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### Bitcoin : A Bit Too Far ?

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#### **Abstract**

Bitcoin is a free open source peer-to-peer electronic cash system that is completely decentralised, without the need for a central server or trusted parties. This article focuses briefly on some legal issues related to financial regulatory aspects about e-money and payment services.

Keywords: **bitcoin; payment services directive, electronic money directive, financial regulatory, European law, data protection, consumer protection.**

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Recently Cindy Cohn, the legal director and general counsel for the Electronic Frontier Foundation, announced (1) that EFF recently removed the Bitcoin donation option on the EFF website, and that EFF has decided to not accept Bitcoins. The main reason is that the legal issues involved with creating a new currency system such as Bitcoin are very complex and that it is unclear how Bitcoin fits into the existing legal framework.

### **How does it work?**

Bitcoin (2) is developed by programmer Satoshi Nakamoto (probably a pseudonym) as a free open source peer-to-peer electronic cash system that is completely decentralised, without the need for a central server or trusted parties. Users hold the crypto keys to their own money and transact directly with each other, with the help of a P2P network to check for double-spending. Unlike Second Life's Linden Dollars, which are controlled by Linden Labs, there is no central clearing house run by a company or organisation behind the Bitcoin-platform. It is not linked to any real life currency, but it can be used to purchase real life goods and services, not just in the virtual world. There is no central authority to approve transactions paid by Bitcoins, and manage the money supply but rather created on a peer-to-peer network. An excellent explanation of how its works can be found in the Economist (3).

In this blogpost, we will not get into the criticism (4) related to security or the economic underlying principles etc. Rather, we'll focus briefly on some legal issues.

### **Is it illegal ?**

The EFF is right, the legal framework is complex. There are several important legal aspects, such as data protection and privacy, consumer protection, contractual and private international law issues, e-commerce legislation including liability issues in virtual worlds, and the financial regulatory aspects, know your customer etc. Neither the Bitcoin website nor the text of its software license shed any light on this. Well, not much anyway. The Bitcoin software license (in the license.txt file that one can open after downloading) is in fact just a short license and disclaimer of any liability for the "as is" software. The Bitcoin website(s) refer to some legal questions in the US, but provides few or no answers.

Let's have a first glance at the financial regulatory aspect in the European Union, based on the information found on the Bitcoin websites. Following article 6 of the Rome I Regulation, the legislation of the country of the consumer's habitual residence applies in this situation. To make a long story short: this means that the European consumer is protected by the legislation of his own member state. An important question is whether Bitcoin falls under the application of the Electronic Money Directive 2009/110/EC. "Electronic 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.

As far as I understand the way Bitcoin works, the question whether Bitcoin is e-money in the meaning of Electronic Money Directive could be subject to debate. It is a monetary value stored on the computer of each participant in the peer-to-peer network. Bitcoins can be used to buy goods and services from third parties outside of the peer-to-peer network. It seems that every participant in the peer-to-peer network is a bitcoin “miner” - individually or via a pooled effort - but this “mining” activity doesn’t imply an issuing of Bitcoins on receipt of funds. The miners don’t receive any funds in return. This would mean that they are not considered as e-money issuers. However, websites that issue bitcoins upon payment of currency (dollars, euro’s) could be considered as e-money issuers. The same goes for the entrepreneurial types who are organising a pooling of bitcoin-mining or are - in Bitcoin-speak - “selling mining contracts” against real life currency (dollar, euro’s,...).

### **Fly under the European radar**

Assuming that we would indeed be dealing with e-money in the meaning of the Directive, this means that anyone issuing Bitcoin e-money must comply with the regulatory framework. The Directive foresees some exemptions that fly under the e-money Directive’s regulatory radar. The Directive does not apply to monetary value stored on specific pre-paid instruments, designed to address precise needs that can be used only in a limited way, because they allow the electronic money holder to purchase goods or services only in the premises of the electronic money issuer or within a limited network of service providers under direct commercial agreement with a professional issuer, or because they can be used only to acquire a limited range of goods or services.

An instrument should be considered to be used within such a limited network if it can be used only either for the purchase of goods and services in a specific store or chain of stores, or for a limited range of goods or services, regardless of the geographical location of the point of sale. Clearly the European legislator was not thinking of peer-to-peer networks at that time, but rather about store cards, petrol cards, membership cards, public transport cards, meal vouchers or vouchers for services, but it could be argued that Bitcoin falls under that exemption because of its limited use ... for now. This would not make Bitcoin operate in a legal vacuum, but its exchanges would then be subject to the same regulations as for trading commodities or bartering.

If Bitcoin develops into a general-purpose instrument (meaning that it is widely accepted in daily economic life), the exemption from the scope of the e-money Directive should no longer apply. Also, it could be argued that Bitcoin cannot benefit from the above exemption in the first place, because it is typically designed for a network of service providers that is continuously growing. If Bitcoin cannot (or no longer) be exempted from the scope of the e-money Directive, this means trouble in Bitcoin-paradise... obtaining a license to issue e-money from the competent financial services authority, complying with the general prudential rules, having a minimum capital and own funds, being able to redeem, at any moment and at par value, the monetary value of the electronic money held, etc.

## Conclusion

Bitcoin could make itself more attractive to consumers and potential commercial partners by providing more clarity on all regulatory issues, and not only in the US (5), but also in the EU. Anyway, I stick to the old wisdom to “not put all your eggs in one basket” and will not invest all my savings (6) into it... Having said that, it is truly fascinating and worth following for various reasons. Bearing in mind past efforts to crack down on P2P-networks such as BitTorrent, Pirate Bay, etc it is obvious that the regulatory authorities may face a challenge enforcing anything on Bitcoin.

## References

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