STATES OF JERSEY

REGULATION OF VIRTUAL CURRENCY: CONSULTATION PAPER

Presented to the States on 10th July 2015
by the Chief Minister

STATES GREFFE
Regulation of Virtual Currency

The creation of a business-friendly framework that encourages innovation, jobs and growth in both the financial services and digital sector is a priority for the Government of Jersey. Virtual Currency systems can be significant building blocks of a modern digital economy. The introduction of an appropriate and proportionate regulatory regime in this area is intended to encourage confidence and innovation in the sector.

This Consultation Paper highlights the most prominent money laundering and terrorist financing risks that the Government of Jersey believe are associated with virtual currencies in their current form. It goes on to present a number of options for regulating virtual currency activity. In forming these options, the consultation paper has regard to the approach of a number of other jurisdictions and papers/policy documents produced by leading organisations. It also considers whether there is a case for adopting a standard for distributed ledger technology and the possibility of potential future pan-Channel Island work in this area.

Date published: 9 July 2015
Closing date: 7 August 2015

How we will use your information

The information you provide will be processed for the purpose of consultation. The Chief Minister’s Department will use your information in accordance with the Data Protection (Jersey) Law 2005 and the Freedom of Information (Jersey) Law 2011. Please note that we may quote or publish responses to this consultation but we will not publish the names and addresses of individuals. If you do not want any of your response to be published, you should clearly mark it as confidential. Confidential responses will be included in any summary of statistical information received and views expressed.
Outline of Consultation

*Virtual currency* systems represent new and empowering technology. They incorporate both new payment systems and new virtual currencies.

Whilst governments are keen to embrace the potential offered by the virtual economy there is also a need to introduce measures to tackle virtual economy-based money laundering and financing of terrorism (“ML/FT”), including giving regulators and law enforcement agencies the necessary powers and resources.

Should virtual currencies accomplish the necessary levels of user acceptance and market penetration in the future, both legitimate and nefarious users may achieve full independence in acquiring, transferring and spending virtual currencies within the virtual economy.

The inherently decentralised, *distributed*, implicitly anonymous and versatile nature of *virtual currency* systems (often boosted with extensions, protocols and further developments which grant even greater anonymity) make *virtual currency* systems attractive to cybercriminals, online-based traditional crime perpetrators, money launderers and terrorist financiers.

Accordingly, the Government of Jersey considers that, whilst governments should embrace the potential offered by the virtual economy, there is also a need to introduce measures to tackle virtual economy-based ML/FT.

The Government of Jersey believes that by putting in place an appropriate and proportionate regulatory environment, the jurisdiction will be protected

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1 Words in italics are defined in a Glossary found in Appendix 1 to the Consultation Paper.
from unacceptable risk. At the same time, a modern digital economy can be fostered with a business friendly framework therefore encouraging innovation and growth in the virtual currency arena.

The consultation paper highlights current risks that the Government of Jersey believes are associated with virtual currencies in their current form and presents a number of options for regulating virtual currency activity. In forming these options, the consultation paper has regard to the approach adopted by a number of other jurisdictions and papers and policy documents produced by leading organisations.

The paper also considers whether there is a case for setting a Distributed ledger technology standard and explores the possibility of pan-Channel Island work in this area after a series of initial meetings with the other Channel Islands.

This consultation paper has been prepared in conjunction with the Jersey Financial Services Commission (the “JFSC”), the Joint Financial Crimes Unit of the States of Jersey Police, the Law Officers’ Department, Jersey Finance Limited (“JFL”) and Digital Jersey (“DJ”).

**Who should respond and ways to respond**

The Government of Jersey is interested in receiving responses from individuals or businesses that interact with virtual currency or are likely to interact with virtual currencies. The Government of Jersey would particularly encourage both those in the financial services and the digital communities to respond to the consultation paper.
Seminar

The consultation paper is supported by a consultation seminar that will occur on 3 August 2015 at from 12noon - 2pm at The Town Hall, York Street, St Helier, Jersey. The consultation seminar will act as a forum to explore some of the topics raised in this paper in more detail and will serve as an open forum for feedback to the questions asked in this consultation paper.

The event is free to attend if a ticket is obtained through registration at the below website link:


Online submission

You can also respond to the consultation paper online at the following link:

https://www.surveymonkey.com/r/5QZFQJW

Writing

Should you wish to respond in writing you may submit responses directly to the following address:

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Further Questions

Should you have any questions about the paper and wish to speak to an individual in an organisation that has been involved in the preparation of this consultation paper, contact details are listed below:

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This consultation paper has been sent to the Public Consultation Register.

**Feedback on this consultation**

We value your feedback on how well we consult or seek evidence. If you have any comments on the process of this consultation (as opposed to the issues raised) please contact Communications.Unit@gov.je
Part 1: Introduction

1.1 A currency is according to its economic definition something which operates as:

(1) a medium of exchange;

(2) a unit of account; and

(3) a store of value

1.2 For the purpose of the consultation paper, currencies divide into two categories:

(i) Fiat currencies, which mean money issued (whether physical or electronically) by the government of a country or territory. This is money as is ordinarily understood, and is legal tender in at least one country or territory.

(ii) Virtual currencies, which may have one or more of the characteristics of a currency amongst user groups. However, they are not legal tender in any country or territory, which may to a greater or lesser extent, affect how far they are treated as a medium of exchange, unit of account or store of value.

1.3 Virtual currency is often confused with electronic money. A virtual currency is not electronic money. According to the ECB, virtual currency systems are not full forms of money as defined in economic literature nor are they money or currency from a legal perspective. Whereas virtual currencies will always be held in digital form, fiat currencies may also be held in digital form (so the terms “virtual” and “digital” are not interchangeable).

1.4 The virtual currencies referred to in this paper:

(i) are online value transfer systems that utilise a decentralised consent mechanism (Bitcoin and the like); or

(ii) provide for a decentralised debt issuance and settlement mechanism (e.g. Ripple).

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2 ECB further analysis on virtual currency schemes
3 Bitcoin is one form of virtual currency. In this paper Bitcoin is discussed regularly as it is currently the most popular form of virtual currency however other virtual currencies exists and will continue to be formed.
These systems are decentralised (no centrally controlled and maintained payment ledger) and their native currencies are convertible (they have an equivalent value in, and can be exchanged for, fiat currency. They are often crypto-graphically protected (and referred to as crypto-currencies).

