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 You can access a [guidance paper](#) that has been issued with this draft Ruling. The guidance paper provides an overview of the tax treatment for transactions associated with crypto-currencies, specifically Bitcoin. Where other crypto-currencies have the same characteristics as Bitcoin, the information in the guidance paper applies equally to the taxation treatment for other crypto-currencies.



Draft Goods and Services Tax Ruling

Goods and services tax: the GST implications of transactions involving bitcoin

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❶ This publication provides you with the following level of protection:

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What this Ruling is about

1. This draft Ruling explains the Commissioner’s view on the goods and services tax (GST) consequences of transactions involving the use of Bitcoin.
2. In particular, this draft Ruling considers whether bitcoin is ‘money’ as defined in section 195-1 of the *A New Tax System (Goods and Services Tax) Act 1999* (GST Act) and whether it is a ‘financial supply’ under subsection 40-5(1) of the GST Act.
3. In considering the GST consequences, the draft Ruling focuses on the requirement that there must be a ‘supply for consideration’ for there to be a taxable supply. For the purposes of this draft Ruling, it is assumed that the other requirements in section 9-5 (taxable supplies) and section 11-5 (creditable acquisitions) of the GST Act are satisfied.
4. All references in this draft Ruling are to the GST Act unless otherwise specified.

Ruling

5. A transfer of bitcoin is a 'supply' for GST purposes.¹ The exclusion from the definition of supply for supplies of money² does not apply to bitcoin because bitcoin is not 'money' for the purposes of the GST Act.³

6. The supply of bitcoin is not a 'financial supply' under section 40-5. Further, it is not an input taxed supply under paragraph 9-30(2)(b).

7. A supply of bitcoin is a taxable supply under section 9-5 if the other requirements in section 9-5 are met and the supply of bitcoin is not GST-free under Division 38 (for example, as a supply to a non-resident for use outside of Australia).⁴ A supply of bitcoin in exchange for goods or services will be treated as a barter transaction.

Example 1: bitcoin exchange transactions

8. *Liam carries on a business buying and selling bitcoin (BTC) as an exchange service online in Australia charging a 1% commission on the published exchange rate. Liam is registered for GST.*

9. *David, who is not registered for GST, uses Liam's online service to exchange 10 BTC to Australian dollars. The exchange rate at the time of the transaction is 1BTC = AUD662. The commission is \$66.20. David receives AUD\$6,553.80 for his 10 BTC.*

10. *The following day Karin, who is registered for GST, wishes to purchase 10 BTC from Liam's online service for use in acquiring an asset for her business. The exchange rate is 1BTC = AUD662. Karin acquires the 10 BTC for AUD\$6,686.20 plus GST. The GST inclusive amount of AUD\$7,354.40 is calculated as follows: 10 BTC x AUD\$662, plus AUD\$66.20 commission, plus AUD\$668.62 GST.*

11. *Liam records this exchange transaction with Karin and includes the amount in his business activity statement. If Karin's acquisition is wholly for a creditable purpose, Karin may claim input tax credits for the GST she paid on the acquisition of the bitcoin. When Karin later acquires an asset in exchange for bitcoin, she will record the supply of bitcoin as a taxable supply and an equivalent credit may be claimed in respect of her asset acquisition.*

Example 2: bitcoin provided in exchange for goods or services

12. *Paul owns a computer shop and is registered for GST. He sells a server for a GST-inclusive price of \$7,700 to Ross Co, a building company that is registered for GST. Paul agrees to accept bitcoin from Ross Co in exchange for the server.*

¹ Subsection 9-10(1).

² Subsection 9-10(4) excludes a supply of money from the definition of supply except where money is provided as consideration for the supply of money.

³ 'Money' is defined in section 195-1.

⁴ See section 38-190.

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13. When Paul lodges his business activity statement, he includes \$7,700 for the taxable supply of the server to Ross Co and claims credits of \$700 for the acquisition of the bitcoin. When Ross Co lodges its business activity statement, it includes \$7,700 for the GST inclusive market value of the bitcoin, and claims credits of \$700 for the acquisition of the server.

Example 3: merchant using an intermediary to accept bitcoin in exchange for goods or services

14. Following on from Example 2 above, Paul has an agreement with an intermediary acting as his agent to accept bitcoin in exchange for goods and services. When customers provide bitcoin to the intermediary in exchange for goods and services, Paul pays commission to the intermediary equal to 1% of the price. The intermediary agrees to deposit Australian currency (immediately or within one day) into Paul's nominated bank account. There is no agreement between the customer and the intermediary.

15. Two transactions occur here. First, the customer supplies bitcoin in exchange for the supply of goods and services from Paul as a barter transaction. The GST consequences of this are explained in Example 2. Second, Paul supplies bitcoin to the intermediary (through the transfer of bitcoin from the customer) for Australian currency which is treated as a taxable supply by Paul on which GST is payable. The intermediary provides Paul with taxable services for which the commission is consideration and the intermediary may claim credits for the acquisition of the bitcoin.

Date of effect

16. When the final Ruling is issued, it is proposed to apply both before and after its date of issue. However, the Ruling will not apply to taxpayers to the extent that it conflicts with the terms of settlement of a dispute agreed to before the date of issue of the Ruling (see paragraphs 75 to 76 of Taxation Ruling TR 2006/10).

17. While the ATO view will have application for periods prior to its publication, the ATO will not generally apply compliance resources to past year cases in relation to taxpayers who have behaved in a bona fide manner and made a genuine attempt to understand and satisfy their obligations.

Commissioner of Taxation

20 August 2014

Appendix 1 – Explanation

ⓘ *This Appendix is provided as information to help you understand how the Commissioner’s preliminary view has been reached. It does not form part of the proposed binding public ruling.*

Relevance of the concepts of ‘money’ and ‘currency’ in the GST Act

18. Whether bitcoin is ‘money’ is relevant for determining whether the transfer of bitcoin is a ‘supply’ for GST purposes. A supply ‘...does not include a supply of money unless the money is provided as consideration for a supply that is a supply of money’.⁵ The value of a taxable supply is calculated by reference to the price which is made up of consideration which is expressed as an amount of money and the GST inclusive value of non-monetary consideration.⁶ Further, the value of that taxable supply must be expressed in Australian currency or translated into Australian currency if the consideration is expressed in a foreign currency.⁷ Having regard to these provisions, ‘money’ is a central concept in determining whether there is a ‘supply’ for GST purposes, and the calculation of the GST payable on a taxable supply.

