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ELECTRONIC MONEY INSTITUTIONS

CURRENT TRENDS, REGULATORY ISSUES AND FUTURE PROSPECTS

by Phoebus Athanassiou and Natalia Mas-Guix
In 2008 all ECB publications feature a motif taken from the €10 banknote.

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ABSTRACT

Adopted in response to the emergence of new prepaid electronic payment instruments and aspiring to establish a clear legal framework for the strengthening of the Single Market in payment services and the promotion of competition between issuing institutions, the E-money Directives have yet to achieve their objectives. Several years after the legislation’s entry into force, relatively few licences have been issued, while the size of the e-money market continues to remain modest. What is more, the likelihood of an immediate increase in the volume of e-money issuance appears small, not only because of the still limited consumer interest in e-payment instruments but, also, on account of the perceived failings of the current regulatory regime. The purpose of this paper is to examine critically the state of play in this segment of the financial services industry and to inquire how the E-money Directives might be amended to bring about enhanced legal and operational certainty, facilitate the delivery of the potential benefits of e-money and contribute to the development of e-commerce within the EU. Our discussion of the regulatory concerns raised by the E-money Directives and our inquiry into the most appropriate means of resolving these will be preceded by an examination of the e-money market’s expansion hitherto and its future growth prospects within the EU.
INTRODUCTORY REMARKS

The European Union (EU) has undertaken a number of electronic commerce (e-commerce) related initiatives in a bid to boost the Union’s economic fortunes, improve its competitiveness and facilitate its progressive adaptation to the digital age. In March 2000, the Lisbon European Council recognized the importance of responding to the shift to a ‘digital, knowledge-based economy, prompted by new goods and services’ and stressed the need for the creation of a more favourable environment for the expansion of e-commerce and for the wider use of the Internet and information technologies. In order to help achieve those objectives, the Presidency of the Lisbon European Council invited the Commission to draft a comprehensive ‘eEurope Action Plan’ which was endorsed a few months later at the Feira European Council. In establishing targets and standards to be achieved across a wide spectrum of actions ranging from the facilitation of access to the Internet and the strengthening of consumer confidence to the promotion of IT-supported learning networks and electronic payment systems, the eEurope Action Plan 2002 and its 2005 update represent the main EU policy blueprints in this area.

To attain the goals set by the Action Plans, the European institutions have adopted also a number of legislative measures. These include Directive 2000/28/EC of the European Parliament and of the Council of 18 September 2000 amending Directive 2000/12/EC relating to the taking up and pursuit of the business of credit institutions (First e-Money Directive) and 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 (Second e-Money Directive) e-money (together, ‘the

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2 For an overview and a discussion of the political and legislative initiatives for the regulation of e-commerce see Hörnle (2000).  
Directives’). The Directives, their weaknesses and the possibilities for their revision are the subject-matter of this paper. Our analysis of the Directives’ shortcomings in Part 3 will be preceded by an overview of the features of e-money and an inquiry into the contemporary European market for e-money.

1. – NON-LEGAL DEFINITION OF E-MONEY AND THE CONTEMPORARY EUROPEAN MARKET FOR E-MONEY

1.1 Lay definition of e-money

E-money can be defined as any amount of monetary value represented by a claim issued on a prepaid basis, stored in an electronic medium (for example, a card or computer) and accepted as a means of payment by undertakings other than the issuer, predominantly for small-value transactions (for example, the settlement of modest transactions over the Internet and of parking or telephone charges and payment for public transport services). In common with banknotes and coins, e-money is ‘fiduciary money’, deriving its value not from its intrinsic worth but, instead, from the bearer’s expectation that it can be exchanged for its underlying value. However, unlike other forms of fiduciary money or existing single-purpose prepaid card schemes, e-money payment instruments are the result of an exchange of token into electronic (‘scriptural’) money, intended for use as multipurpose payment instruments. The use of generic terms such as ‘e-cash’ or ‘cyber-cash’ to describe contemporary e-money schemes is potentially misleading. Notwithstanding certain similarities with e-money such schemes are, in fact, diverse, and operate according to different formats. Two main areas of digital money operations can be identified: first, online payment transactions and second, payment transactions across a standard retail environment, using e-money stored on a card or server. Box 1 explains these concepts in greater detail.


11 For an account of various schemes and their conceptual similarities and differences, see Edgar (2000); Long and Casanova (2002), pp. 244-245.
Box 1 - Main areas of e-money

- **e-money in a virtual environment**
The most successful schemes to date fall essentially into the category of pre-funded, personalised online payment schemes, involving the transfer of funds stored in an online account (excluding traditional bank deposits). Accounts are typically accessible via Internet browser, e-mail and/or, in some cases, via mobile phone text messaging (SMS). Examples of pre-funded personalised online payment schemes include Paypal, Digicash and Moneybookers.

- **e-money in a standard retail environment**
Two main categories exist according to the storage device used:

  ➢ **Card-based** e-money (‘electronic purses’) which relies on a device containing hardware-based security features (typically in the form of a microprocessor chip embedded in the plastic card). The card is used for authentication rather than account information. Aside from conventional e-purses, smartcards for public transport are the second most widely-used application of card-based e-money.

  ➢ **Software-based** e-money (sometimes referred to as ‘digital cash’ or ‘network money’) which employs specialised software on a personal computer, typically allowing electronic value to be transferred via telecommunication networks and the Internet. The value held by a customer is stored centrally on a server under the control of the issuer and customers access their purses remotely.

The ‘physical’ existence of e-money in the form of stored-value retail cards poses the greatest challenges in terms of infrastructure, due to the practical difficulties inherent in setting up environments or common platforms for the widespread use of e-money. The development of smartcard technology, particularly in its contactless multipurpose form, has given a major impulse to the expansion of e-money in the retail e-money market. Box 2 distinguishes amongst different types of smartcards.

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12 A smartcard essentially is a plastic card with an embedded micro-processor chip which is capable of storing significant amounts of data and performing basic computing operations. The large memory capacity implies that stored data can be encrypted and better protected than on a magnetic stripe card. In addition, smartcards provide the user with greater convenience, accelerating checkout or authentication processes.
**Box 2. Categories of smartcards**

- **According to their purpose**
  - *Single-purpose card*: usually in the form of a magnetic stripe card to record the amount of funds stored therein. It is designed to facilitate only one type of transaction, for example, telephone calls, public transportation, parking facilities, etc. A distinguishing feature is that the issuer and the service provider are usually the same entity.
  - *Closed-system or limited-purpose card*: generally used at a small number of points of sale within a well-identified location, such as a university campus or a football stadium.
  - *Multipurpose card*: can perform a variety of functions with several vendors.

- **According to the technology they incorporate**
  - *Contact card*: a microprocessor chip is embedded in the card and the card must be inserted into a smartcard reader which physically comes into contact with the chip’s pad to transmit/receive data.
  - *Contactless smartcard*: the card must pass close to a smartcard reader to register a transaction, so that the embedded antenna in the card can communicate with a receiving antenna in the reader.
  - *Hybrid card*: is one that has both contact and contactless capabilities, often used for transport applications. The contact mode is used to load the card with value and the contactless mode is used to reduce the value as services are consumed.
  - *Proximity card*: communicates through an antenna similar to contactless smartcards except that it is a read-only device; no information can be written in the chip’s memory.

1.2 Europe’s contemporary e-money market

Notwithstanding their advantages over other payment instruments, e-payment schemes (excluding the use of credit and debit cards which do not qualify as e-money within the meaning of the Directives) have not experienced the mass expansion originally anticipated
within the EU. Despite a modest increase in e-money usage in recent years, the role of e-money continues to be marginal in the EU, with total euro area e-money balances estimated to account for no more than 0.1% of banknotes and coins in circulation in December 2007, an increase of 0.04% on the figure for December 2000; similarly, the number of e-money transactions effected in the euro area in 2006 represented a share of 0.7% of all non-cash payments compared to an estimated 0.3% in 2000.14 Whilst in absolute terms the e-money market has been growing, in relative terms, i.e. as a proportion of all cashless payment instruments used in the euro area, its share has remained stable since 2002.

This is not to say, however, that there is a lack of interest in the issuance of e-money from EU-based e-money issuers. A recent evaluation study produced for the European

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13 Unlike e-money, the use of a debit card requires a bank account while the use of a credit card requires first the agreement of the credit card provider or bank and, second, the advance of the necessary funds. With e-money, no prior authorisation and no account are necessary since the customer is purchasing a non-cash means of payment which can be used in the same way as cash or other forms of card payment.

Commission identified 9 licensed e-money issuers in the EU and at least 72 institutions in 7 EU Member States issuing e-money subject to the national waiver provisions foreseen in Article 8 of the Second Directive; moreover, e-money was also being issued by a relatively small number of banks established in some 15 EU Member States\textsuperscript{15}. More recent estimates suggest that, in early 2007, there were as many as 24 licensed e-money issuers in the EU across 7 jurisdictions (of which 13 are in the UK, 3 in France, 3 in Italy, 2 in Slovenia and one each in Germany, Cyprus and Denmark) and approximately 94 e-money issuers operating subject to the Article 8 waiver (with the Czech Republic and the UK accounting for the lion’s share, with 39 and 38 institutions, respectively). No e-money issuers were found to be operating in at least 10 EU jurisdictions (Portugal, Spain, Luxembourg, Poland, Malta, Slovakia, Bulgaria, Estonia, Lithuania, and Hungary) while the number of issuers making use of the ‘European Passport’ provided for under the First Directive was estimated to stand at no more than 10 (of which most are based in the UK).

It follows that, however modest its current size, a market for e-money payment instruments within the EU does exist, with a potential for further growth which, although difficult to evaluate need not be insignificant. This growth potential will ultimately depend on the incentives for the different stakeholders to make use of electronic money. Merchants may enjoy lower transaction costs with e-money since it reduces the need to handle banknotes and coins and requires fewer data exchanges and online authorisations than other forms of electronic payment. Issuers of e-money may benefit from the fees charged to consumers and merchants as well as from the revenues from the investment of outstanding e-money balances. Bank issuers of e-money may also benefit from cost savings as a result of reduced cash handling. On the other hand, possible disincentives facing e-money issuers include the costs of meeting regulatory requirements and the fixed costs associated with the purchase and maintenance of e-money cards and software or merchant terminals.

