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THE REGULATION OF ELECTRONIC MONEY INSTITUTIONS IN THE SADC REGION: SOME LESSONS FROM THE EU*

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1 Introduction

The dawn of the computer network and the subsequent introduction of the Internet to the general public have changed the way in which society communicates and uses information. One noticeable benefit is the impact of technology in terms of creating various opportunities for trade and commerce, which include making payments more efficient, safer and quicker. Banking via the Internet has become increasingly popular. This has become an important reason for the introduction and development of a large number of electronic payment systems. With this rapid technological development, electronic money (or "e-money") and electronic devices (such as "digital cash" or the "smart card") now make it easy and convenient to manage and transfer funds without having to carry large sums of cash. Notwithstanding the rapid developments in these payment systems, the attitude adopted by the regulatory industry for many years, as Mann[1] correctly observes, "opposed regulation fearing that regulation would stifle developing business models". The author further acknowledges a possible and necessary shift from this attitude "simply due to the level of uncertainty in the interpretation of existing law".[2]

This uncertainty is evident also in the area of electronic payment systems and poses several regulatory challenges. These include, among others, whether electronic money constitutes money or legal tender, and whether or not issuers of these methods of payment are deposit-taking institutions and therefore subject to the stiff soundness and prudential regulatory frameworks applicable to banks. Furthermore, these developments raise relevant questions regarding whether or not e-money

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1 Mann *Payment Systems* 339-341.

2 Mann *Payment Systems* 339-341.

transactions fit neatly into existing laws regulating contractual relationships, and whether or not the laws regulating monetary policies and the state's monopoly to issue money also apply to e-money. It is also questionable as to whether or not there is a need for a new regulatory framework specifically for these payment systems. It is not disputed, however, that the existing legal frameworks in many jurisdictions did not contemplate the rapid development of e-money when they legislated on related issues such as consumer protection and the legality or validity of financial transactions. As a result, numerous legal frameworks in various jurisdictions still lag behind with regard to regulating this technology. A regulatory "wait-and-see approach" is evident in many countries and continents, including member countries of the South African Development Community (SADC). The European Union (EU) has, however, taken some steps to address issues relating to e-money regulation.

Traditionally, the issuing of money has been (and still remains) the province of the state, with banks controlling the execution of payment transactions under the supervision of the central bank. The question as to whether or not the issuing of e-money should be the responsibility of banking institutions appears repeatedly on the regulatory agenda, in search of conceptual interpretation. The question looks in particular at whether or not the issuing of e-money complies with the functional identification of banks as deposit-taking institutions. The relevance of this conceptualisation is important to determining whether or not e-money should be subject to the supervisory framework applicable to banks.

This article discusses some of the aspects of electronic money regulation by the European Union, so as to determine how developments in the regulation of e-money in the EU may be helpful for the development of a similar framework in the SADC region.

2 A conceptual overview of electronic money

Technological innovations have transformed the way in which concepts such as "money" are defined.[3] Money in the form of coins or notes has been a universally accepted medium of exchange. On the other hand, it has been possible to transfer money electronically for many years. However, one is still left with the following question: what does the term "electronic money" mean? A connection between terms such as "electronic", "cyber", "digital" or "e" (followed by a hyphen) which habitually precede existing financial concepts such as "money", banking" or "cash", has added confusion to the way in which we understand money as a method of payment. It is not surprising that terms such as "electronic banking", "e-cash", "e-money" or "cyber-money" are widely used to explain new mediums of exchange that use electronic devices. While electronic banking involves broader banking services that incorporate the use of computer technology,[4] electronic payment systems represent one element of electronic banking service with added technological features.

As will be indicated in this article, the term "e-money" plays a central role in many international, continental, regional and national legal frameworks that regulate similar types of payment systems. As a result, the definition of this term is important in order to determine its usefulness with regard to constructing a regulatory framework.

"E-money" does not have a universally accepted definition. This is mainly because this is a relatively new concept, and most legal frameworks regulating it are still in their developmental stages. Electronic money has been defined loosely to refer to a variety of retail payment mechanisms that are operated using electronic devices.[5] Basically, the electronic value is acquired and loaded onto an electronic device.

3 Proctor *Legal Aspect* 54.
4 Robertson, Goodall and Power "Internet Payments" 371.
5 Tan *E-payment* 345.

The definition provided by the EU in the E-money Directive 2009/110/EC[6] is adopted for the purpose of this discussion. Article 2(2) of the E-money Directive 2009/110/EC defines "electronic money" as follows:

> electronic money means electronically, including magnetically, stored monetary value as represented by a claim on the issuer; which is issued on receipt of funds; for purposes of making payment transactions … which is accepted by a natural or legal person other than the electronic money issuer.[7]

The important element of this definition is the meaning of "electronic", which arguably distinguishes between e-money and conventional money such as coins and banknotes. This distinction is arguably important as it helps to determine whether the institution that issues e-money must be regulated in terms of the regulatory framework for banks or under a separate regulatory framework for electronic money institutions. The repealed E-money Directive 2000/46/EC defined e-money as a "monetary value represented by a claim on the issuer which is stored on an electronic device".[8] Without specifically defining what the term "electronic" mean, recital 3 of E-money Directive 2000/46/EC described electronic money as an "electronic surrogate for coins and banknotes".[9] Recital 7 of this directive, however, is helpful to understanding the significance of the terms "electronic" used in the E-money Directive 2000/46/EC and the E-money Directive 2009/110/EC). Recital 7 specifically uses this description to introduce a separate prudential supervisory regime for e-money institutions, which differs from the supervisory regimes relating to banks.

The E-money Directive 2009/110/EC also does not define the term "electronic". Like recital 7 of the E-money Directive 2000/46/EC, recital 13 of the E-money Directive 2009/110/EC also distinguished the issuing of e-money under its scope from the deposit-taking function of banks (referred to as "credit institutions") under the

6 E-money Directive 2009/110/EC [2009] *OJEU* L267.
7 Article 2(2) of Payment Services Directive 2007/64/EC [2007] *OJEU* L319 defines "payment transaction" in point five of A 4 as "an act, initiated by the payer or by the payee, of placing, transferring or withdrawing funds irrespective of any underlying obligation between the payer and the payee".
8 Article 1(3)(b) of E-money Directive 2000/46/EC [2000] *OJEC* L275.
9 Recital 3 of E-money Directive 2000/46/EC [2000] *OJEC* L275.

Banking Directive 2006/48/EC.[10] The Recital specifies that the issuance of e-money does not constitute a deposit-taking activity "in view of its specific character as an electronic surrogate for coins and banknotes". The E-money Directive 2009/110/EC has adopted a "technically neutral" (also known as "technology neutral") approach for the definition of e-money in recital 7 of the E-money Directive 2009/110/EC.[11] The main purpose of this approach is to cover all situations where a payment service provider issues a pre-paid stored value in exchange for funds.[12] As discussed below, one of the characteristics of this approach is that the rule regulating technology should be flexible enough to embrace technological changes and market developments.[13] A regulating instrument is therefore not required to define or specify the relevant technology that falls under its scope. The adoption of this approach may, as discussed below, give rise to different interpretations. The question raised may be whether or not a particular technology used for a particular payment system is important to determine whether or not such payment system falls under the regulatory scope of the E-money Directive 2009/110/EC. If a strict technology neutral approach is applied, such determination may create challenges for the regulators of e-money institutions.

3 Different categories of electronic payment systems

The categories of electronic payment systems that can be found in the literature include electronic payment systems as either access (or account-based) products or stored-value (or token-based) products.[14] This classification is technical and therefore not a strict one. An electronic payment system may fall into one or both of these categories.