19. ‘Money’ is defined to specifically include, amongst other things, ‘currency (whether of Australia or of any other country)’.⁸ The term ‘currency’ is not defined. The meaning of each of these terms in the context of the GST Act is discussed in detail in the explanation below.

20. Determining whether bitcoin is ‘money’ or ‘currency’ for the purposes of the GST Act requires consideration of the characteristics of Bitcoin.

What is Bitcoin?

21. The *Oxford Dictionary of English*⁹ defines Bitcoin as:

a type of digital currency in which encryption techniques are used to regulate the generation of units of currency and verify the transfer of funds, operating independently of a central bank: *bitcoin has become a hot commodity among speculators | If you want to buy something using bitcoin you need to make sure the seller accepts the cryptocurrency.*

⁵ Subsection 9-10(4).

⁶ Subsection 9-75(1).

⁷ Section 9-85.

⁸ Definition of ‘money’ in section 195-1.

⁹ *Oxford Dictionary of English* [online] 3rd ed. viewed 7 August 2014 www.oxfordreference.com.

22. It is described by commentators as ‘a virtual currency that essentially operates as online cash’¹⁰ and as a ‘crypto-currency, designed to reinvent the way that money works’.¹¹ Bitcoin operates as a decentralized peer-to-peer payment network whose implementation relies on the use of public-key cryptography to validate transactions involving existing bitcoin and in doing so generates new bitcoin.¹² The Bitcoin system is decentralized in that it is not under the control of a central authority.¹³ Transactions on the Bitcoin network are denominated in bitcoin. The value of bitcoin is ‘not derived from gold or government fiat, but from the value that people assign it’.¹⁴

23. The process through which bitcoins are created and enter into circulation is called bitcoin ‘mining’. Mining involves a ‘miner’ using freely downloadable Bitcoin software to solve complex cryptographic equations that essentially verify and validate transactions involving the transfer of existing bitcoins between other parties, for example to ensure an existing bitcoin cannot be transferred more than once by the one person. The first ‘miner’ to successfully solve an equation receives as a reward a specified number of newly created Bitcoins to their Bitcoin address. The process of ‘mining’ has been explained as follows:¹⁵

The actual mining of Bitcoins is by a purely mathematical process. A useful analogy is with the search for prime numbers: it used to be fairly easy to find the small ones (Eratosthenes in Ancient Greece produced the first algorithm for finding them). But as they were found it got harder to find the larger ones.

...

For Bitcoins the search is not actually for prime numbers but to find a sequence of data (called a ‘block’) that produces a particular pattern when the Bitcoin ‘hash’ algorithm is applied to the data. When a match occurs the miner obtains a bounty of Bitcoins (and also a fee if that block was used to certify a transaction). The size of the bounty reduces as Bitcoins around the world are mined.

The difficulty of the search is also increased so that it becomes computationally more difficult to find a match. These two effects combine to reduce over time the rate at which Bitcoins are produced and mimic the production rate of a commodity like gold. At some point new Bitcoins will not be produced and the only incentive for miners will be transaction fees.

¹⁰ Brito, J and Castillo, A ‘Bitcoin: A Primer for Policymakers’, *Policy*, Summer 2013-2014, vol. 29, no. 4, pp 3-12.

¹¹ Bradbury, D ‘The problem with Bitcoin’, *Computer Fraud & Security* November 2013, issue 11, pp 5-8.

¹² Refer note 10 above at p 4.

¹³ See also Guthrie, N ‘The End of Cash? Bitcoin, the Regulators and the Courts’ *Banking & Finance Law Review* Apr 2014, vol 29, no. 2, pp 355-367; Moore, T ‘The promise and perils of digital currencies’ *International Journal of Critical Infrastructure Protection*, 2013, pp 147-149.

¹⁴ Refer note 10 above at p 4 and see also note 13 above: Guthrie, N at 357 and Moore, T at p 147.

¹⁵ Tindell, K ‘Geeks Love the Bitcoin Phenomenon Like They Loved the Internet in 1995’ *Business Insider* 5 April 2013. See also note 11 above at pp 5-6.

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24. Bitcoins that are already in circulation can be acquired either by exchanging 'national' or 'fiat' currencies¹⁶ for them through an online exchange (or through a Bitcoin ATM), or by accepting them as a gift or in exchange for goods and services.

25. Bitcoins are sent and received via Bitcoin addresses. A Bitcoin address is a long alphanumeric string used by the network as an identifier. A Bitcoin address can be generated at no cost by any user of Bitcoin and a person can have any number of Bitcoin addresses.¹⁷

26. Bitcoin uses public key cryptography to make and verify digital signatures used in Bitcoin transactions.¹⁸ Each user is assigned a 'public/private' keypair which is saved to that person's Bitcoin wallet. A Bitcoin wallet has been described as something 'that stores the digital credentials for [a person's] bitcoin holdings'.¹⁹

27. The public key is an alphanumeric number that mathematically corresponds to the Bitcoin address which is publically known. The private key is also an alphanumeric number, however, it is kept secret as it is what allows the bitcoins to be transferred between Bitcoin addresses.²⁰ The private key is also mathematically related to the Bitcoin address. It is designed so that the Bitcoin address can be calculated from that private key, but importantly, the same cannot be done in reverse.²¹

28. To transfer bitcoins, a person creates a transaction message with the number of bitcoins to be transferred and signs the transaction with their private key.²² Those bitcoins are associated with the person's public key. The transaction is then broadcast to the Bitcoin network for validation through the Bitcoin mining process.²³

29. A bitcoin is only accessible by the person in possession of the private key that relates to the Bitcoin address associated with that person's bitcoin holdings. Accordingly, a bitcoin consists not just of the numerical amount (or balance) of bitcoins and the Bitcoin address to which they are associated, but also the related private key that allows the holder to do anything with those bitcoin.