Notwithstanding the potential efficiency gains\textsuperscript{16} – only realisable if the general public builds confidence in electronic money – the development of e-money raises also a number of policy issues for central banks, arising from the fact that e-money could become a very close

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\textsuperscript{16} These include easier and cheaper retail transactions for consumer and merchants, as well as reduced accounting errors, fraud and theft incidents. It has been estimated that the cost of cash in Europe accounts for 0.5% of EU GDP. The cost structure associated with cash payments is roughly distributed across three groups: 10% is borne by central banks, 25% by the retail sector and 65% by the banking industry. (Source: MasterCard).
substitute for banknotes and coins. In particular, a scenario in which e-money widely circulates could challenge (i) the role of money as a well-defined and stable unit of account for conducting transactions, (ii) the efficiency of monetary policy (mainly related to the potential shrinking of central bank balance sheets and their ability to steer short-term interest rates) and (iii) the critical role played by central banks in promoting the smooth operation of payment systems. The wider circulation of e-money would inevitably also have implications for central bank seigniorage revenues. At present, however, the relevance of e-money to current monetary analysis remains limited on account of the small fraction of total money which it represents.

Although the limited penetration of e-money is perceived generally to be the result of technical and psychological barriers, of which the most significant are (i) the lack of standardisation and interoperability amongst e-money schemes, (ii) the absence of credible guarantees in connection with the security and anonymity of e-money scheme transactions and users, and (iii) the lack of market confidence in these new payment instruments, legal considerations might account also for the hitherto weak growth in the sector, at least in the European context where regulation was intended to promote innovation in this field. Soon after the adoption of the Directives, commentators voiced concerns, questioning whether the instruments laid the foundations for a clear regulatory framework capable of encouraging the growth of e-money business within the EU, particularly on account of the contested definition of e-money; others expressed doubts on the capacity of the Directives to achieve their stated objective of creating a favourable environment for non-banks to become e-money issuers.

Moreover, there is evidence to suggest that the European Commission is not unaware of the

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17 Another argument frequently invoked to explain the industry’s slow growth is the modest amount of e-money that can be stored in the e-payment systems in circulation. This explanation is unconvincing, however, since the ability to make micro-payments is the very advantage of e-money, giving it an edge over other types of non-cash payment means. A more plausible reason may be the fact that, for all its drawbacks, cash is anonymous whereas e-money is not. Accordingly, States have long sought to restrict the use of anonymous financial instruments.

18 Unlike cash which is anonymous, most e-transfers immediately provide at least two counterparties, the seller and the underlying financial institution, with a record of what goods or services an individual has purchased. Even if e-purses were developed which did not necessitate such information transfers, they would still involve the use of electronic equipment. In such circumstances doubts might remain that the other counterparty to the transaction will keep a record leaving an audit trail which may be subsequently followed.

19 For a detailed account of the various factors hindering the development of e-money payments see ECB (2004), pp. 9-11.

20 See Krueger (2002). Interestingly, the European approach to e-money issuers is fundamentally different to that followed in the USA, where there are, at present, no Federal level restrictions on the issuance of e-money (and no proposals for the introduction of such) despite the fact that different Federal agencies address specific policy matters of relevance to e-money issuance.

defects arising under the current regulatory regime and of their potential implications. In 2004, the Commission issued a brief Guidance Note on the application of the Second Directive to mobile network operators (MNOs)\(^\text{22}\). Motivated by the need to clarify for the benefit of competent Member State authorities whether mobile digital content services (such as ringtones or other non-voice digital content) qualified as e-money within the meaning of the Directive, the Guidance Note concluded that prepaid services do not fall within the scope of the Directive except where they give rise to a direct payment relationship between a mobile telephony pre-pay customer and a third party vendor, that is to say, where the third party vendor effectively accepts the prepaid stored value issued by the MNO as a form of payment\(^\text{23}\). More recently, a Commission Staff Working Document\(^\text{24}\) made the following recommendations for a possible revision to the Second Directive: (i) clarification of its e-money definition, (ii) reconsideration of the application of the redeemability requirement to MNOs and other hybrid e-money products, (iii) lowering of the initial capital requirement threshold for e-money issuers and review of the list of eligible investments for e-money issuers, (iv) abolition of the prohibition on e-money issuers from pursuing any business other than the issuance of e-money and closely related activities and (vi) review of the operation of the waiver regime\(^\text{25}\).

Whilst it represents a significant step towards a frank discussion of the future of the Second Directive, the Staff Working Document is open to criticism for the absence of implementation details concerning some of its recommendations. Nonetheless, the picture painted by the Commission’s activities confirms the fact that, notwithstanding their recent adoption, several of the provisions in the Second Directive are in need of revision. The remainder of this paper will examine the background to the Directives, their main shortcomings and how these may be addressed in a future revision of the Directives.

\(^{22}\) European Commission (2004). Significantly, the Commission’s conclusions were said to apply to ‘other potential “hybrid” issuers of e-money’, thus indicating the significance of the Guidance Note for the demarcation of the Directive’s coverage.

\(^{23}\) Ibid., paragraphs 14 and 15. The ‘hybrid’ nature of MNOs, the impossibility of applying to them the Directive’s strict redeemability requirement and the difficulty of subjecting them to the anti-money laundering rules normally applicable to the issuers of e-money were amongst the reasons behind the Commission’s decision to treat MNOs flexibly. For a critical account of the link between the Directives and MNOs see Mansour (2007).


\(^{25}\) Ibid., pp. 12-13.
2. - THE E-MONEY DIRECTIVES AND THEIR BACKGROUND

The Directives were adopted after a long period of gestation dating back to a Report of the Working Group on EU Payment Systems to the Council of the European Monetary Institution (EMI)\textsuperscript{26} which dealt with the issue of prepaid multipurpose payment cards\textsuperscript{27}. The Report had concluded that the right to issue electronic purses should be restricted to credit institutions ‘in order to: (i) protect the integrity of the retail payment system; (ii) protect consumers against the consequences of the failure of the issuers; (iii) facilitate the conduct of monetary policy; and (iv) ensure fair competition between issuing institutions\textsuperscript{28}. The Report’s conclusions were reflected in an Opinion of the Council of the EMI annexed to the 1997 EMI Annual Report\textsuperscript{29} which proposed that a legal obligation should be imposed requiring e-money to be ‘redeemable at par, implying that issuers must be in a position to convert electronic money into central bank money on request of the holder of the electronic money’ as one of several minimum requirements to which e-money issuers ought to be subject ‘regardless of the nature of the issuer of E-money\textsuperscript{30}.

Building on the EMI’s analysis, a 1998 ECB Report\textsuperscript{31} concluded that clear rules should be established on the conditions subject to which e-money might be issued, that e-money issuers should meet a number of minimum requirements, that the interoperability of e-money schemes should gradually be enhanced and that adequate guarantee, insurance or loss-sharing schemes needed to be put in place, aiming in particular, to protect customers and merchants.

\textsuperscript{26} Working Group on EU Payment Systems (1994).
\textsuperscript{28} Working Group on EU Payment Systems (1994), paragraph 9. Nonetheless, the Report foresaw the possibility of allowing some non-fully fledged credit institutions to issue prepaid multipurpose cards under specific conditions in exceptional circumstances (e.g. in the case of schemes already in operation before the policy conclusions of the report were drawn up) provided that they provide only domestic payment services, that they are subject to appropriate regulations, in particular, with respect to liquidity requirements and that they are supervised by the institution which supervises credit institutions (see paragraph 32 of the Report).
\textsuperscript{29} EMI (1998).
\textsuperscript{30} Ibid., paragraph 4.
\textsuperscript{31} ECB (1998).
against losses and to preserve their confidence in e-money\textsuperscript{32}. Significantly, the ECB Report emphasised that ‘the most straightforward solution would be to limit the issuance of electronic money to credit institutions, as this would avoid changing the existing institutional setting for monetary policy and banking business’\textsuperscript{33}. The ECB added also that it ‘would see great merit in pursuing an amendment to the First Banking Coordination Directive\textsuperscript{34} so as to include all issuers of electronic money in the definition of “credit institution” along with institutions which receive deposits or other repayable funds from the public and grant credit for their own account’. The ECB’s interest in e-money, attributable to the obvious monetary policy implications of its issuance and to the central banking concerns raised by its diffusion\textsuperscript{35}, were to have an appreciable impact on the architecture and content of the Directives. An examination of the rationale and provisions of the Directives suggests that the EMI and the ECB recommendations were largely heeded by the Commission in its drafting of the Directives\textsuperscript{36}.

The First Directive (Directive 2000/28/EC) amended the definition of ‘credit institution’, as originally laid down in the First Banking Coordination Directive\textsuperscript{37}, to include e-money institutions within its scope. The policy objective pursued through this amendment was ‘to allow institutions which are not willing to enter into full banking operations to issue electronic money under the fundamental rules governing all other credit institutions’ and to avoid distortion of competition between institutions issuing e-money, whether banks or not\textsuperscript{38}. The practical implication of that amendment is to permit an e-money institution which is authorised in its home Member State to benefit from a ‘European Passport’ – in common with other credit institutions following the adoption of the Second Banking Coordination

\textsuperscript{32} Ibid., pp.1-3.
\textsuperscript{33} Ibid., p. 3. The ECB Report justified this recommendation on the understanding that it would provide a level playing field, ensuring that all e-money issuers are subject to an appropriate form of prudential supervision and fall within the range of institutions potentially subject to ECB reserve requirements.
\textsuperscript{35} For a concise presentation of the monetary policy issues inherent in the issuance of e-money see Hartmann (Monika) (2006), pp. 7-18; Hartmann (Philipp) (2002); and ECB (2000).
\textsuperscript{38} See European Commission (1998).
Directive\textsuperscript{39} – according to which it may issue e-money throughout the EU, either on a cross-border basis or by way of establishment in another Member State (or both). Permitting the e-money issuance business to benefit from a ‘European Passport’ has been hailed as the most significant achievement of the Directives\textsuperscript{40}.

The Second Directive (Directive 2000/46/EC) introduced the concept of e-money institutions as a special type of credit institution, subject to prudential supervision rules similar to those applicable to standard credit institutions under the recast Banking Directive\textsuperscript{41} and provided a Community law definition of e-money. Accordingly, e-money is defined as a claim on the issuer that is (a) stored on an electronic device (the first criterion), (b) issued on receipt of funds of an amount not less in value than the monetary value issued (the second criterion) and (c) accepted as means of payment by undertakings other than the issuer (the third criterion)\textsuperscript{42}. With a view to ensuring the soundness and stability of e-money institutions, the rules set out in the Second Directive comprehensively addressed all aspects of their authorisation and supervision, including their licensing, initial and ongoing minimum capital requirements, limits on permissible investments, fit and proper management obligations etc\textsuperscript{43}. Since e-money institutions are not deemed to accept deposits\textsuperscript{44} and cannot grant credit\textsuperscript{45}, the regulatory and supervisory rules prescribed by the Directive are less strict compared to those applicable to banks under the recast Banking Directive. Thus, in line with the Directive’s


\textsuperscript{40} See Krueger (2002), p. 249.


