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Regulating payment services and electronic money: A comparative regulatory approach with a specific focus on Turkish legislation



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ABSTRACT

Keywords: E-Money Payment services Regulation EU Turkey This paper aims to provide a comparative overview and evaluation of various legal frameworks for electronic money and online payment matters by mainly evaluating and comparing U.S., EU and Turkish Law, occasionally making a comparative analysis in terms of conformity as to how EU countries assess or accept European Commission ("the Commission") regulations. By realizing a comparative study, this paper analyses whether the world, especially the EU is on the right path and moving forward while trying to recover ambiguities and faults in EC Directives. This paper also evaluates new regulations in Turkey in both general and comprehensive aspects, and reveals the importance of small differences in the Law compared to the EC Directives and how these do affect Turkey and can make them better.

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1. Introduction

Electronic payments or payment services have existed for a very long time. With first universal payment card, IDC's ("Diners Club International") Diners Club Card in 1950, 1 electronic payments emerged and have since then evolved into the now pervasive electronic money. The phenomenon of electronic money was first officially investigated by the European Central Bank in 1993 and was published in its report in 1994. 2 However, electronic money at that time only included

prepaid cards.³ The European Central Bank's 1994 report focused its analysis on the multi-purpose prepaid card, which might as well be called "electronic purse", defined as "a plastic card which contains real purchasing power, for which the customer has paid in advance".⁴ During that time, Europe tried to implement a regulation on electronic payments, and the United States focused on this issue quite a few times.⁵

To understand electronic money, Juho Heikkilä and Markku Laukka from Helsinki University of Technology, in the framework of their research on electronic money, compared electronic money to physical money and proposed a few criteria to

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¹ The History of Electronic Payments (Part 1) at http://blog.e-money.com/the-history-of-electronic-payments-part-1/, accessed on September 28, 2014.

² European Central Bank, Report on Electronic Money, 1988, 1.

³ Id.

⁴ N. Janson, 'The Development of Electronic Money: Toward the privatization of money issue ?' at http://www.arraydev.com/commerce/jibc/0406-04.asp.

⁵ See U.S. Department of the Treasury, Toward Electronic Money and Banking: The Role of Government, 1996 or Governor Edward W. Kelley, Jr.'s speech on Developments in electronic money and banking, Texas, 1996 at http://www.federalreserve.gov/boarddocs/speeches/1996/19960618.htm. http://dx.doi.org/10.1016/j.clsr.2015.03.009

establish whether the system amounts to good electronic money. According to these criteria, a good electronic money should be secure, anonymous, portable, two-way, off-line capable, divisible, scalable, reliable, efficient, easily integrated and reusable. Associate Professor Shunsuke Inenaga, Professors Kenichirou Oyama and Hiroto Yasuura from Kyushu University have a technical approach to electronic money, where they describe it under two systems: "note type electronic money system" and "balance type electronic money system". In the former, digital notes are stored in each user's device in electronic form of physical cash. The latter system is a much more lightweight version of the former.

Electronic money has been discussed for many years along with many attempts at giving it a suitable definition. The need to regulate electronic money emerged when technology evolved much further to a point where electronic money was not limited to solely payment cards. Nowadays technology keeps evolving and creating many different payment systems. Another example, amongst other existing systems, is the "near field communication system", where people can make payment just by approaching their electronic devices, mobile wallets, online money transfer, electronic funds transfer etc. The EU welcomed the "electronic money" term with the Directive 2000/46/EC, 10 and has been struggling to provide a single market environment for it ever since. 11 The U.S. acknowledges the term and tries to adapt it as an integrated entity into its acts.

The most difficult task is perhaps to achieve a level playing field and sufficient amount of protection while avoiding hampering technological innovation. The EU had its fair share of failure with the first electronic money directive, Directive 2000/46/EC. Subsequently, the Payment Services Directive regulated many types of services related to payment as well as electronic money and the new electronic money Directive, Directive 2009/110/EC ("E-Money Directive"), paved the way for a much freer market with less restriction and more activities, as well as being more in line with the Payment Services Directive. However, aiming to align the two Directives created confusion as they contradicted each other in several parts. Eventually, the comparison of conformity reports and other impact assessments led to a proposal for a new Payment Services Directive ("Proposal"), which is not a simple amendment but an entirely new Directive repealing the current Payment Services Directive 2007/64/EC.¹² In regulating its

Directives, the EU follows a more 'explain everything in detail and wait and see' approach rather than imposing broad principles or rules which can be interpreted differently and are adaptable to the situation. Although this type of regulation provides easier and more traceable harmonization, it decreases the chance to achieve more technological innovation flow and a freer market.

Following the same path, Turkey has recently adopted "electronic money" regulations based on EC Directives. As the regulations are almost identical to the EC Directives except for minor differences, a Turkish law regarding electronic money and payment services raises the same questions and concerns the Directives raise. While the new Directives paved the way for more companies to invest in electronic money and for more electronic money institutions, Turkey is not a part of European economic integration. This raises another concern, which is whether the same restrictions regarding electronic money institutions in place in the EU will repeat themselves for new electronic money participants, in other words electronic money institutions.

We are examining this widely discussed topic with a regulatory approach, while trying to put forward the negative and positive aspects of the legislation and informing the reader about the current situation and background of the legislative measures taken with respect to electronic money and payment services. In order to achieve our aim, we will first be giving a brief introduction to current EU legislation regarding electronic money and payment services. Following the introduction, we will review the definitions under EU and U.S. legislation by stating their importance in terms of the relevant market. We will be explaining the results of the close interaction between payment services and electronic money in EU regulation, specifically the problems that arise as well as the results of the terminology differences between EU and US regulations. Furthermore, we will be taking a closer look at the situation in Turkey with its country specific regulations by reviewing its close relations to EU regulation for electronic money and services. Finally, after bringing clarification to the situation in the EU, US and Turkey, we will take a final look at the regulation in EU and Turkey with a regulatory approach.

2. An introduction to EU regulation: electronic money and payment services

The EU has two applicable directives directly related to payment services and electronic money. The first one is Directive 2009/110/EC on Electronic Money Institutions and Directive 2007/46/EC (the Payment Services Directive). The Payment Services Directive tries to create a modern framework, harmonization and proper operation of a single market. ¹³

As mentioned above, 2009/110/EC came in later in order to free the market and to allow more electronic money institutions. ¹⁴ It has achieved significant progress in this sense. Firstly, it increased the activities in which the Electronic Money Institutions can engage, shown as one of the major

⁶ J. Heikkilä, M. Laukka, Electronic Money, 2000, at http://www.tml.tkk.fi/Opinnot/Tik-110.501/1999/papers/electronic_money/electronicmoney.html.

