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# Virtual Currencies, M-Payments and VAT: Ready for the Future?

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**Abstract** VAT is a critical factor for the success of Bitcoin and other virtual currencies. The EU Court of Justice has recently decided that bitcoins should be treated as regular money, at least for purposes of VAT. The author addresses the implications of this decision and considers which VAT related questions are still left outstanding for Bitcoin. He concludes with some remarks about the VAT aspects of m-payments.

Developments in the area of law often fail to keep pace with technological advancements. A recent example of regulators lagging behind technological developments can be found in the appearance of virtual currencies with bitcoin as their most prominent representative and the use of mobile payments (m-payments). From a VAT perspective the use of these instruments implies entering unregulated territory. Nonetheless VAT is a critical factor for the success of bitcoin and other virtual currencies. A payment with regular money falls outside the scope of VAT. Payments

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in any other form are in principle subject to VAT as a payment in kind. Divergent views have existed with respect to the VAT qualification of bitcoins. In its recent decision in the case *David Hedqvist*[1] the EU Court of Justice (ECJ) has, however, shed some light on this topic and harmonized the EU VAT treatment to some extent.

In this chapter the author provides an introduction to the phenomenon of Bitcoin followed by an overview of its VAT implications. The author concludes with addressing the VAT issues of m-payments.[2]

## An Introduction to Bitcoin

Bitcoin is an open source, peer-to-peer digital currency. It relies on the principles of cryptography (communication that is secure from view of third parties) to validate transactions and govern the production of the currency itself.[3] It was developed by a programmer (or group of programmers) who used the pseudonym Satoshi Nakamoto and whose identity remains unclear. The unit of the network is bitcoin or BTC (or XBT), which many consider a currency or internet cash.[4] This digital currency does not have a physical form but exists only as a balance on a bitcoin account (or "wallet").

Bitcoins are not issued by a state, bank or other financial institution, but are generated by the Bitcoin software itself and can only exist within that software. Bitcoins are not pegged to any real-world currency. The exchange rate is determined by supply and demand in the market. There are several exchange platforms for buying and selling bitcoins that operate in real time.[5]

[1] ECJ 22 October 2015, Case C-264/14, Skatteverket v David Hedqvist, ECLI:EU:C:2015:718.

[2] Reference is made to Bitcoin, capitalized, for the system (the software and the network it runs on) and bitcoin, lowercase, for the currency itself.

[3] Craig Kent Elwell, Maureen Murphy, Michael V Seitzinger, Bitcoin: Questions, Answers and Analysis of Legal Issues, Washington, Congressional Research Service, 20 December 2010, p. 1.

[4] Goldman Sachs, Global Market Research, Top of Mind, 11 March 2014, All about Bitcoin.

[5] An overview of such exchanges can be found at: http://bitcoincharts.com/markets/currency/EUR.html.

Nowadays, bitcoins are more and more accepted as tender.[6] Bitcoin offers users the advantages of lower transaction costs and increased privacy. However, there are also a number of disadvantages that could hinder wider use. These include sizable volatility of the price of bitcoins, and uncertain security from theft and fraud.

It is generally acknowledged that the Bitcoin technology is revolutionary and holds promise for a variety of alternative uses. In this chapter I will, however, only address the use of bitcoins as a means of payment. More specifically, I will only address the VAT consequences of such use.

## Currencies, Money and Bitcoins

Throughout history, people have used a variety of currencies as means of payment. In this respect, a currency is something that goes round; something that is accepted in exchange for goods or services, not for itself but to be exchanged later for another good or service. A currency is a unit to quantify money. Money itself is, according to its intrinsic nature, abstract purchasing power.[7]

The first currencies were commodities with an intrinsic value such as livestock, seeds, gold and silver. Less valuable commodities were also used such as cowry shells or beads. These currencies were gradually replaced by coins and paper money. Commodity-backed money appeared, which consisted of items representing the underlying commodity (for instance: gold certificates).[8]

For a long time, currencies were privately issued; governments did not claim a formal monopoly over the issue and use of money within their territories.[9] As of the nineteenth century, monetary instruments were standardized and the status of legal tender was reserved for national currency. Another development was that commodity-backed money was replaced by fiduciary money. Such "fiat" money could no longer be redeemed for

[6] European Central Bank (October 2012), Virtual Currency Schemes, October 2012.

[7] Francis Mann, The Legal Aspect of Money, Oxford: At the Clarendon Press (1971), p. 29.