\textsuperscript{42} Article 1(3)(b) of Directive 2000/46. The difficulties posed by this definition in relation to e-money institutions are discussed in more detail below.

\textsuperscript{43} In comparing the Commission Proposal of 1998 to the final text adopted in 2000, one cannot fail to notice that the scope of business for e-money institutions has become more restricted, the capital requirements have been increased and the conditions for the granting of a waiver have been tightened, and at the same time redeemability and reporting requirements have been introduced.

\textsuperscript{44} Article 2(3) of Directive 2000/46. Crucially, however, that provision stipulates that this rule is to apply only where the funds received are ‘immediately exchanged for e-money’. The Directive remains silent as to the interpretation of the ‘immediacy’ requirement (in this connection Kohlbach has proposed sensibly the application of a functional criterion). Where the monies that the issuer receives are not redeemed immediately butare, instead, placed in a remunerated account, such monies will arguably qualify as deposits, becoming available for income generation.

\textsuperscript{45} Article 1(5)(a) of Directive 2000/46. However, the opportunity for virtual lending lies in the volume of unclaimed e-money liabilities or in e-money balances which claimants choose to hold for some time as a store of value, rather than redeem immediately. The continuous growth in outstanding e-money balances held with e-money institutions, in conjunction with the uncertainty surrounding the meaning of ‘immediately exchanged’, suggests that it is only a matter of time before one of the fundamental assumptions of the Directive, that e-money institutions do not accept deposits, is overtaken by the facts and proven obsolete.
objective to tempt non-bank credit institutions to enter the market as e-money issuers subject to a reduced prudential supervision regime – and having regard to the lower risks inherent in the issuance of e-money – e-money institutions were made subject only to some of the prudential supervision rules applicable to standard credit institutions\(^{46}\). At the same time, some of the benefits of this lighter prudential supervision were offset by restrictions in connection with their business activities and investments which are more stringent than in the case of other credit institutions\(^{47}\).

The prudential supervision guarantees built into the Second Directive suggest that the Community legislature saw greater merit in protecting consumers than in opening up the market to the largest possible number of participants. Caught between the cautious approach of the ECB\(^{48}\) and the more liberal stance of the European Commission, placing greater emphasis on innovation and competition, the Second Directive represents something of a compromise. Several years following its adoption, arguably only as a result of the relatively insignificant volume of e-money issuance within the EU and consumer apathy towards alternative payment instruments, the Directives’ shortcomings have remained unexposed\(^{49}\). Nonetheless, it remains the case that some eight years after its adoption (and over five since its transposition into the legal orders of the EU15 Member States), the Directives’ success in encouraging the growth of new and innovative forms of e-payments (e.g. multi-merchant e-loyalty schemes with bonus points) or e-payment schemes making use of established media (e.g. fixed line and mobile phone telecommunication networks) has been less than spectacular. The need to ensure the future expansion of the European e-money market adds to the urgency of the task to resolve the Directives’ failings before their implications begin to manifest themselves and before the growth prospects of this segment of the financial services

\(^{46}\) As e-money institutions cannot grant credit, unlike other credit institutions they need not maintain a solvency ratio to cover credit exposure. Similarly, they need not maintain an amount of capital to cover market risk nor are they subject to restrictions on the amount of credit that they can grant to one client or to a group of connected clients. In the same vein, because the issuance of e-money is, in principle, not a deposit-taking activity, e-money institutions are in principle not subject to measures for the protection of client savings, to the provisions of the recast Banking Directive dealing with the solvency ratio of credit institutions and to measures against large exposures.


\(^{48}\) For an account of the rationale for using the minimum reserves mechanism as an instrument for the maintenance of price stability and a discussion of whether that rationale is consistent with the imposition of minimum reserve requirements upon e-money institutions see Vereecken (2000) ‘Electronic Money’, pp. 419-420. Contrast Hartmann (Philipp) (2002), pp. 69-71.

\(^{49}\) The authors disagree, however, with commentators who have argued that the risks identified by the ECB and which have shaped the contents of the Directive were overstated. Despite the limited expansion and success of e-money products to date, the industry’s future growth prospects are good and so, too, is the likelihood of the Directive’s safeguards becoming more relevant as the industry expands.
industry are artificially arrested. Part 3 of this paper will examine what possible adjustments to the Directives might help achieve these objectives.

3. – PROPOSALS TO AMEND THE DIRECTIVES

As the European Commission conceded in its Staff Working Document, the Second Directive’s definition of e-money and the legal and practical uncertainties associated with that definition are amongst the key weaknesses of the legal framework governing the taking up and pursuit of e-money activities within the EU. Implicit in the Commission’s findings, as a further defect in need of rectification, is the wide margin of discretion that the Directive’s definition of e-money leaves to the competent national authorities when deciding whether or not to treat a particular body as an e-money institution.

The Commission has focused its attention rightly on the issues highlighted above, considered to be two of the most problematic aspects of the Directives. This emphasis can be explained by the fact that, seen from the perspective of the competent Member State authorities, the key question to be resolved before a decision can be made on whether the Directives’ provisions apply to a particular institution is whether such institution is an e-money institution within the meaning of the Directives. To that question the Directives provide a seemingly straightforward answer. Except where the object of inquiry is a bank (in which case it falls to be regulated under the existing provisions50), an institution is capable of qualifying as an e-money institution where it issues ‘e-money’, within the meaning of Article 1(3) of the Second Directive51. However, to the equally crucial question of when a given payment instrument qualifies as e-money, the Second Directive’s answer is far from straightforward. This is because, notwithstanding its detailed definition of ‘e-money’, that definition is somewhat problematic, with the uncertainty surrounding the interpretation of each of its components further exacerbated by the power of the Member States under Article 8 of the Second

50 Since the adoption of the Consolidated Banking Directive standard credit institutions have been permitted to issue and administer means of payment (including e-money) throughout the EU on the basis of their Member State banking authorisation. The innovation introduced by the E-money Directives was the creation of a dedicated legal framework enabling specialised, non-standard credit institutions to issue e-money and benefit from a European passport.

51 The picture is, in fact, somewhat more complex, with research suggesting the existence of two different approaches to defining e-money institutions: some Member States (including Austria, Germany, the Netherlands, Spain and Portugal) regard e-money institutions as a subcategory of credit institutions while others (including Ireland, Denmark, Sweden and the UK) view them as a separate category of regulated institutions licensed to issue e-money payment instruments (see Association of E-Money Institutions in the Netherlands).
Directive to waive the Directives’ application in respect of certain institutions, notwithstanding their prima facie qualification as e-money institutions. The lack of a common understanding on what qualifies as e-money inevitably leads to diverging interpretations and to variations in the Directives’ implementation at national level. The current form taken by the regulatory framework for e-money (namely, directives), might be questioned also in view of the room that it allows for the divergent implementation of their provisions by national authorities. A directive is stated to be a legal instrument binding the Member States as to the result to be achieved but which allows them to choose the form and methods of implementation in the light of domestic circumstances. On the other hand, a regulation is directly applicable and binding erga omnes throughout the EU. Considering the essential need for the regulatory framework on e-money to ensure a level playing field for EU electronic money providers, a regulation might well constitute a more appropriate legal instrument compared to the directives currently used.

The following sections will examine separately the shortcomings of each of the components of the definition of e-money, proposing specific solutions in each regard. Part 3.4 will consider some subsidiary issues, not linked directly to the definition of e-money but having an impact, nevertheless, on the Directives’ ability to meet the objectives underlying their adoption.

3.1 Storage of value in an electronic device

The Second Directive contains a ‘technology-neutral’ definition of e-money. Article 1(3)(b)(i) sets out the first limb of the definition of ‘electronic money’, requiring it to be monetary value represented by a claim on the issuer which is ‘stored on an electronic device’. Although the Community legislature has opted rightly for as wide a definition as possible of the ‘electronic device’ in which the monetary value can be stored, in order to avoid the need constantly to revise the Directive to keep pace with technological change, and notwithstanding the fact that a recital in the preamble contains some indication of the types of devices envisaged, the discretion that the definition allows to Member State authorities to

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52 This definition is explained in recital 5 to the Directive by reference to the desire to ‘provide a regulatory framework that assists electronic money in delivering its full potential benefits and that avoids hampering technological innovation in particular’.

53 Recital 3 (‘chip card’ or ‘computer memory’). It should be noted that these terms were originally included in the definition of e-money proposed in the Commission’s 1998 draft, Article 1(3)(b).
designate eligible storage devices is so unfettered that it was predestined to foster divergent interpretations of what is a key determinant of the Second Directive’s applicability. Leaving aside the potential for national variations in the interpretation of Article 1(3)(b)(i), it is far from certain that this particular component of the definition has been successful at keeping pace, since the Directive’s adoption, with the various business models that have emerged, such as mobile telephone prepaid payment cards, retail customer ‘loyalty cards’, re-loadable or one-off voucher-type electronic cards or employee-scheme electronic cards. The Commission’s 2004 paper on MNOs is proof to that effect.

To preserve a certain degree of flexibility in the face of unanticipated technological developments, while at the same time helping maintain a minimum level of legal certainty, it is proposed that a revised Second Directive might include a non-exhaustive list of eligible payment instruments (possibly in the form of an Annex) or, alternatively, identify what is not capable of being treated as ‘e-money’ irrespective of where it is stored (namely, in a card of any designation or in another storage medium) and of what device is used for the storage of its underlying value (namely, an embedded microprocessor chip, a magnetic stripe, a microcircuit, a software system or any other device). For instance, card-type electronic gift vouchers replacing paper-form ones as well as public transport or mobile phone prepaid payment cards ought, arguably, to be excluded from the Directive’s ambit on account of the economic purpose of their issuance which is only ancillary to the provider’s main business and hence does not merit regulation within the e-money framework, notwithstanding the fact that the electronic device used may be exactly the same as in the case of established types of e-money.

A related but broader issue to be considered is whether payment services offered or payment instruments issued by specific types of entities (including prepaid service providers and ‘hybrid institutions’) the business of which does not exclusively or predominantly consist in

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54 On the other hand, a customer loyalty card scheme that entitles the holder to purchase goods but, also, obtain discounts on third party goods or services unrelated to the issuer’s main business or an incentive scheme (‘gift currency scheme’) which rewards the use of a particular card or account that can be used for purchases from a variety of vendors (including online merchants) and is convertible into cash might be more difficult to exclude from the scope of a revised directive. At the same time, a ‘frequent flyer’ or ‘air miles’ loyalty scheme run by an airline that is not convertible into cash or negotiable outside that business would not qualify as e-money.