⁷ Id.

⁸ Inenaga, S.; Oyama, K.; Yasuura, H., 'Towards modeling stored-value electronic money systems', Institute of Electrical and Electronics Engineers, 2009, 3.

⁹ Inenaga et al., 1.

http://eur-lex.europa.eu/LexUriServ/LexUriServ.do? uri=CELEX:32000L0046:EN:HTML

¹¹ Please see Section 3 and Section 5 of this article.

¹² Proposal for a Directive of the European Parliament and of the Council on Payment Services in the Internal Market and Amending Directives 2002/65/EC, 2013/36/EU and 2009/110/EC and Repealing Directive 2007/64/EC (Proposal for PMD2), accessible at EN.

¹³ Directive 2007/64/EC, Recital 1-3.

¹⁴ See Chapter 2.

reasons why new actors were prevented from entering the market.¹⁵ Also, the initial capital requirement was reduced and rules on liquidity were changed to be more in line with Directive 2007/110/EC. 16 It also brought clearer scope to the definition of "electronic money" by excluding the payment instruments. These allow the electronic money holder to purchase goods or services only in the premises of the electronic money issuer or within a limited network of service providers under direct commercial agreement with a professional issuer, or because they can be used only to acquire a limited range of goods or services. 17 It does not stop there and also excludes some payment instruments explicitly such as store cards, services vouchers, membership cards etc.18 However, one exemption to pay attention to is that instruments which can be used for purchases in stores of listed merchants are not exempted from the scope of this Directive, being designed for a network of service providers which is continuously growing. 19

It is necessary to stress this clause specifically as this raises the question whether some payment instruments, including services vouchers, which are used in stores of listed merchants such as Sodexo or Multipass, will be exempted from the Directive or otherwise be included. Sodexo, Groupe Chèque Déjeuner and Edenred raised this question in their contribution to The European Parliament's Economic and Monetary Affairs Committee public consultation and stated that Sodexo is a "services voucher" and services vouchers must be excluded from the Payment Services Directive and Directive 2009/110/EC.²⁰ They based their claims on several legal points. The first one is Article 3 (g) (v) of the PSD excluding "paper vouchers" from the scope of the Directive. The second is Article 3(k) of the PSD, which exclude services based on instruments that can be used to acquire goods or services only in the premises used by the issuer or under a commercial agreement with the issuer, either within a limited network of service providers or for a limited range of goods or services. The third one is Article 2(iv) of Directive 2009/110/EC, which excludes the monetary value stored on instruments, exempted under Article 3(k) and Recital 5 of the Directive 2009/110/EC regarding the exemptions.21

As there is no clear definition of paper vouchers or its scope under the directives, Article 3(g) (v) of the PSD (Directive 2007/64/EC) is not a strong basis. The regular meal vouchers such as Sodexo or Ticket Restaurant of Edenred are issued after conducting a commercial agreement between the issuer (e.g. Sodexo, Edenred) and the business providing certain goods or services such as meals, drinks, grocery, etc. PSD explicitly states in Article 3(k) that services based on instruments that can be used to acquire goods or services only in the premises used by the issuer or under a commercial agreement with the

issuer either within a limited network of service providers or for a limited range of goods or services are excluded. The uncertainty in this Article is whether the goods or services subject to these meal vouchers are considered as "limited range of goods or services". The range of this limit is not identified in the PSD. As to the range of the limit, the Commission merely states that the range of the limit should be identified on a case by case basis.²² Therefore, if the goods or services subject to meal vouchers are considered "within this limited range", they will be excluded from the PSD as they are issued as a result of a commercial agreement between the issuer and the business.

On the other hand, Recital 5 of the Directive 2009/110/EC brings an explanation as to the scope of the limits by also specifically including meal vouchers to the exemption as well as other instruments. Recital 5 states that an instrument should be considered to be used within such a limited network if it can be used only for the purchase of goods and services in a specific store or chain of stores, or for a limited range of goods or services, regardless of the geographical location of the point of sale. The recital adds that such instruments could include store cards, petrol cards, membership cards, public transport cards, meal vouchers or vouchers for services.

However, the recital also states that where such a specificpurpose instrument develops into a general-purpose instrument, the exemption from the scope of this Directive should no longer apply and instruments which can be used for purchases in stores of listed merchants, should not be exempted from the scope of the Directive 2009/110/EC as such instruments are typically designed for a continuously growing network of service providers. Recital 5 of the Directive 2009/ 110/EC offers a much clearer explanation by adding specific examples and a detailed structure. It also expresses when this limit is breached. The first situation is where the "specificpurpose instrument" becomes a "general-purpose instrument". The instruments mentioned in Recital 5 are identified as specific-purpose instruments, but the Directive does not explicitly mention what a general-purpose instrument is. The Directive states that:

Instruments which can be used for purchases in stores of listed merchants should not be exempted from the scope of this Directive as such instruments are typically designed for a network of service providers which is continuously growing.

However the term's continuous growth and its saturation point are debatable and the Directive does not explicitly state whether this situation amounts to a specific-purpose instrument becoming a general-purpose or a separate exemption. A general-purpose instrument should be clearly defined in the same way a specific-purpose instrument is defined under the Directive. The Directive should state explicitly and clearly when a specific-purpose instrument becomes a general-purpose one to provide a better understanding. In the Proposal, a specific-purpose instrument becoming general-

¹⁵ See Chapter 2.

A. Murray, Information Technology Law: The law and society (2nd, Oxford University Press, Oxford, UK 2013) 480.

 $^{^{\}rm 17}$ Directive 2009/110/EC, Recital 5.

¹⁸ Id.

¹⁹ Id.

²⁰ European Parliament Committee on Economic And Monetary Affairs - Public Consultation, Contribution by Sodexo, Groupe Chèque Déjeuner and Edenred.

²¹ Id.

²² Question no. 158 of 9.12.2008 regarding Article 3(k), accessible at http://ec.europa.eu/internal_market/payments/docs/framework/transposition/faq_en.pdf.

purpose still remains undefined.²³ However, a new clause was added to the exemption Recital:

The exemption should apply in combination with the obligation of potential payment service providers to notify activities falling within the scope of the definition of a limited network..²⁴

This clause and the relevant provision Article 30(2),²⁵ would remove the problems that have arisen from the unclear definition of "limited network" but the Proposal still avoids a definition for general-purpose instruments or the situation, where a specific-purpose instrument becomes a general-purpose one. However, Article 3 brings a very clear and specific negative scope, which provides a sufficient guideline concerning payment services that would fall outside the scope of the Directive. Therefore, another solution to prevent the confusion arising from the "specific-purpose instrument becoming general-purpose" clause is to refer the reader to the negative scope in the relevant paragraph of the Recital instead of offering an unclear response.