[8] European Central Bank (October 2012), Virtual Currency Schemes, p. 9.

[9] Aleksandra Bal, Stateless Virtual Money in the Tax System, European Taxation, July 2013.

a commodity. It is money issued by a central authority. People are willing to accept the money in exchange for goods and services simply because they trust this central authority.[10] Trust ("fiducia") is crucial for this kind of money. If the public loses its trust in the central authority, the money will lose its value.

With the creation of the World Wide Web and the ongoing proliferation of the internet, virtual communities appeared some of which issued their own virtual currencies. In this respect a digital currency is a type of unregulated, digital money, which is issued and usually controlled by its developers, and used and accepted among the members of a specific virtual community.[11] Bitcoin also falls within the latter category.

## An Introduction to EU VAT

VAT, short for value added tax, is a primary source of income for many countries. Especially for EU countries, as they levy a VAT based on the framework set out in the VAT Directive.[12]This taxation applies generally to transactions relating to goods or services and is proportional to the price charged by the taxable person in return for the goods and services which he has supplied. The tax is charged at each stage of the production and distribution process, including that of retail sale, irrespective of the number of transactions which have previously taken place. The amounts paid during the preceding stages of the process are deducted from the tax payable by a taxable person, with the result that the tax applies, at any given stage, only to the value added at that stage and the final burden of the tax rests ultimately on the consumer.

The EU harmonization of VAT was set in motion because of two reasons. First of all, harmonization was needed to pave the way for a European single market. Back in 1967, Member States of the EEC[13]

[10] European Central Bank (October 2012), Virtual Currency Schemes, p. 10.

[11] European Central Bank (October 2012), Virtual Currency Schemes, p. 13.

[12] Council Directive 2006/112/EC of 28 November 2006 on the common system of value added tax. O.J. 2006, L 347.

[13] The European Economic Community is more or less the predecessor of the EU. When the European Union (EU) was created in 1993, the EEC was transformed into the European

levied a variety of turnover taxes. These differences in taxation hampered intracommunity trade. To resolve this, the First[14] and Second[15] Directives, both enacted in 1967, obliged Member States to replace their existing turnover taxes with a VAT. The directives provided only a general outline of the VAT that the EU countries must introduce on their territory. Under the VAT regime (local) VAT was due on importation of goods, while VAT was paid back on export. This implied an equal tax burden for foreign and local products and created a level playing field for intracommunity trade.

The second reason for the VAT EU harmonization lies in the financing of Europe. In 1970[16] the European Council agreed that the European Communities should have "own resources". One of these own resources was (and is) the VAT resource, a certain percentage of the aggregate national VAT base that each country must pay to Brussels. The Sixth Directive[17] was adopted in 1977 to ensure that all Member States used the same set of rules to calculate their VAT base.[18] This directive has been replaced by the current VAT Directive.[19]

A taxable person performing VAT taxed activities must charge VAT on its output while claiming back the VAT paid on costs. As a result of this "taxation of output/deduction of input", a taxable person remits the VAT on the value it has added. Payment of VAT is thus divided between the various parties in the chain from producer to consumer. It is generally

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Community (or EC), one of the EU"s three pillars (the other two were: the Common Foreign and Security Policy (CFSP) and Justice and Home Affairs (JHA), which was shrunk and renamed Police and Judicial Co-operation in Criminal Matters (PJC) in 2003). As of 1 December 2009 the Treaty of Lisbon made an end to the EU-pillar system; merging the EC with the other two pillars in a supranational system under the EU name.

[14] Directive 67/227 of 11 April 1967, O.J. No. 71, repealed by Directive 2006/112/EC.

[15] Directive 67/228 of 11 April 1967, O.J. No. 71.

[16] Decision of 21 April 1970 on the replacement of financial contributions from Member States by the Communities" own resources, O.J. No. L 94, 28.4.1970, p. 19.

[17] Sixth Council Directive 77/388/EEC of 17 May 1977, O.J. No. L 145 of 13 June 1977, p. 1, replaced by Council Directive 2006/112/EC (the VAT Directive).

[18] We see this reflected in the full name of this directive: "Sixth Council Directive 77/388/EEC of 17 May 1977 on the harmonization of the laws of the Member States relating to turnover taxes – Common system of value added tax: uniform basis of assessment".