55 The term, employed by the Commission in its Guidance Note on MNOs (and, more recently, in its Staff Working Document), is intended to describe service providers who issue e-money in a manner which is only incidental to their core business, i.e. institutions whose principal line of business is not the issuance of e-money (e.g. public transport companies and MNOs).
the issuance of e-money, can properly be treated as ‘e-money’ for the purposes of Community law, even if those products *prima facie* fit the technological profile of the e-money definition established by Article 1(3)(b)(i) of the Second Directive. An e-money definition which, however unwittingly, relies on the product’s ‘technological wrapping’ but ignores the purpose of its issuance or the business activities of its issuer is too sweeping to serve the legitimate objectives which underpinned the Directives’ adoption, being prone to mechanistic misinterpretations. We will revert to this last, crucial point in Part 3.4 of this paper.

3.2 Issuance on receipt of funds of an amount not less in value than the monetary value issued

Article 1(3)(b)(ii) of the Second Directive sets out the second limb of the definition of ‘electronic money’, requiring it to be monetary value represented by a claim on the issuer which is ‘issued on receipt of funds of an amount not less in value than the monetary value issued’. Of all the three components of the Directive’s definition of e-money, this is the most technical but, by no means, the least important or the least problematic. This criterion is, first and foremost, a reminder that funds must be received in return for the e-money issued since, as we have seen earlier in this paper, for the purposes of the Directive, e-money is to be understood as no more than the result of an exchange (i.e. the conversion of token into e-money rather than the *creation* of money). More importantly however, the inclusion of this particular requirement into the definition of e-money was motivated by the Community legislature’s desire to hinder uncontrolled credit creation by e-money institutions in the form of the issuance of e-money at a discount. While the monetary policy rationale behind this prohibition is fairly straightforward\(^\text{56}\), the current formulation of Article 1(3)(b)(ii) fails to clarify whether the issuance of an e-money amount which is *less* in value than the monetary value received in consideration for its issuance was envisaged possible or whether such issuance at a premium might disqualify those products from consideration as e-money\(^\text{57}\).

\(^{56}\) The issuance by e-money institutions of e-money at a discount would increase the volume of scriptural money in circulation – something which only a central bank is entitled to do – with inflationary implications. A decentralisation of control over the volume of money in circulation was not amongst the Directive’s aspirations.

\(^{57}\) It is precisely in order to avoid the possibility that e-money issued at a premium might fall outside the scope of the national implementation of the Directive, that the UK definition of e-money – under Article 3(1) of the Financial Services and Markets Act 2000 (Regulated Activities) Order 2001 (SI 2001/544, as amended) – omits the phrase ‘of an amount not less than the monetary value issued’. The retention of the phrase ‘issued on receipt of funds’ is considered sufficient to ensure that any form of prepaid e-money is captured by that definition (see Long and Casanova (2003) and Bamodu (2003)).
Although the only logical inference capable of being drawn from Article 1(3)(b)(ii) is that ‘e-money could well be of a lower value than the funds received in return, as the e-money institution is allowed to charge a fee for its services’, a less ambiguous formulation would merit consideration, not least because uncertainties surrounding this particular aspect of the e-money definition are bound to discourage prospective market entrants from taking advantage of the opportunities offered by the Directive, casting doubts on the profitability of their prospective involvement in the issuance of e-money.

Whatever the true interpretation of Article 1(3)(b)(ii), this component of the e-money definition is intimately linked to the redeemability condition enshrined in Article 3. In guaranteeing the possibility for the bearer to reconvert the e-value to banknotes confidence may be preserved in electronic money as an effective and reliable substitute for coins and banknotes. Considering the central significance of redeemability to the very essence of e-money within the Directives’ scheme, it is proposed that Article 3 itself is integrated in the definition of e-money, as an additional element of the Article 1(3)(b)(ii) requirement, rather than as an obligation which follows as a result of a product falling within the definition’s scope. To delete the Article 1(3)(b)(ii) requirement (or any part of it) from a future definition of e-money, as the Commission has suggested, would be to exacerbate legal uncertainty. Clarification of that requirement’s wording, fusion with Article 3 or, preferably, the wholesale incorporation of Article 3 in the Article 1 definition of e-money would be more preferable solutions, as the notion of redeemability is effectively a fourth criterion of the Directive’s definition of e-money, which carries equal weight to the other three. If unnecessary confusion is to be avoided, the redeemability criterion should be no less

59 The paramount importance of the redeemability requirement is demonstrated by the fact that what was no more than a matter of contractual choice under Article 2(4) of the draft directive, became a strict legal requirement following insistence by the ECB in its Opinion that ‘[F]rom the monetary policy point of view, the redeemability requirement is necessary in order, inter alia, to preserve the unit-of-account function of money, to maintain price stability by avoiding the unconstrained issuance of electronic money, and to safeguard both the controllability of liquidity conditions and the short-term interest rates set by the ESCB’ (Opinion of the European Central Bank (CON/1998/56), paragraph 19).
60 Several commentators have observed that one important counter-argument against multicurrency domestic monetary systems is the cost of transacting associated with the simultaneous use of more than one unit of account. Where more than one units of account co-exist, the currency competition between them makes price comparisons cumbersome for consumers and reduces price competition in the market (Hartmann (Phillip), p. 66; Roger Bootle, pp. 11-12). Precisely in order to avoid the cost of currency competition the Directive requires e-money balances to be redeemable at par value in euro notes, coins or balances of euro-denominated accounts.
61 Referring to the second part of the Article 1(3)(b)(ii) requirement (‘not less in value’) in its recent Staff Working Document, the Commission proposed that ‘this phrase should be removed from the definition and [included] in a specific article’ (SEC(2006) 1049, p. 11).
separated from the Article 1 criteria than the remaining three components of the definition of e-money be dispersed throughout the Directive’s text, as has been proposed by the Commission. Importantly, integration of the redeemability criterion in the definition of e-money would have an impact on the type of payment instruments that would from the outset fall outside the scope of the Directive. In particular, certain schemes such as electronic gift vouchers, smartcards for public transport, etc. which do not ensure full redeemability (as the float on their pre-paid cards or accounts is only known ‘ex post’ when customers have purchased goods and services from a third party) thus would fall outside the regulatory framework. At the moment, Poland is the only Member State which has integrated the redeemability criterion in its definition of e-money.

3.3 Acceptance as means of payment by undertakings other than the issuer

Article 1(3)(b)(iii) of the Second Directive sets out the third limb of the definition of ‘electronic money’, requiring it to be monetary value represented by a claim on the issuer which is ‘accepted as means of payment by undertakings other than the issuer’. Whilst the purpose of this criterion is legitimate (so as to demarcate e-money products from payment instruments accepted by their issuer only) nonetheless it has been identified correctly by the Commission in its Staff Working Document as the criterion which is most open to misinterpretation. To this one might add also that, certainly from the point of view of the Directive’s users (including the competent Member State authorities), this criterion is amongst the most definitive in determining whether a particular payment instrument is to be considered as e-money. That this interpretation must have been the understanding also of the Community legislature seems plausible: frequent references in the preamble to ‘bearer confidence’ suggest that the Directive is interested solely in instruments which have not only a wide circulation in terms of the number of individuals using them or the value represented but also, and more importantly, are widely accepted by third parties as a substitute for token money. The questions raised by this third criterion, to which the Directive provides no

62 The unsatisfactory level of attention that the redeemability condition currently attracts and its limited visibility result, perhaps, from the fact that this condition was not to be found in the 1998 draft. Rather, as we have seen, it was inserted only thereafter.
64 ‘Acceptance by a third party’ has been identified by a commentator as the ‘primary interpretative difficulty’ of the e-money definition (Penn (2005), p. 350).
65 Hayek’s definition of ‘money’ (‘to serve as a widely accepted medium of exchange is the only function which an object must perform to qualify as money…’) is consistent with the view that the Directive could have been
answer, are of both a quantitative and qualitative nature. How broad is the number of entities accepting e-money as a means of payment required to be for these to qualify as e-money? And, equally importantly, what sort of relationship needs to exist between the issuer and the accepting undertaking?

Not only does the Second Directive not address these questions directly, it also sows seeds for further confusion by way of Article 8 which authorises Member States to grant waivers, presumably to facilitate the establishment of ‘relatively small and close’ payment schemes. Interestingly, that waiver provision gives Member State authorities the possibility not only to exclude ‘small e-money institutions’ (defined as those whose total business activities do not exceed a certain threshold) but also to determine when the relationship between issuer and accepting undertaking is close enough to justify non-application of the Directives’ rules to the e-money in question. Not unsurprisingly, the option for national authorities to grant waivers contributes to the legal uncertainty surrounding the interpretation of the Article 1(3)(b)(iii) criterion. The importance of a parallel amendment to Article 8 on waivers is paramount, therefore, if the ambiguities inherent in the third component of the e-money definition are to be overcome. Options for the competent Member State authorities to determine when the relationship between the issuer and the accepting undertaking is distant enough to justify treating a specific payment instrument as falling within the fold of the Directives should be removed and replaced by provisions that clearly define which closely related (affiliated) third parties are to be excluded, what type of relationship between the issuing institution and the accepting undertaking is required before their dealings can fall outside the Directives’ scope of application and what other quantitative or qualitative considerations need to be taken into account for an objective, non-discriminatory assessment of whether the issuance of e-money has a Community dimension. The mere fact that an issuer and the accepting institution are different legal entities, each with a separate legal personality, ought not to be sufficient for their dealings to be caught by the Directives if the issuing and the accepting institutions are intended to encompass only such instruments as are widely accepted as substitutes for scriptural money (Hayek (1976), p. 46).

66 Such was the official motivation behind the waiver option contained in Article 7 of the draft directive (see European Commission (1998)).

67 For an e-money institution to qualify for a waiver a requirement which must satisfied in all cases is that the storage device used for the making of payments may not exceed a storage capacity of EUR 150 (see the proviso to Article 8(1) of the Directive).

68 These requirements can, of course, draw on the current text of the Directive, for instance with regard to the ratio between the issuer’s turnover and the value of the money that he or she issues. In order not to discourage the issuance and use of e-money, it is proposed that such threshold should be relatively high.
connected through a parent-subsidiary relationship or another close connection. To consider such dealings to fall within the scope of the Directives would be highly questionable both from an economic and a conceptual perspective as the monetary value stored in the prepaid card scheme could not be regarded as widely accepted by third parties.