The Commission further stated that if there is a doubt about whether a payment system it to be considered within the scope of the foregoing exemption, the decision making body will be the national authority supervising electronic money and payment services. Consequently national authorities are directly competent to evaluate the business models.

While evaluating the scope of the foregoing exemption, a possible problem could be that one of the instruments specifically stated as an example for exclusions under Directive 2009/110/EC (e.g. meal vouchers, store cards) could breach the limit. If one of these instruments becomes a general-purpose instrument or more specifically the network of services of the subject store(s) increases and comes to a point where it continuously grows, the issuers might claim that they are specifically excluded under Recital 5 of the Directive 2009/110/EC despite their situation changes. A possible solution to prevent this problem might be that of removing specific examples from the relevant provisions and letting the national authorities supervising electronic money and payment services evaluate the business model case by case.

Conformity reports show that European countries are much inclined to adopt the new electronic money Directive compared to the old one, as they are at least in partial conformity with the Directive already. The United Kingdom, for instance, has undergone some changes in the structure and minor changes regarding periods, fund limits etc. but these are not at a level to break conformity²⁶ compared to

Germany's position being in partial conformity only in terms of Article 3(1) of the Directive.²⁷ This shows that Directive 2009/110/EC edged as close as any Cyber Law directive could ever reach to achieving the single market.

In terms of conformity, the situation is different for Directive 2007/64/EC (PSD). It appears that the PSD could not achieve the single market aim efficiently, as some countries were not inclined to full conformity, such as Germany and the United Kingdom. Germany showed a significant amount of non-conformity with nine definitions adopted in a non-conforming way, nine provisions adopted in partial conformity, twelve non-identifiable provisions and thirteen provisions that Germany chose not to transpose into its legislation.²⁸ The United Kingdom has no provisions in non-conformity, but several provisions in partial conformity and several provisions that it chose not to transpose.²⁹

3. Electronic money and payment services definitions under different legislation

Definitions of electronic money and payment services are especially important as they determine which payment instruments, institutions or services will be within the scope of the Directive, taking into consideration that these terms are quite new and evolving continuously. How these terms are defined in the context of the specific character of electronic payments and payment services will determine how extensive their market is going to be in the future.

The requirements for the definition of electronic money are mentioned in the Directive 2009/110/EC's preamble. The preamble emphasizes that the definition should cover all types of electronic money, from the ones held on a payment device in the electronic money holder's possession to the ones stored remotely at a server and managed by the electronic money holder through a specific account for electronic money. According to the preamble, the definition should also aim to avoid hampering technological innovation and cover all the electronic money products available in the market as of the day of the legislation, as well as products which could be developed in the future. The legislator, in that aspect, does not have an easy task. Technology develops faster than law and it is not quite possible to predict every possible change related to electronic money.

The Commission itself provides a definition by stating that electronic money is "a digital equivalent of cash, stored on an

 $^{^{23}}$ Proposal for PSD2, Recital 12.

²⁴ Id.

²⁵ "Member States shall require that, before taking up an activity referred to in Article 3(k) for which the volume of payment transactions calculated in accordance with Article 27(1) (a) exceeds the threshold referred to therein, service providers notify their intention to the competent authorities and submit a request for recognition as a limited network."

²⁶ For more detail, see Conformity Assessment of Directive 2009/ 110/EC UNITED KINGDOM at http://ec.europa.eu/internal_ market/payments/docs/emoney/1309-study/united-kingdom_en. pdf.

²⁷ Conformity Assessment of Directive 2009/110/EC GERMANY at http://ec.europa.eu/internal_market/payments/docs/emoney/1309-study/germany_en.pdf.

²⁸ Conformity Assessment of Directive 2007/64/EC GERMANY at http://ec.europa.eu/internal_market/payments/docs/framework/transposition/germany_en.pdf.

²⁹ Conformity Assessment of Directive 2007/64/EC UNITED KINGDOM at http://ec.europa.eu/internal_market/payments/docs/framework/transposition/united_kingdom_en.pdf.

³⁰ Directive (EC) 2009/110/EC on the taking up, pursuit and prudential supervision of the business of electronic money institutions amending Directives 2005/60/EC and 2006/48/EC and repealing Directive 2000/46/EC [2009] OJ L267/7.

electronic device or remotely at a server."³¹ Article 2/2 of the Directive 2009/110/EC defines electronic money as:

electronically, including magnetically, stored monetary value as represented by a claim on the issuer which is issued on receipt of funds for the purpose of making payment transactions as defined under paragraph 5 of Article 4 of the Directive 2007/64/EC, and which is accepted by a natural or legal person other than the electronic money issuer.³²

Directive 2009/110/EC also excludes certain electronic instruments or values. It is important to highlight these exceptions, as they determine the applicability of the electronic money regulation to certain payment systems. Firstly, Directive 2009/110/EC is not applicable to:

specific pre-paid instruments, designed to address precise needs that can be used only in a limited way, because they allow the electronic money holder to purchase goods or services only in the premises of the electronic money issuer or within a limited network of service providers under direct commercial agreement with a professional issuer, or because they can be used only to acquire a limited range of goods or services.

The Directive 2009/110/EC later on gives examples of these instruments as "store cards, petrol cards, membership cards, public transport cards, meal vouchers or vouchers for services".33 Loyalty cards can also be included to the foregoing exception. Directive 2009/110/EC also excludes monetary values that are used to purchase digital goods or services where, by virtue of the nature of the good or service, the operator adds intrinsic value to it, e.g. in the form of access, search or distribution facilities, provided that the good or service in question can be used only through a digital device, and provided that the telecommunication, digital or information technology operator does not act only as an intermediary between the payment service user and the supplier of the goods and services.³⁴ Certainly, this exemption will be evaluated based on the properties of the subject value. However, to give a more common example, mobile apps, ringtones and games are excluded from the scope of the Directive 2009/ 110/EC. Those more hybrid electronic transactions or services still remain unclear e.g. vouchers and ticketing services of mobile operators.35

In order to provide the reader with more country specific examples, we would like to note that the Electronic Money

Regulations of 2011 in the United Kingdom defines electronic money as electronically (including magnetically) stored monetary value. This is represented by a claim on the electronic money issuer which is issued on receipt of funds for the purpose of making payment transactions. This in turn is accepted by a person other than the electronic money issuer and is not excluded by regulation 3.36 The definition has its roots in Directive 2009/110/EC as well as its exemptions. Electronic Money Regulations of 2011 of the United Kingdom exclude monetary value stored on instruments that can be used to acquire goods or services only in or on the electronic money issuer's premises or those made under a commercial agreement with the electronic money issuer, either within a limited network of service providers or for a limited range of goods or services. Electronic Money Regulations of 2011 of the United Kingdom also exclude monetary value that is used to make payment transactions executed by means of any telecommunication, digital or IT device, where the goods or services purchased are delivered to, are to be used through a telecommunication, digital or IT device, provided that the telecommunication, digital or IT operator does not act only as an intermediary.³⁷ In short, this means electronic money which can be used for a limited network of service providers or for a limited range of goods or services and monetary values i.e. goods or services which can only be used directly by the electronic device, without the operator acting as an intermediary such as becoming a reseller. United Kingdom's most used prepaid card model "Oyster" is exempted from the regulation as it is only used for payments to its issuer and has a limited use.