Account-based products refer to payment systems in terms of which money is represented by numbers in a conventional bank account, and these numbers are

10 Banking Directive 2006/48/EC [2006] *OJEU* L177.
11 Recital 7 of E-money Directive 2009/110/EC [2009] *OJEU* L267.
12 Recital 7 of E-money Directive 2009/110/EC [2009] *OJEU* L267. See also para 6 of Proposal for an E-money Directive 2009/110/EC 2013/0264 COD.
13 Bezzina and Terrab 2005 *CS* 29.
14 Geva 2001 *YIFEL* 259. See also Yang 2005 http://www.lawbridge.org/english/LAW/20055/0821553577455.html

transferred between parties in an electronic manner via computer networks.[15] The underlying principle of these systems is that the instruction to exchange money between bank accounts is maintained by the institution that initiated the payment systems, such as a technology company which has an agreement with the bank to provide payment services.[16] Examples in this category are credit or debit cards, ATMs and Internet banking through which EFT facilities are provided, which essentially facilitate access to money in a bank account.

Token-based products, on the other hand, are devices that allow participants to exchange electronic tokens during the transaction, without relying on a bank account.[17] The system used to effect payment carries the value on itself in the form of a digital coin or token.[18] The equivalent value of traditional money is converted into electronic tokens and transferred into a digital account before it can be spent.[19] It is not clear, however, whether or not access products are covered by the definition adopted by the EU in the E-money Directive 2009/110/EC.

One important classification of token-based e-money products is emphasised in various definitions. E-money products are classified as hardware-based stored-value cards, and software-based electronic cash.[20] The primary difference between the two classifications is not patently clear. This classification plays a vital role in the analysis of the existing e-money market and the rationale for the regulation of e-money under the EU. The hardware-based e-money involves the use of a small plastic card with a small, round gold metal microchip embedded at the back of the card.[21] The card is loaded with a prepaid monetary value stored on the card – hence the term

15 Abrazhevich *Electronic Payment Systems* 24. Examples of this category are access products such as credit and debit card-based systems, electronic cheque payments, electronic funds transfers and electronic funds transfers at point of sale; Tether "Payment Systems" 181.
16 Camp, Sirbu and Tygar "Token and Notational Money".
17 Camp, Sirbu and Tygar "Token and Notational Money". Also see Tether "Payment Systems" 190, who refers to this class of electronic payment system as a "cash-based system".
18 Abrazhevich *Electronic Payment Systems* 27.
19 Brands "Electronic Cash" 50.
20 Cohen 2010 *RIPE* 199; Geva 2001 *YIFEL* 252.
21 Svigas *Smart Card* 17. See also Cohen 2010 *RIPE* 199.

"stored-value card".[22] Typical examples of this category are Visa Cash, Proton and Mondex.[23]

"Software-based e-money" simply refers to electronic devices in which monetary value is stored on a computer server accessed via the Internet.[24] The value resides in an electronic account (called a cyberwallet) on a computer drive.[25] As in the case of a smart card, information stored on this account is stored in the form of digital coins (or tokens) which have a monetary value.[26] Examples of those that have gained popularity in the e-commerce market include CyberCash, NetCheque, First Virtual, PayPal and DigiCash (eCash).[27]

4 Different regulatory and institutional approaches

By way of comparison, there are two different approaches to the regulation of e-money. These approaches are summarised as the "wait-and-see approach" (or "leave it to the market approach") and the "in-advance regulatory approach".[28] A consideration of these approaches provides insight into the possibilities in regulating e-money institutions.

A wait-and-see approach is generally adopted to avoid stiff regulation which could hamper development and the introduction of new technologies.[29] The premise of this approach is not to overreact to the regulation of these technologies, but to maintain expertise in these products and their development, which is likely to occur at a rapid pace, and to allow for careful studies of potential issues.[30] The approach requires regulators to "be cautious and to at least wait for a partially proven business before burdening the business with regulation".[31] It shuns any regulatory intervention that

22 Mills and Peterson 2001 http://iacis.org/iis/2001/mills296.PDF.
23 Sabri 2004 "E-Payments Without Frontiers". The European Central Bank identified 33 hardware and software-based electronic money products that are in circulation worldwide.
24 Claxton 2011 *AJICL* 525.
25 O'Mahogany, Peirce and Tewari *Electronic Payment* 146.
26 Schutzer "Foundations" 189.
27 CEC 2008 http://www.ecu-activities.be/documents/publications/publication/1998_4/commission-proposal.html.
28 Gillespie *et al* "Toward Electronic Money".
29 Mboweni 1999 http://www.bis.org/review/r991013b.pdf.
30 Gillespie *et al* "Toward Electronic Money".
31 Gormez and Capie *Prospects for Electronic Money*.

might erect barriers against entry into the electronic payment industry, which might in turn have the effect of limiting competition.[32]

The weaknesses of this approach are threefold. Firstly, the market entry of these technologies may be slow in the absence of a proper legal framework, which should be implemented to address issues such as consumer protection. Consumers who access these products in the absence of a proper legal framework may face risks such as fraud, theft, and unfair trade practices.[33] They may also have no legal remedies if they are subject to operational errors and the malfunctioning of the systems used to facilitate payments using e-money.[34] Secondly, a legal framework is crucial to guard against possible systematic risks arising from the operation of institutions that provide for these products. Thirdly (and connected to the second point), adopting a legal framework will level the playing field for existing financial institutions and new market entrants that also want to provide these payment systems.

The in-advance regulatory approach, on the other hand, has a different focus for regulating payment systems. It pre-empts the challenges of redressing undesirable situations once e-money schemes are fully introduced and widely used.[35] This approach takes into account the stability of existing payment systems under the existing financial services framework, with banks as the main providers. The approach accepts that these payment systems may be regulated under the regulatory framework relating to banks. However, it also recognises a circular academic debate regarding whether the issuing of e-money should be the function of banks or other institutions.[36] The essence of the debate is whether the value or purchasing power loaded onto these e-money devices represents, for the issuers, a source of funds equivalent to "deposit-taking", which is the main function of banks.[37] The argument is that if non-bank institutions are allowed to offer e-money services,

32 Mann 2004 *TLR* 706.
33 BIS 1997 http://www.bis.org/publ 7.
34 BIS 1997 http://www.bis.org/publ 7.
35 EMI 1994 http://www.systemics.com/docs/papers/EU_prepaid_cards.html.
36 Mann 2004 *TLR* 704.
37 EMI 1994 http://www.systemics.com/docs/papers/EU_prepaid_cards.html.

there is a necessity to regulate these institutions in order to enhance consumer protection, facilitate the development of e-commerce, and create legal certainty.[38] Such regulation is also required to encourage new market entrants of non-bank institutions and to stimulate competition between banks and non-bank institutions in their rendering of e-money services.[39] The problem in adopting this approach is that one needs to be able to distinguish between the different entities that may issue e-money and the impact on them of the existing regulatory framework for banks. Such a distinction must take into account the involvement of separate legal entities which may serve as e-money issuers or service providers. As discussed below,[40] the EU has adopted this approach for the reasons mentioned above. The EU had either to impose on these entities the existing licensing or prudential requirements applicable to banks or to design new ones specifically for them. The key question was the extent to which these requirements should be guided by the requirements relating to the licensing of banks.

Historically, payment systems were exclusively the functions of regulated commercial banks over and above their deposit-taking functions. Banks are also market leaders in piloting e-money products.[41] However, the licensing and prudential regulation essentially targets the main function of banks as deposit-taking institutions. This seems to ignore other functions of banks as facilitators of payment systems and as e-money issuers, as well as the exclusive risks inherent in these functions. It further ignores other non-banking institutions, such as telecommunication operators and computer companies, which are attempting to enter the markets involved in the issuing of e-money products in competition with conventional banks.[42] The following description of e-money products, which focuses on the issuing entities, outlines different regulatory models that may be adopted in the regulation of e-money issuers.

38 Penn 2005 *JFRC* 349.
39 Krueger "E-money Regulation" 239.
40 See para 7 below.
41 Scott and Zachariadis *Historical Analysis*.
42 Bradford *et al* "Nonbanks and Risk" 19.