¹⁶ For example, Australian dollars, US dollars etcetera. 'Fiat money' is defined as 'Money that a government has declared to be legal tender, although it has no intrinsic value and is not backed by reserves. Most of the world's paper money is now fiat money.': *A Dictionary of Finance and Banking* (Oxford) 4th revised ed.

¹⁷ See note 11 above at p 5.

¹⁸ See note 10 above at p 4.

¹⁹ Villasenor, J 'Secure Bitcoin Storage: A Q&A With Three Bitcoin Company CEOs' *Forbes* 26 April 2014.

²⁰ See note 10 above at p 4.

²¹ Wiener, H, Zelnik, J, Tarshish, I, & Rodgers, M 'Chomping at the Bit: U.S. Federal Income Taxation of Bitcoin Transactions' *Journal Of Taxation Of Financial Products* (2013) vol. 11, no. 3, pp. 35-47 at 35.

²² Kondor D, Posfai M, Csabai I, Vattay G 'Do the Rich Get Richer? An Empirical Analysis of the Bitcoin Transaction Network' (2014) *PLoS ONE* vol. 9, issue 2 pp 1-10 at p 1.

²³ See note 10 above at p 4.

Is Bitcoin ‘money’ for GST purposes?

30. For the purposes of the GST Act, the term ‘money’ is defined in section 195-1 as:

Money includes:

- (a) currency (whether of Australia or any other country); and
- (b) promissory notes and bills of exchange; and
- (c) any negotiable instrument used or circulated, or intended for use or circulation, as currency (whether of Australia or of any other country); and
- (d) postal notes and money orders; and
- (e) whatever is supplied as payment by way of:
 - (i) credit card or debit card; or
 - (ii) crediting or debiting an account; or
 - (iii) creation or transfer of a debt.

However, it does not include:

- (f) a collector’s piece; or
- (g) an investment article; or
- (h) an item of numismatic interest; or
- (i) currency the market value of which exceeds its stated value as legal tender in the country of issue.

31. Generally the use of the term ‘includes’ indicates something broader than what follows in a statutory definition. Determining whether a broader meaning is intended and the content of that meaning is informed by the statutory context in which the term ‘money’ appears.²⁴ In determining whether bitcoin is ‘money’ for the purposes of the GST Act, it is essential to consider each of the specified items in the definition in section 195-1. Should bitcoin be ‘money’ then further consideration of the meaning of ‘money’ is not required.

Is Bitcoin ‘money’ under any item listed in the section 195-1 definition?***Paragraph (a): ‘currency (whether of Australia or of any other country)’***

32. Paragraph (a) of the definition operates to include:
‘currency (whether of Australia or of any other country)’.

33. The term ‘currency’ in paragraph (a) of the definition of ‘money’ is qualified by ‘of Australia’ and ‘of any other country’. The term ‘Australian currency’ is interchangeable with the term ‘currency of Australia’, which is prescribed a meaning under Australian law by virtue of the *Currency Act 1965* (Cth) (Currency Act).

²⁴ *ZY Finance Co Pty Ltd v. Cummings* (1964) 109 CLR 395 at 398-399 and *Blacktown Workers’ Club Ltd v. O’Shannessy* (2011) 183 LGERA 184 at 190-191.

34. In *Leask v Commonwealth*²⁵ (*Leask*), in finding that subsection 31(1) of the *Financial Transaction Reports Act 1988* (Cth) was a law with respect to 'currency' within the meaning of paragraph 51(xii) of the Constitution, Brennan CJ stated:²⁶

Currency consists of notes or coins of denominations expressed as units of account of a country and is issued under the laws of that country for use as a medium of exchange of wealth.

35. Gummow J further explained:²⁷

Section 8(1) of the *Currency Act 1965* (Cth) ('the Currency Act') states that the monetary unit, or unit of currency, of Australia is the dollar; s 9(1), so far as is material, requires every transaction, dealing, matter or thing relating to money or involving the payment of, or a liability to pay, money to be made, executed, entered into or done according to the currency of Australia, unless the currency of some other country is used; and s 11(1) requires that every payment, unless made according to the currency of some other country, be made according to the currency of Australia.

...

In *Watson v Lee* (167), Mason J, with whom Gibbs J agreed, held that s 51(xii) gave the Parliament power 'to control and regulate the receipt and use' in Australia of foreign currency. Barwick CJ and Stephen J (with whom Gibbs J also agreed) spoke to the same effect (168). By parity of reasoning, the power also supports laws to control and regulate the receipt and use of coin and paper money in Australia, being the medium of exchange in Australia.

Stephen J and Mason J also emphasised that, while 'coinage' and 'legal tender' involved quite specific and narrow concepts, the former being concerned with coins as money and the latter with the prescription of that which at any particular time may be a lawful mode of payment, 'currency' was a broader expression. This is exemplified by the provisions of the *Currency Act* to which I have referred earlier in these reasons. They illustrate the proposition that currency is a universal means of exchange, designated by a particular unit of account (169). (footnotes omitted)

²⁵ [1996] HCA 29; (1996) 187 CLR 579.

²⁶ *Leask* (1996) 187 CLR 579 at 595.

²⁷ *Ibid* at 617-618 and 622.

36. Accordingly, the meaning of the ‘currency of Australia’ under the Currency Act is the requisite monetary unit of exchange established by that Act as a means of discharging monetary obligations for all transactions and payments in Australia. Conversely, ‘the currency of some country other than Australia’ – the only other species of ‘currency’ according to which transactions and payment obligations can be discharged consistent with the Currency Act – must be any monetary unit recognised by another country’s laws for the same purposes. It is the legislative recognition of something as a monetary unit of exchange which makes that thing ‘currency’. That ‘currency’ can only exist within a legal framework and as an exercise of sovereignty is an aspect of the State theory of money²⁸ insofar as it is only by ‘fiat’ of the State that legitimacy is conferred.

37. It is a general principle of statutory interpretation that, where a statute uses words that have acquired a legal meaning, ‘it will be taken, prima facie, that the legislature has intended to use them with that meaning unless a contrary intention clearly appears from the context’.²⁹

38. In *Gamer’s Motors Centre (Newcastle) Pty Ltd v Natwest Wholesaler Pty Ltd*³⁰ (Gamer’s) Priestley JA further elaborated:³¹

The object of the approach is not to find the legal as opposed to the ‘ordinary’ meaning, but to find from the range of legal and ordinary meanings, which in any event will seldom be in watertight compartments, the meanings best suited to the statutory document as a whole.