France,³⁸ Germany,³⁹ Spain⁴⁰ and Italy⁴¹ literally transposed the "electronic money" definition given under Article 2/2 of the Directive 2009/110/EC. As it appears, Europe follows Directive 2009/110/EC in defining electronic money. Countries outside Europe, such as Turkey, also have similar approaches. The definition of electronic money under Turkish law is almost identical to the definition adopted by the Directive 2009/110/EC. Electronic money is defined under Turkish Law as:

monetary value issued on receipt of funds, stored electronically, used for the purpose of making payment transactions described in this Law and accepted as a payment instrument by natural and legal persons other than the electronic money issuer.

In the United States, in 2000, the National Conference of Commissioners on Uniform State Laws ("NCCUSL") developed the Uniform Money Services Act ("UMSA") aiming to effectively regulate money service businesses.⁴² Under the draft UMSA, electronic money is defined as:

³¹ European Commission, 'E-money' (European Commission Official Website 2014) http://ec.europa.eu/internal_market/payments/emoney/ accessed September 20, 2014.

³² Directive (EC) 2009/110/EC [2009] OJ L267/7, Article 2/2.

³³ Id.

³⁴ Id.

³⁵ European Commission Impact Assessment with Proposal for a directive of the European parliament and of the Council on payment services in the internal market and amending Directives 2002/65/EC, 2013/36/UE and 2009/110/EC and repealing Directive 2007/64/EC and Proposal for a Regulation of the European Parliament and of the Council on interchange fees for card-based payment transactions, Brussels, 24.7.2013, SWD(2013) 288 final, p. 142

 $^{^{36}}$ The Electronic Money Regulations 2011 s 2(1) (16).

 $^{^{37}}$ The Electronic Money Regulations 2011 s 3.

³⁸ Conformity Assessment of Directive 2009/110/EC FRANCE.

³⁹ Conformity Assessment of Directive 2009/110/EC GERMANY.

⁴⁰ Conformity Assessment of Directive 2009/110/EC SPAIN.

⁴¹ Conformity Assessment of Directive 2009/110/EC ITALY.

⁴² D. Bryans, 'Bitcoin and Money Laundering: Mining for an Effective Solution' [2014] Indiana Law Journal 441, 464.

money or a money substitute that is transformed into information stored on a computer chip or a personal computer so that it can be transferred over information systems such as the Internet.⁴³

Despite the fact that the term "electronic money" is not used under U.S. law in general, several federal state laws have definitions of electronic money such as "stored value" defined as

monetary value representing a claim against the issuer that is stored on an electronic or digital medium and evidenced by an electronic or digital record, and that is intended and accepted for use as a means of redemption for money or monetary value or payment for goods or services

in the California Financial Code. 44 This term is relatively close to the definition of electronic money under the Directive 2009/110/EG.

Unlike its approach for the electronic money definition, where it defined electronic money meeting certain requirements, the Commission followed a different one, where it chose to identify specific services as payment services instead of adopting a certain definition. "Payment Services" are defined in the Directive 2007/64/EC⁴⁵ simply as "any business activity listed in the Annex". Each of the activities listed under Annex of Directive 2007/64/EC are covering various payment service types. However, in case new technologies create new business models resulting in different type of payment services in the future, this approach will force a step-by-step extension of the legislation in order to cover each and every occurrence of the newly emerged payment services.

The *Transposition Study Report* of the Tipik Communication Agency⁴⁸ shows that most EU Member States properly transposed the definitions provided by Directive 2007/64/EC and followed the same approach.⁴⁹

Payment services and electronic money are closely intersected in the Directives. In fact, electronic money is just one of the mediums used within payment services. As the E-Money Directive itself states, the definition of electronic money should cover all situations where the payment service provider issues a pre-paid stored value in exchange for funds, which can be used for payment purposes because it is accepted by third persons as a payment. The Directive further expresses under Recital 9 that it needs to be interpreted in conjunction with Directive 2007/64/EC on payment services. The Payment Services Directive, on the other hand, explicitly puts "electronic money" under definition of "funds". This intersection, however, is not as smooth as expected as they contradict one another in some parts, causing confusion.

Payment services are defined as "services enabling cash to be placed on a payment account as well as all the operations required for operating a payment account."52 Christine Riefa, Achim Tiffe, Udo Reifner and Helena Klinger from iff (institut für finanzdienstleistungen), Patrice Muller, Miriam Sinn, Iris Mantovani and Shaan Devnani from London Economics, Krzysztof Korus from Prudentiz and Hugo Godschalk from PaySys discuss in their "Study on the Impact of Directive 2007/64/ EC on Payment Services in the Internal Market" the fact that a payment account for electronic money, by that definition, should be treated in the same manner as any other payment account. However, Directive 2009/110/EC treats a payment account as a tool for storing electronic money and not as a tool for handling payment transactions, which results in uncertainty about the status of a payment account for electronic money under the PSD.53 The proposal addresses this issue by giving a definition for a payment account, which is "an account held in the name of one or more payment service users which is used for the execution of payment transactions."54 The definition is clear. However, the payment account is treated herein as a tool for executing payment transactions. The uncertainty, therefore, still persists. However, the Commission expresses that:

the late transposition by many Member States of the EMD has not allowed gaining sufficient experience with this Directive to evaluate it together with the Payment Service Directive and consider possible synergies in the review. A review of Directive 2009/110/EC is foreseen to take place in 2014. 55

As the "payment account" is clearly defined in the Proposal. It is now electronic money regulation's turn, which may

⁴³ Uniform Money Services Act, drafted by National Conference Of Commissioners On Uniform State Laws, accessible at http://ssl.csg.org/terrorism/umsa2001final.pdf.

⁴⁴ California Financial Code 2013 s 2003(1) (v).