1.5 For the avoidance of doubt, this paper does not apply to centralised virtual currencies (which will have a single administrator that controls the system, issues the currency and maintains a central payment ledger).

1.6 Virtual currency systems have substituted and are able to further substitute banknotes and coins in certain payment situations. Since the usage of virtual currency as a currency for payments remains limited at present (Bitcoin worldwide transactions per day currently represent 0.03% of non-cash retail payment transactions made in the EU). Accordingly, the ECB in its analysis further argues that there is not yet a material risk that virtual currencies can undermine price stability, financial stability and integrity of the real economy nor the smooth operation of payment systems.

1.7 Bitcoin is the most prominent and most widely accepted virtual currency with current market capitalisation fluctuating around US$ 3 billion. There are currently a little over 14 million Bitcoins in circulation, transactions varying between 90,000 and 130,000 per day, more than 3.5 million My Wallet users and on average 250,000 unique Bitcoin addresses used every day.

1.8 Despite this, virtual currency systems are yet to accomplish the necessary market penetration and user acceptance levels to be considered substantially used across the global economy.

1.9 Until such levels of use are reached, the need for interaction between virtual and conventional systems will persist and the level and intensity of interaction between such systems is likely to be driven, at least in the short term, by the pace at which new virtual currency businesses achieve acceptance and recognition, and the pace of integration of the technology into the existing financial services environment.

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4 Number of Bitcoin wallet hosts using Blockchain.info’s my wallet service
5 Information sourced from Blockchain.info
6 In January 2015, whilst there were more than 530 crypto-currencies available for trade in online markets only 10 had market capitalisations over US$ 10 million.
1.10 Should virtual currencies accomplish the necessary levels of user acceptance and market penetration in the future, both legitimate and nefarious users may achieve full independence in acquiring, transferring and spending of their virtual assets within the virtual economy. This will reinforce the need for governments to tackle virtual economy-based ML/FT.

1.11 The inherently decentralised, distributed, implicitly anonymous and versatile nature of virtual currency systems (often boosted with extensions, protocols and further developments granting even greater anonymity) make virtual currency systems attractive to cybercriminals, online-based traditional crime perpetrators, money launderers and terrorist financiers.

1.12 The potential for money launderers and terrorist financiers to exploit virtual currency systems for nefarious purposes is amplified by the fact that the main entry and exit points between the conventional and virtual systems are often represented by unregulated interfaces that are not subject to any requirements to counter ML/FT.

Part 2: Background – main types of virtual currencies

Bitcoin

2.1 Bitcoin is the most prominent decentralised virtual currency that provides for online value transfers between peers by utilising a distributed and decentralised consent mechanism. In this distributed network, private keys and public keys are used to transfer Bitcoins from rightful owner to intended beneficiary and each transaction must be cryptographically signed. Individual users connect with one another through an unencrypted TCP channel over the Internet. The underlying architecture that underpins Bitcoin protocol is designed in a way that no central control or oversight of the network is needed.

2.2 Miners are responsible for adding and ordering transactions into a block which forms part of a block-chain (block-chain is a distributed ledger utilised by Bitcoin. Miners gather transactions, check their validity (using algorithms) and include them in a new block. Miners who wish to add a newly created block (which records changes in

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7 TCP (transmission control protocol) is one of the main protocols in TCP/IP networks. TCP and IP are the basic rules defining the Internet.
ownership) to the chain must demonstrate that they have solved a computationally difficult mathematical problem (known as “proof of work”).

2.3 All Bitcoin transactions are irrevocable and irreversible; they can only be refunded by the beneficiary of the transaction.

**Ripple**

2.4 Ripple is a virtual currency system that functions as an on-line, universal and decentralised debt settlement network with a centrally-issued native currency called Ripple (“XRP”).

2.5 At its core, Ripple is a physical and decentralised network of computers running a common open-sourced software which allows network participants to interact with one another according to the rules set by the Ripple protocol. The protocol provides a set of rules for transaction clearing and settlement. These rules govern the way ownership of any supported item of value or currency (both fiat and virtual-currency) is changed. Ripple protocol is not built to interface directly with consumers which stands in contrast to other, solely peer-to-peer networks (e.g. Bitcoin).

2.6 Ripple operates globally, and is a fast, cheap, secure and asset neutral network that supports, besides its native currency, transfer of almost any fiat currency, virtual currency or other assets of value (e.g. frequent flyer miles, mobile minutes).

2.7 A asset of value not held in XRP are represented as “issuances” (digital representation of real assets) that can be sent and traded through the Ripple network without a need to convert them to XRP (though this may be necessary when there is not otherwise a market for trade).

2.8 Ripple relies on financial institutions to function as:

i) gateways into and out of the Ripple network,

ii) market makers to provide liquidity for currency conversion and trading.

The primary function of a Ripple gateway is to provide access to the Ripple network by accepting cash deposits, creating digital balances in user accounts and redeeming cash for digital balances stored in
accounts. Market makers on the other hand provide liquidity to the network by holding funds in multiple currencies and by competing for foreign exchange trades.

2.9 The settlement process utilised by Ripple is based on consensus that must be reached amongst the network’s participants in order for any transaction to be included into the network’s ledger.

2.10 Whenever a transaction involves users that do not have a trusted relationship established between themselves, the system tries to find a path between the users where each link of the path is between two users (typically a bank, money service business or OTC market) that have a trusted relationship. This mechanism is called “rippling” and is believed to be a digital version of Hawala.

2.11 In order to access Ripple, a user must first purchase a nominal amount of XRP. It is worth noting that Ripples Labs, the Ripple software provider, is currently implementing additional requirements for the use of the software requiring any new user of a Ripple Trade account\(^8\) to upload customer identification information.

**QUESTION 1:**
Is there any other type of virtual currency that does not fit any of the two currently prominent systems and which should be considered at this point in time when considering Regulation of Virtual Currency for Jersey?

