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Response to the Law Commission's Consultation Paper 256 *Digital Assets: A Consultation Paper*

1. Introduction

The legal analysis in the Law Commission's consultation paper on digital assets is admirable in its depth and clarity. There is, however, one omission that I would like to make the Law Commission aware of. This concerns the categorisation of electronic money ('e-money') as a data object. The status of e-money is neither contemplated nor otherwise addressed in the Law Commission's proposals, which might create an unintended lacuna in the law of personal property. I will set out below a possible approach to the categorisation of e-money as a data object, and hope that the Law Commission will be able to take this into account in its current work in this area.

Since its development in the late 1990s, the function of e-money has been understood as an "electronic surrogate for coins and banknotes."[1] This function has generally determined the legal approach to its definition and regulatory framework. Accordingly, the main concerns in drafting the legal definition of e-money as well as the rules governing its issuance and use were to avoid certain negative outcomes from the perspectives of monetary policy and payment systems oversight, with little thought being given to the status of e-money as personal property.[2]

[1] Directive 2000/46 on the taking up, pursuit of and prudential supervision of the business of electronic money institutions [200] OJ L275/39, recital 7; Directive 2009/110 on the taking up, pursuit and prudential supervision of the business of electronic money institutions [2009] OJ L267/7, recital 13.

[2] For example, this early report by the ECB does not mention property at all: European Central Bank, Report on Electronic Money (ECB, 1998), https://www.ecb.europa.eu/pub/pdf/other/emoneyen.pdf?919930e4e315115f196cb797d22caa7f.

Since then, property concerns relating to the ownership of the funds received *in exchange* for e-money (i.e., the funds that are safeguarded by the issuer) have been voiced,[3] but to my knowledge no legal analysis of e-money itself has been set out in either law or guidance. Such an analysis is needed, not only because the status of e-money in property law terms has consequences for the correct understanding of some features of its regulatory framework (including the applicable safeguarding rules and the rules relating to deposit guarantee schemes) but also because legal uncertainty in this respect will disadvantage the e-money sector, as both consumers and issuers can be expected to benefit from the legal framework governing data objects. Furthermore, the imminent regulation of certain crypto-tokens as e-money (which will then become data objects) could result in a differential treatment in property law terms of some types of e-money, an outcome that should be avoided.

E-money is defined 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 . . . and which is accepted by a natural or legal person other than the electronic money issuer."[4] The aspects of this definition that are relevant to the categorisation of e-money in property law terms are that:

(a) e-money is stored monetary value;
(b) on presentation of their e-money to the issuer, holders have a right to receive funds to the value of the e-money they hold, also called a redemption right;
(c) e-money is value that is purchased with funds (i.e., cash, bank money or other e-money); and
(d) e-money is used to make payments or transfers to third parties.

I will explain the relevance of these aspects of the definition further by reference to the Law Commission's three criteria that must be met if an object is to fall within its proposed third category of personal property, namely that (i) the object is composed of data represented in an electronic medium, including in the form of computer code, electronic, digital or analogue signals; (ii) that the object exists independently of persons and exists independently of the legal system; and (iii) that the object is rivalrous.

First, however, I should address the question why e-money is not simply a chose in action, as this would render enquiry into its nature as a data object redundant. I have also addressed this question in a recent article[5] that provides more detail on the possible forms of e-money, the function of the redemption right and the features of e-money that distinguish it from a pure chose in action, as well as appropriate references.

2. Why is e-money not simply a chose in action?

By definition, e-money includes a claim right against the issuer, the redemption right. This existence of this right could lead one to conclude that e-money is nothing more than a right of repayment that is enforceable against the issuer. But this is not the case, and a comparison with deposits may be helpful in drawing out the reasons why.

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[3] For an account of the debate, see Jacques, J (2022) 'E-money and Trusts: A Property Analysis,' 138(Oct) *Law Quarterly Review*, 605-623.
[4] Directive 2009/110 on the taking up, pursuit and prudential supervision of the business of electronic money institutions [2009] OJ L267/7, art. 2(2). Also see reg. 2(1) of the Electronic Money Regulations 2011 (SI 2011/99).
[5] Jacques, J (2022) 'E-money and Trusts: A Property Analysis,' 138(Oct) *Law Quarterly Review*, 605-623.