⁴⁵ http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L: 2007:319:0001:0036:EN:PDF.

⁴⁶ Directive 2007/64/EC Article 4(3).

 $^{^{\}rm 47}$ "1. Services enabling cash to be placed on a payment account as well as all the operations required for operating a payment account. 2. Services enabling cash withdrawals from a payment as well as all the operations required for operating a payment account. 3. Execution of payment transactions, including transfers of funds on a payment account with the user's payment service provider or with another payment service provider: -Execution of direct debits, including one-off direct debits, -Execution of payment transactions through a payment card or a similar device, - Execution of credit transfers, including standing orders. 4. Execution of payment transactions where the funds are covered by a credit line for a payment service user: - execution of direct debits, including one-off direct debits, - execution of payment transactions through a payment card or a similar device, execution of credit transfers, including standing orders. 5. Issuing and/or acquiring of payment instruments. 6. Money remittance. 7. Execution of payment transactions where the consent of the payer to execute a payment transaction is given by means of any telecommunication, digital or IT device and the payment is made to the telecommunication, IT system or network operator, acting only as an intermediary between the payment service user and the supplier of the goods and services."

⁴⁸ http://www.tipik.eu/.

⁴⁹ Tipik Communication Agency, Directive 2007/64/EC General report on the transposition by the Member States, 2011.

⁵⁰ Directive 2009/110/EC, Recital 7.

⁵¹ Directive 2007/64/EC, Art. 15.

 $^{^{52}}$ Directive 2007/64/EC, Annex.

⁵³ Riefa et al., 95.

⁵⁴ Proposal for PSD2, Art. 4(16).

⁵⁵ Proposal for PSD2, 3.

address this issue with a new Electronic Money Directive or amendment of the current EMD (2009/110/EC).

The aforementioned scholars also claim that the Directive does not address the issue of whether executing payment transactions via payment instruments other than a "payment card or similar device" is covered as an issuing payment instrument or whether it is considered a transaction under payment services, as defined in points 3 and 4 of the Annex of the PSD, or as a payment service defined as money remittance. Moreover, it does not clarify the status of transactions initiated by instruments constituting only distance banking.56 The proposal addresses this issue through including a new payment service clause in the Annex, which brings third party service providers to offer online banking based payment initiation services and account information services under the scope of the PSD.⁵⁷ There is much more criticism regarding the Payment Services Directive worth looking at but, eventually, it is possible to conclude that Directives 2007/64/EC and 2009/ 110/EC could not achieve the proper operation of a single market as was ultimately the intention by harmonizing both Directives. Although many issues concerning definitions have been addressed in the Proposal, as the market rapidly expands and new technologies emerge, only practice will demonstrate whether the Proposal will be successful. Moreover, for harmonization issues to be completely addressed, a new or amended Electronic Money Directive would be needed to provide coherence with the Proposal.

In the U.S., there is no "payment service" definition given under any regulation. However, the U.S. Code of the Federal Regulations 1010.100 defines "money services business" ("MSB") as

a person wherever located doing business, whether or not on a regular basis or as an organized or licensed business concern, wholly or in substantial part within the United States, in one or more of the capacities listed in paragraphs (ff)(1) through (ff)(7) of this section" further adding that "this includes but is not limited to maintenance of any agent, agency, branch, or office within the United States.

The U.S. follows the same approach that the EC followed in defining payment service provider and specifically states the activities that a MSB can operate. The Financial Crimes Enforcement Network (FinCEN) of the United States Department of the Treasury defines money services businesses as any person doing business, whether or not on a regular basis or as an organized business concern, in one or more of the following capacities: (1) currency dealer or exchanger, (2) check casher, (3) issuer of traveler's checks, money orders or stored value, (4) seller or redeemer of traveler's checks, money orders or stored value, (5) money transmitter and (6) U.S. Postal Service. Postal Service.

The U.S. and The EU have differences in electronic money and payment services definitions. Harmonization of these

definitions between the U.S. and EU Member States may not seem important at first. However, it is important, as the nature of these payment technologies does not have country frontiers. For entities or systems with no frontiers, the world usually uses the same terms and definitions everywhere to achieve a freer flow between them. Technology terms and definitions of Internet, network, communication etc. and financial terms such as credit cards, debit cards, stock market are identical or very similar around the world. Although it can be said that this goal is achieved around Europe, unfortunately, one cannot say it is completely achieved in the U.S. While adopting the term "stored-value" instead of "electronic money" may seem like an unimportant small detail, this is not the case. The "Stored-value card" and "prepaid card" are defined as different type of cards in the U.S. 60 Moreover, the "Stored-value" term is used both for the value in prepaid cards and stored-value cards, 61 which eventually leads to confusion as several sources count prepaid cards as a stored value card such as prepaid phone cards or gift cards. 62 This ambiguity in terms might confuse any new actor in the U.S., especially when many prepaid cards are not considered to be electronic money as they are excluded by European Law. Moreover, a U.S. company conducting its business internationally (e.g. Amazon, Apple) could hesitate if it were to issue a prepaid card to be used internationally.

4. The Turkish approach for regulating electronic money and payment services

Turkey has regulated electronic money for the first time with Law No. 6493 on Payment and Security Settlement Systems, Payment Services and Electronic Money Institutions (Law No. 6493), which was published in Official Gazette on 27 June 2013. As the provisional Article 2 of this Law is regulating the active system operators, institutions already providing payment services and institutions already issuing electronic money are obliged to adapt their systems to comply with this Law. This must be conducted within a period of one year following the publication of the related regulations by the Bank and the

⁵⁶ Id, 100.

⁵⁷ Proposal for PSD2, 12.

⁵⁸ 31 CFR 1010.100 ff (1)-(8).

⁵⁹ Accessible at http://www.fincen.gov/financial_institutions/msb/definitions/msb.html.

⁶⁰ Federal Reserve Board, A Summary of the Roundtable Discussion on Stored-Value Cards and Other Prepaid Products, accessible at http://www.federalreserve.gov/paymentsystems/storedvalue/ and The Federal Financial Institution Examination Council (FFIEC), 'Prepaid (Stored Value) Cards', IT Examination Handbook Infobase, accessible at .

⁶¹ See The Federal Financial Institution Examination Council (FFIEC), 'Prepaid (Stored Value) Cards', IT Examination Handbook Infobase, accessible at .

⁶² See Federal Reserve Bank of New York, 'Stored Value Cards: An Alternative for the Unbanked?', accessible at http://www.ny.frb.org/regional/stored_value_cards.html or Federal Reserve Bank of Kansas City, 'The Many Uses of Stored-Value Cards', accessible at https://www.kansascityfed.org/PUBLICAT/PSR/Newsletters/StoredValueArticle.pdf.