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\(^8\) Ripple Trade is software that functions as a wallet and allows users to store funds, make payments, purchase currencies, and make orders.
Part 3: Risk of ML/FT

3.1 The ML/FT vulnerabilities identified as the most prominent requiring the attention of respective government agencies are:

- Inherent ‘pseudonymity’ of virtual currency ownership - with no requirement to attach true names to the currency owned and transacted.

- Problematic traceability of transactions - which is a function of the implicit anonymity of ownership, address disposability and fluid structure of transactions.

- Use of additional technology-enabled anonymisation and encryption protocols and extensions and stealth currency emulations - that add an extra veneer of secrecy to the already pseudo-anonymous nature of ownership and its traceability.

- Decentralised architecture – no trusted, central currency issuing authority administering and controlling virtual currencies and that can assist law enforcement and other government agencies for investigative or asset seizure purposes. This is aggravated by the fact that virtual currencies exist in a digital universe entirely outside the reach of any particular country.

- Non-existent regulatory framework - with no statutory requirements to prevent and detect ML/FT applicable to businesses acting as the interface between virtual currencies and the conventional financial system.

- Secure technology – where law enforcement may not have the requisite IT skills, forensic expertise and knowledge needed to effectively target virtual currency related ML/FT and deprive criminals of their virtual currency denominated criminal gains.

3.2 These vulnerabilities will attract specific user categories (e.g. cybercriminals, drug dealers). They will be attracted also by the relative instantaneous manner of borderless and irreversible transactions.

3.3 The FATF in its report⁹ providing an initial assessment of risk associated with virtual currencies argues that, at least in the near

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⁹ FATF Report on Virtual Currencies, key definitions and potential ML/TF risks
term, only convertible virtual currencies are likely to present ML/FT risks that stem predominantly from their anonymity, inherent non-face-to-face nature and existence outside the reach of any country.

3.4 Despite every transaction being publicly logged and unalterably and permanently stored in a block-chain, Bitcoin\textsuperscript{10} addresses are not associated with the identity of their users/holders and so transactions (unlike wire transfers) are not identifiable to a particular person. Furthermore, in order to achieve greater anonymity and security, Bitcoin users can use a new address for each transaction in order to avoid transactions being linked to a common owner.

QUESTION 2:
Are there any other material ML/FT risks associated with virtual currencies that should be considered for the purpose of an effective and suitable framework for preventing and detecting ML/FT?

Part 4: Existing local framework

4.1 In Jersey, respective authorities have already taken a proactive approach in embracing virtual currencies.

Consumer protection

4.2 Jersey’s Trading Standards Office has issued a general guide\textsuperscript{11} permitting virtual currency prices to be displayed alongside fiat currency prices. The advice given by the Office applies to business-to-consumer contracts only and not business-to-business contracts.

Tax

4.3 In respect of crypto-currency treatment, Jersey’s Tax Office has published guidance\textsuperscript{12}. The Tax office has advised that, while crypto-

\textsuperscript{10}http://www.gov.je/sitecollectiondocuments/industry%20and%20finance/id%20crypto%20currency%20guidance%202020140918%20je.pdf

\textsuperscript{11}http://www.gov.je/TaxesMoney/IncomeTax/Technical/Guidelines/Pages/CryptocurrenciesTreatment.aspx
currency mining on a small or irregular scale will not be regarded as a trading activity (and so will not constitute a taxable event), exceptions may occur where mining activities are accompanied by trading in crypto-currencies on a sufficiently commercial scale.

4.4 As regards business activities involving exchanging virtual currencies to and from fiat currencies, these will be liable to income tax only when the principles of trading are met.\(^{13}\)

4.5 When a virtual currency is used to purchase goods or services, the value of the supplied goods or services must be converted to pounds sterling for GST purposes at the date of the transaction. No GST will be due where virtual currencies are exchanged for sterling, other fiat currencies or other virtual currencies.

Regulatory legislation

4.6 In July 2014, the JFSC authorised the first Bitcoin collective investment fund. In funds where Bitcoins are an asset class, the key ML/FT risks will stem from the provenance of Bitcoin and potential for investors to launder illicit proceeds through the fund.

4.7 These risks are able to be mitigated by imposing conditions on the licensing of a fund, for example, a requirement to only obtain Bitcoin from a licensed exchange.

4.8 Other businesses have outlined plans to the JFSC to launch and operate virtual currency activities in Jersey involving Bitcoin vending machines and various business models of a Bitcoin exchange, whereby fiat currencies are exchanged for virtual currencies.

4.9 Activities relating to the exchange of or sale of Bitcoins are currently not regulated. They are not considered to be money service business (defined in Article 2(9) of the Financial Services Law because, as explained in Part 1 above, Bitcoins are not a currency or money as ordinarily understood. This means that:

- The business of exchanging any fiat currency into a virtual currency is not a bureau de change activity.

\(^{13}\) Please note that the Guidance provided by the Taxes Office is generic and professional tax advice should always be sought in individual situations.
The business of exchanging one virtual currency for another is not a bureau de change activity.

The ‘exchange only service’ (i.e. exchange between fiat currency and virtual currency and nothing more) does not fall under "engaging in money transmission services".

4.10 In instances where a ‘composite transaction’ service that consists of both the exchange of fiat currency for virtual currency and services for the onward use of both as a means of payment is provided, then this activity is considered to be engaging in money transmission services in accordance with Article 2(9)(d) of the Financial Services Law, where the two services form part of a continuous (i.e. composite) whole.

4.11 However, other business activities related to services provided in relation to virtual currencies will be covered by the existing statutory framework in Jersey. If undertaken by way of business, these include activities set out under Paragraph 7, Part B, Schedule 2 to the Proceeds of Crime Law, in particular business activities involving:

- lending services to third parties, including consumer credit, where virtual currency is the type of asset lent;
- investing, administering or managing virtual currency funds on behalf of third parties; and
- providing safe custody of virtual currencies.