A deposit involves a right held by a person (the depositor) to draw against the credit balance with the deposit-accepting bank. This right constitutes the entirety of the deposit's use value. There is no object or thing to which the right attaches and which could then be used or traded in its own right; rather, if the depositor wishes to transfer their 'bank money' to a third party, they must activate their claim right against the bank, asking the bank to extinguish their right in favour of the third party. It is thus widely accepted that what is involved in a deposit are two parties who have entered into a relationship that has resulted in corresponding rights and liabilities, and it is this relationship – and only this relationship – that is engaged every time bank money is used. This has two consequences. The first is that bank money cannot be transferred laterally between parties without the involvement of the deposit-accepting bank. The second is that the right that the depositor holds cannot be lost by abandoning or destroying a 'thing,' as there is no such separate thing. This means that if the depositor loses access to their account because they have displaced their access credentials, this makes no difference to their rights; all that needs to be shown is that the person claiming these rights is really the person with whom the bank has an ongoing relationship for accepting deposits.

In contrast, the use value of e-money lies not in its redemption right but in the ownership rights in the monetary value (i.e., the e-money) that may be used for payments and transfers. Redemption merely ensures that the last holder in the payment chain is able to exchange e-money for funds. All prior holders use the e-money for payments and transfers, and because they exchange their e-money for goods and services or otherwise divest themselves of it, they do not have a need to make a redemption claim. The more successful the e-money scheme, the longer the e-money circulates without any need for redemption. Hence, in relation to the primary function of e-money as a means of payment, the same can be said about e-money as about crypto-tokens: "The functionality of a crypto-token vis-à-vis the crypto-token system and other participants in the crypto-token system is inherent to the instantiated crypto-token itself. So crypto-tokens are not things in action."[6]

While the e-money issuer is usually involved in any e-money transaction, the involvement consists of processes such as authorisation and settlement rather than the meeting of a liability. Some forms of e-money may even be transferable without any involvement of the issuer at all, such as where e-money may be stored on a device that can be passed from hand to hand, the bearer being assumed to be the rightful owner of the e-money. In the latter case, if the e-money holder loses access to the e-money (for example, by giving away, breaking or losing the e-money card on which the value is held), they lose their rights to it. Only if they can persuade the issuer to re-instate the ownership link between them (the holder) and the e-money – and not the link between the issuer and the holder as parties with rights and liabilities – can they regain their ownership rights. To do this, the holder does not need to show that they are the person who they claim to be, but that they are the rightful owner of the e-money. They have to demonstrate ownership of a thing because that thing mediates the relationship between the issuer and the holder.

It is in accordance with this understanding of e-money that the redemption right is regarded as attaching to the e-money itself, in whoever's hands it may be, and not to any specific person. This means that when the redemption right is finally exercised by the last holder in the payment chain, this involves the e-money holder presenting the e-money (rather than himself) to the issuer, who then honours the claim associated with the e-money.

This comparison shows that while e-money involves a claim right, it is itself a thing and thus more than this claim right. Therefore, it cannot be categorised as a pure chose in action.

[6] Para. 10.66 of the consultation paper, footnote omitted.

3. The first criterion: Is e-money composed of data represented in an electronic medium, including in the form of computer code, electronic, digital or analogue signals?

E-money is monetary value that is electronically recorded as a credit or debit entry, usually in a numeric ledger situated in a central database, although it is also theoretically possible to record e-money directly on a physical instrument, such as a card or voucher. Following the explanations provided in section 1 above, it should be apparent that the ledger entries involved in e-money resemble those involved in certain crypto-tokens rather than those involved in bank money: "An entry in a bank account ledger merely records a debt of an amount equal to the final balance standing to the credit of the account holder. In contrast, . . . the data structure which constitutes a crypto-token (including the data which records account balances) is not a right against another person or obligor (such as a bank). Instead, it has the characteristics of an object of property in itself."[7]

4. The second criterion: Does e-money exist independently of persons and independently of the legal system?

4.1 Does e-money exist independently of persons?

E-money is definable, identifiable, stable and separable from persons. Transferability from one person to another is essential to its use as a means of payment. Some forms of e-money may also be abandoned, lost or destroyed as a matter of both fact and law (see section 1 above).

4.2 Does e-money exist independently of the legal system?

As has been shown in section 1 above, e-money is more than the redemption right that is associated with it. It is a standalone thing that has existence independently of the legal system. The rights involved in e-money primarily consist of ownership rights in a thing, i.e., value, which may then be exchanged for goods or services or otherwise transferred to third parties. These rights persist independently of any relationship with the issuer, who is not necessary for their enforcement, even though the e-money can only be used within the e-money ecosystem and subject to the issuer's terms.