Banking Regulation and Supervision Agency ("BRSA") under the scope of this Law and to apply to the BRSA to obtain the necessary permissions depending on their type of institution determined by the definition they fall under within the scope of this law.

The regulation on Payment Services and Issuance of Electronic Money, Payment Institutions and Electronic Money Institutions came into force exactly one year later on 27 June 27 2014, which suggests that another year later on 27 June 2015 Turkey will be completely adapted to the new system.

Law No. 6493 entails provisions related to electronic money and payment services at the same time contrary to the Commission's approach, which separated payment services and electronic money related provisions into two separated Directives. We have given the definition of "electronic money" and "payment services" under Turkish law above. Below we give a detailed examination of the scope of the Law.

4.1. Payment services

"Payment services" are defined under the Law numerus clausus. The payment services list under this Law is almost identical to the one within Directive 2007/64/EC except for the "services for mediating invoice payments", which was added to the Turkish law as another type of payment service. These payment services refer to some companies, which pay bills or deposit money on behalf of people in return of a commission fee. This service gives people the opportunity to make payments without going into long queues and traveling long distances to pay their bills or keep track of their debts.

These transactions, however, are greatly open to fraud as the service providers can take the payment and the commission, and then disappear. Turkey has had and continues to have its share of such fraudulent acts.⁶⁴ Therefore, special regulation was needed for services for mediating invoice payments. This particular addition to the Law was still criticized in one of the dissenting opinions on the preamble of the Law No. 6493, because the way it was regulated was not sufficiently clear to be able to prevent anti-money laundering.⁶⁵ It appears as though the dissenting opinion made a valid point as money laundering remains an issue as mentioned earlier. However, Article 5/6 of the Regulation on Payment and Security Settlement Systems, Payment Services and Electronic Money Institutions provides a condition: this requires that the institution conducting the service for mediating invoice payments to draft a contract with the invoice issuing institutions to collect money on their behalf. As it has just been a few months since the Regulation came into force, only time will

tell if this small but significant addition regarding payment service providers mediating invoice payments will heal the seemingly persistent problems.

Payment services being defined numerus clausus might seem like a good approach. However, this might pose the same risks Directive 2007/64/EC poses in terms of applicability. Payment services evolved consistent with the development of technology and new payment systems might possibly evolve in the future. Therefore, a numerus clausus approach might cause a possible new payment system to be unregulated. Turkey has experienced unregulated payment systems to flow freely, which caused substantial amounts of monetary fraud as mentioned above. The Law might have chosen this problem, as the regulation came in one year after the Law and several invoice payment service frauds had already occurred, moreover there is still one year left for payment service providers to take the necessary permits or licenses under this Law. A small amendment or new regulations might require some time to be adapted to, and this happening does not seem very far ahead considering the evolution of technology, emerging currencies and electronic money forms.

In fact, Article 12 of the Law No. 6493 gives a very important authority to Banking Regulation and Supervision Board, which is to determine the scope of transactions and services outside the scope of the Law. 66 By this provision, it is possible for the Board to catch developments regarding payment services rapidly and involve them into the scope of payment services under Law No. 6493 with a simple Board decision.

4.2. Electronic money

The definition of electronic money under this Law and the fact that the definition takes after Directive 2009/110/EC are mentioned above. The EC Directive on Electronic Money was implemented into Turkish law, even in conformity.

Taking from the definition, one can say that electronic money is all the monetary value that is (i) issued at par value on receipt of funds, (ii) stored electronically, (iii) used for the purpose of making payments, (iv) accepted as a payment instrument by natural and legal persons other than the electronic money issuer. This is a comprehensive definition, very similar to the definition under 2009/110/EC, which aims to be wide enough to avoid hampering technological innovation and to cover not only all the electronic money products available today in the market, but also those products which could be developed in the future.⁶⁷ However, there is one significant difference compared to Directive 2009/110/EC: this definition does not explicitly include monetary values stored "magnetically", while it does not exclude them either. Value in smart cards is one example of magnetically stored value as smart cards contain a magnetic stripe encoded with a small amount of fixed data to identify the store. 68 An example of a smart card is the Octopus card used in Hong Kong, which is a

⁶³ See 2.1 and 2.2.

⁶⁴ Several examples of news pages at 'Invoice Payment Fraud in Karsiyaka' at http://www.milliyet.com.tr/karsiyaka-da-fatura-odeme-dolandiriciligi-izmir-yerelhaber-182961/, 'Invoice Payment Fraud One More Time' at http://www.ekonomigazete.com/haberdetay/2039-yine-fatura-odeme-merkezi-doland%C4%B1r%C4%B1c%C4%B1l%C4%B1g%C4%B1.html, 'Hit worth millions in Buca' at http://www.milliyet.com.tr/buca-da-fatura-odeme-merkezinde/gundem/detay/1865486/default.htm.

⁶⁵ Preamble of Law No. 6493 on Law on Payment and Security Settlement Systems, Payment Services and Electronic Money Institutions, Dissenting Opinion.

⁶⁶ Law No. 6493, Article 12(2) (l).

 $^{^{67}}$ Directive 2009/110/EC, Recital 8.

⁶⁸ H. Henderson, Encyclopedia of Computer Science and Technology (Revised Edition, Infobase Publishing, New York 2009) 435, 436.

rechargeable contactless smart card used in an electronic payment system, which started as a fare collection system, and then became an electronic cash system used in convenience stores, supermarkets, restaurants and parking garages. An example of a smart card used in Turkey is the Sodexo Restaurant Pass, which is used to purchase food from contracted restaurants, where the card is interacted with the terminal at the store and the payment is completed when the user enters his password.

Electronic money is a very new concept for Turkey and is thus very newly regulated. The only electronic money regulated until now was under the Law No. 5464 on Banking Cards and Credit Cards. Despite the monetary values and the fact that banking and credit cards are considered electronic money; no definition was made in that respect. While Turkish Law might have a definition for electronic money now, Turkey is still not familiar with electronic monetary practices. The Law does not clearly define monetary values, designed to address precise needs that can be used only in a limited way, within a limited network of service providers under direct commercial agreement with a professional issuer, or to acquire a limited range of goods or services.

This exclusion provision and the definition of electronic money were directly taken from Directive 2009/110/EC. But even this Directive cannot clarify some services, such as PayPal. For instance, while Deutsche Bank clearly calls PayPal software-based electronic money, stating that it is a form of electronic money stored on an account in the Internet, Andrej Savin, Associate Professor at Copenhagen Business School claims that PayPal does not fall under the provisions of the E-Money Directive. Therefore, the outcome of a possible conflict or an official explanation may be needed to clarify this matter.