**QUESTION 3:**
Are there other key areas where you consider that virtual currency activity is caught by the existing statutory framework?
5.1 Approaches taken to address *virtual currency* risks vary from country to country. In order to inform respondents to the consultation, an outline is provided below on the approaches taken so far by various jurisdictions to regulation of *virtual currency*.⁴

5.2 The emergence of virtual currencies has attracted attention not only from technologists, speculators and crypto-anarchists, but from public authorities too. Politicians, regulators, law enforcement agencies, tax collectors and trading standard agencies around the globe have been developing their thoughts concerning the most effective and suitable definition, classification and subsequent treatment of *Bitcoin* and other virtual currencies.

5.3 Politicians and regulators in several countries have held public hearings to gain a comprehensive understanding of the newly emerged virtual currencies in order to:

- determine and design a suitable and proportionate regulatory framework for virtual currencies and thus maximise the potential offered by the very potent, yet possibly disruptive technology;
- ensure ongoing stability in financial markets; and
- protect businesses and their customers from illegal activities.

5.4 Examples of public hearings include *Bitcoin* inquiries conducted by the Canadian Senate Committee on Banking, Trade and Commerce and Australian Senate’s Economics References Committee. Both inquiries sought to examine and gauge the potential economic impact of virtual currencies across various industries, both nationally and internationally, and consider best tax, trade, digital commerce and AML/CFT treatment of virtual currencies.

5.5 Particular focus in both inquiries was placed on a suitable and effective regulatory regime that would encourage innovation, promote competition, protect consumers and protect against unlawful activity and behaviour. The following key success factors were identified for an effective regulatory framework:

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⁴ This document should not be used as an exhaustive list of every action carried out by a specific jurisdiction but as a summary of the key actions taken by each jurisdiction referred to up to the date of publication of the consultation paper.
• Thorough understanding of virtual currencies and their key attributes, including the technology and protocols that underpin these systems;

• Major risks clearly identified and effectively managed; and

• Effective cooperation and collaboration between public and private sectors.

5.6 In the European Union, the EBA has asserted that, in order to manage/mitigate risks comprehensively, a substantial body of regulation would be needed. The regulatory framework would need to encompass governance requirements for several market participants, the segregation of client accounts, capital requirements etc. Since this is acknowledged to be almost impossible to achieve in the medium-term, the EBA has recommended that national supervisory authorities in Member States should discourage credit institutions, payment institutions and e-money institutions from buying, holding or selling virtual currencies.

5.7 This approach has been, to some extent, echoed in Canada which, as a result of a recent regulatory reform, has prohibited banks from opening and maintaining correspondent banking relationships with businesses dealing in virtual currencies that are not registered with FINTRAC, Canada’s financial intelligence unit.

5.8 Other countries have either intentionally decided not to take any proactive steps or decided to wait and follow suit, whilst other countries have embarked upon a process of determining the most effective regulatory response to the emergence of virtual currencies.

Australia

5.9 In a format similar to the inquiry conducted by the Canadian Senate, the Australian Senate’s Economics References Committee has organised public hearings with public, private, and academia representatives (including the international community) on virtual currencies. The hearings took place in November 2014 and a report produced by the Committee is expected to be presented to the Senate (after an extension was granted) by 10 August 2015.

15 EBA/Op/2014/08, EBA opinion on ‘virtual currencies’
The inquiry was set up to:

- establish how to develop an effective regulatory system for virtual currencies;
- gauge the potential impact of digital currency technology on the Australian economy;
- consider how Australia can take advantage of digital currency technology to establish itself as a market leader in this field; and
- cover any other related matters\(^\text{16}\).

There were, in total, 44 written submissions to this inquiry comprising submissions made by individuals, private organisations (e.g. Ripple Labs Inc.), trade associations (e.g. Australian Bankers’ Association), and public authorities (Australian Taxation Office, Attorney-General's Department and Australian Securities and Investments Commission).

5.10 The Australian Securities and Investments Commission concluded in their submission to the digital inquiry that virtual currencies do not fit within the existing definitions of a financial product in Australia. This is based on the fact that contracts between parties are settled immediately and there is no delay between the entry and delivery of digital currency that would make the contract meet the definition of a derivative. In support of this conclusion, the Commission also asserts that virtual currencies do not afford the holder any rights to make payments using the digital currency (no legal tender status or to rights to redeem virtual currency for cash).

5.11 Venture capital markets and OTC markets that allow virtual currencies to be bought and sold have also been the subject of a review conducted by the Commission. It concluded that trading platforms through which offers to buy and sell virtual currencies are matched or facilitated are not financial markets as virtual currency is not regarded as a financial product.

5.12 The submission of the Australian Attorney-General's Department explains that the Department commenced a review in December 2013 of Australia’s AML/CFT regime in order to examine the operations of the regime, consider issues raised by regulated

\(^{16}\) Australian Senate Bitcoin inquiry terms of reference
businesses and government agencies, and determine any enhancements. The main ML/FT concerns observed are the perceived anonymity and security of virtual currencies and the fact that these features will be exploited and abused to facilitate the laundering of proceeds of crime and the purchase of illicit goods and services.

5.13 In order to proactively address the emerging risks of virtual currencies that are exploited for criminal purposes, the Australian Crime Commission has launched an investigation into cryptocurrencies and their links with organised crime. An example of this initiative is a Project codenamed Longstrike which aims to gather intelligence on organised crime groups that make use of Darknets to harbour trading in illicit commodities, where Bitcoin and other virtual currencies have become the currency of choice/the sole currency for both cybercriminals and for those who engage in internet enabled-traditional crime.

5.14 According to the Australian Crime Commission, the current unregulated environment and anonymity of transactions render the technology and virtual currencies attractive to criminals.

**Canada**

5.15 Canada is keen to lead in promoting virtual currencies and introduced a new Bill C-31 which became law in June 2014. The law extends the application of the Canadian Proceeds of Crime (Money Laundering) and Terrorist Financing Act to persons and entities that deal in virtual currencies.

5.16 Consequentially, the definition of money services business now includes an entity that is engaged in the business of dealing in virtual currencies, as defined by regulation. In order to meet the definition of money service business, the entity has to either have a place of business in Canada; or has to provide money service business to its customers in Canada.

5.17 Whilst the omnibus C-31 bill amended Canada’s AML/CFT legislation and brought business dealing in virtual currencies under the AML/CFT supervisory framework, the term ‘dealing in virtual currencies’ was not defined. The implementation of the amendments to the AML/CFT legislation depends upon adoption of regulations that will define the term ‘dealing in virtual currencies’. It
is expected that the definition will cover virtual currency exchanges, but not individuals or businesses.