Their troubled relationship to the Article 1(3)(b)(iii) criterion aside, waivers are unwelcome for several other reasons. For instance, it is far from clear what effect they have, whether simply to waive an institution’s duty to comply with some of the prudential supervision safeguards set out in the Directives or, instead, effectively to exempt that institution from the scope of application of the Directives\textsuperscript{69}. Although the latter interpretation is the least likely, the wording of Article 8 is so unclear\textsuperscript{70} that national authorities might be excused for a decision to treat waived institutions as if they did not constitute e-money institutions or as exempt from licensing or registration requirements\textsuperscript{71}. Evidence gathered from a recent evaluation study undertaken within the ESCB\textsuperscript{72} confirmed significant uncertainties across EU Member States concerning the waiver provisions. Doubts were manifested not only regarding the criteria for the grant of a waiver but, also, concerning its effects and implications.

Moreover, even assuming the only effect of a waiver to be to deny the benefit of free movement and a ‘European Passport’ to the issuers concerned, without otherwise interfering with their fundamental regulatory compliance obligations\textsuperscript{73}, Article 8 would remain

\textsuperscript{69} The Explanatory Memorandum to the 1998 draft indicated that ‘[T]he waiver only applies to business activities (Article 1(4)), application of the First and Second Banking Directives (Article 2(1)), initial capital and own funds requirements (Article 3(1)) and Article 8 which requires existing electronic money schemes to submit information to the competent authorities’ (European Commission (1998)). As the contents of the Directive have since materially changed in several respects, the continuing validity of these clarifications is difficult to ascertain, not least in connection with ‘supervening’ legal requirements, such as the redeemability requirement. The ECB’s observation in its Opinion that ‘… the redeemability requirement should be applied indiscriminately to all electronic money schemes irrespective of their size…’ suggests that this requirement should also apply to waived entities (Opinion of the European Central Bank (CON/1998/56), paragraph 24). However, in their national implementation measures, at least seven Member State jurisdictions (UK, Sweden, Spain, the Netherlands, Finland, Denmark and the Czech Republic) have declared all of the Directive’s provisions as ‘waivable’.

\textsuperscript{70} Article 8(1) provides that ‘Member States may allow their competent authorities to waive the application of some or all of the provisions of this Directive and the application of Directive 2000/12 to electronic money institutions …’ (emphasis added).

\textsuperscript{71} Exemptions apply also under the Consolidated Banking Directive (see Article 2 thereof). However, their effect is to exempt certain credit institutions from some of the prudential supervision requirements established by that directive and not to exempt them from categorisation as credit institutions.

\textsuperscript{72} Internal ESCB study on the statistical treatment of non-financial e-money institutions, March 2007.

\textsuperscript{73} The first limb of this conclusion is supported by the Annex to the E-Commerce Directive (Directive 2000/31/EC) which expressly excludes the emission of e-money by ‘waived’ e-money institutions from the scope of application of the country of origin principle enshrined in Article 3 of that directive.
problematic because of its potential to generate unevenness in the Directive’s implementation, ultimately damaging the market integration goal pursued by the Directives.

Last but not least, from a purely conceptual perspective, if an entity is considered to satisfy the requirements for classification as an e-money institution, it is unclear why such entity should enjoy the potential of an exemption (even if only partial) from the Directives’ scope of application. The Second Directive constitutes a minimum harmonisation measure, not an opt-in regime. Accordingly, while (partial) derogations granted on the basis of objective circumstances might be acceptable, waivers do not appear to be consistent with that measure’s logic if the implication of their grant is not to permit e-money issuance to be conducted on a (partly or wholly) unregulated basis by waived entities, a possibility that the very adoption of the Directive expressly intended to guard against. Moreover, it is uncertain also whether the current waiver system is an appropriate legal tool to apply to small scale e-money issuers (not the same as local area e-money schemes). This uncertainty arises since, even if a waiver has a positive impact on these institutions in reducing prudential supervisory requirements, it impedes also their possibility to benefit from the mutual recognition arrangements in place (the ‘European Passport’), thus hindering their potential to grow and expand their business cross-border.

For these reasons, the retention of waivers in a revised Directive merits reconsideration, while thought should be given also to the conversion of certain waiver requirements to mandatory conditions which, if fulfilled, would automatically exclude an institution from the Directives’ scope of application.\textsuperscript{74}

\textsuperscript{74} It is telling of the Member States’ assessment of the clarity and utility of Article 8 of the Directive that implementation varies widely from one Member State to another. Not all Member States have implemented the Article 8 waiver (Austria, Hungary, Lithuania, Portugal, Slovakia, Slovenia); others have not implemented the waiver in relation to the float size (Estonia, Finland, Poland, Spain), or have lowered the threshold for such (Greece), drastically limiting the usefulness of the waiver for smaller e-money schemes in those jurisdictions, notwithstanding the fact that the predominant logic underlying the waiver’s introduction was seemingly to facilitate the establishment of ‘limited’ payment schemes.
3.4 Other shortcomings of the Directives

3.4.1 Clearing and settlement of e-money transactions

As was discussed earlier in this paper, the main focus of the Directives is on the regulation of e-money institutions and on their prudential supervision obligations. The Community legislature has not specifically addressed the clearing and settlement of transactions involving the use of e-money. This omission ignores the fact that e-money institutions are not only credit institutions but also payment service providers and fails to acknowledge – in relation to the future growth prospects of the EU’s e-money industry – the significance of clearing and settlement aspects for the acceptability of these innovative payment instruments by European consumers. In the absence of a harmonised regime for the clearing and settlement of e-money transactions, ‘standard’ clearing systems (i.e. those operated by banks) are used for the settlement of e-money transactions, with e-money institutions co-operating with banks to settle transactions realised via their own systems. The possibility cannot be excluded, however, that the need for issuers to rely on the traditional banking route for the clearing and settlement of e-money transactions may undermine the attractiveness of goods or services settled by way of e-payment instruments (and, implicitly, e-money instruments themselves). Those limitations arise since consumers of such goods or services are capable of realising transactions and taking full advantage of the possibilities offered by providers only if all three market players (service provider, e-money issuer and user) participate, directly or indirectly, in the same clearing scheme. As expansion of the European e-money market cannot be furthered in the absence of a secure and efficient environment for the clearing and settlement of e-money transactions, one of the key issues for a revised Directive could be that of the

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76 These operate under the close supervision of national central banks (NCBs). Maintaining the integrity of clearing and settlement systems has become a core function for central banks, of comparable importance with their price stability maintenance and lender of last resort functions.

77 The limitations imposed by clearing and settlement may be seen, for example, in the case of an e-money scheme which provides for the refund of unused e-money balances to made by direct credit to the user’s bank account. If the user has no access to a bank account or if the issuing institution and the user are located in different jurisdictions, absent an alternative clearing and settlement process, the issuing institution would either be unable to redeem the consumer’s unused e-money balance or would be able to do so only at a cost (reflecting the cross-border bank transfer charges).
regulation of the clearing and settlement aspects of transactions involving the use of e-money, whether through the banking system or through a different, dedicated route. 

3.4.2. Restrictive provisions and their potential impact on the development and profitability of the EU e-money market sector

Another aspect of the Directives which is open to criticism relates to the limited options available under it to e-money issuers to turn a profit through the issuance of e-money. In its current formulation, the Second Directive is fairly restrictive, not only in relation to the initial capital and ongoing own funds requirements under Article 4 (which serve obvious prudential supervision purposes) but, also, by way of the Article 2 restriction on credit lending, the Article 1(5) restriction on ancillary business activities of e-money institutions, the Article 3 redemption at par value requirement and the Article 5 restrictions on permissible investments by e-money institutions. As a result, the issuance of e-money at a premium is, practically, the only source of return for e-money issuers (hence the importance of as clear as possible a re-formulation of the Directive so as to avoid uncertainty in this respect).

The resulting lack of business incentives inherent in the Directive may have some unwelcome legal ramifications. First, there is the potential for an adverse impact on the utility of the ‘European Passport’, identified earlier as the Directive’s greatest achievement: having regard to the restrictions on the sources of return available to e-money issuers, a certain antinomy may be seen to exist between the right to a ‘European Passport’ accorded by the Directives and the regulatory straightjacket forced on e-money institutions. Second, doubts may be entertained as to whether imposing restrictions on e-money institutions in some respects stricter than those applicable to standard credit institutions does not negate the Directives’ ambition to create a level playing field between dedicated e-money issuers and other credit institutions for the issuance of e-money. Paradoxically, the severity of the restrictions may, 

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78 It is noted, in this regard, that the Payment Services Directive inter alia lays down rules on the execution of payment transactions where the funds involved are e-money. As a result, the PSD rectifies, at least to an extent, the Directives’ silence on the clearing and settlement of e-money transactions.

79 Kohlbach has observed aptly that ‘it almost seems as if the conjunction of investment restrictions, funds requirements and passport freedoms gives e-money issuers who can’t turn a profit in their own Member State a “license” to not make a profit in the rest of the Union either’.

80 Challenging the very need for a level playing field, Kohlbach has argued that ‘what is missing [from the Directive] is a growth path for small issuers that want to go transnational, and a framework that provides financial incentives for “start-ups” to launch new, Union-wide payments products. The Directive would hence appear to fail in its first objective, which is “to assist electronic money in delivering its full potential benefits”.’
at least *prima facie*, legitimise waivers and their function within the context of the Directive, to the extent that, by being exempted from the scope of such restrictions in connection with their sources of income, small e-money institutions may enjoy the prospect of the pursuit of e-money issuance under more favourable economic conditions. However, should it be determined that the sole feature of waivers resides in their ability to release e-money institutions from the Directive’s investment or ancillary business activity restrictions, as a means of providing an incentive to small entities to enter the market, then relaxation (or even repeal) of some of those restrictions might constitute a more effective means to achieve the same objective, compared to the uncoordinated grant of waivers by national authorities.