For instance, as to Bitcoin, the BRSA of Turkey declared that Bitcoin is not within the scope of Law No. 6493. This declaration does not present detailed information but warns Bitcoin users and moves it out of the scope of Law No. 6493. Still, Turkey uses Bitcoin based on a Turkish Lira-Bitcoin exchange, called BTCTurk, and leftover foreign currency can be exchanged at the Istanbul Ataturk Airport for bitcoins through an ATM-like machine. 74

5. Evaluation of the regulation of electronic money and payment services

Cyberspace regulations around the world mainly aim to regulate laws on a certainty basis, imposing very specific and detailed provisions. The Commission achieves harmonization by following such a method. However, not everyone considers this approach to be the right solution. Perhaps one of the most systematic evaluations of cyberspace regulation is made by Chris Reed, Professor of Electronic Commerce Law at the Centre for Commercial Law Studies at Queen Mary University of London, who emphasizes on very interesting points in his study "How to Make Bad Law: Lessons from Cyberspace." After stating that the disadvantages of such certainty are less obvious, but more dangerous, ⁷⁶ he claims that this tick-box approach in cyberspace regulations weakens the normative effect of the law⁷⁷ as it creates several important problems.

One of the problems he states is a detailed law imposing overly detailed requirements resulting in complexity, which might eventually lead to ignorance of the law by avoiding that activity. The former E-Money Directive might be shown as an example of such result as it imposed detailed requirements for electronic money institutions. Article 1(5) of Directive 2000/46/EC limited business activities of electronic money institutions to: (i) issuing of electronic money (ii) the provision of closely related financial and non-financial services such as the administering of electronic money by the performance of operational and other ancillary functions related to its issuance, and the issuing and administering of other means of payment but excluding the granting of any form of credit; and (iii) the storing of data on the electronic device on behalf of other undertakings or public institutions. With this provision, unless they were also credit institutions under the Banking Directive, electronic money institutions could not undertake any business activity unrelated to their operation as electronic money institutions, preventing third party businesses from becoming electronic money institutions, unless they are specialized.⁷⁹ Companies avoided investing in such a field, as the research shows that in 2006 there were only nine Electronic Money Institutions in Europe; four in the UK, three in Norway, and one each in Germany and the Netherlands.⁸⁰ Eventually, the Commission admitted that Directive 2000/46/ EC created legal uncertainty regarding its applicability to several business models, which hindered the development of new and innovative services.81

The Commission appears to fix most of these issues by imposing much less restrictions on electronic money

⁶⁹ Wild, Charles; Weinstein, Stuart; MacEwan, Neil; Geach, Neal (2011-04-01). Electronic and Mobile Commerce Law: An Analysis of Trade, Finance, Media and Cybercrime in the Digital Age (p. 286). Independent Publishers Group. Kindle Edition.

⁷⁰ Sodexo Passcard User Manual accessible at http://tr.sodexo.com/trtr/Images/psc_sn_pcardmanuelkullanici_tr_130508_tcm77-40617.pdf.

⁷¹ M. Zähres, Banking & Technology Snapshot - Digital economy and structural change, Deutsche Bank DB Research, 2012, 3.

⁷² A. Savin, EU Internet Law (1st, Edward Elgar, Cheltenham, UK 2013) 229.

⁷³ BRSA Press Release About Bitcoin of November 25, 2013, No: 2013/32, at https://www.bddk.org.tr/websitesi/turkce/Duyurular/Basin_Aciklamalari/12574bitcoin_hk_basin_aciklamasi.pdf.

⁷⁴ Library of Congress, Regulation of Bitcoin in Selected Jurisdictions, http://www.loc.gov/law/help/bitcoin-survey/.

 $^{^{75}}$ C. Reed, 'How to Make Bad Law: Lessons from Cyberspace', The Modern Law Review, Vol. 73, 2010, p. 903-932.

⁷⁶ Reed, 912.

⁷⁷ Id.

⁷⁸ Id.

⁷⁹ Murray, 475.

⁸⁰ Evaluation Of The E-Money Directive (2000/46/EC) Final Report. 4.

⁸¹ Proposal for a Directive Of The European Parliament And Of The Council of on the taking up, pursuit and prudential supervision of the business of electronic money institutions, amending Directives 2005/60/EC and 2006/48/EC and repealing Directive 2000/46/EC, 6.

institutions, bringing much clearer definitions etc. as we explain in detail below. 82 Moreover it has certainly shown its results as the market now is much freer in Europe and there are more electronic money institutions already.83 However, there are other problems Reed states, which might still be there due to contradiction and too frequent amendments.84 Contradiction might arise as a natural result of frequent amendment. Specifically, considering the payment services as part of the Payment Services Directive (2007/64/EC) or providing a detailed definition and exclusions for electronic money as in Directive 2009/110/EC might be quite relevant and applicable for a period of time. However, as soon as new technologies emerge, an amendment will be required to try and fix all the problems and dilemmas created during the application of the current Directives. This might eventually lead to contradiction of the Directive with other Directives, which are very closely related or intersecting, such as Payment Services Directive and the new Electronic Money Directive.

As a matter of fact, two Directives already appear to be contradicting in some parts, which creates confusion as to their applicability and thus Directive 2007/64/EC could not achieve the proper operation of a single market it ultimately aimed for as mentioned above. Eventually, comparison of conformity reports and other impact assessments led to a proposal for a new Payment Services Directive, which is not just a simple amendment but an entirely new Directive repealing the current Payment Services Directive 2007/64/EC. EC. Ec. 86

One of the points that the EC emphasizes in its impact assessment is the inconsistent application of the existing rules across Member States. This is due to many options and often very general criteria of application; in particular, certain exemptions set out in the PSD appear too general or outdated with regard to market developments, which are being interpreted very differently.⁸⁷ The solution it provides, however, is adapting the exemption clause to Directive 2009/110/EC88 in a much stricter manner. However, this is a short term solution. Despite it preventing large networks involving high payment volumes and ranges of products and services, the proposed Directive states that in case such a specific-purpose instrument develops into a general-purpose instrument, the exemption from the scope of this Directive should no longer apply.⁸⁹ Under which conditions this specific payment instrument will turn into a general-purpose instrument is not clear, as citing some instruments to clarify this situation brings more confusion to the matter. The instruments mentioned in Recital 5 are identified as specific-purpose instruments, but the Directive does not explicitly mention what a general purpose instrument is. The Directive states that:

Instruments which can be used for purchases in stores of listed merchants should not be exempted from the scope of this Directive as such instruments are typically designed for a network of service providers which is continuously growing

... but it does not explicitly state whether this situation means a specific-purpose instrument becoming generalpurpose or a separate exemption. For instance, if a petrol card, which is designed specifically to buy fuel for your vehicle starts encompassing other services for your vehicle such as repair, washing etc., will it become a card used for general purposes or will the decision to include some additional merchants agreeing to provide those services, render it similar to a card used for purchases in stores of listed merchants? The Directive thus poses questions rather than providing answers, since it does not just regulate the exemption but also gives examples of specific-purpose instruments. Putting a list of specific-purpose instruments under this exemption as examples is as good as inviting the issuers of these instruments to act more bravely, as they will believe that their service is counted under the exemption specifically. This is especially so since it is not clearly identified when they will be considered as general-purpose instruments. The solution to this might be to remove these examples from the Directive by keeping the exemption clause or by bringing clarity to the matter where a specific-purpose instrument develops into a general purpose instrument.