[19] Council Directive 2006/112/EC of 28 November 2006 on the common system of value added tax.

believed that this system of fractioned payments makes VAT less susceptible to fraud than other forms of indirect taxation.

## Money, Payments and VAT

One of the inherent features of the EU VAT system is that the mere payment of money does not in itself constitute a VAT taxable event. Although this feature is generally acknowledged, it is not specifically codified. It seems to follow from the structure of VAT as set forth in the VAT Directive. According to Article 2(2) of this directive, VAT is intended as a general tax on consumption exactly proportional to the price of the goods and services. One could imagine the consumption of coins or bills, for instance to create works of art or as (costly) fuel. However, generally speaking, money in its capacity as a means of payment cannot be consumed,[20] but only spent. Without consumption, there can be no taxation.

The ECJ recognized this principle in its decision in the case *Mirror Group* where the ECJ stated: "As to whether a supply of services was made, it must be noted that a taxable person who only pays the consideration in cash due in respect of a supply of services, or who undertakes to do so, does not himself make a supply of services for the purposes of Article 2(1) of the Sixth Directive."[21]

On the same date the ECJ also issued its decision in the case *Fitzgerald*. Here the ECJ held that: It is supplies of goods or services which are subject to VAT, rather than payments made by way of consideration for such supplies.[22]

The ECJ reiterated this point of view in *BUPA*: "In that connection, it must also be borne in mind that it is the supplies of goods or services which are subject to VAT, rather than payments made by way of consideration for such supplies (…)".[23]

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[20] One could describe consumption as the process in which the recipient of goods or services changes these goods and services into something else.

[21] ECJ 9 October 2001, Case C-409/98, *Mirror Group*, ECLI:EU:C:2001:524, paragraph 26.

[22] ECJ 9 October 2001, Case C-108/99, *Cantor Fitzgerald*, ECLI:EU:C:2001:526, paragraph 17.

[23] ECJ 21 February 2006, Case C-419/02, *BUPA Hospitals and Goldsborough Developments*, ECLI:EU:C:2006:122.

The ECJ did not provide any indication that the above reasoning was limited to specific forms of "payments" such as currencies recognized as legal tender.

From the above it follows that a mere exchange of means of payment (where one supply of money is paid with a corresponding supply of money) does not fall within the scope of EU VAT. A reciprocal payment, where money in one form (or denomination) is traded in for money in a different form, thus remains outside the scope of VAT. That is, in as far as the value of the money traded in equals the value of the money received. A difference in values implies that one party does not only receive the monetary equivalent of the money traded in, but also an additional payment. This additional payment can be seen as a remuneration for the exchange itself.

This reasoning clearly underlies the judgment of the ECJ in the case *First National Bank of Chicago*.[24] This case addressed the VAT aspects of currency transactions of a bank. National currency was exchanged for foreign currency and vice versa using different exchange rates; an "offer" and a "bid" price. The "offer" rate was used when selling foreign currency, the "bid" rate was used when purchasing foreign currency (and, from a VAT point of view supplying national currency while receiving foreign currency as payment). The difference between the "offer" and the "bid" prices was known as "the spread". In its decision the ECJ held that this "spread" was in fact the remuneration the bank received for the exchange of currency. The exchange of the currencies itself was disregarded.

In its written observation in this case the UK Government considered that in the absence of consideration, a foreign exchange transaction entered into without the charging of a commission or a fee did not constitute a supply of goods or services but was simply the exchange of one means of payment for another. With respect to the mere exchange of one means of payment against another means of payment, the ECJ implicitly followed the UK observations; such exchange did not in itself constitute a VAT relevant event. However, the ECJ found that the use of offer and bid prices and the ensuing "spread" did in fact constitute remuneration for the exchange transactions.

[24] ECJ 14 July 1998, Case C-172/96, *First National Bank of Chicago*, ECLI:EU:C:1998:354.

More recently Advocate General Kokott addressed this issue in her conclusion in the case *Granton Advertising*.[25] Here Kokott stated that:

> 41. Such an approach is also consistent with the objectives which I attribute to the exemption of transactions concerning negotiable instruments. In my view, such instruments are rights which are regarded in the course of trade as being similar to money and which are to be treated for VAT purposes in the same way as payments of money. Payments of money are admittedly not taxed as such, but are rather simply the consideration for a taxed supply, either because they are neither a supply of goods nor a supply of services within the meaning of Article 2(1) of the Sixth Directive, (21) or because they are non-taxable by virtue of Article 13(B)(d)(4) of the Sixth Directive.