39. As noted above, the term ‘currency’ is not defined in the GST Act. It has both an ordinary meaning and a legal meaning. The *Macquarie Dictionary*³² relevantly defines ‘currency’ as:

1 that which is current as a medium of exchange; the money in actual use;

.....

5 circulation, as of coin.

²⁸ C. Proctor, *Mann on the Legal Aspects of Money* (Oxford University Press, 6th ed. 2005) at [1.12] – [1.15].

²⁹ *Attorney-General (NSW) v. Brewery Employees Union of New South Wales* (1908) 6 CLR 469 at 531. See also the discussion in Pearce and Geddes, *Statutory Interpretation in Australia* (7th ed. 2011) at 128 [4.13] which considers case authority which has both applied the rule and distinguished it based on the context of the particular case.

³⁰ (1985) 3 NSWLR 475. For an application of this principle see *Johnson v Native Title Registrar* [2014] FCA 142 at ([29]-[30]).

³¹ (1985) 3 NSWLR 475 at 484. See also McHugh JA in *Gamer’s* (1985) 3 NSWLR 475 at 494.

³² *The Macquarie Dictionary*, [Online], viewed 23 June 2014, www.macquariedictionary.com.au.

40. The dictionary definition focuses on the function of currency as a medium of exchange. The legal meaning is that taken from the Currency Act. The Currency Act forms part of the broader statutory context in which the GST Act is to be construed. The use of the qualifiers 'of Australia' and 'of any other country' in paragraph (a) of the definition of 'money' are consistent with the concept of 'currency' in the Currency Act. Taking into account that context, the Commissioner is of the view that the concept of 'currency' in the GST Act does not extend to any broader concept of money that is current as a medium of exchange in the community.

41. Rather, in using the term 'currency', Parliament intended that the term take its legal meaning under the Currency Act – namely, a currency recognised as a universal means of exchange, designated by a particular unit of account and form of payment by the law in Australia or in some other country. The qualifiers 'of Australia' and 'of any other country' divide currency into two types: Australian currency and currency that is recognised as a universal means of exchange, designated by a particular unit of account and form of payment by the laws of another sovereign State (that is, foreign currency).

42. There is nothing in the GST Act which indicates an intention to depart from this established legal meaning of 'Australian currency' or the associated concept of 'foreign currency'.

43. Bitcoin is not a legally recognised universal means of exchange and form of payment by the laws of Australia or the laws of any other country. Therefore, it is not 'currency (whether of Australia or of any other country)' under paragraph (a) of the definition of 'money'.

Paragraph (b): promissory notes and bills of exchange

44. In Australia, the *Bills of Exchange Act 1909* (Cth) (the BOE Act) establishes a framework within which the use of specified financial instruments is comprehensively governed. The BOE Act defines the terms 'bills of exchange' and 'promissory note' in sections 8 and 89 respectively. A 'bill of exchange' is defined as:

8(1) A bill of exchange is an unconditional order in writing, addressed by one person to another, signed by the person giving it, requiring the person to whom it is addressed to pay on demand, or at a fixed or determinable future time, a sum certain in money to or to the order of a specified person, or to bearer.

8(2) An instrument which does not comply with these conditions, or which orders any act to be done in addition to the payment of money, is not a bill of exchange.

45. A 'promissory note' is defined as:

89(1) A promissory note is an unconditional promise in writing made by one person to another, signed by the maker, engaging to pay, on demand or at a fixed or determinable future time, a sum certain in money, to or to the order of a specified person, or to bearer.

46. It is specifically stated in the BOE Act that common law rules shall continue to apply to bills of exchange and promissory notes unless inconsistent with that statute.³³ Therefore, the legal meaning of these terms is also informed by relevant case law.

47. Each of the definitions quoted above evidence the character of bills of exchange and promissory notes as documentary intangibles in that the rights are transferrable by the document itself. The holder of the document, by reason of that holding alone, is able to enforce those rights against others. The same is not true for a bitcoin holding.

48. Further, the reference to ‘a sum certain in money’ in the definitions of a bill of exchange and promissory note requires payment in either Australian currency or foreign currency. That is, the sum must be denominated in and the rights enforceable by reference to ‘fiat’ currency. This interpretation is consistent with case law which, for example, has concluded that an instrument which provided for payment in gold dust was not a promissory note.³⁴

49. It follows that a bill of exchange or promissory note which purportedly granted a right denominated in bitcoin does not meet paragraph (b) of the definition of ‘money’ in the GST Act.

Paragraph (c): negotiable instruments used or circulated as currency

50. Paragraph (c) of the definition of ‘money’ includes:

any negotiable instrument used or circulated, or intended for use or circulation, as currency (whether of Australia or of any other country).

There are two elements to this paragraph – first, whether Bitcoin is a negotiable instrument, and second, whether its use or circulation is as currency of Australia or any other country.

51. The term ‘negotiable instrument’ is not defined. As noted in paragraphs 37 and 38 above, where words have a range of meanings, the construction of those words must take into account both the legal and ordinary uses to which they have been put. The meaning best suited to those words is determined by reference to the statutory context as a whole.

³³ Subsection 5(2) of the BOE Act.

³⁴ *McDonald v. Belcher* [1904] AC 429 at 435. See also Guest, AG 2009 *Chalmers and Guest on Bills of exchange, cheques and promissory notes*, 17th ed. Sweet & Maxwell, London, pp. 29-30.