5.18 In addition to the extended definition of money service business and a requirement subjecting dealers in virtual currencies to register with FINTRAC (Canada’s financial intelligence unit), banks are, under the C-31 Bill, prohibited from opening and maintaining correspondent banking relationships with digital currency dealers that are not registered with FINTRAC as a money service business.

5.19 The Canadian Senate’s Banking, Trade and Commerce Committee has undertaken an extensive special study on the use of digital currencies and held a series of public hearings with representatives of both public and private sector. The Senate Committee in its final report entitled ‘Digital Currency: You can’t flip this coin!’ recommends i) digital currency exchanges to be defined as any business that allows customers to convert state–issued currency to digital currency or vice versa and ii) the government to require digital currency exchanges, with the exclusion of business that solely provide wallet services, to meet the same requirement as money service businesses.

United States (US)

5.20 The New York Department of Financial Services (NYDFS) is the only known regulator to have created a bespoke comprehensive framework, known as a ‘BitLicense’ for regulating virtual currency firms. The framework issued on 03 June 2015 (the third and final version of the framework) incorporates key consumer protection, anti-money laundering and cyber security rules tailored to virtual currency firms.

5.21 The NYDFS’s BitLicense is designed to capture financial intermediaries only, with no intention to regulate software developers. The activities considered to be virtual currency business activity and therefore captured by the framework are set out in Section 200.2 of the BitLicense.

5.22 Alongside the BitLicense, the NYDFS has developed a ‘transitional BitLicense’ - a two-year transitional tailored licence issued to businesses that are unable to satisfy all of the requirements of a full licence.
5.23 California is home to approximately 40% of all Bitcoin jobs in the US and almost half of all Bitcoin related venture capital. It is the first US state to pass a bill (AB-129) which ensures that Bitcoin and other alternative currencies such as digital currency, points, and coupons do not violate the law when used for the purchase of goods and services or transmission of payments.

5.24 FinCEN, the US financial intelligence unit, issued an interpretative guidance paper on 18 March 2013 clarifying the application of regulations to persons administering, exchanging, or using virtual currencies. Whilst a user of a virtual currency is not a money service business, an administrator or exchanger is considered to be a money transmitter, therefore carrying on a money service business.

5.25 The Internal Revenue Service issued a notice n. 2014-21 on 25 March 2014 providing information on federal tax treatment and tax implications of transactions involving virtual currencies. The notice provides that a virtual currency is treated as property for federal tax purposes and not as a currency for the purposes of foreign currency gain or loss.

5.26 In June 2013, the Securities and Exchange Commission fined Trendon Shavers US$ 40 million for defrauding investors in a Bitcoin Ponzi scheme. Shavers was the operator of Bitcoin Savings and Trust and fraudulently accumulated 700,000 Bitcoins in funds. In order to establish whether Bitcoin could be considered as money and their use constitute an offence of running a Ponzi scheme, a Texas magistrate court ruled that Bitcoin can be used as money, used to purchase goods or services, exchanged for fiat currencies, and therefore is a currency or form of money.

France

5.27 The French Senate’s Committee of Finance issued a report\textsuperscript{17} in August 2014 following a joint meeting held between the Senate, Treasury, Customs, Central Bank and TracFin (France’s financial intelligence unit).

5.28 The report considers different attributes of virtual currencies, e.g. legal status, tax treatment, approaches taken by foreign authorities on regulation of virtual currency transactions and exchange

\textsuperscript{17} French Senate report on virtual currencies
platforms as well as virtual currencies’ innovative potential. The report calls for continued analysis of developments in this area and for work to be undertaken on adopting a regulatory framework at European level in order to be truly effective.

**Germany**

5.29 Germany’s federal regulator, BaFin, has assessed *Bitcoin* and its characteristics and published a guidance note\(^\text{18}\) on its website clarifying regulatory treatment of *Bitcoin*.

5.30 According to the note, BaFin takes the view that *Bitcoin* and the likes qualify as financial instruments under the respective provisions of the German Banking Act. *Bitcoin* is thus effectively regarded as a private means of payment, similar to, but not qualifying as, a foreign currency, and without a legal tender status.

5.31 While the ordinary activities of mining, purchasing and selling *Bitcoins* in an existing market are not subject to authorisation requirements, there are instances where, if an additional service to ordinary activities is provided, authorisation will be required.

These activities include:

- Principal broking services – anyone buying and selling *Bitcoins* for commercial purposes in their own name for the account of third parties engages in principal broking services and these services are subject to authorization requirements;

- Multilateral trading systems – brings together multiple third party buying and selling interests in financial instruments within the system and in accordance with pre-defined provisions in a way that results in a contract in respect of the financial instruments; and

- Broking and proprietary trading – “offering regionally structured commercial web lists consisting of persons who buy or sell *Bitcoins* at their place of residence” qualifies as investment and contract broking. Currency exchange offices are regarded by BaFin as proprietary traders.

\(^{18}\) BaFin guidance on virtual currency
5.32 The assessment concludes that the need to regulate businesses that seek to engage in trading in Bitcoins (financial instruments) stems from the fact that there are a number of factors (loss, theft, negligent conduct, and ML) that elevate the inherent risk level presented by Bitcoin to its users.

**Hong Kong**

5.33 The Government of Hong Kong in their response to a question from a member of the Legislative Council of Hong Kong set out that Bitcoins are not a legal tender in Hong Kong, have not been accepted widely as a medium of payment and their circulation as a medium of exchange in Hong Kong is limited.

5.34 Bitcoin and other kinds of virtual currencies are regarded as commodities or virtual commodities for individual speculative activities. Given the very limited market penetration and small scale circulation, the Government of Hong Kong in its statement issued in March, 25, 2015 did not consider it necessary to introduce new legislation to regulate trading in virtual currencies or prohibit people from participating in such activities.