According to a report by the World Bank on its effort to combat money laundering facilitated through the internet (ie cyber laundering), there are predominantly four models of e-payment systems involving different avenues through which e-payments can be made.[43] These models have been utilised effectively to explain the possible regulatory and supervisory approach to e-money institutions.[44] The first model is called the merchant issuer model.[45] In terms of this model, the issuer of an electronic payment such as a stored value smart card and the retailer are the same person.[46] The merchant who sells the goods and services to whom payment is made is also the issuer of the goods or services.[47] In this case, a traditional bank is not involved in the issuing of electronic payment. The second model is a bank-issuer model, in terms of which the issuer (who is a bank) and the retailer are different parties and the transaction is cleared through the usual financial systems. The issuer may be affiliated to a bank and thus serve as an operator of payments using e-money. A model which is the direct opposite is the non-bank issuer model.[48] In terms of this model, the issuer from whom the user buys electronic value is not a bank but a technology company that has introduced the e-money product and supplies it either to banks or directly to users.[49] Traditional banks, as in the merchant-issuer model, are not involved in the process of issuing electronic payments.[50] This model is also known as the "gatekeeping strategy", in terms of which banks' involvement is limited to the role of gatekeepers to control the entrance of new e-money institutions into the financial services.[51] The final model is the peer-to-peer model.[52] In this model, a bank or non-bank may issue e-money.[53] Once issued, the e-money may be transferred between users with or without the use of a traditional banking system.[54] The essence of this approach is its provision of options to determine

43 Kellerman *Money Laundering in Cyberspace*.
44 Piffaretti *Theoretical Approach* 8.
45 Kellerman *Money Laundering in Cyberspace*.
46 Kellerman *Money Laundering in Cyberspace*.
47 Leslie *Legal Principles of Combatting Cyberlaundering* 67.
48 Kellerman *Money Laundering in Cyberspace*.
49 Kellerman *Money Laundering in Cyberspace*.
50 Leslie *Legal Principles of Combatting Cyberlaundering* 67.
51 Mann 2004 *TLR* 705-707.
52 Kellerman *Money Laundering in Cyberspace*.
53 Kellerman *Money Laundering in Cyberspace*.
54 Leslie *Legal Principles of Combatting Cyberlaundering* 68.

whether the issuer of e-money should be a bank or not. These models provide the regulators of new e-money institutions with options to decide on the model that will best suit their domestic circumstances. Whatever model is chosen, an important factor that must be taken into account is whether traditional banks must be involved only in the issuing of e-money or in both the issuing and the processing of payment. The discussion below[55] examines a plausible model for the regulation of e-money institutions in the SADC region.

5 The regulation of e-money products in the SADC region

Developing countries have generally faced several challenges in terms of the adoption of electronic commerce since the advent of computer technologies.[56] Although the benefits of using technology in commerce are obvious, accurate figures regarding the spread of e-commerce do not exist. Likewise, time series data on e-money are almost non-existent. Factors contributing to the lack of this statistical data include the current embryonic stage of these products.[57] There is also a concomitant challenge relating to the proper classification of various payment methods that are conducted electronically such as mobile payments (using mobile phones) and e-money.[58] Added to that is the non-existence of a universal regulatory framework for e-money schemes due to their rapid development.[59] What is available to measure the magnitude of e-commerce is Internet usage.[60] Nevertheless, it is unreasonable to assume that most Internet usage is for the sake of e-commerce or e-payment.[61] Despite a lack of accurate statistical data on the usage of the electronic payment systems in the SADC region, some industrial movements towards the adoption of these systems are evident in few of the SADC member countries.

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55 See para 7 below.
56 The term "developing countries" here refers to the newly emerging and post-colonial economies of Africa, Asia, South America, and the Pacific regions.
57 Gormez and Capie *Prospects for Electronic Money*.
58 Field "Developing Implications of Mobile Money" 4.
59 Gormez and Capie *Prospects for Electronic Money*.
60 UNCTD 2003 http://unctad.org/en/docs/issmisc20036_en.pdf.
61 Mensah, Bahta and Mhlanga "E-commerce Challenges in Africa". This 2005 study conducted for the United Nations Economic Commission for Africa recorded the number of Internet subscribers to have grown by more than 150% since 2004 in several sub-Saharan African countries.

As far back as 1997 two major banks in South Africa concluded a franchise agreement with Mondex International Ltd.[62] According to Kutler, "the entity [ie Mondex International Ltd] gives Mondex a foothold on [the African] continent and an opportunity to put its smart card-based electronic cash system to work in a developing economy".[63] The agreement was intended to cover Common Monetary Area countries, ie South Africa, Lesotho, Namibia and Swaziland. In the same year 17 central banks of the Common Market for Eastern and Southern Africa (COMESA) member states[64] also entered into a franchise agreement with Mondex International Ltd. It was noted in the October 2011 Brainstorm Magazine that about 500 000 South Africans hold PayPal accounts.[65]

The implementation of electronic payment systems on the African continent has made visible progress. However, e-money products in the SADC region are penetrating very slowly.[66] The primary cause of this delay is the issue of the convertibility of local currencies in most of the SADC member states, which hampers the opportunity for online cross-border trade using electronic payment systems. According to Lawrence and Tar, "[m]ost consumer markets face severe limitations in terms of connectivity, ability to pay ... ownership of credit cards, and access to other means of payment for online purchases".[67] The insufficient availability of technological infrastructure and the inadequacy of the legal and regulatory framework are additional factors.[68] An appropriate regulatory framework is also essential for the adoption and implementation of e-money products.

The SADC is currently involved in several projects to integrate the payment systems of its member states. Its main focus at the moment is on the establishment of the SADC central bank by 2016 and a single SADC currency by 2018.[69] Little attention

62 Bidoli *Financial Mail* 5. The two banks are Absa Bank Limited and Standard Bank of South Africa Limited.
63 Kutler *American Banker* (1997) 24.
64 Kutler *American Banker* (1999) 14. The COMESA countries include 13 SADC member states excluding Botswana and South Africa.
65 Watkins *Brainstorm Magazine* 6.
66 Bwalya "E-commerce Penetration" 237.
67 Lawrence and Tar 2010 *ISJ* 24.
68 Lawrence and Tar 2010 *ISJ* 24.
69 SADC 2011 http://www.sadcbanker.org.

has been devoted to establishing a regulatory framework for electronic commerce in general, and payment systems and issuing institutions in particular.[70] SADC is not indifferent to the integration of a legal framework for the regulation of electronic payment systems, however. It is evident that the 1992 SADC Treaty encourages member states to harmonise policies in certain areas of co-operation, including finance, science and technology, and services.[71] Some relevant discussions aimed at harmonising the supervision of banks and their regulations are also continuing. The starting point is to have some sort of harmonised regional regime for the regulation and supervision of financial services, including e-money products and the institutions that issue them. SADC should therefore focus on the full integration of banking and other financial markets as one feature of its monetary union goal.[72] Nevertheless, most SADC member states seem to have adopted a wait-and-see approach and are therefore reluctant to begin with the stiff regulation of e-money, which could hamper the introduction of these innovative and promising technologies.[73]

6 Regulation of electronic money institutions in the EU

6.1 A brief regulatory background

The EU started discussions on the regulation of electronic money in 1994. Its main concern was to address two problems, namely: the soundness of the issuers of e-money products and the soundness of e-money as a method of payment.[74] The EU demanded far-reaching steps to regulate the issuing of e-money products. Different approaches and the EU's position on the regulation of e-money were proposed to the EU Commission by the European Monetary Institute.[75] In a 1994 report[76] to the EU Commission, the European Monetary Institute proposed a regime based on the bank-issuer model for the issuing of e-money with regard to prepaid stored-value smart cards. Its suggestion for this "bank only approach" was to reserve the issuing