52. An examination of the context in which the phrase ‘negotiable instrument’ appears indicates that it is intended to take on a technical or legal meaning. The *Encyclopaedic Australian Legal Dictionary*³⁵ defines a ‘negotiable instrument’ as:

A document recording a chose in action (such as a promise to pay money by one person to another, or a direction by one person to another to pay money to a third person), with the following characteristics: the ability to transfer the property rights recorded on the document by delivery, or by signature (indorsement) and delivery, of the document itself (unless the document, being a bill, is marked non-transferable) and without immediate notice of the transfer to the person against whom the rights are to be enforced — an instrument so transferred is said to be ‘negotiated’; the ability to sue on the property rights recorded in the document in the name of the person who currently owns the rights (being the holder of the document); and the transfer not being ‘subject to equities’, so that a transferee in good faith, for value, prior to the maturity date of the instrument and without notice of prior defects in title (such as fraud or theft) can acquire a better title than previous holders, free of defects in title and personal equities between remote prior parties. *Miller v. Race* (1758) 1 Burr 452 ; 97 ER 398 per Lord Mansfield LCJ; *Crouch v. Credit Foncier of England Ltd* (1873) LR 8 QB 374 at 381–2 per Blackburn J; *Goodwin v Robarts* (1875) LR 10 Ex 337 at 346–54 per Lord Cockburn LCJ (affirmed (1876) 1 App Cas 476) ; *Ilich v. R* (1987) 162 CLR 110 ; 69 ALR 231 ; 61 ALJR 128 ; [1987] HCA 1.

53. Bitcoin neither is nor involves a negotiable instrument at least because there is no instrument recording any chose in action against anyone relating to the payment of currency, nor any use or circulation actual or intended as ‘currency’. It follows that bitcoin is not money under paragraph (c) of the definition.

Paragraph (d): postal notes and money orders

54. Neither the term ‘postal note’ nor ‘money order’ are defined for the purposes of the GST Act. Those terms take their ordinary meaning subject to context and applicable rules of interpretation.

55. The *Macquarie Dictionary*³⁶ defines each of these terms as follows:

- ‘postal note’ (or ‘postal order’) is ‘an order for the payment of ... money, bought from and generally cashed at a post office’; and
- ‘money order’ is ‘an order for the payment of money, as one issued by one post office and payable at another’.

³⁵ *Encyclopaedic Australian Legal Dictionary* [online] Lexis Nexis, 2011 viewed 23 June 2014 www.lexisnexis.com.

³⁶ *The Macquarie Dictionary*, [Online], viewed 23 June 2014, www.macquariedictionary.com.au.

56. Bitcoin is neither a 'postal note' nor a 'money order' at least because no post office is involved and no money, in the sense of fiat currency, is involved. Therefore, Bitcoin does not meet paragraph (d) of the definition of 'money' in the GST Act.

Paragraph (e): payment supplied by specified means

57. Paragraph (e) of the definition of 'money' states:

whatever is supplied as payment by way of:

- (i) credit card or debit card; or
- (ii) crediting or debiting an account;
- (iii) creation or transfer of a debt.

58. The term 'payment' is not defined and therefore takes its ordinary meaning subject to context and applicable rules of interpretation.³⁷ That context may limit a word which would otherwise have a wide connotation.³⁸

59. The *Macquarie Dictionary*³⁹ defines 'payment' as '2. That which is paid; compensation; recompense' or '3. requital'. These definitions are of a wide connotation. The question is whether, in the context in which the word 'payment' appears in the definition of 'money', it is intended that a narrower definition be applied.

60. The Commissioner's view is that for the purposes of paragraph (e), there will be 'payment' by way of one of the payment mechanisms listed in paragraph (e) if whatever is supplied is denominated in (or sounds in), and the performance or enforcement of the relevant payment is in (or sounds in), fiat currency.⁴⁰ There is a distinction in the GST Act between consideration which finds expression as an amount of money and that which does not. The latter is sometimes called non-monetary consideration or 'in kind' consideration.⁴¹ Bitcoin is not denominated in an amount of fiat currency nor is consideration provided as an amount of bitcoin something which finds expression in money.

³⁷ *Avondale Motors (Parts) Pty Ltd v. FCT* [1971] HCA 17 at [13] referring to the maxim *noscitur a sociis*.

³⁸ See further in Pearce and Geddes, *Statutory Interpretation in Australia* (7th ed. 2011) at [4.23] for circumstances in which the maxim *noscitur a sociis* has been applied to limit a word of wide possible connotation.

³⁹ *The Macquarie Dictionary*, [Online], viewed 23 June 2014, www.macquariedictionary.com.au

⁴⁰ The concept of 'payment' may encompass an amount accounted for in notional units that are directly translatable as of right to a particular amount of fiat currency (see GSTR 2003/14 *Goods and services tax: the GST implications of transactions between members of a barter scheme conducted by a trade exchange*).

⁴¹ Section 9-75 and GSTR 2001/6 *Goods and services tax: non-monetary consideration* at [32]. See also *Burrill v Commissioner of Taxation* (1996) 67 FCR 519 at 525 where the Court stated that a promise to pay money was 'not consideration in kind, and although it is not actually money, it sounds in money'.

61. Even if ‘payment’ takes a broader meaning, bitcoin would not fall within any of the payment mechanisms listed in paragraph (e) of the definition of ‘money’ in the GST Act. The reasons for this conclusion are as follows.

‘Whatever is supplied as payment by way of credit card or debit card’

62. In a credit card or debit card situation, a customer is able to effect payment for goods or services through a series of pre-existing contracts between the customer and the credit or debit card provider and the credit or debit card provider and the merchant.⁴² Bitcoin holdings and transactions do not replicate the contractual relationships between the parties to a credit or debit card transaction, and so do not fall within the scope of subparagraph (e)(i) of the definition of ‘money’ in the GST Act.

‘Whatever is supplied as payment by way of crediting or debiting an account’

63. The term ‘account’ is not defined and therefore takes its ordinary meaning subject to context and applicable rules of interpretation.⁴³

64. The Commissioner considers that, having regard to the context in which the phrase ‘crediting or debiting an account’ appears, the word ‘account’ is intended to be used in its legal sense. That is, the account must consist of a chose in action which the account holder can enforce against the account provider. As was discussed above, a holding of bitcoin creates no right of action against anyone. Where there is a transfer of bitcoin, the person receiving it has not ability, by virtue of that holding to compel anyone to do anything. Hence, bitcoin does not satisfy paragraph (e)(ii) in the definition of ‘money’ in the GST Act.