In respect to the issuer's terms, it is important to distinguish between the e-money itself and the terms under which the financial service that encompasses the various uses of e-money is supplied. When e-money is issued, there is a purchase transaction by which the buyer purchases e-money in exchange for handing over funds of an equivalent amount to the issuer. This purchase is governed by contract, but this contract effectively concludes with the conclusion of the purchase. From the point of purchase onwards, the use of the e-money is then subject to the ongoing terms of the issuer (as well as of other parties, such as acquirers) governing access to, and the use of, the e-money ecosystem. Terms may include the types of merchants that the e-money may be spent with, the countries in which the e-money may be spent, the safekeeping of access credentials, transaction fees, statutory rules on the provision of payment services, terms relating to anti-money laundering obligations, etc. Importantly, these terms all concern the e-money ecosystem, not the ownership of the e-money itself. Thus, in contrast to the examples provided by the Law Commission when discussing in-game digital assets in chapter 7 of the consultation paper, the e-money issuer has no right to revoke ownership of the e-money if a holder does not comply with its terms of use. This is because the e-money holder has not purchased contractual rights of access under an ongoing licence that may be terminated, but a thing of

[7] Para. 12.39 of the consultation paper, footnote omitted.

value in relation to which the contract has concluded on purchase. Hence, the issuer may revoke *access* to the e-money ecosystem in certain circumstances but continues to be bound by the *ownership* rights of the holder to the e-money and therefore must, as a minimum, redeem it on presentation by the holder.

The obligation to recognise issued e-money as value owned by the e-money holder even persists after the issuer's insolvency and where the e-money ecosystem is no longer in operation, in which case the Electronic Money Regulations 2011[8] and the Payment and Electronic Money Institution Insolvency Regulations 2021[9] provide for the redemption of issued e-money. In that case, safeguarded funds are distributed amongst everyone who can show they are owners of e-money – not because the safeguarded funds are owned by e-money holders,[10] but because the e-money itself continues to exist and carries a right of redemption. This is a strong indication of the existence of e-money independently of any legal system. Only in a situation where the ownership rights of an e-money holder are themselves in doubt (e.g., in cases of financial crime) can the issuer (or court, or insolvency practitioner) deny a holder of e-money their ownership rights to it. However, such a denial leaves intact the existence of the e-money itself, which can be returned to its rightful holder. Hence, the same can be said about e-money as about crypto-tokens: "No legal rule can on its own create or destroy a crypto-token — no court decision can say that a crypto-token has ceased to exist."[11]

In this context, when deciding whether e-money exists independently of the legal system, care should also be taken not to give undue weight to the fact that e-money is centrally issued and can only be used within the particular scheme's ecosystem. For instance, certain crypto-tokens also involve central issuance, and the openness/closedness of the ecosystem is a matter of degree both for e-money and crypto-tokens. E-money is by definition monetary value that is accepted by parties *other than the issuer*, and these parties may range from a handful of merchants in a local e-money scheme to millions of users that accept e-money in transfers nationally and internationally.[12] While these parties must link to the issuer's ecosystem when they accept e-money, it is difficult to conceive of property relations in a digital environment that are not to some extent contingent on licenced infrastructure. Furthermore, developments in the interoperability of e-money systems may change the way in which e-money is used, rendering any perceived reliance on a central issuer's infrastructure and associated terms tenuous.

Finally, the potential for e-money to be stored on physical cards which may be transferred entirely outside the system of the issuer should also speak for the independent existence of e-money from any legal system.

5. The third criterion: Is e-money is rivalrous?

E-money is issued by a central party, the issuer, who ensures through its internal accounting processes that the e-money cannot be double spent, and who polices access and transactions. Together with the

[8] SI 2011/99.

[9] SI 2021/716.

[10] That this is not the case has been shown in the Ipagoo litigation: *Re Ipagoo LLP (In Administration)* [2021] EWHC 2163 (Ch); *Re Ipagoo LLP (In Administration)* [2022] EWCA Civ 302.

[11] Para. 10.71 of the consultation paper.

[12] The biggest schemes, such as PayPal, have several hundred million users.

rules of the e-money system, the control exercised over the ledger by the issuer means that use of the e-money by one person necessarily prohibits its use by any other.

6. Conclusion

I have set out above why e-money is not a pure chose in action and how it meets the three criteria stipulated by the Law Commission for its proposed new category of personal property, data objects. Adopting this categorisation would increase legal certainty, may aid consumer protection and business case innovation and would ensure the equal treatment in property law terms of e-money and crypto-tokens that will fall within the scope of the e-money regulatory regime. While I have not been able to consider all the consequences of the categorisation of e-money as a data object (including remedies, custody in distribution business models, etc.), I believe the approach here could mirror that adopted for crypto-tokens.