### 3.4.3 Treatment of hybrid e-money issuers

We have left for last what, in our view, is an even more serious shortcoming of the Directives, one that we have already touched upon earlier in this paper in our discussion of the definition of e-money. This concerns the unwarranted assumption that issuers of money claims stored in electronic media or providers of e-payment services ought necessarily to be classified as e-money institutions, merely because their products appear *prima facie* to fulfil the requirements of Article 1(3)(b) of the Second Directive. That assumption is all the more unwarranted when it is acknowledged that Article 1(5) of the Second Directive already restricts the business activities of e-money institutions beyond the issuance of e-money to the provision of closely related non-financial services and to the storing of data on behalf of other undertakings or public institutions, a limitation which clearly suggests that the issuance of e-money should be the main (albeit not the exclusive) business activity pursued by an institution for it to qualify as an e-money institution. Ultimately, the problem lies in the Directive’s vague delimitation of the concept of e-money and in its failure to cater for ‘hybrid institutions’ (of which MNOs are only one example). Accordingly, the Directive’s rules would appear to capture, for instance, cards issued by tour operators enabling holders to pay for various goods or services within holiday villages, with tour operators regarded as e-money institutions even though their main business is provision of holiday services rather than the issuance of e-money. Having regard to the fact that Article 1(4) of the Directive prohibits ‘persons or undertakings that are not credit institutions … from carrying on the business of issuing electronic money’ a tour operator would be permitted to continue
issuing payment cards only on condition of establishment of a subsidiary whose exclusive activity is to manage the financial liabilities resulting from e-money issuance.\textsuperscript{81}

The uncertainty surrounding the Directives’ scope cannot, in our view, be resolved on the basis that operators of ‘peripheral’ schemes approach their competent national authorities with a request for a waiver from some (or all) of the Directives’ provisions. This solution is unsatisfactory not least because of the potential of the waiver mechanism to generate cross-jurisdictional disparities in the treatment of the same type of activity. Regard should invariably be had to the nature of an issuer’s business in order to determine whether its products qualify for the e-money label, since too formalistic an interpretation of Article 1(3)(b) of the Second Directive is apt to lead to awkward outcomes, contrary to the spirit of the Directives. \textit{Table 1} provides some examples of the diverse treatment across the EU of hybrid e-money institutions.\textsuperscript{82}

\textit{Table 1. The treatment of different smartcard-based payment schemes in different European jurisdictions}

<table>
<thead>
<tr>
<th>PAYMENT SCHEME</th>
<th>TREATMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smart cards of transport companies</td>
<td>• Transport for London’s Oystercard:</td>
</tr>
<tr>
<td></td>
<td>Does not constitute e-money to the UK’s Financial Services Authority because it is accepted as a means of payment only by Transport for London, even though the acquired travel right can be used to travel on the services provided by different operators.</td>
</tr>
<tr>
<td></td>
<td>• Rejsekort A/S:</td>
</tr>
<tr>
<td></td>
<td>A fully-licensed e-money institution in Denmark, offering a country-wide electronic ticket system for travel payments, known as the ‘Travel Card’. This card is a contactless smart card that contains an ‘electronic purse’ used to pay for travel journeys.</td>
</tr>
<tr>
<td></td>
<td>• Transport companies in the Czech Republic:</td>
</tr>
</tbody>
</table>

\textsuperscript{81} This was the temporary solution proposed to the Commission by the Committee of European Banking Supervisors (CEBS) which in commenting on the application of the Directive to MNOs and other hybrid issuers suggested that such undertakings should set up dedicated subsidiaries until such time as a revised Directive produces a workable solution to the definition of e-money issued by hybrid institutions (SEC(2006) 1049, p. 10)

\textsuperscript{82} This table has been prepared on the basis of replies to a February 2007 questionnaire prepared by the Monetary and Financial Statistics Division (S/MFS) of the ECB in order to determine the implications for monetary statistics of the diverse treatment across the EU of hybrid e-money institutions.
36 transport providers in the Czech Republic offering prepaid cards that can be used to pay for transport services of other providers and for drinks/snacks at train/bus stations, constitute licensed e-money institutions and operate under the waiver established by Article 8 of the Second Directive.

<table>
<thead>
<tr>
<th>Prepaid cards used in local areas (i.e. university areas or football stadia)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Smart cards for university students:</strong>&lt;br&gt;The Maltese Government issues smart cards to university students as a form of annual grant. Purchases are restricted to specific items in participating shops. These cards are not considered e-money in Malta.</td>
<td></td>
</tr>
<tr>
<td><strong>Chip-based payment cards in Germany for processing payment transactions at football stadia:</strong>&lt;br&gt;Two companies offering computer chip based payment cards to pay for transactions in football stadia are currently treated as e-money institutions in Germany, and operate under the waiver. The cards are valid only at the premises of the respective stadia.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pre-paid electronic gift vouchers</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The pre-paid electronic gift cards of a large non-financial corporation (present in several EU Member States) that retails electronic and consumer products are treated as e-money in some but not other Member States. The electronic vouchers only recently replaced the previous paper-based ones and are issued by an independent subsidiary. They are accepted only in the various stores of the retail chain.</strong></td>
<td></td>
</tr>
</tbody>
</table>

The Second Directive’s definition of e-money would, therefore, benefit from further clarification, placing the emphasis on the nature of the business of the issuing undertaking as the key criterion of the Directives’ applicability, not – as it is currently the case – on the basis of decentralised, country-specific designation of eligible issuers and products by means of the waiver mechanism, triggered at the initiative of the payment system provider and leaving considerable discretion to the competent national authority but, rather, subject to specific, objective and non-discriminatory conditions (such as the nature of the business of the issuers and the volume of the unredeemed e-money balance held) established by the Directive itself\(^\text{83}\).

\(^\text{83}\) A related but somewhat different idea proposed by a commentator consists in the establishment of a separate, lighter regime for ‘limited-purpose electronic payment instruments’ i.e. instruments the use of which would be ‘limited to a small number of clearly identified points of sale within a well-defined location’ (see ECB (2000), p.
4. – WHY AMENDING THE DIRECTIVES IS IMPORTANT

There are two principal reasons why the ambiguities surrounding the definition of e-money and the status of e-money institutions should be dispelled. The first relates to the potentially serious consequences of divergent national interpretations of the Directives for the industry’s future growth prospects; the second concerns the difficulties that those interpretations might entail for regulatory and supervisory authorities in their practical application of the Directives, in the absence of any authoritative ECJ ruling on their interpretation.

The risks that uncoordinated and increasingly divergent practices in the national authorities’ application of the Directives’ provisions pose to the e-money industry’s expansion manifest themselves in one of two ways: (i) directly, through the licensing by Member States of entities engaged in business activities involving the issuance of payment cards of some designation or other but which are not, properly speaking, e-money institutions and the (potentially unnecessary) compliance costs and regulatory obligations arising thereby, especially where similar business activities are dealt with differently within the same jurisdiction, or (ii) indirectly, where the same entity pursuing the same business activity in more than one jurisdiction has to comply with the prudential requirements of the Directives in one jurisdiction but not in another (a consideration that may weigh on its decision not to expand in a ‘regulated’ jurisdiction or affect the economic viability of its e-money issuance business, hampering its achievement of economies of scale that only its operation in more than one jurisdiction can allow)\(^84\). The unwarranted subjection of an institution to the Directives’ rules is in itself damaging even if that institution does not conduct – nor has any future intention to conduct – cross-border business: the damage apt to result from divergent national interpretations of the Directives is not necessarily conditional on the existence of a cross-border dimension to the activities of specific institutions. The domestic effects of subjecting institutions to unnecessary or unequal regulatory compliance burdens, taken

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50. Schemes falling within such a category include electronic payment instruments accepted only as payment for public transportation where the latter is provided by several companies within one city, and e-loyalty and e-payment schemes (see Krueger (2002), p. 249). While superficially attractive in view of the substantive commercial interest, especially in e-loyalty schemes, such a regime would be difficult to apply in practice (not least in determining the dividing line between ‘limited-purpose’ and ‘multipurpose’ schemes) and, unless thoroughly thought through, might allow hybrid institutions to avoid the Directives’ requirements altogether.

84. For a revealing example of the divergent treatment of the business activities of PayPal in the US and in Europe, see Kohlbach (2004).
together with the possible cross-border trade implications of opposing interpretations across different jurisdictions could prove to be far from negligible and have the potential to grow even further, as the EU market for e-money slowly develops.

Divergent interpretations of the concept of e-money may prove problematic also because of the difficulties that these may entail for regulatory and supervisory authorities in their practical application of the First Directive which includes e-money institutions within the recast Banking Directive’s definition of ‘credit institutions’. Such characterisation of e-money institutions as credit institutions does not merely entail prudential supervision but also wider monetary policy and statistical implications. As credit institutions, e-money institutions are subject to minimum reserves requirements, within the meaning of Regulation ECB/2003/9 on the application of minimum reserves (the Minimum Reserves Regulation), as well as to the duty to report to the ECB monetary and financial institution (MFI) statistics within the meaning of Regulation ECB/2001/13 concerning the consolidated balance sheet of the monetary financial institutions sector (the MFI Regulation). In setting out the categories of institutions to which minimum reserve requirements apply, Article 2(1) of the Minimum Reserves Regulation refers to ‘credit institutions as defined in the first subparagraph of Article 1(1) of the Consolidated Banking Directive, other than participating NCBs’.

Accordingly, that definition creates one exception only to the obligation to hold minimum reserves namely, in the case of NCBs of Member States which have adopted the single currency. Moreover, Article 2 of the Minimum Reserves Regulation establishes a sui generis exclusion and exemption regime which bears no relationship to the one established under the recast Banking Directive. In particular, Articles 2(1) and (2) of the Minimum Reserves Regulation provide that the following categories of credit institutions are excluded or exempted from reserve requirements: (i) credit institution branches of participating Member State credit institutions located outside the euro area, (ii) credit institutions the authorisation of which has been withdrawn or renounced or which are subject to winding-up proceedings taken by a judicial or other competent authority of a euro area Member State; in addition the

85 It should be recalled that as early as 1998, the ECB advocated the inclusion of e-money institutions in the definition of credit institutions in view of e-money’s ‘significant implications for monetary policy in the future’ and, in particular, on account to ensure that ‘price stability and the unit-of-account function of money are not put at risk’ (ECB (1998), p. 1). In line with the 1994 Report of the EMI, the ECB Report concluded that the most straightforward solution would be to limit the issuance of e-money to credit institutions as this would avoid changing the existing institutional setting for monetary policy and banking business and ensure a level playing-field for all issuers of e-money.


ECB may exempt (iii) institutions subject to reorganisation measures and (iv) institutions for which the purpose of the ECB’s minimum reserve system would not be met by imposing reserve requirements upon them. Moreover, Article 5(2) of the Minimum Reserves Regulation provides that, subject to the fulfillment of the conditions stipulated in Articles 11 and 13, a lump-sum allowance of EUR 100 000 is to be deducted from the minimum reserve base of each eligible institution. It follows that unless it benefits from the lump-sum allowance or has been granted a derogation or exemption under Article 2 of the Minimum Reserves Regulation, a credit institution (including an e-money institution) must hold minimum reserves with its competent NCB. As regards the obligation to report statistics, Article 2(1) of the MFI Regulation provides that the actual reporting population for the ECB’s MFI statistics ‘shall consist of the MFIs resident in the territory of the participating member states’, with the concept of MFI including ‘resident credit institutions as defined in Community law’ hence, also e-money institutions. Furthermore, Article 2(2) of the MFI Regulation provides that the only exception to apply is where the NCB has granted a derogation to a ‘small’ MFI, within the meaning of that provision. In this connection it should be recalled that, in accordance with Article 7 of Council Regulation 2533/98 concerning the collection of statistical information by the European Central Bank, the ECB has the power to impose sanctions for breaches of the obligation to report statistics and in accordance with Council Regulation 2532/98 concerning the powers of the European Central Bank to impose sanctions; and that, under Article 11 of Regulation ECB/1999/4 on the powers of the European Central Bank to impose sanctions, sanctions apply also in the case of a breach of the obligation to hold minimum reserves. The implications of the categorisation of an institution as an e-money institution by its national authorities (which may or may not be the NCB of its Member State of registration, depending on the allocation of regulatory and supervisory tasks within the relevant jurisdiction) are, therefore, clear: that institution will have to hold minimum reserves with its NCB and report statistics, subject to sanctions for non-compliance, however correct or incorrect its categorisation as an e-money institution or however inconsistent such categorization may be with the practice followed in other Member States. In the same vein, having regard to the fact that the ‘list of MFIs for statistical purposes’, within the meaning of Article 3 of the MFI Regulation, is established and maintained by the ECB but compiled on the basis of data provided by competent Member States.