‘Whatever is supplied as payment by way of creation or transfer of a debt’

65. The term ‘debt’ is not defined and therefore takes its ordinary meaning subject to context and applicable rules of interpretation.⁴⁴

⁴² See *Re Charge Card Services* [1989] 1 Ch 497 for a detailed discussion of the credit card system and *Commissioner of Taxation v. American Express Wholesale Currency Services Pty Ltd* (2010) 187 FCR 398 at 421-2. See also GSTR 2014/D2 *Goods and services tax: treatment of ATM service fees, credit card surcharges, and debit card surcharges.*

⁴³ *Avondale Motors (Parts) Pty Ltd v. FCT* [1971] HCA 17 at [13] referring to the maxim *noscitur a sociis*.

⁴⁴ *Ibid.*

66. The Commissioner considers that, having regard to that statutory context ‘debt’ should be given its legal meaning of ‘an obligation to pay a sum of *money* owed’.⁴⁵ The transfer of bitcoin does not constitute the creation or transfer of a debt in the sense that there is an obligation to pay money. Hence, Bitcoin does not satisfy the terms of paragraph (e)(iii) of the definition of ‘money’ in the GST Act.

What is the intended scope of the term ‘money’

67. As was noted at paragraph 31, the definition of ‘money’ in the GST Act is an inclusive definition which generally indicates something broader than what follows in a statutory definition. Determining whether a broader meaning is intended and the content of that meaning is informed by the statutory context in which the term ‘money’ appears.⁴⁶

68. In the Commissioner’s view, the use of the term ‘money’ is intended to prescribe fiat currency and those financial instruments and payment mechanisms which are denominated in, or relate directly to, fiat currency.⁴⁷

69. The meaning of ‘money’ in the context of the GST Act was considered in *Travelex Limited v. Commissioner of Taxation*⁴⁸ (*Travelex*). There Emmett J observed:⁴⁹

Money is any generally accepted medium of exchange for goods and services and for the payment of debts (see *Butterworth’s Australian Legal Dictionary* at 759). Currency and legal tender are examples of money. However, a thing can be money and can operate as a generally accepted medium and means of exchange, without being legal tender. Therefore, bank notes have historically been treated as money, notwithstanding that they were not legal tender. It is common consent and conduct that gives a thing the character of money (see *Miller v. Race* (1758) 1 Burrow 452 at 457). Money is that which passes freely from hand to hand throughout the community in final discharge of debts and full payment for commodities, being accepted equally without reference to the character or credit of the person who offers it and without the intention of the person who receives it to consume it or apply it to any other use than in turn to tender it to others in discharge of debts or payment for commodities (see *Moss v. Hancock* [1899] 2 QB 111 at 116).

⁴⁵ *A Dictionary of Law* (7th ed.) [online], definitions 1 and 2 of ‘debt’, viewed 23 July 2014 www.oxfordreference.com.

⁴⁶ *ZY Finance Co Pty Ltd v. Cummings* (1964) 109 CLR 395 at 398-399 and *Blacktown Workers’ Club Ltd v. O’Shannessy* (2011) 183 LGERA 184 at 190-191.

⁴⁷ Such as, for example, a promise to pay money under a bond which ‘sounds in’ money: *Burrill v. Commissioner of Taxation* (1996) 67 FCR 519 at 525.

⁴⁸ [2008] FCA 1961; 2008 ATC 20-087.

⁴⁹ [2008] FCA 1961 at [25].

70. In *Mann on the Legal Aspects of Money*,⁵⁰ Proctor says that the formulation in *Moss*, as referred to by Emmett J in *Travellex*, applied the functional theory to the definition of money. The functional theory of ‘money’ focused on that which was a generally accepted medium of exchange for goods and services and the payment of debts.⁵¹

71. In the modern era, however, the State theory of ‘money’⁵² requires that, in addition to the functional characteristics described, money ‘must exist within some form of legal framework, because it reflects an exercise of sovereignty by the State in question’.⁵³

72. It has been argued that bitcoin satisfies the functional theory of money because it serves as a medium of exchange, a unit of account and a store of value. In addition it is argued that bitcoin’s increasing acceptance in the community as a means of discharging debts and a means of exchange for acquiring goods and services has now reached the point that it qualifies as money. In determining whether bitcoin is money for GST purposes, however, it is not necessary to come to a conclusion whether bitcoin satisfies the functional requirements referred to in *Moss*.

73. Custom alone, whether it be local or international, cannot make something ‘money’ in the absence of an ‘exercise of monetary sovereignty by the State concerned’. Consistent with statutory context,⁵⁴ policy and the wider legislative framework governing Australian currency established by the Currency Act, this is the sense in which the word ‘money’ is used in the section 195-1 definition.⁵⁵ Bitcoin, therefore, is not ‘money’ for GST purposes.

Is a supply of Bitcoin input taxed?

Financial supplies

74. A financial supply is input taxed under section 40-5.⁵⁶ An entity may make financial supplies in the course of carrying on an enterprise if the entity provides, acquires or disposes of an interest listed in the GST Regulations and certain other requirements for a ‘financial supply’ are satisfied. No GST is payable on input taxed supplies.

⁵⁰ Proctor C, *Mann on the Legal Aspects of Money* (Oxford University Press, 6th ed. 2005) at [1.11].

⁵¹ *Moss v Hancock* [1899] 2 QB 111 (at 116), *Ilich v. R* (1987) 162 CLR 110 (at 118), *Travellex Ltd v. Commissioner of Taxation* [2008] FCA 1961 (at [25]), *Messenger Press Pty Ltd v. Commissioner of Taxation* [2012] FCA 756 (at [195-196]).

⁵² See paragraph 36 above.

⁵³ Proctor, note 50 above at [1.12].

⁵⁴ Discussed at paragraph 18 above.

⁵⁵ cf *Travellex Ltd v. Commissioner of Taxation* [2008] FCA 1961 (at [26-28]).

⁵⁶ See GSTR 2002/2 *Goods and services tax: GST treatment of financial supplies and related supplies and acquisitions* for detailed discussion of the operation of the financial supplies provisions.