70 Mezghani "E-commerce Readiness in the SADC".
71 Article 21 of *SADC Treaty* (1992).
72 Salami *Financial Regulation in Africa* 63.
73 Mboweni 1999 http://www.bis.org/review/r991013b.pdf.
74 ECB 1998 https://www.ecb.europa.eu/pub/pdf/other/emoneyen.pdf.
75 Krueger "E-money Regulation" 240.
76 EMI 1994 http://www.systemics.com/docs/papers/EU_prepaid_cards.html.

of e-money for banks (which it refers to as "credit institutions").[77] One simple motivation determined its position. The European Monetary Institute looked at the economic description of the term "deposit" or "deposit-taking" to decide on its position. It treated the value of the money received by the issuer as a claim which the cardholder had on the third party and which could be used to make payment to a wide range of retailers.[78] It concluded that the same reasons for authorities to reserve deposit-taking functions specifically for banks, in order to ensure the soundness of the payment system and protect consumers against systematic risks, should also apply to the issuers of e-money products.[79] The EU Commission was, however, concerned about the idea of limiting the issuing of e-money solely to banks. The Commission tends to differentiate between the deposit-taking function of banks and the issuing of e-money, seeing these functions as involving different levels of risks, which warrant different levels of prudential requirements.[80] The Commission was looking for a way to encourage innovation and foster e-commerce in Europe through the provision of e-money products.[81] Both the EU Commission and the European Monetary Institute, nonetheless, agreed initially that the new e-money institutions should be subject to strict prudential and licensing requirements, similar to those applicable to banks.[82] The debate centred on the application of banking regulations to e-money and the idea that the proliferation of *ad-hoc* regulatory approaches to e-money could stifle innovation and competition. This debate led to the first introduction, regulation and harmonisation of the law regulating e-money institutions in Europe.[83]

The EU Commission's efforts to regulate the issuing of electronic money brought about a "three-track regulatory" regime consisting of traditional credit institutions (ie banks), the introduction of payment institutions, and the launching of a new e-money institution.[84] It resulted in the regulation of these institutions under the

77 Van Hove *ePSO Newsletter* 77.
78 EMI 1994 http://www.systemics.com/docs/papers/EU_prepaid_cards.html.
79 ECB 1998 https://www.ecb.europa.eu/pub/pdf/other/emoneyen.pdf.
80 Mavromati *Law of Payment Services* 150.
81 Krueger "E-money Regulation" 243.
82 Luyat 2009 *RLPJ* 539.
83 Luyat 2009 *RLPJ* 540.
84 Pichler *ePSO Newsletter* 53.

Banking Directive 2000/12/EC,[85] the Payment Services Directive 2007/64/EC[86] and the E-money Directive 2000/46/EC.[87] These instruments have been subject to several amendments and some have been repealed to update them or to consolidate them with other directives with corresponding regulatory subjects. Only the relevant instruments that brought about these amendments and repeals are discussed to the extent that they related to the regulatory and supervisory requirements.

6.2 Different licensing and prudential requirements in terms of the EU's three-track regulatory regime

6.2.1 Prudential requirements for credit institutions

The main objective of the Banking Directive 2000/12/EC was the provision of a strict supervisory framework for banks in the European communities and their sound administration through the adoption of effective prudential requirements.[88] In particular, it aimed to provide for a simpler process of establishing and conducting the businesses of credit institutions,[89] to determine the scope of these businesses,[90] and to strengthen their prudential supervision and the protection of their clients.[91] Article 4 defined a "credit institution" as "an undertaking whose main business is to receive deposits or other repayable funds from the public and [that] grants credits for its own account". The directive also imposed prudential requirements that consider the risks inherent in the business of deposit-taking. Article 8 required credit institutions to be authorised before commencing such business. It is a prerequisite for authorisation of a credit institution that it must possess an initial capital of not less than 5 million euros in terms of Article 5(1). It nonetheless provides for discretionary exemptions in relation to credit institutions which were in existence before 15 December 1979[92] and an option to authorise the establishment of certain

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85 Banking Directive 2000/12/EC [2000] *OJEC* L126.
86 Payment Services Directive 2007/64/EC [2007] *OJEU* L319.
87 E-money Directive 2000/46/EC [2000] *OJEC* L275; E-money Directive 2009/110/EC [2009] *OJEU* L267.
88 Bekink 2000 *JFSR* 231.
89 Recital 3 of Banking Directive 2000/12/EC [2000] *OJEC* L126.
90 Recital 6 of Banking Directive 2000/12/EC [2000] *OJEC* L126.
91 Recital 30 of Banking Directive 2000/12/EC [2000] *OJEC* L126.
92 Article 5(1) of Banking Directive 2000/12/EC [2000] *OJEC* L126.

categories of credit institutions with an initial capital of less than 5 million euros but not lesser than 1 million euros.[93]

The Banking Directive 2000/12/EC was reviewed in 2006 following several amendments, and this resulted in the development of the Banking Directive 2006/48/EC. The Banking Directive 2006/48/EC added the issuing of e-money (which is discussed fully below) within the definition of a credit institution.[94] This addition provides two main options to any person who wishes to apply for a licence to issue e-money. The person could apply for a licence as an e-money institution under the then E-money Directive 2000/46/EC. Alternatively, the person could apply for a licence as a full-blown credit institution under the Banking Directive 2006/48/EC. By adding the issuing of e-money within the definition of a credit institution, the EU incorporated both the bank-issuer model and the non-bank issuer model within the supervisory and regulatory framework for credit institutions. This position has, as will be shown below, been supplemented by the E-money Directive 2009/110/EC.[95]

Another important development that was brought about by the Banking Directive 2006/48/EC was the taking into account of the minimum capital requirements provided in Basel II.[96] Basel II was developed by the Basel Committee on Banking Supervision to revise the supervisory regulations governing the capital adequacy of internationally active banks.[97] Its main emphasis is on strengthening the regulatory capital framework in order to ensure that banks' risk exposures are backed by a high-quality capital base. The Banking Directive 2006/48/EC therefore incorporated capital requirements which are equivalent to the provisions of the Basel II.[98] The

93 Article 5(2) of Banking Directive 2000/12/EC [2000] *OJEC* L126.
94 Article 4(1)(a) of Banking Directive 2006/48/EC [2006] *OJEU* L177.
95 E-money Directive 2009/110/EC [2009] *OJEU* L 267.
96 Recital 33 Banking Directive 2006/48/EC [2006] *OJEU* L177. See also BIS 2006 http://www.bis.org/publ/bcbs128.pdf.
97 BIS 2011 http://www.bis.org/publ/bcbs189.htm para 1.
98 Recital 33 of Banking Directive 2006/48/EC [2006] *OJEU* L177.

directive left the initial capital requirements intact, as provided in the Banking Directive 2000/12/EC above.[99]

The Capital Adequacy Directive 2006/49/EC, which regulates the capital adequacy of credit institutions and non-bank investment firms, did not change the initial capital amounts stipulated in the Banking Directive 2006/48/EC. The importance of this directive was to harmonise the capital requirements for credit institutions and investment firms and to provide a common framework for measuring the capital requirements in terms of the guideline provided by Basel II.[100] However, these issues are outside the scope of this article.

The supervisory requirements for credit institutions regulated under the Banking Directive 2006/48/EC and Capital Adequacy Directive 2006/49/EC were recently replaced with the objectives of establishing uniform prudential requirements for credit institutions and investment firms and incorporating the new supervisory requirements in terms of Basel III.[101] This amendment was introduced by the Capital Requirements Directive 2013/36/EU of 26 June 2013, which came into force on 1 January 2014 ("CRD IV")[102] and the Capital Requirements Regulations No 575/2013 ("CRR").[103] A "credit institution" is defined in Article 4 of the CRR as "an undertaking the business of which is to take deposits from or other repayable funds from the public and to grant credits for its accounts". No reference is made, however, to the issuing of e-money by credit institutions, as was included in the Banking Directive 2006/48/EC. As a result, the CRD IV and the CRR have not changed the definition of "credit institutions" given in the previous directives, as discussed above. As already indicated, this issue is addressed by the E-money Directive 2009/110/EC. In addition, nothing with reference to the initial capital amounts required for the authorisation of a credit institution has been changed by the CRD IV and CRR. The maximum initial capital required remains 5 million with an option to allow a lesser amount of not less than 1 million for certain categories of credit institutions.