**Singapore**

5.35 The Monetary Authority of Singapore asserts that virtual currencies will have a role to play in the future but is doubtful about their potential to replace fiat currencies entirely. In order to address ML/FT risks presented by virtual currencies, the Authority announced in March 2014 that it will introduce rules that will require virtual currency businesses acting as intermediaries (definition of intermediaries includes operators of Bitcoin exchanges and Bitcoin vending machines) to implement CDD and other measures to prevent and detect illegal activities.

5.36 This public commitment forms a part of overall efforts to preserve and further enhance Singaporean prominence in anticipating technology driven changes in financial services.

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19 Government of Hong Kong press release on Bitcoin

20 MAS to regulate Virtual Currency Intermediaries for ML and TF risks
5.37 The UK is home to some of the world’s most popular Bitcoin products and services. HM Treasury has run a consultation (ended on 3 December 2014) on virtual currencies with the aim of enabling the government to examine the potential benefits that digital currencies may bring to consumers, businesses and the wider economy, and identify potential barriers that virtual currency businesses face when trying to establish themselves in the UK.

5.38 As a result of this consultation, the UK Government announced in March 2015 its response to the call for information on Digital currencies. The next steps listed by the UK are:

- The government intends to apply anti-money laundering regulation to digital currency exchanges in the UK, to support innovation and prevent criminal use. The government will formally consult on the proposed regulatory approach early in the new Parliamentary session.

- As part of this consultation on the proposed regulatory approach, the government will consider how to ensure that law enforcement bodies have effective skills, tools and legislation to identify and prosecute criminal activity relating to digital currencies, including the ability to seize and confiscate digital currency funds where transactions are for criminal purposes.

- The government will work with BSI (British Standards Institution) and the digital currency industry to develop voluntary standards for consumer protection.

- The government is launching a new research initiative which will bring together the Research Councils, Alan Turing Institute and Digital Catapult with industry in order to address the research opportunities and challenges for digital currency technology, and will increase research funding in this area by £10 million to support this.

5.39 HM Revenue & Customs published a brief in March 2014 setting out the position on the tax treatment of income and charges made in connection with Bitcoin activities. It does not consider the exchange

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21 HM Treasury – Digital currencies: response to the call for information – March 2015
of Bitcoin or other virtual currencies for fiat currency to be activity that is within the scope of UK’s Money Laundering Regulations 2007, as Bitcoin is not recognized as money in the UK.

5.40 In one of its quarterly bulletins (Q3, 2014), the Bank of England asserts that ‘although the monetary aspects of digital currencies have attracted considerable attention, the distributed ledger underlying their payment systems is a genuine technological innovation’. It continues positing that the interest in and the adoption of virtual currencies appears to be driven by three key factors; ideology, financial return and pursuit of lower transaction fees. The Bank of England concludes, that the presently too small total stock of digital currencies does not pose a threat to financial and monetary stability, but it is conceivable that in time, this could change.

Isle of Man

5.41 In 2014, the Isle of Man’s Department of Home Affairs conducted a consultation on changes to be made to Schedule 4 of the Proceeds of Crime Act which included a proposal to cover persons carrying on virtual currency business.

5.42 The activities included in the proposal encompass the issuing, transmitting, transferring, providing safe custody or storage of, administering, managing, lending, buying, selling, exchanging or otherwise trading or intermediating convertible virtual currencies, including crypto-currencies or similar concepts where the concept is accepted by persons as a means of payment for goods or services, a unit of account, a store of value or a commodity. The Proceeds of Crime Order came into force on 1 April 2015.

5.43 The proposal also includes introducing a €1,000 occasional transaction threshold for convertible virtual currency activities into the Isle of Man’s Anti-Money Laundering and Countering the Financing of Terrorism Code.

5.44 In addition to the above, an opinion of the Isle of Man Attorney General’s Chambers in relation to the regulatory status of a virtual currency business model concludes that, where a Bitcoin company acts as an intermediary between a merchant and its customer (making payments in Bitcoins for goods or services purchased from a merchant), it would be construed as money transmission/remittance. Consequently, this activity would
constitute a regulated activity if carried on in or from within the Isle of Man. This is in line with Jersey legislation.

Part 6: Options for regulation of virtual currency

6.1 In considering options for regulation of virtual currencies, it is helpful to refer to the four “guiding principles” set out in Article 7 of the Financial Services Commission (Jersey) Law 1998. In particular the need to counter financial crime both in Jersey and elsewhere must be of paramount importance when considering the introduction of, or amendment to, any regulatory regime.

6.2 Factors that need to be considered in determining what form of regulation may be appropriate include:

- the way virtual currencies manifest themselves, and their specific terms;
- the nature and scale of the risks identified;
- the need to preserve the integrity and stability of existing financial services;
- the need to prevent businesses and their customers from engaging in criminal activity; and
- the need to promote innovation by enabling technology driven changes to traditional financial products and services and further development of the digital economy.

6.3 As mentioned earlier in this paper, some activities involving virtual currencies are already subject to regulation and supervision. For example, existing legislation captures:

- Persons engaged in the business of money transmission on a “composite” basis - who fall under the definition of money service business (Article 2(9)(d) of the Financial Services Law).
- Persons engaged in lending in virtual currencies (Paragraph 7(1)(b) of Part B of the Schedule to the Proceeds of Crime Law).
- Persons engaged in safe custody of virtual currencies (Paragraph 7(1)(m) of Part B of the Schedule to the Proceeds of Crime Law).

- Persons engaged in the business of otherwise investing, administering or managing virtual currencies on behalf of third parties (Paragraph 7(1)(n) of Part B of the Schedule to the Proceeds of Crime Law).

6.4 However, reliance on existing provisions is unlikely to focus on activities that will most effectively address the risks identified in this paper.

6.5 It is also worth noting that, by electing to regulate and supervise virtual currency operators for AML/CFT purposes only, customers and wider industry participants may incorrectly assume that a robust and comprehensive prudential and conduct of business regime is in place, including customer protection schemes.

6.6 Options A to C below consider regulation for AML/CFT purposes only. Option D proposes regulation for prudential and conduct of business purposes. The options are presented as alternatives to each other, but are not mutually exclusive and some could be implemented together.

