevant indicator of the risk of the activity. On the other hand if the monthly turnover is high, the issued electronic money is lower than the monthly payment volume. In this situation, payment volume is the more relevant indicator for electronic money. Based on data provided from the EMI, monthly turnover is on average 2, which means that on average, electronic money stays only 2 weeks at the EMI.