Kokott holds that "rights" with the same use as money should also be treated as money for purposes of VAT. The transfer of such rights should be treated as the mere transfer of money, a payment, and therefore remain outside the scope of VAT. The ECJ did not specifically address this issue in its decision in this case as it explicitly found in its "preliminary remarks" that contrary to what was indicated by the referring court,[26] the use of a Granton card could not be considered a "payment" for the purpose of the Sixth Directive. Based on this finding, the ECJ concluded that the issuance of the Granton card was taxed.[27] Clearly, the VAT consequences would have been different had the Granton card been qualified as a means of payment.

## Paying with Bitcoins

When looking at the VAT aspects of bitcoins, the first question that comes to mind is whether bitcoins should be treated as a means of payment comparable to other sorts of money. If you pay with bitcoins, should this

[25] Conclusion of Advocate General J. Kokott of 24 October 2013, Case C-461/12, *Granton Advertising BV*, ECLI:EU:C:2013:700.

[26] The Dutch District Court (Gerechtshof) of Den Bosch.

[27] ECJ 12 June 2014, Case C-461/12, *Granton Advertising BV*, ECLI:EU:C:2014:1745.

supply be treated the same as the supply of regular money—and thus remain outside the scope of VAT—or does this supply constitute a payment in kind? In the latter case bitcoin users may be obliged to pay VAT on their spending of bitcoin.

In what is considered the first landmark case (2013) involving bitcoins the US Magistrate Judge Amos Mazzant claimed that Bitcoin is a form of money:

> It is clear that Bitcoin can be used as money. It can be used to purchase goods or services, and (…) used to pay for individual living expenses. The only limitation of Bitcoin is that it is limited to those places that accept it as currency. However, it can also be exchanged for conventional currencies, such as the U.S. dollar, Euro, Yen, and Yuan. Therefore, Bitcoin is a currency or form of money (…).[28]

Other parties in the USA did not agree with the qualification of bitcoins as money. In 2014 the US Internal Revenue Service issued guidelines on the tax treatment of virtual currencies. According to this "Notice 2014–21" virtual currencies, including bitcoins, qualify as tangible personal assets. As a result, bitcoins are an investment subject to capital gains. Bitcoins will also be taxed with income tax if used to pay for goods and services.[29] In 2015 another US institution, the US Commodities Futures Trading Commission, took the position that bitcoins and other virtual currencies were a commodity covered by the Commodity Exchange Act.[30]

Across the ocean in the EU, virtual currencies such as bitcoins also received a mixed legal reception. Especially when it related to VAT. In

[28] Memorandum opinion regarding the Courts subject matter jurisdiction (6 August 2013, Judge Amos Mazzant), *US Securities and Exchange Commission v. Trendon T. Shavers et al.*, case number 4:13-cv-00,416, in the US District Court for the Eastern District of Texas.

[29] See: IRS Virtual Currency Guidance: Virtual Currency Is Treated as Property for US Federal Tax Purposes; General Rules for Property Transactions Apply, https://www.irs.gov/uac/Newsroom/IRS-Virtual-Currency-Guidance (accessed 18 November 2015).

[30] CFTC Orders Bitcoin Options Trading Platform Operator and its CEO to Cease Illegally Offering Bitcoin Options and to Cease Operating a Facility for Trading or Processing of Swaps without Registering, http://www.cftc.gov/PressRoom/PressReleases/pr7231-15 (accessed 18 November 2015).

the UK the tax authorities[31] advocated the view that bitcoins were money for purposes of VAT. This implied that supplying bitcoins as payment was not a payment in kind, but fell outside the scope of VAT. On the other hand, the German Federal Ministry of Finance[32] and the Austrian Ministry of Finance[33] took the position that bitcoins did not qualify as money. In their view, paying with bitcoins constituted a payment in kind for purposes of VAT. The supply of bitcoins entails the transfer of the entitlement to certain rights in a separate network. Such a supply does not fall under any of the current exemptions in the VAT Directive and will therefore be subject to VAT when performed by a tax payer. Under this scenario anyone paying with bitcoins on a regular basis, and thus supplying services on a regular basis, becomes a VAT taxable person. The mere spending of bitcoins would then attract an obligation to pay VAT. Traders accepting bitcoins as payment will be confronted with an additional VAT levy when they exchange bitcoins for regular currencies. Also, should the trade in bitcoins be VAT taxed, such market may offer a breeding ground for carousel fraud.[34]

The recent decision of the ECJ in the case *David Hedqvist*[35] put an end to the above divergent VAT treatment of bitcoins.