75. A supply is a financial supply only if it is mentioned as a financial supply in regulation 40-5.09 or is an incidental financial supply under regulation 40-5.10.⁵⁷ Regulation 40-5.12 exclude things that otherwise would be a financial supply other than things that are an incidental financial supply.⁵⁸

Item 9: Australian currency or currency of a foreign country

76. The provision, acquisition or disposal of an interest in Australian currency, the currency of a foreign country, or an agreement to buy or sell currency of either kind is a financial supply.⁵⁹ The term ‘currency’ for the purposes of item 9 has the same meaning as in paragraph (a) of the definition of ‘money’ in section 195-1 for GST purposes.⁶⁰ As bitcoin is not ‘currency’ of Australia or any other country for GST purposes, it is not a financial supply.

Item 11: A derivative

77. The term ‘derivative’ is defined in the GST Regulations as:

An agreement or instrument the value of which depends on, or is derived from, the value of assets or liabilities, an index or rate.

78. Although an entity may enter into an agreement which uses the exchange rate of a bitcoin as a measure of value, this definition does not apply to bitcoins themselves. Bitcoin is not itself an agreement or instrument nor is it evidenced or created through an agreement or instrument. Whilst the value of a bitcoin may fluctuate over time, the bitcoin itself does not derive its value from any asset or liability, or the movements in an index or rate. Bitcoin is not a derivative as defined in the GST Regulations.

Subregulation 40-5.09(4A): ATM services

79. Certain automatic teller machine (ATM) services are input taxed as financial supplies where they involve specified accounts. The term ‘**account**’ is defined in the dictionary to the GST Regulations:

account:

- (a) means an account mentioned in item 1 in the table in regulation 40-5.09; and
- (b) includes an account in relation to which the account holder (the customer) has the right:
 - (i) to have the account maintained by the account provider (the provider); and
 - (ii) to repayment of the amount credited to the account by the provider; and

⁵⁷ Paragraph 40-5.08(1)(b) of the GST Regulations.

⁵⁸ Regulation 40-5.10 of the GST Regulations.

⁵⁹ Item 9 of the table in subregulation 40 5.09(3) of the GST Regulations.

⁶⁰ Refer to paragraphs 32-43 above.

- (iii) to require the provider to act on directions by the customer that are in accordance with the arrangements, or any agreement, between the provider and the customer in relation to operation of the account.

80. Use of Bitcoin ATMs do not involve transactions from, into or of an 'account' as defined.⁶¹ Further, Bitcoin ATMs are not part of the ATM payment system.⁶² Services provided through a Bitcoin ATM are not financial supplies.

GST-free supplies⁶³

81. The supply of bitcoin from an entity in Australia to a non-resident, including a bitcoin exchange that is outside Australia, may be a GST-free supply under item 2 in the table in subsection 38-190(1).

82. Item 2 refers to supplies made to a non-resident who is not in Australia when the thing supplied is done⁶⁴ and:

- the supply is neither a supply of work physically performed on goods situated in Australia when the work is done nor a supply directly connected with real property situated in Australia or
- the non-resident acquires the thing in carrying on the non-resident's enterprise, but is not registered or required to be registered.

83. Item 3 in the table in subsection 38-190(1), also may apply to the transfer of bitcoins by a supplier located in Australia to a recipient outside Australia at the time of the supply and where the effective use or enjoyment takes place outside Australia.⁶⁵ Item 3 does not apply to work physically performed on goods situated in Australia at the time of the supply nor to a supply directly connected with real property situated in Australia.

⁶¹ See also discussion at paragraph 64 above.

⁶² See paragraph 5 of GSTR 2014/D2: 'The term "ATM" is an automatic teller machine that is used in the payment system designated by the Reserve Bank of Australia (RBA) as the ATM system.'

⁶³ See more generally GSTR 2000/31 *Goods and services tax: supplies connected with Australia*.

⁶⁴ See GSTR 2004/7 *Goods and services tax: in the application of items 2 and 3 and paragraph (b) of item 4 in the table in subsection 38-190(1) of the A New Tax System (Goods and Services Tax) Act 1999*.

• when is a 'non-resident' or other 'recipient' of a supply 'not in Australia when the thing supplied is done'?

• when is 'an entity that is not an Australian resident' 'outside Australia when the thing supplied is done'?

⁶⁵ See GSTR 2007/2 *Goods and services tax: in the application of paragraph (b) of item 3 in the table in subsection 38-190(1) of the A New Tax System (Goods and Services Tax) Act 1999 to a supply, when does 'effective use or enjoyment' of the supply 'take place outside Australia'?*

84. Subsection 38-190(2) provides that a supply covered by any of items 1 to 5 in the table in subsection 38-190(1) is not GST-free if it is the supply of a right or option to acquire something the supply of which would be connected with Australia and would not be GST-free.⁶⁶

85. Subsection 38-190(2A) provides that a supply covered by any of items 2 to 4 in the table in subsection 38-190(1) is not GST-free if the acquisition of the supply relates (whether directly or indirectly, or wholly or partly) to the making of a supply of real property situated in Australia that would be input taxed under Subdivisions 40-B or 40-C.

86. Under subsection 38-190(3), a supply covered by item 2 in subsection 38-190(1) is not GST-free if:

- (a) it is a supply under an agreement entered into, whether directly or indirectly, with a **non-resident**; and
- (b) the supply is provided, or the agreement requires it to be provided, to another entity in Australia.⁶⁷

⁶⁶ See paragraphs 143-150 of GSTR 2003/8 *Goods and services tax: supply of rights for use outside Australia*.

⁶⁷ See GSTR 2005/6 *Goods and services tax: the scope of subsection 38-190(3) and its application to supplies of things (other than goods or real property) made to non-residents that are GST-free under item 2 in the table in subsection 38-190(1) of the A New Tax System (Goods and Services Tax) Act 1999*.

Appendix 2 – Your comments

87. You are invited to comment on this draft Ruling including the proposed date of effect. Please forward your comments to the contact officer by the due date.

88. A compendium of comments is prepared for the consideration of the relevant Rulings Panel or relevant tax officers. An edited version (names and identifying information removed) of the compendium of comments will also be prepared to:

- provide responses to persons providing comments; and
- be published on the ATO website at www.ato.gov.au.

Please advise if you do not want your comments included in the edited version of the compendium.