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99 Article 9 of Banking Directive 2006/48/EC [2006] *OJEU* L177.
100 Recital 5 and A 1, read with A 3, of Capital Adequacy Directive 2006/49/EC [2006] *OJEU* L177.
101 Proposal for a Capital Requirements Directive 2013/36/EU 2011/0203 COD.
102 Capital Requirements Directive 2013/36/EU [2013] *OJEU* L176.
103 Capital Requirements Regulations (EU) No 575/2013 [2013] *OJEU* L176.

6.2.2 Prudential requirements for payment institutions

The Payment Services Directive 2007/64/EC regulates the provision of payment services by "payment institutions".[104] It defines these institutions in accordance with the entities that provide payment services in the European Community.[105] Recital 7 of this directive introduced payment institutions as a new form of payment service providers that are neither credit institutions within the then Banking Directive 2006/48/EC nor e-money institutions in terms of the then E-money Directive 2000/46/EC.[106] The Payment Services Directive 2007/64/EC defines a payment system as "a funds transfer system with formal and standardised arrangements and common rules for the processing, clearing and/or settlement of payment transactions".[107] The definition of "payment services" is unclear, however. Article 4(3) defines these services as the "business activities" listed in its annexure. The list in the annexure appears to be exhaustive.[108]

The annexure contains seven types of payment services with a wide range of transactions which cannot be clearly delimited. Cash payments directly from the payer to the payee, without any intermediary intervention, are nevertheless excluded as a payment service within the scope of the Payment Services Directive 2007/64/EC.[109] The annexure specifically lists payments services that enable the placement of cash on a payment account, cash withdrawals from the payment account (ie ATMs), the execution of payment transactions such as the transfer of funds from one account to another, as well as the execution of a payment transaction in a situation where the funds are covered by a credit line for a payment service user such as direct debits.[110] It also covers payment services that serve the issuing and acquiring of payment instruments as well as money remittance

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104 Recital 10 of the preamble of Payment Services Directive 2007/64/EC [2007] *OJEU* L319.
105 Article 4 of Payment Services Directive 2007/64/EC [2007] *OJEU* L319.
106 Recital 9 of Payment Services Directive 2007/64/EC [2007] *OJEU* L319.
107 Article 4(6) Payment Services Directive 2007/64/EC [2007] *OJEU* L319. Also see A 16, which defines a "payment service" as an "instruction by a payer or payee to his payment service provider requesting the execution of a payment transaction".
108 Mavromati *Law of Payment Services* 150.
109 Article 3(a) of Payment Services Directive 2007/64/EC [2007] *OJEU* L319.
110 Point 1-4 of Annexure to Payment Services Directive 2007/64/EC [2007] *OJEU* L319.

systems.[111] It further includes a payment service that provides the execution of payments transactions on condition that such execution is given with the consent of the payer by means of any telecommunication or digital device to the telecommunication or digital network operator who acts only as an intermediary between the payment service user and the supplier of goods.[112] Article 3 further provides for types of payment systems that are not within the scope of the directive. This article excludes payment transactions related to securities asset servicing, dividends, income or other distributions that are carried out by credit institutions, among others. Article 3, read together with Recital 9 above, is an indication that the regulatory requirements for payment institutions are not equivalent to those of credit institutions in terms of the CRD IV and CRR or e-money institutions in terms of the E-money Directive 2009/110/EC.

Any institution that provides payment systems regulated under the Payment Services Directive 2007/64/EC must satisfy the requirements for authorisation in terms of Article 10. Before such authorisation, these institutions must satisfy the relevant authorities that they have the required initial capital, as stipulated in Article 5. Of interest here are the different amounts of initial capital that are set for different types of payment services. The difference in the amounts of the initial capital depends on the type of payment service provided by such an institution. The lowest initial capital amount required for licensing a particular service provider is only 20 000 euros in respect of the provision of money remittance systems and 50 000 euros in respect of the execution of payments transactions, on condition that such execution is given with the consent of the payer by means of any telecommunication or digital device to the telecommunication or digital network operator.[113] However, payment services providers who provide payment services that enable the placing or withdrawal of an amount on and from a payment account, the services that execute payment transactions, and the issuing and/or acquiring of payment instruments, as

111 Point 1-4 of Annexure to Payment Services Directive 2007/64/EC [2007] *OJEU* L319.

112 Point 7 of Annexure to Payment Services Directive 2007/64/EC [2007] *OJEU* L319.

113 Article 6(a), read with point 7 of the Annexure to Payment Services Directive 2007/64/EC [2007] *OJEU* L319.

listed above, must hold the greatest amount of initial capital, which is at least 125 000 euros.[114]

The difference in initial capitalisation in terms of CRD IV (read with CRR) and the Payment Services Directive 2007/64/EC is determined by the level of risk posed by a particular service regulated under it. The Payment Services Directive 2007/64/EC explicitly prohibits payment institutions from accepting deposits.[115] The rationale for this differentiation lies in the fact that the business of payment institutions entails only a low level of risk, whereas credit institutions experience a high level of risk, as they receive unsecured deposits or other repayable funds.[116] The Payment Services Directive 2007/64/EC aims to ensure that prudential requirements are proportionate to the low operational and systematic risks associated with the services provided by payment institutions. It has, as a result, adopted a micro-prudential approach to financial supervision, distinct from the then Banking Directive 2006/48/EC – and arguably the CRV IV – in order to provide a level playing field and encourage competition among financial service providers.[117]

6.2.3 Prudential requirements for electronic money institutions

As indicated above, the first regulatory framework for electronic money institutions in the EU was promulgated in 2000 in the form of the E-money Directive 2000/46/EC. Owing to the failure to achieve the main objectives of harmonising the legal framework in the European Community, it was substantially revamped in 2009 in the form of the E-money Directive 2009/110/EC. This overhaul did not change its main objectives. It endeavoured to address the deficiency encountered in the interpretation of the E-money Directive 2000/46/EC and to take into account new regulatory developments and new innovations in the market.

The main objective of regulating e-money in the EU was to achieve the essential harmonisation of prudential supervision throughout the European Community.[118] The

114 Article 6(b) of Payment Services Directive 2007/64/EC [2007] *OJEU* L319.
115 Recital 11 of Payment Services Directive 2007/64/EC [2007] *OJEU* L319.
116 Mavromati *Law of Payment Services* 151.
117 Mavromati *Law of Payment Services* 174.
118 Recital 4 of E-money Directive 2000/46/EC [2000] *OJEC* L275.

EU also recognised the importance of having a single regulatory framework in this area of financial services. The provision of such a framework was intended to assist e-money to deliver its full potential benefits.[119] From the preamble of the E-money Directive 2000/46/EC, it is evident that this instrument was developed mainly to circumvent the strict licensing and prudential requirements in relation to the deposit-taking functions of credit institutions under the then Banking Directive 2000/12/EC.

The E-money Directive 2000/46/EC was clearly intended to introduce a "separate prudential supervisory regime for electronic money institutions" which would be less cumbersome than the same regime applicable to credit institutions.[120] While the objectives are adequate for the intended goal to realise the full potential of these technological developments, it is from the approach taken by the EU that some lessons can be drawn for the future development of the regulatory framework in the SADC region. These lessons can be learned from the key provisions of E-money Directive 2009/110/EC, in comparison with equivalent provisions in the E-money Directive 2000/46/EC. The key provisions are the adoption of a technology-neutral approach, the definition of "e-money", and the licensing and prudential requirements applicable to e-money institutions.

6.2.4 The position of credit institutions as e-money issuers and the latest developments

Before embarking on a discussion of the lessons that can be learned from the regulatory framework for e-money in the EU, two important developments are worth mentioning. These developments relate to the clarity provided by E-money Directive 2009/110/EC with regard to the position of credit institutions as issuers of e-money, as well as the latest proposal for the possible review of Payment Services Directive 2007/64/EC and the E-money Directive 2009/110/EC.