## The Case of David Hedqvist

David Hedqvist was a Swedish individual who was planning to offer bitcoin exchange services. Hedqvist had received a ruling from the Swedish Authority for the Ruling (Skatterättsnämnd) stating that these activi-

[31] This approach was put forward in: Revenue & Customs Brief 09/14, Tax treatment of activities involving Bitcoin and other similar cryptocurrencies, issued 3 March 2014, http://www.hmrc.gov.uk/briefs/vat/brief0914.htm (accessed on 18 November 2015).

[32] In a letter dated 24 April 2014 from Dr. Michael Meister (Parlamentarischer Staatssekretär beim Bundesminister der Finanzen) on: Umsatzsteuerliche Behandlung von Bitcoins, see also: http://www.bundesverband-bitcoin.de/wp-content/uploads/2014/05/140512-Antwort-PStS-Meister.pdf (accessed on 18 November 2015).

[33] Letter from Bundesminister Dr. Michael Spindelegger to the Austrian Parliament dated 22 July 2014, GZ. BMF-310,205/0115-I/4/2014.

[34] By using the same mechanisms that were previously used in the trade of carbon rights, see: Redmar Wolf, The Sad History of Carbon Carousels. VAT Monitor 2010, no. 6.

[35] ECJ 22 October 2015, Case C-264/14, *Skatteverket v David Hedqvist*, ECLI:EU:C:2015:718.

ties would be VAT exempt. According to the Skatterättsnämnd bitcoins should be considered "currency" for purposes of VAT, and reference was also made to the decision of the ECJ in the case *First National Bank of Chicago*.[36] The Swedish tax authority (Skatteverket), however, appealed against the decision Skatterättsnämnd. Legal proceedings followed in which the Swedish Supreme Court found that the decision of the ECJ in the case *First National Bank of Chicago* did not necessarily relate to virtual currencies like bitcoin. The court decided to stay the proceeding and referred the following questions to the ECJ:

> Is Article 2(1) of the VAT Directive to be interpreted as meaning that transactions in the form of what has been designated as the exchange of virtual currency for traditional currency and vice versa, which is effected for consideration added by the supplier when the exchange rates are determined, constitute the supply of a service effected for consideration? If the answer to the first question is in the affirmative, is Article 135(1) to be interpreted as meaning that the abovementioned exchange transactions are tax exempt?[37]

In answering these questions, Advocate General Kokott and the ECJ addressed some fundamental VAT issues of Bitcoin.

First of all, the question of whether paying with bitcoins constitutes a VAT taxable event. In her opinion, Advocate General Kokott refers to the *First National Bank of Chicago* where the ECJ held that the exchange of currencies in relation to which a bank sets different rates for the sale and purchase of the currencies involved constitutes the supply of a service effected for consideration. In this respect Kokott notes:

> 13. (…) However, the taxable service effected by the bank comprised the exchange activity only, and not the transfer of the currencies themselves. The Court of Justice considered that this transfer constituted neither a supply of goods nor a supply of services, as the currencies were legal tender. (4) The court found that in principle the consideration for the taxable exchange

[36] ECJ 14 July 1998, Case C-172/96, *First National Bank of Chicago*, ECLI:EU:C:1998:354.

[37] Request for a preliminary ruling from the Högsta förvaltningsdomstolen (Sweden) lodged on 2 June 2014 — Skatteverket v David Hedqvist (Case C-264/14).

service consisted in the difference between the purchase and sale prices for the currencies.

14. The judgment was based on the fact that the transfer of legal tender as such is accepted as not constituting a chargeable event for VAT purposes. (…) Rather, such a transfer can in principle (…) only constitute the consideration for a taxed supply, as VAT is a tax on the end consumption of goods. (…) Currencies currently used as legal tender — unlike gold or cigarettes, for instance, which also are or have been used directly or indirectly as means of payment — have no other practical use than as a means of payment. Their function in a transaction is simply to facilitate trade in goods in an economy; as such, however, they are not consumed or used as goods.

15. That which applies for legal tender should also apply for other means of payment with no other function than to serve as such. Even though such pure means of payment are not guaranteed and supervised by law, for VAT purposes they perform the same function as legal tender and as such must, in accordance with the principle of fiscal neutrality in the form of the principle of equal treatment, (…) be treated in the same way.