Due date: 3 October 2014
Contact officer: Hoa Do
Email address: hoa.do@ato.gov.au
Telephone: (08) 9268 5171
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Perth WA 6848

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References

Previous draft:

Not previously issued as a draft

Related Rulings/Determinations:

GSTR 2000/31; GSTR 2001/6;
GSTR 2002/2; GSTR 2003/8;
GSTR 2003/14; GSTR 2004/7;
GSTR 2005/6; TR 2006/10; GSTR
2007/2; GSTR 2014/D2

Subject references:

- GST financial supplies
- GST money
- GST non-monetary consideration

Legislative references:

- Bills of Exchange Act 1909 (Cth) 5(2)
- Bills of Exchange Act 1909 (Cth) 8
- Bills of Exchange Act 1909 (Cth) 89
- Constitution (Cth) 51(xii)
- Currency Act 1965 (Cth) 8(1)
- Currency Act 1965 (Cth) 9(1)
- Currency Act 1965 (Cth) 11(1)
- Financial Transaction Report Act 1988 31(1)
- ANTS(GST)A 1999 9-5
- ANTS(GST)A 1999 9-10(1)
- ANTS(GST)A 1999 9-10(4)
- ANTS(GST)A 1999 9-30(2)(b)
- ANTS(GST)A 1999 9-75
- ANTS(GST)A 1999 9-75(1)
- ANTS(GST)A 1999 9-85
- ANTS(GST)A 1999 11-5
- ANTS(GST)A 1999 Div 38
- ANTS(GST)A 1999 38-190
- ANTS(GST)A 1999 38-190(1)
- ANTS(GST)A 1999 38-190(2)
- ANTS(GST)A 1999 38-190(2A)
- ANTS(GST)A 1999 38-190(3)
- ANTS(GST)A 1999 40-5
- ANTS(GST)A 1999 40-5(1)
- ANTS(GST)A 1999 195-1
- ANTS(GST)R 1999 40-5.08(1)(b)
- ANTS(GST)R 1999 40-5.09
- ANTS(GST)R 1999 40-5.09(3)
- ANTS(GST)R 1999 40-5.09(4A)
- ANTS(GST)R 1999 40-5.10
- ANTS(GST)R 1999 40-5.12

Case references:

- Attorney General (NSW) v. Brewery Employees Union of New South Wales (1908) 6 CLR 469
- Avondale Motors (Parts) Pty Ltd v. FCT [1971] HCA 17; 2 ATR 312; 71 ATC 4101
- Blacktown Workers' Club Ltd v. O'Shannessy [2011] NSWCA 265; 183 LGERA 184
- Burrill v. Commissioner of Taxation (1996) 67 FCR 519; 33 ATR 133; (1996) 96 ATC 4629
- Commissioner of Taxation v. American Express Wholesale Currency Services Pty Ltd [2010] FCAFC 122; 187 FCR 398; 2010 ATC 20-212; 77 ATR 12
- Gamer's Motors Centre (Newcastle) Pty Ltd v Natwest Wholesaler Pty Ltd (1985) 3 NSWLR 475
- Ilich v R (1987) [1997] HCA 1; 162 CLR 110
- Johnson v Native Title Registrar [2014] FCA 142; 218 FCR 415
- Leask v Commonwealth [1996] HCA 29; (1996) 187 CLR 579; 35 ATR 91; (1996) 96 ATC 5071
- McDonald v. Belcher [1904] AC 429
- Messenger Press Proprietary Ltd v Commissioner of Taxation [2012] FCA 756; 2012 ATC 20-234
- Miller v. Race (1758) 1 Burrow 452; 97 ER 398
- Moss v. Hancock [1899] 2 QB 111
- Re Charge Card Services [1989] 1 Ch 497; [1988] 3 All ER 702; [1988] 3 WLR 764
- Travelex Limited v. Commissioner of Taxation [2008] FCA 1961; 2008 ATC 20-087; 71 ATR 216

GSTR 2014/D3

- ZY Finance Co Pty Ltd v. Cummings (1964) 109 CLR 395; [1964] ALR 667
- Other references:*
- *A Dictionary of Finance and Banking* [online] 4th revised edn viewed 28 July 2014 www.oxfordreference.com
 - *A Dictionary of Law* [online] 7th ed. viewed 23 July 2014 www.oxfordreference.com
 - Bradbury, D 'The problem with Bitcoin', *Computer Fraud & Security* November 2013, issue 11
 - Brito, J and Castillo, A 'Bitcoin: A Primer for Policymakers', *Policy*, Summer 2013 2014, vol. 29, no. 4.
 - *Encyclopaedic Australian Legal Dictionary* [online] Lexis Nexis, 2011 viewed 23 June 2014 www.lexisnexis.com.
 - Guest, AG *Chalmers and Guest on Bills of exchange, cheques and promissory notes* (2009) 17th ed. Sweet & Maxwell, London
 - Guthrie, N 'The End of Cash? Bitcoin, the Regulators and the Courts' *Banking & Finance Law Review* Apr 2014, vol 29, no. 2.
 - Kondor D, Posfai M, Csabai I, Vattay G 'Do the Rich Get Richer? An Empirical Analysis of the Bitcoin Transaction Network' (2014) PLoS ONE vol. 9, issue 2 pp 1-10
 - *The Macquarie Dictionary*, [Online], viewed 23 June 2014, www.macquariedictionary.com.au
 - Moore, T 'The promise and perils of digital currencies' *International Journal of Critical Infrastructure Protection*, 2013,
 - *Oxford Dictionary of English* [online] 3rd ed. viewed 7 August 2014 www.oxfordreference.com
 - Pearce and Geddes, *Statutory Interpretation in Australia* (7th ed, 2011)
 - Proctor C *Mann on the Legal Aspects of Money* (Oxford University Press, 6th ed. 2005)
 - Tindell, K 'Geeks Love the Bitcoin Phenomenon Like They Loved the Internet in 1995' *Business Insider* 5 April 2013
 - Villasenor, J 'Secure Bitcoin Storage: A Q&A With Three Bitcoin Company CEOs' *Forbes* 26 April 2014
 - Wiener, H, Zelnik, J, Tarshish, I, & Rodgers, M 'Chomping at the Bit: U.S. Federal Income Taxation of Bitcoin Transactions' *Journal Of Taxation Of Financial Products* (2013) vol. 11, no. 3

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