As discussed above, the question of whether or not credit institutions should issue e-money was not addressed by the Banking Directive 2000/12/EC, although it was covered in terms of the Banking Directive 2006/48/EC. Although promulgated after

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119 Recital 5 of E-money Directive 2000/46/EC [2000] *OJEC* L275.
120 Recital 7 and 13 of E-money Directive 2000/46/EC [2000] *OJEC* L275.

the E-money Directive 2009/110/EC, the CRD IV and CRR also remain silent on whether or not credit institutions are allowed to issue e-money. The current position is therefore still regulated by the E-money Directive 2009/110/EC.

The E-money Directive 2009/110/EC specifically provides that the issuance of e-money does not constitute a deposit-taking function provided by credit institutions in terms of the repealed Banking Directive 2006/48/EC.[121] This directive made the distinction between deposit-taking and e-money issuing "[f]or prudential reasons".[122] It also recommended an amendment of the definition of "credit institution" in the repealed Banking Directive 2006/48/EC in order to exclude e-money issuers as credit institutions.[123] Its position, however, is that both credit institutions and e-money institutions may issue e-money.[124] The EU took into consideration the different prudential requirements applicable to credit institutions and e-money institutions. In order to maintain the level playing field between these classes of institutions, the E-money Directive 2009/110/EC allows credit institutions to carry out the activity of issuing e-money through a subsidiary.[125] This subsidiary is regulated under a less cumbersome prudential regime in terms of E-money Directive 2009/110/EC, as compared to the new, hefty regime that came into being with the CRD IV and CRR.[126] The current regulatory position in the EU is therefore that the position of credit institutions as issuers of e-money is no longer regulated under the CRD IV and the CRR but under the E-money Directive 2009/110/EC. Nevertheless, where a credit institution is issuing e-money, the applicable prudential requirements are regulated in terms of the CRD IV and the CRR. Furthermore, a credit institution that wants to pursue the issuing of e-money may decide to conduct such business as a full-blown credit institution regulated under the CRD IV and CRR or as a subsidiary under the E-money Directive 2009/110/EC. The position therefore still provides for the bank-

121 Recital 13 of E-money Directive 2009/110/EC [2009] *OJEU* L267.
122 Recital 16 of E-money Directive 2009/110/EC [2009] *OJEU* L 267.
123 Recital 25 E-money Directive 2009/110/EC [2009] *OJEU* L267.
124 Recital 16 of E-money Directive 2009/110/EC [2009] *OJEU* L267. Other institutions listed in this recital include post office giro institutions, the European Central Bank and national central banks when not acting in their capacity as a monetary authority, and other public, regional, or local authorities.
125 Recital 25 of E-money Directive 2009/110/EC [2009] *OJEU* L267.
126 E-money Directive 2009/110/EC [2009] *OJEU* L267.

issuer model and the non-bank issuer model, which was the position under the Banking Directive 2006/48/EC. However, the E-money Directive 2009/110/EC has added the "gatekeeping" function of credit institutions, as discussed above. This leaves credit institutions with a choice to either take the issuing of e-money in terms of the CRD IV and CRR regime or to act as a gatekeeper for others to enter into the market as their subsidiary, without issuing e-money themselves.

The second important point relates to a recent development with regard to a proposal to review the Payment Services Directive 2007/64/EC and the E-money Directive 2009/110/EC. On the 24th June 2013, the European Commission presented a new legislative package which includes the review of the Payment Services Directive 2007/64/EC.[127] A proposal for this review was adopted and subsequently documented on the 27 July 2013.[128] The main objectives of the proposal were the rendering of a secured and low-cost internet payment service, the protection of consumers against fraud and the possible abuse of payment services, and the provision of increased consumer rights when sending transfers and money remittances outside Europe or paying in non-EU currencies.[129] More importantly, the proposal seeks to extend the scope of the Payment Services Directive 2007/64/EC by promoting the emergence of new players such as the providers of mobile and internet payments in Europe.[130] For the purposes of this article, the proposed directive will not change the prudential requirements for payment systems under the Payment Services Directive 2007/64/EC. In particular, the initial capital amounts required in relation to payments services stipulated in the annexure are the same, as discussed above.[131] However, it extends the regime under the Payment Services Directive 2007/64/EC to cover new services and their providers. These services are third-party payment service providers whose business activity is providing services based on access to payment accounts, such as initiation or account information,

127 Almunia and Barnier 2013 http://ec.europa.eu/avservices.
128 Proposal for a Second Payment Services Directive 2013/0264 COD.
129 Proposal for a Second Payment Services Directive 2013/0264 COD 12.
130 Recital 2 of the Proposal for a Second Payment Services Directive 2013/0264 COD.
131 Article 6 of Proposal for a Second Payment Services Directive 2013/0264 COD.

without holding clients' funds.[132] The list in the annexure still contains seven types of payment services. However, the payment services in point 7 have been reviewed and extended to specifically provide for services based on access to payment accounts in the form of payment initiation services or account information services.[133]

The proposal also acknowledges a blurred distinction between payment institutions, subject to the Payment Services Directive 2007/64/EC, and electronic money institutions subject to E-money Directive 2009/110/EC brought about by the convergence of the technology and the business model.[134] The EU has observed that the implications of this convergence will require a review of the E-money Directive 2009/110/EC, which was meant to take place in 2014.[135] The proposal has not been approved as a law, nor has the EU documented any proposal for the review of the E-money Directive 2009/110/EC. It is anticipated that such an approval will be forthcoming either in 2016 or 2017 with the possibility of a combined Second Payment Services Directive and a Third E-money Directive.[136] The lessons discussed below are based on the current regulatory regime.

7 Lessons learned from the EU's regulatory regime

The first lesson to be learned from the EU's legal framework is its adoption of a technology-neutral approach (or "techno-neutral"), which serves to achieve one of its objectives: not hampering technological innovations.[137] This approach simply requires that the rules that regulate technological activities not assume a particular technology or hinder the use or development of similar technologies in future.[138] The approach intends to reduce the risk that the current regulating rules may become

132 Recital 26 and Point 7 of Annexure to the Proposal for a Second Payment Services Directive 2013/0264 COD.

133 Point 7 of the Annexure 1 provided as follow: "Services based on access to payment accounts provided by a payment service provider who is not the account servicing payment service provider, in the form of: (a) payment initiation services; (b) account information services."

134 Proposal for a Second Payment Services Directive 2013/0264 COD 2-3.

135 Proposal for a Second Payment Services Directive 2013/0264 COD 3.

136 Dolan, Benchley and Butler 2013 http://www.sjberwin.com/insights/2013/09/26/payment-services-directive-2-and-regulation-on-multilateral-interchange-fees.

137 Recital 5 of E-money Directive 2000/46/EC [2000] *OJEC* L275 and Recital 7 of E-money Directive 2009/110/EC [2009] *OJEC* L267.

138 Clinton and Gore 1997 http://www.w3.org/TR/NOTE-framework-970706.html.

outdated by technological changes, and thus lose their meaning and authority.[139] It is also a legal rule that does not discriminate against a particular technology.[140] In essence, it advocates the drafting of rules that are framed in terms of their functions or values and which are not based on a particular technology.[141] The law is prohibited from being specific in describing the technology contemplated by the regulation.