16. This is consistent with the case-law. The case-law treats legal tender and other pure means of payment — such as vouchers with a face value (…) or the purchase of "points rights" for later use in hotels or accommodation (…) — in largely (…) the same way, in that in the latter cases the transfer of the means of payment is not held to constitute a taxable transaction.

17. According to the findings of the referring court, bitcoins also constitute a pure means of payment. The only purpose of possessing them is to reuse them as a means of payment at some point. For the purposes of the chargeable event for VAT, therefore, they must be treated in the same way as legal tender.[38]

Kokott concludes that the approach in *First National Bank of Chicago* must also be applied to bitcoins. Their transfer as such does not constitute a chargeable event. However, as Mr. Hedqvist plans to buy and sell bitcoins for Swedish crowns at a price which includes a markup on the

[38] Opinion of Advocate General Kokott, delivered on 16 July 2015, Case C–264/14, *Skatteverket v David Hedqvist*, ECLI:EU:C:2015:498.

exchange rate on a particular exchange site, his activity includes VAT relevant services in the form of the exchange.

In its decision the ECJ characterizes bitcoins as virtual currency with bidirectional flow. This virtual currency has no purpose other than to be a means of payment. Like means of payment officially recognized as "legal tender" (the ECJ refers to "traditional currencies"), bitcoin cannot be considered tangible property.[39] According to the ECJ, the exchange of different means of payment, does not qualify as a VAT relevant "supply of goods". However, the exchange at hand constitutes a VAT relevant service. The remuneration for this service is the margin that Hedqvist includes in the calculation of the exchange rate at which he is willing to sell and purchase the currencies concerned.

The ECJ thus follows in *David Hedqvist* the same reasoning as in *First National Bank of Chicago*. The respective supplies of means of payment (whether or not qualifying as legal tender) are disregarded. Relevant is only the exchange of means of payment in as far a spread is realized on this exchange. Apparently, paying with bitcoin is put on the same footing as paying with legal tender; this "supply" falls outside the scope of VAT.

## The Exchange Service: Exempt?

Once it is established that the exchange of bitcoin against a regular currency constitutes a VAT relevant service, the question arises whether this service is taxed or exempt.

Also on this issue differing opinion existed between the Member States. UK tax authorities suggested an exemption: "Charges (in whatever form) made over and above the value of the Bitcoin for arranging or carrying out any transactions in Bitcoin will be exempt from VAT under Article 135(1)(d) [of the VAT Directive]."[40]

Other EU countries advocated a different approach; Austria, for instance, was of the opinion that: "Der Umtausch von virtuellen Währungen in

[39] In the French version of the decision bitcoin is described as: "moyens de paiement" while legal tender is: "moyens de paiement légaux". See: Redmar Wolf, Bitcoin and EU VAT. International VAT Monitor, October/September 2014, p. 254.

[40] Revenue & Customs Brief 09/14, paragraph 4.

gesetzliche Zahlungsmittel kann einen steuerbaren und steuerpflichtigen Umsatz darstellen, wenn der Umtauschende Unternehmer ist, der diesen Umsatz im Rahmen seines Unternehmens ausführt."[41]

In *David Hedqvist* the ECJ decides this matter; the exchange services are VAT exempt, although not under the provision suggested by the UK tax authorities (Article 135(1)(d) of the VAT Directive). The latter provision refers to transactions relating to, *inter alia*, "deposit and current accounts, payments, transfers, debts, cheques and other negotiable instruments". According to the ECJ this means that services or instruments must be involved that operate as a way of transferring money. The exemption thus concerns only derivatives of currency and not the currencies themselves.

According to the ECJ the "bitcoin" virtual currency, is not a current account or a deposit account, a payment or a transfer but, instead, a direct means of payment between the operators that accept it. As a result, Article 135(1)(d) of the VAT Directive does not apply to the exchange of bitcoins.

The ECJ subsequently reviews the exemption for transactions involving, *inter alia*, "currency" [and] bank notes and coins used as legal tender (Article 135(1)(e) of the VAT Directive). From the various language of this provision it is not clear whether this exemption is restricted to transactions involving traditional currencies (legal tender) or also encompasses transactions involving other currencies. Where there are linguistic differences in the various versions of a provision, the context of the provision and the aims and scope of the VAT Directive must be taken into account for determining the scope of the provision.