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State authorities, unless the ECB has granted derogations to one or more of the listed institutions, it is bound legally to insist on the collection of statistics and on the holding of minimum reserves by all institutions listed therein. Significantly, the possibility to grant a derogation under the current legal framework is more narrowly circumscribed in the case of statistics, where only small MFIs can benefit from such a derogation, than in the case of minimum reserves, where the ECB has the residual power to exempt ‘institutions for which the purpose of the ECB’s minimum reserve system would not be met by imposing reserve requirements upon them’.

The statistical and minimum reserve implications resulting from the recognition of e-money institutions as credit institutions give rise to several questions to which no clear-cut answer is readily available and which suggest, admittedly not without the benefit of hindsight, that their inclusion in the definition of credit institutions is less straightforward than originally contemplated. For instance, taking into account that Article 2(3) of the Directive, read in conjunction with recitals 7 and 9 of the preamble, explicitly acknowledges that some e-money institutions will be deemed not to accept deposits (namely, where the e-money balance issued in exchange for token money is immediately used up) while others will, should it not be recognised in relation to those institutions that do not accept deposits that the calculation of the minimum reserve base necessary for the definition of their reserve requirements may pose problems? At the same time, can it really be the case that only some institutions need to hold minimum reserves (namely, those that are deemed to accept deposits) while others need not do so? Finally, should one conclude that those e-money institutions which are deemed to accept deposits need to comply with existing national depositor protection arrangements? Similar questions arise with regard to the collection of statistics from e-money institutions. Having regard to the fact that a waiver under Article 8 of the Second Directive will be granted by the competent Member State authorities only in certain (undefined) circumstances to certain issuers, is it not reasonable to entertain doubts on the legitimacy of collecting statistics from some e-money institutions (those which are not waived) but not from others (waived institutions)? Is it legitimate, from a statistical point of view, to treat comparable institutions differently, merely on the basis of their different

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91 This conclusion seems unwarranted. The presumption must be, therefore, that e-money institutions always take deposits, even where the period of time that elapses between the making of the deposit and the exhaustion of the corresponding monetary value is fairly limited. Moreover, since deposit-taking constitutes the hallmark of a credit institution, e-money institutions must have been deemed to accept deposits one way or another, otherwise they would not qualify as credit institutions.
categorisation by national authorities? In this connection it is worth noting that Regulation ECB/2001/13 specifies that ‘the principal purpose [of the production of the consolidated balance sheet of the monetary financial institutions (MFI) sector] is to provide the ECB with a comprehensive statistical picture of monetary developments in the participating Member States, which are viewed as one economic territory’\textsuperscript{92}. Needless to say that diverging interpretations of the concept of e-money across Member States, with its effect on the composition of the MFI sector, could negatively affect the compilation of a comprehensive statistical picture of monetary developments. A possibility that merits consideration with regard to the collection of statistics is that e-money institutions for which the Member States could waive the application of the provisions of the Directives should not, from a statistical point of view, be treated as e-money institutions since, to do otherwise, would entail collecting statistics from some institutions in some Member States only while allowing comparable institutions in other Member States pursuing similar business activities not to report statistics, merely because they happen to benefit from a waiver under national law. Incidentally, the issue raised by this difference in treatment militates in favour of rendering the Article 8 conditions mandatory (as suggested earlier in this paper) to avoid their selective application by competent Member State authorities.

The same is true of hybrid e-money institutions and of their treatment across the EU. In February 2007, the results of an internal ESCB questionnaire confirmed that the national treatment of hybrid e-money institutions significantly varies across the EU and that a harmonised approach for the treatment, and notably the statistical reporting, of such institutions was needed. As a result, Regulation ECB/2001/13 was amended to provide NCBs with the possibility to grant, on a non-discriminatory basis, derogations from the reporting requirements to particular e-money institutions whenever: (i) the e-money issued is accepted as payment by a limited number of undertakings; and (ii) over three-quarters of their total balance sheet is unrelated to the issuance of e-money and the financial liabilities relating to outstanding e-money do not exceed EUR 100 million.\textsuperscript{93} Table 2, below, provides details of the implications for the ECB’s MFI reporting of the treatment of hybrid institutions as e-money issuers.

\textsuperscript{92} Recital 2 of the preamble to Regulation ECB/2001/13 (emphasis added).

Table 2. The treatment of hybrid issuers of e-money: implications for the ECB’s reporting of monetary statistics

The ECB’s monetary statistics capture the electronic money that is issued by monetary financial institutions (MFIs) located within the euro area. The outstanding amount of electronic money is classified according to Regulation ECB/2001/13 as deposit liabilities and included within the item ‘overnight deposits’. Overnight deposits issued by euro area MFIs and held by non-MFI euro area residents are included in the euro area monetary aggregates and included in the calculation of the Eurosystem’s minimum reserve requirement.

The inclusion of certain hybrid e-money institutions within the scope of the Directives, particularly if such treatment is not supported by fundamental economic or statistical reasons, could have the following adverse implications:

- First, the treatment of certain hybrid e-money institutions as MFIs and the subsequent need to reclassify financial relations between the MFI population and those e-money institutions as inter-MFI relations conflicts with the European System of Accounts (ESA 95) principle by which the sector of classification is based on the main focus of business.

- Second, the main part of the balance sheet of some hybrid e-money institutions, whose business is mainly of a non-financial nature, would fall into the residual category of remaining assets/liabilities. Given the large volume of their non-financial business, such items would increase considerably thus reducing the quality of the consolidated balance sheet of the MFI sector.

Incorporation of these institutions in the MFI population and the resulting increase in the reporting and administrative burden involved contradicts current EU efforts to reduce the administrative costs faced by the EU non-financial sector.

CONCLUSION

It follows from the preceding discussion that, while the Directives are relatively straightforward in themselves, the implications of treating e-money institutions as credit institutions are so wide-ranging that, if e-money institutions are to continue being treated as credit institutions, the importance of their correct categorisation on the basis of clear and unequivocal criteria cannot be stressed highly enough. For level playing field and cross-border-promotion trade purposes (as well as, ultimately, for monetary policy reasons), an amendment of the definition of e-money, a rethinking of the concept of an e-money institution and a review of the waiver regime are necessary. At the same time, even if e-money institutions were to no longer be considered as credit institutions under Community
law, considering that they would still perform activities considered, in several respects, as close substitutes to those of credit institutions, there would be a strong case for their continuing treatment as MFIs, for statistical purposes, and for their continuing reporting of data under Regulation ECB/2001/13. This objective could either be achieved through the introduction of a specific provision in the revised E-Money Directive to that effect and/or through an amendment of Regulation ECB/2001/13 (adding e-money institutions, in the sense of the E-Money Directive, as a new type of “other MFIs”).

On the question of the best instrument for the introduction of the changes proposed in this paper it is noted that the Commission Staff Working Document recommended the incorporation of the Second Directive in the recently adopted Payment Services Directive (PSD). While this was a conceptually sound recommendation, considering the direct linkages between these two legal acts, and bearing in mind the undesirability of a proliferation of directives dealing with similar or overlapping issues (namely, payment services), the opportunity presented by the finalisation of the PSD ultimately was not taken, with the result that a revision of the Directive by means of a free standing legal act is effectively the only alternative. Whatever the instrument to be used, one thing is clear: a harmonised e-money framework, capable of fostering business development and enabling the even-handed and efficient prudential supervision of these institutions is of utmost importance, both for the sector’s future growth prospects and for the coherence of the financial services-related Community legal framework at large.

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96 While neither regulating the issuance of e-money nor amending the prudential regulation of e-money institutions, for which the PSD provides derogations (Articles 34 and 53 thereof), some of its provisions apply nonetheless to e-money institutions (see, in particular, Articles 60 and 61).
97 This is all the more so, considering that, while aligning with one another two so closely related Directives could signal advantages, in terms of simplification, the difference between ELMIs and Payment Institutions (PI) is not clear and would need to be further considered and clarified. The same is true of the issuance of e-money where some clarity is desirable on whether or not this is to be considered as a payment service.
## 1. Population of EU e-money institutions, as of May 2007

### France

<table>
<thead>
<tr>
<th>Institutions</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 fully operating e-money institutions (but not subject to the Directives)</td>
<td>Institutions issuing e-money but created before 2002, and not subject to Regulation 2002-13 (the national transposition of the E-Money Directives), because no requirement exists to apply for new authorisation.</td>
</tr>
<tr>
<td>2 waived e-money institutions</td>
<td></td>
</tr>
<tr>
<td>SFPMEI</td>
<td></td>
</tr>
<tr>
<td>w-HA</td>
<td></td>
</tr>
<tr>
<td>France Telecom Encaissements</td>
<td>Operating under an exemption procedure according to Article L511-7-II of the French Monetary and Financial Code. Hybrid issuers are not considered e-money institutions in France. They are allowed to issue prepaid electronic devices under Article L511-7-I-5 of the Monetary and Financial Code.</td>
</tr>
<tr>
<td>Kadeos</td>
<td></td>
</tr>
<tr>
<td>Cinedis</td>
<td></td>
</tr>
</tbody>
</table>