When the approach is applied to e-money products, it requires the products envisaged in the regulatory instrument not to favour, for instance, only hardware-based e-money, but to include its software-based counterpart. It also requires the legislator to second-guess any other types of e-money products that may be developed with future technological innovations. The rules must be wide-ranging and inclusive of all possible products that may fall under the realm of an e-money regulatory framework. This means that the "law must encompass anything under the sun made by man".[142] The shortcoming of this approach is that the choice as to which electronic devices are subject to regulation is left open to the regulating authorities.[143] Under the E-money Directive 2000/46/EC and E-money Directive 2009/110/EC, the approach has rendered absolute neutrality a myth. As the discussion below relating to the definitions of e-money will indicate, these directives are in theory techno-neutral, but are techno-specific in practice. The anomaly of the approach is that one technology may, by definition, be preferred in the regulatory development process. As has been correctly stated, "the EU Directives often express support for technology-neutral policies, but once rhetoric translates into action, technology-specific policies are (often) implemented".[144] As a result, existing technology benchmarks and conditions the way in which the regulators think.[145]

In addition, although the regulators rightly envisage techno-neutrality in order for current e-money instruments to be forward-looking, the regulatory process often

139 Reed *Making Laws for Cyberspace* 190-191.
140 Ali 2009 *Lex Electronica* 12.
141 Thompson 2012 *BUJSTL* 304.
142 *Diamond v Chakrabarty* 447 US 303, 309 (1980) 306.
143 Reed 2007 *Script-ed* 272.
144 Azar and Sanden 2011 *EIST* 138.
145 Hanrahan "Abstraction of Services and Network Technologies".

fails to deliver such neutrality and causes problems of interpretation, application and definition (as well as classification) of the subject matter of regulation. The lesson to be learned from this approach is that absolute techno-neutrality may not be viable. It is suggested that some balance between techno-neutrality and techno-specific regulation must be fostered in order to achieve the intended objectives. If a technology-neutral approach is adopted, it is advisable to have a definition of e-money that will determine the scope of the relevant regulating instrument.

The second lesson can be found in the definition of the subject of regulation. It has been correctly noted that "neutrality as between different technologies depends very much on the definition of the technology to be regulated".[146] E-money Directive 2000/46/EC and E-money Directive 2009/110/EC seek to develop a definition of e-money that is techno-neutral. The initial definition of e-money attempted to address the issue relating to the categorisation of payment systems.[147] On a literal interpretation, an e-money device must firstly have a monetary value in itself. Accordingly, the E-money Directive 2000/46/EC contemplates token-based products as e-money and excludes access-based products. The requirement that the e-money represents a "claim on the issuer" simply requires the issuer to accept the money and to pay the equivalent e-money back to the bearer of the e-money device.[148] The definition has also succeeded in ensuring that the e-money products contemplated in the E-money Directive 2000/46/EC are pre-paid instruments. A reference to "issued on receipt of funds of an amount not less in value than the monetary value" serves to exclude other instruments such as credit cards and entrenches the pre-payment of money equal to the value of the equivalent e-money issued.[149] It also excludes the circulation of e-money products that are issued at a discount.[150] In addition, the definition makes an important provision which excludes single-purpose devices such

146 Reed 2007 *Script-ed* 91.
147 Article 1(3)(b) of E-money Directive 2000/46/EC [2000] *OJEC* L275.
148 Guadamuz and Usher "EC Electronic Money Directives" 175.
149 Guadamuz and Usher "EC Electronic Money Directives" 175.
150 AEI "Electronic Money Directive".

as charge cards and store cards which are accepted as a means of payment by the issuer only.[151]

The E-money Directive 2000/46/EC has not, however, succeeded in explaining what is meant by "electronic", in order to fully describe "electronic money". Its provision that monetary value be "stored on an electronic device" widens the scope of the regulatory framework to include any devices that involve electronic technologies. The wide scope of this definition creates several problems for the implementation of the directive. It is questionable whether or not the electronic devices contemplated by this directive were limited to the existing technology only or could also include any new e-money models that may be developed in future. The problem in the definition is not one of interpretation but one of implementation. As previously indicated, the regulation of e-money in the EU was an attempt to stimulate the use of chip-based smart cards as a replacement for coins and notes.[152] At the time, mobile phone operators which use mobile prepaid cards to purchase value stored on these cards to pay for additional services (other than airtime) and goods were not in existence or contemplated by the phrase "stored on an electronic device".[153] Similarly, alternative Internet payment systems such as PayPal have raised the question as to whether or not account-based products are considered to be e-money.[154] Despite drawing money from an existing bank account which can later be transferred for paying goods and services using e-mail, PayPal claims to be an e-money institution.[155] In essence, it is akin to an account-based product which is supposed to be regulated under the CRD IV and CRR. Its position as to whether or not it is covered by the E-money Directive 2009/110/EC is not clear from the broad definition of e-money. The E-money Directive 2009/110/EC, despite advocating a

151 Article 1(3)(b) of E-money Directive 2000/46/EC [2000] *OJEC* L275.
152 Recital 3 of the E-money Directive 2000/46/EC [2000] *OJEC* L275. Recital 3 considers electronic money as an electronic surrogate for coins and banknotes stored on an electronic device such as a chip card or computer memory.
153 European Commission 2004 http://ec.europa.eu/internal_market/payments/docs/emoney/2004-05-consultation_en.pdf.
154 Guadamuz and Usher "EC Electronic Money Directives" 196.
155 PayPal 2013 https://www.paypal.com/za/webapps/mpp/ua/useragreement-full. It does so simply in order to be able to enjoy the less cumbersome prudential regime under the E-money Directives rather than the stringent regime under the Banking Directives.

techno-neutral definition to overcome the definitional conundrums, did not add any substantial provisions to the new definition to address its scope.[156]

The lesson that can be learned in this regard is that while the EU has managed to exclude post-payment instruments and single-purpose products from the purview of the e-money legal framework, it has neglected to address the challenges posed by the issue of what constitutes an "electronic device" in terms of the E-money Directive 2000/46/EC and "electronically ... stored monetary value" in terms of the E-money Directive 2009/110/EC. As the PayPal scenario indicates, such a lack of foresight may encourage unnecessary regulatory arbitrage within its three-track regulatory regime, consisting of credit institutions, payment institutions and e-money institutions.

A lesson can also be learned from the different choices made in search of appropriate prudential requirements for e-money institutions. The prudential requirements applicable to e-money aim to achieve two different objectives. On the one hand, the EU wants to ensure the soundness of the business of e-money, while, on the other hand, it proposes a supervisory structure that will not inhibit innovations and new entrants to the e-money market. The E-money Directives discussed above draw some experiences relating to the appropriate prudential requirements from the repealed Banking Directive 2000/12/EC and the Banking Directive 2006/48/EC as well as the Payment Services Directive 2007/64/EC, following the latter's promulgation in 2007. In both the E-money Directives, a risk-based approach is adopted by the EU for deciding on appropriate prudential requirements for e-money institutions.[157] The approach is achieved by applying less cumbersome prudential requirements for e-money institutions, which are distinct from the stringent requirements applicable to banks.[158] The EU Commission proposed a requirement that a new e-money institution must hold a minimum initial

156 Recital 7 of E-money Directive 2009/110/EC [2009] *OJEU* L267.

157 See Recital 7 of E-money Directive 2000/46/EC [2000] *OJEC* L275 and Recital 9 of E-money Directive 2009/110/EC [2009] *OJEU* L267.

158 See Recital 14 of E-money Directive 2009/110/EC [2009] *OJEU* L267.

capital amount of 500, 000 euros before it can be licensed as such.[159] Surprisingly, this minimum amount did not find its way into the E-money Directive 2000/46/EC. Article 4 of this directive imposes a hefty minimum initial capital amount of 1 million euros on new e-money institutions. This is arguably calibrated by the EU's efforts to align the issuing of e-money with the deposit-taking function of banks. The E-money Directive 2000/46/EC stated plainly that, despite introducing a separate prudential supervisory regime for e-money institutions, this regime is "calibrated on the prudential supervisory regime applying to credit institutions".[160] This approach, as evidenced from the comments by various stakeholders,[161] created barriers for new entrants into this market and failed to ensure a level playing field between credit institutions and e-money institutions, in sharp contrast with the objectives of the legal framework.[162] However, the E-money Directive 2009/110/EC attempted to overcome these barriers. It proposed substantially lesser prudential requirements for initial capital. It shifted completely from following the trend under the repealed Banking Directive 2006/48/EC by adopting a legal framework that is aligned with a similar framework under the Payment Services Directive 2007/64/EC.[163] Under the Payment Services Directive 2007/64/EC, payment institutions are required to hold the maximum initial capital amount of 125 000 euros. For the EU, an initial capital commensurate with the risk posed by e-money was set at 350 000 euros under the E-money Directive 2009/110/EC.[164] This indicated a major shift from the initial capital of 1 million euros under the E-money Directive 2000/46/EC.