6.7 Brief preliminary discussions have occurred between authorities in the Channel Islands regarding potential advantages to developing a joint Channel Island standard for Regulation of Virtual Currency. If it is felt that this could be advantageous, further discussion on a standard for Regulation of Virtual Currency could be raised between the Channel Island authorities. If these discussions resulted in agreement on such a standard, it could then be for each of the Islands to implement the standard within their own respective legislative regimes.

6.8 It has been suggested that a clear and unified position being advanced by the Channel Islands to the outside world may have a greater impact and therefore create confidence in the approach adopted by the Channel Islands.
Option A – regulate all virtual currency activities

6.9 Option A is to add the following activities to the definition of “financial services business” in Schedule 2 to the Proceeds of Crime Law:

“Activities covering issuing, transmitting, transferring, providing safe custody or storage of, administering, managing, lending, buying, selling, exchanging or otherwise trading or intermediating convertible virtual currencies, including virtual currencies or similar concepts where the concept is accepted by persons as a means of payment for goods or services, a unit of account, a store of value or a commodity.”

6.10 This change could bring a significant number of additional activities connected with virtual currencies within the scope of the Money Laundering Order, including activities occurring exclusively within the virtual ecosystem with no interaction between real and virtual economy. Given that virtual currencies are considered to still be in their experimental stage, this definition may be too wide. Also, some activities, e.g. lending and safe custody, will already be covered by Schedule 2 to the Proceeds of Crime Law (i.e., there will be duplication).

6.11 Under this option, Article 4 of the Money Laundering Order would require identification measures to be applied to any one-off virtual currency transaction of €1,000 (or equivalent) or more.

Option B – regulate interface with fiat currencies

6.12 In line with the approach likely to be adopted by the FATF, option B is to add the following activity to the definition of “financial services business” in Schedule 2 to the Proceeds of Crime Law:

“Acting as an interface between legacy financial systems and virtual currencies, e.g. virtual currency exchanges and Bitcoin ATM operators.”

6.13 This is also the approach announced by the Monetary Authority of Singapore in March 2014 which is yet to be implemented. This change focuses on “gatekeepers”: those businesses that exchange fiat currencies for virtual currencies (and vice versa).
6.14 Under this option, Article 4 of the *Money Laundering Order* would require identification measures to be applied to any one-off *virtual currency* transaction of €1,000 or more.

**Option C – extend meaning of cash and money**

6.15 Option C is to extend a number of existing provisions so that they will be read as applying to virtual currencies, where this is not already the case.

6.16 A definition of “bureau de change” would be amended into Schedule 2 of the *Proceeds of Crime Law*, so that it would also include any case where a *fiat currency* is exchanged for a *virtual currency*, *virtual currency* is exchanged for a *fiat currency*, and *virtual currency* is exchanged for a *virtual currency*.

6.17 The definition of “high value dealers” contained in Schedule 2 to the *Proceeds of Crime Law* would be amended to include:

“Persons who, by way of business, trade in goods when they receive, in respect of any transaction, a payment or payments in *virtual currency* of at least €15,000 (or equivalent) in total, whether the transaction is executed in a single operation or in several operations which appear to be linked.”

6.18 The definition of “issuing and administering means of payment” set out in Article 7(1)(e), Schedule 2 to the *Proceeds of Crime Law* would be amended to include:

“Any operator of a virtual currency.”

6.19 Regulation of *virtual currency* operators may prove to be unworkable, in particular for *decentralised virtual currencies*, as there is no central authority that issues currency.

6.20 Under this option, existing one-off transaction thresholds would be retained.
Option D – extend meaning of investment

6.21 Option D is to amend the definition of “investment” in the Financial Services Law to treat virtual currencies and similar concepts as a type of investment. The effect of this would be to capture any person:

- Dealing in virtual currencies, that is buying or selling either as principal or as agent;
- Undertaking discretionary management, that is, the person decides as agent to buy or sell virtual currencies;
- Gives advice in respect of virtual currencies.

6.22 This option bears some similarities with the approach taken by Germany’s financial services regulator.

6.23 The regulatory scope of this option would be closest to option A. However, whereas option A would regulate operators only for AML/CFT purposes, option D would also apply prudential and conduct of business rules.

6.24 Such an approach may be considered to be premature. It could also have the effect of pushing business away from Jersey (on the basis that most other jurisdictions are likely to regulate virtual currency activities only for AML/CFT purposes).

6.25 However, it could also be argued that such an approach may encourage operators to establish themselves in Jersey on the basis that they could present themselves as regulated and supervised by the JFSC. A full regulatory regime would undoubtedly also help to manage risk more effectively, and encourage the use (or greater use) of virtual currencies by more risk-averse users.

**QUESTION 4:**
Which option (or combination of options) do you consider represents the best approach for Jersey to take in respect of regulation of virtual currency?

And why?
Part 7: Distributed ledger technology standard

7.1 Some brief and preliminary discussion between the Channel Islands has occurred regarding whether regulation of the underlying “distributed ledger” technology would be advantageous in providing confidence to the marketplace that the Channel Islands are suitable jurisdictions in which to conduct “distributed ledger” technology based business. A standard might involve registration, inspection, certification and periodical checking of the underlying “distributed ledger” technology system sitting behind any particular business that would use, develop or provide “distributed ledger” technology.22

7.2 When considering a technical quality standard for distributed ledger technology, consideration should also be given to whether this should be mandated by legislation or whether it should be voluntary. Voluntary application would allow those who wished to obtain the status of meeting the “distributed ledger” technology standard’ to apply to be registered.

QUESTION 6:
Do you consider that a technical quality standard for “distributed ledger” technology would be advantageous, and, if so, should it be voluntary or compulsory?

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22 Which would include, for example, a Block-chain
23 Before any standard was implemented, further consultation would occur on the format and detail of any standard.
QUESTION 7:
Do you consider that a common technical quality standard for “distributed ledger” technology could be implemented and administered by one Channel Island body as a joint Channel Islands Standard or should it be a common standard administered by separate jurisdictional bodies?
Summary of Consultation Paper Questions

1) Is there any other type of virtual currency that does not fit any of the two currently prominent systems and which should be considered at this point in time when considering Regulation of Virtual Currency for Jersey?

2) Are there any other material ML/FT risks associated with virtual currencies that should be considered for the purpose of an effective and suitable framework for preventing and detecting ML/FT?