### UK

<table>
<thead>
<tr>
<th>Institutions</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>13 fully operating e-money institutions</td>
<td></td>
</tr>
<tr>
<td>38 waived e-money institutions</td>
<td>Fully operating e-money institutions in the UK</td>
</tr>
<tr>
<td>Paypal (Europe) Ltd</td>
<td>Several also provide cross-border services in other EU countries on the basis of the European Passport established by the E-Money Directives.</td>
</tr>
<tr>
<td>Neteller</td>
<td></td>
</tr>
<tr>
<td>NCS Mobile Payment Bank</td>
<td></td>
</tr>
<tr>
<td>Newcastle Building Society</td>
<td></td>
</tr>
<tr>
<td>Smart Voucher Ltd</td>
<td></td>
</tr>
<tr>
<td>Click and Buy (Europe) Ltd</td>
<td></td>
</tr>
<tr>
<td>FirePay UK Ltd</td>
<td></td>
</tr>
<tr>
<td>Starbucks Card Europe Limited</td>
<td></td>
</tr>
<tr>
<td>Citadel Commerce UK Ltd</td>
<td></td>
</tr>
<tr>
<td>Google Payment Ltd</td>
<td></td>
</tr>
<tr>
<td>Moneybookers Ltd</td>
<td></td>
</tr>
<tr>
<td>Prepay Technologies Ltd</td>
<td></td>
</tr>
<tr>
<td>Starbucks Card (Europe) Ltd</td>
<td></td>
</tr>
<tr>
<td>Allied Wallet Limited</td>
<td></td>
</tr>
<tr>
<td>Bangonet Limited</td>
<td></td>
</tr>
</tbody>
</table>

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98 The table includes information on all EU Member States except Romania.
Holders of a small e-money issuer certificate

Under Articles 9C to 9G of the UK Financial Services and Markets Act 2000 (Regulated Activities) Order 2001 (as amended), the holder of a small e-money issuer certificate is excluded from the regulated activity of issuing e-money. The FSA will grant a small e-money issuer certificate only where any of the following criteria are met:

- e-money issued to consumers is subject to a storage amount of EUR 150 and the total e-money issued is limited to EUR 5 million;
- e-money issued to consumers is subject to a storage amount of EUR 150, the total e-money issued is limited to EUR 10 million and only issued for use by connected parties; or
- e-money issued to consumers is subject to a storage amount of EUR 150, the total e-money issued is limited to EUR 10 million and only issued for use within a limited geographic area.

| Belgium |
|-----------------|-----------------|
| Cheshire County Council | Cobalt Telephone Technologies Limited |
| Concessionary Solutions Limited | Credecard Plc |
| Earthport plc | Easy Debit Card Limited |
| EB Payments Limited | Gobaldosh Limited |
| Ingotz Net Services Limited | Instant Pay Limited |
| Internetwith Limited | Ixaris Systems Ltd |
| Mobile Unity Limited | MPP Global Solutions Limited |
| netCashis Limited | Nochex Ltd |
| Nova International Limited | Opay Ltd |
| Opera Telecom Limited | Orange Home UK Plc |
| Pay As You Click Limited | PayHound Ltd |
| Paysafecard.com Limited | PPPay Ltd |
| Probability Games Corporation Limited | SecureAccountnet Limited |
| Seed Capital Limited | Sparta Technologies Limited |
| Teleglobal Limited | Tikits.com Limited |
| Toni & Guy International Limited | Tranzcash Limited |
| Universal Money Ltd | University of Wales Institute Cardiff |
| Wallie Limited | Ymogen Ltd |
| ECB Legal Working Paper Series No 7 | July 2008 |

| 2 waived e-money institutions | Not treated as credit institutions. The application of Directive 2000/46 is waived on the basis that outstanding e-money does not exceed EUR 5 million. |
| Tunz.com | |
| Wallie Regus Stephanie | |

| Cyprus | |
| 1 fully-operating e-money institutions | |
| CSC 24 SEVEN.COM.LIMITED | - |

| Latvia | |
| 4 waived e-money institutions | Active e-money institutions operating under the waiver offered by Article 8 of Directive 2000/46. In accordance with Article 8(1)(a), application of Articles 4 and 5 of the Directive is waived in respect of these institutions. |
| CityCredit | |
| Dāvanu karte | |
| ELS INTERNATIONAL | |
| Mikromaksājumi | |

| Sweden | |
| 3 waived e-money institutions | These institutions issue e-vouchers and all operate under the waiver. According to the Financial Supervisory Authority they are not regarded as e-money institutions. All provisions of the Directive have been waived on the basis of a maximum storage amount of EUR 150 and a close financial or business relationship between the undertaking and the issuer. |
| Media-Saturn Holding Sweden AB | |
| Getitcard Sweden AB | |
| Wallie AB | |

<p>| Czech Republic | |
| 39 waived e-money institutions | E-purse companies, operating under the waiver offered by Article 8 of Directive 2000/46. |
| Benefit Management s.r.o. | |
| Computer Press, a.s. | |
| Wallie a.s. | |
| Anexia s.r.o. | |
| Autobusy Karlovy Vary, a.s. | |
| Connex Praha, s.r.o. | |
| CONNEX Východní Čechy a.s. | |
| CS TRANS s.r.o. | |
| ČSAD autobusy Plzeň a.s. | |
| ČSAD Benešov a.s. | |</p>
<table>
<thead>
<tr>
<th>Czech Republic</th>
<th>Transport companies issuing smartcards, benefiting from the waiver established by Article 8 of Directive 2000/46.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSAD Česká Lipa a.s.</td>
<td>Dopravní podnik města Hradce Králové, s.r.o.</td>
</tr>
<tr>
<td>CSAD Frýdek Místek a.s.</td>
<td>Dopravní podnik města Pardubic a.s.</td>
</tr>
<tr>
<td>CSAD Havířov a.s.</td>
<td>Dopravní podnik Teplice, s.r.o.</td>
</tr>
<tr>
<td>CSAD Jablonec nad Nisou a.s.</td>
<td>Dopravní podnik Ústeckého kraje, a.s.</td>
</tr>
<tr>
<td>CSAD Jindřichův Hradec, a.s.</td>
<td>ICOM transport a.s.</td>
</tr>
<tr>
<td>CSAD Karviná a.s.</td>
<td>Koordinátor ODIS s.r.o.</td>
</tr>
<tr>
<td>CSAD Liberec, a.s.</td>
<td>Ligneta autobusy s.r.o.</td>
</tr>
<tr>
<td>CSAD MHD Kladno a.s.</td>
<td>Městská autobusová doprava Kolin, s.r.o.</td>
</tr>
<tr>
<td>CSAD POLKOST, spol. s r.o.</td>
<td>Městský dopravní podnik, Opava a.s.</td>
</tr>
<tr>
<td>CSAD Semily, a.s.</td>
<td>Okresní autobusová doprava Kolin, s.r.o.</td>
</tr>
<tr>
<td>CSAP s.r.o.</td>
<td>OSNADO spol. s r.o.</td>
</tr>
<tr>
<td>CSAD Slaný a.s.</td>
<td>Plzeňské městské dopravní podniky, a.s.</td>
</tr>
<tr>
<td>Dopravní podnik města Hradce Králové, s.r.o.</td>
<td>PROBO TRANS BEROUN, spol. s r.o.</td>
</tr>
<tr>
<td>Dopravní podnik města Pardubic a.s.</td>
<td>TRADO BUS, s.r.o.</td>
</tr>
<tr>
<td>Dopravní podnik Teplice, s.r.o.</td>
<td>TRADO MAD, s.r.o.</td>
</tr>
<tr>
<td>Dopravní podnik Ústeckého kraje, a.s.</td>
<td>TRANSCENTRUM bus s.r.o.</td>
</tr>
<tr>
<td>ICOM transport a.s.</td>
<td>TQM - holding s.r.o.</td>
</tr>
<tr>
<td>Koordinátor ODIS s.r.o.</td>
<td>Denmark</td>
</tr>
<tr>
<td>Ligneta autobusy s.r.o.</td>
<td>1 fully-operating e-money institution</td>
</tr>
<tr>
<td>Městská autobusová doprava Kolin, s.r.o.</td>
<td>Rejsekort A/S</td>
</tr>
<tr>
<td>Městský dopravní podnik, Opava a.s.</td>
<td>Countrywide electronic ticket system for travel payment</td>
</tr>
<tr>
<td>Okresní autobusová doprava Kolin, s.r.o.</td>
<td>Italy</td>
</tr>
<tr>
<td>OSNADO spol. s r.o.</td>
<td>3 fully-operating e-money institution</td>
</tr>
<tr>
<td>Plzeňské městské dopravní podniky, a.s.</td>
<td>Cartalis Istituto di moneta elettronica Spa.</td>
</tr>
</tbody>
</table>
Mobilmat Istituto di moneta elettronica Spa  
Istituto di Moneta Elettronica Europeo (IMEL.EU) Spa.  

<table>
<thead>
<tr>
<th>The Netherlands</th>
<th>1 waived e-money institution</th>
<th>Operating under the waiver</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inter.Egi</td>
<td>NCS mobile payment Bank GmbH</td>
<td>Fully operating e-money institutions</td>
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<td>Allianz Arena Payment GmbH</td>
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<td>Esprit Card Services GmbH</td>
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<td>Media-Saturn Verwaltung Deutschland GmbH</td>
<td>Operating under the waiver</td>
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<td>SFM Payment GmbH</td>
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<table>
<thead>
<tr>
<th>Germany</th>
<th>1 fully-operating e-money Institution</th>
<th>4 waived e-money Institutions</th>
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<tbody>
<tr>
<td></td>
<td>NCS mobile payment Bank GmbH</td>
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<thead>
<tr>
<th>Finland</th>
<th>1 waived e-money institution (defined as a ‘limited credit institution’)</th>
<th>According to national legislation, limited credit institutions do not fulfil the criteria of credit institutions and hence are not issued with a credit institution licence. Limited credit institutions are defined (National Credit Institutions Act-121/2007) in a manner which brings them within the scope of the waivers established by Article 8 of Directive 2000/46</th>
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<td>Kiinteistö Oy Ideapark</td>
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<th>Slovenia</th>
<th>2 fully-operating e-money institutions</th>
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<td>Activa</td>
<td></td>
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<td>Paysafecard</td>
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</table>
2. Evolution of e-money transactions in the euro area

Chart 1. Number and value of total e-money transactions in the euro area, in millions.

Source: ECB, Payment Systems Statistics
Annual frequency, latest data from 2006

Chart 2. Evolution of e-money transactions in the euro area (by number and value) as a percentage of all transactions.

Source: ECB, Payment Systems Statistics
Annual frequency, latest data from 2006
Chart 3. Use of payment instruments in the EU25 by country (chart for 2006)\(^9\)

\(^9\) Chart for the Czech Republic relate to 2004.
Chart 4. Number of cashless payment transactions per type of instrument, *as a percentage of total* (2006 chart)

Source: ECB, Payment Systems Statistics

Chart 5. Number of cashless payment transactions per type of instrument (*in billions of transactions*, 2006 chart).

Source: ECB, Payment Systems Statistics
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5 “Legal and institutional aspects of the currency changeover following the restoration of the independence of the Baltic States” by K. Drēviņa, K. Laurinavičius and A. Tupits, July 2007.