The exemption for transactions involving currency is intended to alleviate the difficulties connected with determining the taxable amount and the amount of VAT deductible which arise in the context of financial transactions. Such difficulties not only exist when traditional currencies are exchanged but also when traditional currencies are exchanged for virtual currencies which are accepted as means of payment. Transaction in non-traditional currencies, such as bitcoin, are financial transactions.

[41] Letter from Bundesminister Dr. Michael Spindelegger to the Austrian Parliament dated 22 July 2014, GZ. BMF-310,205/0115-I/4/2014, paragraph 19.

Limiting the scope of the exemption to transactions involving only traditional currencies would then deprive the exemption of part of its effect. From this the ECJ concludes that the exemption for transactions in currencies should also cover the exchange of bitcoins at hand.

Exchanging bitcoins for legal traditional currencies is thus put on the same footing as the "regular" exchange of traditional currencies.

## Defining Bitcoin

The decision of the ECJ in *David Hedqvist* includes a description of bitcoin and its peculiarities. In this respect the ECJ does not refer to legislation, but to "common ground". According to the ECJ it is common ground that the bitcoin virtual currency has no other purpose than to be means of payment and that it is accepted for that purpose by certain operators. It is also common ground that the bitcoin is neither a security conferring a property right nor a security of a comparable nature.[42] The ECJ refers to bitcoin as being a virtual currency with bidirectional flow. The ECJ also notes that the bitcoin virtual currency cannot be regarded as "tangible property" nor as a current account, a deposit account, a payment or a transfer.

## Accepting Bitcoins as Payment

In *David Hedqvist* not all VAT aspects of the use of bitcoins were addressed. The ECJ did not provide guidance on the valuation of bitcoins. When a retailer accepts bitcoins as a remuneration for taxed goods or services, VAT will be due on the value of the bitcoins. This matter is undisputed; paying with bitcoins does not imply that goods or services acquired with bitcoins become VAT free. The practical issue here is, however, how the taxable amount should be calculated when receiving bitcoins as payment. Which exchange rate should be used? Article 91(2) of the VAT Directive prescribes that when accepting a currency other

[42] As mentioned in Article 135(1)(f) of the VAT Directive.

than that of the EU country where the taxable transaction takes place, "the exchange rate applicable shall be the latest selling rate recorded, at the time VAT becomes chargeable, on the most representative exchange market or markets of the Member State concerned, or a rate determined by reference to that or those markets, in accordance with the rules laid down by that Member State."

The question that arises here is whether bitcoin qualifies as a "currency" as mentioned in this provision. This term seems restricted to "legal tender", something bitcoin clearly is not. Following the reasoning that the ECJ applied with respect to the scope of the exemption for transactions in (virtual) currencies, however, Article 91(2) of the VAT Directive should also apply to bitcoin transactions. Exchange rates for bitcoins are readily available on the internet, although it is not clear how the "most representative" market should be determined.[43]

## Creating Bitcoins Through Mining

Another issue that the ECJ did not address was the VAT treatment of bitcoin mining. Bitcoin mining is the process of making computer hardware do mathematical calculations for the Bitcoin network to confirm transactions and increase security. It involves applying computer power to solve complicated algorithms. Once such math problem is solved ("a new block is mined") the network itself awards a certain amount of newly generated bitcoins to the miner.

In my view obtaining bitcoins through the process of mining does not constitute a VAT relevant activity. The bitcoins are automatically generated by the network itself; there is no specific customer for the mining activities. Mining therefore does not lead to a situation in which a legal relationship exists between a provider of a service and the recipient (the customer) as the ECJ described in its decision in the case *Tolsma*.[44] Without such legal relationship, there is no supply against consideration and no VAT taxable event.

[43] See for instance: http://www.coindesk.com/price/.

[44] ECJ 3 March 1994, Case 16/93, *R. J. Tolsma v Inspecteur der Omzetbelasting Leeuwarden*.

If the miner subsequently exchanges the bitcoins against regular currency, goods or services this does not constitute a taxable event either. As can be derived from *David Hedqvist* the supply of bitcoins is a mere payment and falls outside the scope of VAT.

The process of mining may also involve validating payments. A bitcoin transaction will only be processed in the Bitcoin network when it is validated by a miner. A party who wants to transfer bitcoins may include a transaction fee in its payment order. Miners are then enticed to process this transaction with priority.