A lesson that should be learned from this construction of appropriate prudential requirements under the EU is that one should be guided by the main objectives of the prudential requirements for a particular payment system. More importantly, while the supervisory requirements applicable to banks serve as a guide, constructing new supervisory requirements should be guided by the potential risks

159 CEC 2008 http://www.ecu-activities.be/documents/publications/publication/1998_4/commission-proposal.html.
160 Recital 7 of E-money Directive 2000/46/EC [2000] *OJEC* L275.
161 See for instance EPL 2006 http://ec.europa.eu/internal_market.
162 Recital 2 and 4 of E-money Directive 2009/110/EC [2009] *OJEU* L267.
163 Recital 4 of E-money Directive 2009/110/EC [2009] *OJEU* L267.
164 Article 4 of E-money Directive 2009/110/EC [2009] *OJEU* L267.

posed by the business activity in question, balanced against the objective of ensuring the soundness of the operating institution. For e-money institutions, proportionate prudential requirements must be tested in terms of a balance between ensuring the stability of the institution and avoiding the creation of barriers to market entry and enhancing new innovations in this market. In this case, setting the initial capital amount is less important than achieving the envisaged objectives of a legal framework.

8 Conclusion

The proliferation of e-money and the legal and regulatory questions that it continues to ask cannot be avoided. Regulatory authorities, even in developing regions such as the SADC, cannot be indifferent to these developments and the regulatory challenges that they pose. Although a choice is available to "wait and see" how these developments unfold, it is clear that these developments are occurring at a rapid speed. The proliferation of PayPal and various mobile payment systems as worldwide payment devices bears witness to some of the challenges that await the regulating authorities in the near future. With these rapid developments, developing countries might not be able to catch up in terms of constructing an appropriate regulatory framework. Further adverse factors pertaining to the development of an effective framework may include factors such as the unavailability of resources and the lack of an integrated legal framework in some of these regions. For the SADC, in addition to achieving its single monetary goal, it is likely to face challenges in terms of determining what e-money means for this region. Moreover, the relevant choice as to who should issue e-money is expected to be first on the agenda by 2018.

From the lessons learned in the regulation of e-money institutions, SADC will first have to take into account the challenges that the EU encountered over the years in constructing a legal framework in Europe, as it attempted to allow further developments in the context of e-money without hindering innovation through strict regulation. SADC will also have to take the three-track regulatory regime and the anticipated convergence of the legal framework for payment services and electronic money into account. This will help to decide which payment systems should be regulated under each of the three regimes and to test the viability of the three-track regime. If the function of a particular payment system constitutes deposit-taking, it must fall under the supervisory regime applicable to banks. Likewise, if the payment system serves to facilitate access to money and the transfer of such money from one banking account to another without the institution depositing money into its own new account, the institution providing such a service should be regulated under a regime similar to that of the Payment Services Directive 2007/64/EC. Only institutions that provide stored-value products in terms of which conventional money is converted electronically and resides in the possession of the bearer of such devices (either on the stored-value smart card or the microchip of their computer) will be regulated under instruments such as the E-money Directive 2009/110/EC.

The challenge of making such decisions lies in the definition of what constitutes "e-money" and the determination of the applicable electronic devices. Such definition must set the scope of the relevant instrument so that it is comprehensive enough to remove any doubt as to whether or not electronic devices such as mobile phones are covered. The regime will therefore have to place emphasis on defining e-money and e-money institutions as well as on determining the appropriate prudential supervisory and licensing structures. The definition of e-money may adopt a technology-neutral approach. Nonetheless, a balance between techno-neutrality and techno-specificity will somehow have to be achieved. While the regime should acknowledge the prudential requirements applicable to banking supervisory structures, it should adopt a risk-based approach that is suitable to overcoming the risk challenges posed by e-money. Taking into account the embryonic status of e-money in the SADC region, the regime should begin with a bank-issuer model of regulation for banks issuing e-money. In the absence of a harmonised banking regulation in the SADC region, this will allow banks which are already regulated under domestic laws to issue e-money products in a joint venture with the financial system operators. Statistical data relating to the increased use of e-money in the SADC region will eventually provide a good reason to introduce a non-bank issuer model with a new prudential requirements regime, which will apply to independent e-money institutions. A flexible prudential regime must, however, be introduced for e-money institutions that issue e-money products. Such prudential requirements must take into account the minimal risks posed by these devices in comparison with the deposit-taking functions of banks. From the lessons learned under the EU regime it is possible to conclude that the strict requirements applicable to banks are not appropriate for e-money institutions.

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LIST OF ABBREVIATIONS

AEI	Association of E-money Institutions
AJICL	Arizona Journal of International and Comparative Law
ATM	Automated Teller Machine
BIS	Bank of International Settlements
BUJSTL	Boston University Journal of Science and Technology Law
CEC	Commission of European Communities
CRD IV	Capital Requirements Directive 2013/36/EU [2013] OJEU L 176
CRR	Capital Requirements Regulations (EU) No 575/2013 [2013] OJEU L176
CS	Communication and Strategies
ECB	European Central Bank
EFT	Electronic Funds Transfer
EIST	Environmental Innovations and Societal Transitions
EMI	European Monetary Institute
EPL	Evaluation Partnership Limited
EU	European Union
FMR	Financial Modernization and Regulation
HJLT	Harvard Journal of Law and Technology
ISJ	Information, Society and Justice
JFRC	Journal of Financial Regulation and Compliance
JFSR	Journal of Financial Services Research
OJEC	Official Journal of the European Communities
OJEU	Official Journal of the European Union
RIPE	Review of International Political Economy
RLPJ	Rim Law and Policy Journal
SADC	Southern African Development Community
TLR	Texas Law Review
UNCTD	United Nations Conference on Trade and Development
YIFEL	Yearbook of International Financial and Economic Law

THE REGULATION OF ELECTRONIC MONEY INSTITUTIONS IN THE SADC REGION: SOME LESSONS FROM THE EU*

MD Tuba**

SUMMARY

This article analyses the different approaches adopted for the regulation of payment systems in a variety of legislative instruments by the European Union (EU). It looks in particular at how the institutions that issue new electronic money products are regulated and supervised by the relevant authorities in the EU, in comparison with existing institutions such as banks. It analyses some of the lessons that may be learned by the South African Development Corporation (SADC) from the regulatory approaches for electronic money institutions adopted by the EU. The article asks if the approach adopted by the EU may be useful for the future regulation of electronic money institutions in the SADC.

The proliferation of electronic devices that arrived with the invention of the Internet has sparked some regulatory challenges. This development has become global and involves both developed and developing countries, including regions such as the SADC. It is asked if these technological developments should be addressed by means of a concrete regulatory framework while they continue to develop, instead of the regulators waiting to observe and acquaint themselves with the relevant regulatory challenges that underpin the innovations. The EU has attempted to address the anticipated regulatory challenges that came about with the development of electronic money and to align its regulatory approach with other payment systems. This article discusses the regulatory approaches adopted in the EU and provides an overview that the SADC may use in order to adopt an effective regulatory framework for electronic money and the institutions that issue these methods of payment. It analyses both the achievements and the challenges that the

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EU faced (and continues to face) in developing the regulation of e-money, and recommends some possible approaches derived from the lessons learned.

KEYWORDS: Bank Directives; electronic money; European Union; hardware-based e-money; initial capital; payment systems; prudential requirements; SADC; software-based e-money, technology-neutral.