The Proposal acknowledges that the distinction between payment institutions subject to the PSD and electronic money institutions subject to Directive 2009/110/EC is increasingly blurred as technology and business models converge.90 However, the solution it provides is just to add the newly emerged Internet service providers to the stash. 91 This could be considered a short term solution as technologies keep emerging, which will eventually lead to new business models or actors. As mentioned above, this is another example of specified regulation of cyberspace. The EC also continuing this approach in this proposal means that Europe will most likely witness many amendments or repealed directives and more unregulated actors and eventually face a less competitive market. There might be more appropriate solutions to the current challenge posed by technological developments and new business models, such as defining payment services generally, instead of specifically counting them under annexes. Another solution might be leaving the regulatory authorities of each country in charge to decide on which specific services would be considered as a payment service instead of renewing the list each time with new legislation.

Turkey follows the EU approach for the regulation of electronic money and payment services and shares the same issues the directives have encountered that are stated above. However, the directives are drafted and amended evaluating the current situation in Europe and considering European economy. As Turkey is not a country integrated within the EU, taking over some of the provisions exactly as they stand might not lead to the same result it has in the EU itself.

⁸² See Chapter 4.

⁸³ There were 96 non-bank e-money issuers just in United Kingdom in 2010 as per HM Treasury, 'Laying of regulations to implement the new E-Money Directive'.

⁸⁴ Reed, 913.

⁸⁵ See Chapter 3.

 $^{^{\}rm 86}$ Proposal for PSD2.

⁸⁷ Proposal for PSD2, 7.

⁸⁸ Proposal for PSD2, 10.

⁸⁹ Proposal for PSD2, 16.

⁹⁰ Proposal for PSD2, 2.

⁹¹ Proposal for PSD2, 7.

The EU has an integrated economy and Turkey is independent upon it. The initial capital requirement being reduced to €350.000 within the Directive 2009/110/EC might have contributed to the increased new actors issuing electronic money or payment services to join the market, but in Turkey this amount might still be excessive for small or medium size companies to participate in such activities. Unlike the EU, Turkey regulated the initial capital requirement to two million Turkish Liras, more than double the initial capital requirement Directive 2009/110/EC provided for electronic money institutions other than institutions mediating invoice payments (for which, it is one million Turkish Liras, still more than €350.000). Currently in Turkey, mostly banks or large telecom companies are the only organisations initiating activities concerning electronic money and payment services. Perhaps the most important reason for this is the excessive initial capital requirement. Another reason might be that the Law was only recently enacted in Turkey. Therefore, it would be beneficial for the Turkish regulatory authority BRSA to officially inform the businesses of this regulation, its scope and applicability in clear terms.

6. Conclusion

"Money is a terrible master but an excellent servant" said the famous author, politician, businessman of entertainment and philanthropist P.T. Barnum. With emerging technologies, money serves a man even more with the facility to spend or save it. Electronic money, which grants the opportunity to save every nickel you have and to buy things while you are sitting in the comfort of your own home, can make money a master or a slave. For those who want to manage their money, electronic money is a great way to do so. People who want to be a master electronically saw an opportunity with Directive 2000/46/EC but were pushed back with hard restrictions and ambiguous scope of the Law. Europe then took a step towards welcoming new players in the electronic money business and regulated Directive 2007/64/EC and then 2009/110/EC accordingly. In 2006, there were only nine electronic money institutions in Europe,⁹² now there are 96 non-bank electronic money issuers just in the United Kingdom alone.93

Looking at the substantial increase in electronic money institutions and EU member countries being more in conformity with each new directive concerning cyberspace, the EC seems to be on the right path in many ways to create the single market it aims for regarding electronic payments and

payment services. Despite being scattered throughout the states, the U.S. seems to catch the technology on its own terms and most states appear to accept electronic money issuers. However, the issue regarding the applicability of European cyberspace laws regarding electronic money and new technologies still remains a question. Regulating with broader conditions and definitions might be considered a step towards solving this problem. Looking at the recent developments, the EC still believes that adopting a detailed and specific approach for regulation might be a better choice. However, the EC is still struggling with new technologies and consequently new business models emerging and it keeps providing short term solutions with a wait-and-see approach. The EC might adopt a different approach, such as providing broader definitions and conditions, as judging by the high amount of amendments regarding cyberspace regulation, it is not going smoothly. It has been more than five years since the new E-Money Directive (2009/110/EC) came into force and still the EC has not issued a review since it has not gained "sufficient experience" yet. 94 Therefore, making constant amendments to cover new technologies and business models might not be the best option, as it may take years for the world to adopt the new regulations.

Turkey became an actor in the electronic money business recently, and it is still taking baby steps. Until June 2015, one year after the Regulation came into force, every electronic money institution will have to be licensed or will need permission to operate. Time will tell how the electronic money business will work in Turkey, but especially considering recent positive developments in Europe, Turkey appears to be on the right path in following Europe and regulating electronic money and payment services. Europe has nearly two decades of experience regarding electronic money and payment services regulation and is constantly trying to create a proper framework to provide a level playing field, harmonization and an adequate amount of protection. Turkey should have the same goals as the EU and try to achieve a level playing field with an adequate amount of protection, while welcoming investors and new actors in electronic money and payment services and move forward with the current age of the economy. Therefore, Turkey should invite new players, instead of setting thresholds of a great amount of capital and imposing too many restrictions to the free flow of the market, and take lessons from the flaws of Europe's experience in this matter.

⁹² Evaluation Of The E-Money Directive (2000/46/EC) Final Report. 4.

⁹³ HM Treasury, Laying of regulations to implement the new E-Money Directive, 5.

⁹⁴ Proposal for PSD2, 3.