The party placing the payment order does not know which miner will process the transaction, nor does the party placing the payment order have any recourse against this miner if anything goes wrong. A legal obligation to pay a transaction fee does not exist; miners are not entitled to transaction fees. Transaction fees can be compared with a tip or gratuity left for the miner. For VAT purposes, transaction fees will likely not qualify as a remuneration for the processing of the payment. As a result, this mining activity will also remain outside the scope of VAT.

However, let us assume that the transaction fees *does* constitute a VAT relevant remuneration for the processing activity. The question then arises whether this processing is taxed or exempt. In my view, these activities will likely fall under the exemption for transactions concerning payments (Article 135 (1)(d) of the VAT Directive). In its decision in the case *SDC*[45] the ECJ held that such transactions must have the effect of transferring funds and entail changes in the legal and financial situation. The validating activities of miners seem to do just that.[46]

Outside the scope of VAT or VAT exempt, in any event miners will likely not perform VAT taxed activities. However, as these activities comprise "breaking new ground", it may be expected that the ECJ will be asked to shed its light on the VAT implications of bitcoin miners in due course.

[45] ECJ 5 June 1997, Case C-2/95, *Sparekassernes Datacenter* (*SDC*), paragraph 66.

[46] This view is advocated by the UK tax authorities Revenue & Customs Brief 09/14, paragraph 2.

## Conclusions for Bitcoin

Bitcoin offers an alternative means of payment. In its decision in *David Hedqvist* the ECJ has confirmed that for purposes of VAT the use of bitcoins is treated as the use of any other means of payment. This implies that paying with bitcoins constitutes a mere payment and is not a relevant transaction for VAT purposes. When receiving bitcoins as payment, VAT will be due on the value using exchange rates which are readily available on the internet. Exchanging bitcoins for regular currencies remains outside the scope of VAT. Any commission received in this respect is VAT exempt.

The activities of bitcoin miners were not covered by the decision of the ECJ in *David Hedqvist*. It is likely that these activities will not attract VAT. However, the ECJ will have the final say in this matter. Preliminary questions on this were not referred yet, but I expect such questions will follow in due course.

All in all, despite its revolutionary nature, Bitcoin does not attract too many VAT complications within the EU. This is because the ECJ has put the use of bitcoins on the same footing as the use of regular currencies. As a result, from a VAT perspective, the EU is ready for the future of this new form of payment.

## VAT and M-Payments

Compared to bitcoins, the VAT issues for m-payments are rather straightforward. M-payments normally relate to legal tender. As a result, the VAT consequences of this new type of payment do not differ from other ways through which entitlement to regular currency is transferred. Such transfer itself, the payment, falls outside the scope of VAT. Receipt of money through this medium may constitute a payment for goods and services and thus attract VAT.

When mobile phone services enable subscribers to send money, there is a combination of a telecommunication service and a financial service. The various parties involved in arranging this transaction will normally receive a fee. Here VAT complications may occur.

Pursuant to Article 135(1)(d) of the VAT Directive an exemption applies to "transactions concerning transfers and payments". Although this exemption was originally intended for payment services rendered by financial institutions, it is clear from the ECJ"s judgment in SDC[47] that it also applies to such services supplied by other service providers. In the same decision the ECJ held that the exemption thus applied to services which have the effect of transferring funds and entail changes in the legal and financial situation of the parties involved. That certainly happens when using m-payments. However, when several parties are working together to complete payments it may be unclear whose services are VAT exempt and whose services are VAT taxed (for instance because they concern telecommunication services which are not exempt). It all depends on the legal (and factual) relationships between parties. In any event, facilitators of m-payments should not disregard VAT when starting up their activities.

## References

Bal, A. (2013, July). Stateless virtual money in the tax system. *European Taxation*. 53 (7), 351–356.

Elwell, C. K., Murphy, M. M., & Seitzinger, M. V. (2013). *Bitcoin: Questions, answers and analysis of legal issues*. Washington, DC: Congressional Research Service.

Mann, F. (1971). *The legal aspect of money*. Oxford: At the Clarendon Press.

Wolf, R. (2010). The sad history of carbon carousels. *VAT Monitor, 6*, 10–17.

Wolf, R. (2014). Bitcoin and the EU VAT. *International VAT Monitor*. September/October. 254–257.

[47] ECJ 5 June 1997, Case C-2/95, *Sparekassernes Datacenter* (*SDC*).