3) Are there other key areas where you consider that virtual currency activity is caught by the existing statutory framework?

4) Which option (or combination of options) do you consider represents the best approach for Jersey to take in respect of regulation of virtual currency? And why?

5) Do you consider that any other regulatory options should be considered to prevent and detect ML and TF in respect of virtual currencies?

6) Do you consider that a technical quality standard for “distributed ledger” technology would be advantageous, and, if so, should it be voluntary or compulsory?

7) Do you consider that a common technical quality standard for “distributed ledger” technology could be implemented and
administered by one Channel Island body as a joint Channel Islands Standard or should it be a common standard administered by separate jurisdictional bodies?

[END OF PAPER]
### Appendix 1 - Glossary of Terms

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>AML/CFT</td>
<td>means anti-money laundering and countering the financing of terrorism</td>
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<tr>
<td>Bitcoin</td>
<td>is a type of <em>crypto-currency</em> that is a <em>convertible virtual currency</em>. It is divisible; i.e. it can be divided down to 8 decimal places (to one hundred-millionth of a Bitcoin (0.00000001) called the Satoshi)</td>
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<td>Bitcoin address</td>
<td>is a hashed (shortened) version of the <em>public key</em> (160 bits long) which serves as an overt identifier of the originator and beneficiary in <em>bitcoin</em> transactions</td>
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<tr>
<td>Bitcoin wallet</td>
<td>is a piece of software that functions as a data file which contains, amongst other things, pairs of keys for each <em>Bitcoin address</em>, a record of transactions from/to the address, and user preferences. In conventional terms, a Bitcoin wallet is a bank where accounts (<em>Bitcoin addresses</em>) and passwords to these accounts (<em>private keys</em>) are held and stored</td>
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<tr>
<td>Block-chain</td>
<td>is a distributed ledger used to order transactions by placing them into <em>blocks</em> and incorporating individual <em>blocks</em> into a block-chain. [The transaction ordering system is essential to guard against double-spending attacks, where rogue players may seek to outpace the network and generate longer branches of <em>blocks</em> that will effectively enable the “bad players” to double spend their <em>Bitcoins</em>]</td>
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<tr>
<td>CDD</td>
<td>means customer due diligence</td>
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Centralised virtual currency means a *virtual currency* that has a single administrating authority (administrator that controls the system, issues the *virtual currency*, has the authority to redeem the currency, maintains a central payment ledger, etc. (examples include Second Life Linden Dollars, Perfect Money))\(^{24}\)

Convertible virtual currency means a *virtual currency* that has an equivalent value in a *fiat currency* and can be exchanged to and from that *fiat currency*, (examples include *Bitcoin*, Second Life Linden Dollars, Web Money and Liberty Reserve (now defunct))\(^{1}\)

Crypto-currency means a *virtual currency* that is cryptographically protected

Decentralised virtual currency means a *virtual currency* that circulates in a *distributed*, open-source, crypto-graphically protected, peer-to-peer network with no central administrating authority, no central monitoring and oversight (examples include *Bitcoin*, LiteCoin, and Ripple) \(^{1}\)

Digital currency means a digital representation of either *virtual currency* (non-*fiat currency*) or *e-money* (*fiat currency*) and is often interchangeably used with the term *virtual currency*\(^{25}\)

Distributed network means a network in which transactions are validated by a distributed system and consensus achieved to include transactions onto a ledger

EBA means the European Banking Authority

ECB means the European Central Bank

Electronic money means a digital representation of *fiat currency* used to electronically transfer value denominated in *fiat currency*. The values transferred electronically have legal tender status

FATF means the Financial Action Task Force

\(^{25}\) Definition as adopted by *FATF* in Virtual Currencies report of June 2014.
<p>| <strong>Fiat currency</strong> | means currency (physical coins and banknotes) that a country (government) has declared to be legal tender(^1) |
| <strong>Financial Services Law</strong> | means the Financial Services (Jersey) Law 1998 |
| <strong>GST</strong> | means Goods and services tax |
| <strong>Hawala</strong> | is a traditional informal value transfer system that offers fast, cheap and cross border transactions where the money subject to the transfer does not physically move. Hawala is deeply ingrained in the culture of many ethnic groups which have limited or no access to the traditional financial services. |
| <strong>Miner</strong> | is an individual or a group of individuals that engage in a <em>mining</em> process to maintain the integrity and security of <em>Bitcoin</em>. Miners are rewarded for work that is beneficial to the network with a “bounty”, whenever a new <em>block</em> is generated, and with all <em>transaction fees</em> attached to transactions included in a <em>block</em>. |
| <strong>Mining</strong> | is a resource intensive process of adding transactions to <em>Bitcoin’s block-chain</em> of past transactions and is also a mechanism to generate new <em>Bitcoins</em>. |
| <strong>Money Laundering Order</strong> | means the Money Laundering (Jersey) Order 2008 |
| <strong>OTC market</strong> | is an on-line multichannel platform allowing its users (including vendors and customers) to transact in <em>virtual currency</em>, and offering enhanced privacy features and/or escrow systems |
| <strong>Private key</strong> | is a secret number stored in a <em>Bitcoin wallet</em> that, together with a <em>public key</em>, forms the key pairing that is linked to a <em>Bitcoin address</em>. The main function of a private key is to allow <em>Bitcoins</em> to be spent |</p>
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<tr>
<th><strong>Proceeds of Crime Law</strong></th>
<th>means the Proceeds of Crime (Jersey) Law 1999</th>
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<tr>
<td><strong>Public key</strong></td>
<td>often incorrectly called a <em>Bitcoin address</em>, is a 256 bits long random sequence of alphanumeric characters that, together with a private key, forms the key pairing that is linked to a <em>Bitcoin address</em></td>
</tr>
<tr>
<td><strong>Virtual currency</strong></td>
<td>means a digital representation of value that can be digitally traded and functions as: (i) a medium of exchange; (ii) a unit of account and; a (iii) a store of value, but does not have legal tender status¹ The term ‘currency’ is used to reflect public usage of the term. In practice, value is stored on a digital file and is not recognised as a <em>fiat currency</em></td>
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