

# The treatment of e-Money and virtual currencies across jurisdictions

## A comparative table

June 2018



# Introduction

How do different jurisdictions define 'money'?  
What about 'e-money' and 'virtual currency'?  
These definitional questions, and the answers to these questions, help to further our understanding on the function and role of money, e-money and virtual currency. In turn, these answers inform the approach that each jurisdiction takes towards money, e-money and virtual currency – in particular, whether e-money and virtual currency are regulated as money, money equivalents, or something else.

In this table, we have sought to compare the treatment of money, e-money and virtual currency across 28 different jurisdictions. These jurisdictions take a wide variety of approaches towards the regulation of e-money and virtual currencies. Some jurisdictions do not regulate virtual currencies, whereas others regulate virtual currency intermediaries such as exchanges, but do not regulate virtual currencies per se.

It is hoped that this comparative table provides a greater insight into the current state of regulation, and a starting point for the development of future regulations.

We have endeavoured to state the law as at 30 March 2018.

*With special thanks to:*

Jurisdiction	Contributor
France	Contributed by Lise Breteau and her team from Osborne Clarke SELAS.
Germany	Contributed by Dr. Daniel Walter and his team from Osborne Clarke's Cologne office.
Hong Kong	Contributed by John Koh and his team from Koh Vass & Co (in association with Osborne Clarke).
India	Contributed by Prashant Mara and Vikram Jeet Singh from BTG Legal.
The Netherlands	Contributed by Johannes de Jong and Ted Broekhof from Osborne Clarke's Amsterdam office.
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<sup>1</sup>The project coordinator would like to thank Ms Dharini Ravi for her efforts in helping to prepare this paper, together with the accompanying comparative table on the treatment of e-money and virtual currencies across jurisdictions.  
<sup>2</sup>OC Queen Street is a Singapore Law Practice with limited liability (Company Registration: 201618305M) ('LLC'). The LLC is an independently owned and managed Singapore Law Practice and is also a member of Osborne Clarke's international legal practice.

Country	Fiat currency	E-Money	Virtual currency
Australia	<ul style="list-style-type: none"> <li>▪ <b>Australian Dollar</b></li> <li>▪ Central Bank: <b>Reserve Bank of Australia</b><sup>3</sup></li> <li>▪ Notes printed by or under the authority of Reserve Bank of Australia.</li> <li>▪ Coins issued by the Royal Australian Mint.</li> <li>▪ Coins and banknotes are legal tender throughout Australia.</li> <li>▪ Money is defined under the GST Act:<sup>4</sup> <p>'money includes:</p> <ul style="list-style-type: none"> <li>(a) <b>currency</b> (whether of Australia or of any other country); and</li> <li>(b) <b>promissory notes and bills of exchange</b>; and</li> <li>(c) any <b>negotiable instrument</b> used or circulated, or intended for use or circulation, as <b>currency</b> (whether of Australia or of any other country); and</li> <li>(d) <b>postal notes and money orders</b>; and</li> <li>(e) whatever is supplied <b>as payment by</b> way of: <ul style="list-style-type: none"> <li>(i) <b>credit card or debit card</b>; or</li> <li>(ii) <b>crediting or debiting an account</b>; or</li> <li>(iii) <b>creation or transfer of a debt</b>.</li> </ul> </li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ E-money is <b>not defined</b>.</li> <li>▪ Regulated as a '<b>Purchased Payment Facility</b>' ('PPF'):<sup>5</sup> <p>'A purchased payment facility is a facility (<b>other than cash</b>) in relation to which the following conditions are satisfied:</p> <ul style="list-style-type: none"> <li>(a) the facility is <b>purchased by a person from another person</b>; and</li> <li>(b) the facility is able to be used as a <b>means of making payments</b> up to the amount that, from time to time, is available for use under the conditions applying to the facility; and</li> <li>(c) those <b>payments are to be made by the provider of the facility</b> or by a person acting under an arrangement with the provider (<b>rather than by the user of the facility</b>).</li> </ul> </li> <li>▪ PPF is treated akin to a deposit and PPF providers have to be an authorised deposit taking institution under the Banking Act 1959.</li> <li>▪ For example, Paypal is a limited purpose ADI institution<sup>6</sup> and is only allowed to provide PPF services.</li> <li>▪ E-money can also fall into the definition of '<b>non-cash payments</b>' ('NCP') under the Corporations Act:<sup>7</sup> <p>'A <b>payment made</b> or caused to be made, <b>otherwise than by the physical delivery</b> of Australian or foreign currency in the form of <b>notes and/or coins</b>'.</p> </li> </ul>	<ul style="list-style-type: none"> <li>▪ '<b>Digital currency</b>' is defined for Goods and Services Tax purposes:<sup>8</sup> <p><b>digital currency</b> means digital units of value that:</p> <ul style="list-style-type: none"> <li>(a) are designed to be <b>fungible</b>; and</li> <li>(b) can be provided as consideration for a supply; and</li> <li>(c) are generally available to members of the public without any substantial restrictions on their use as consideration; and</li> <li>(d) are <b>not denominated in any country's currency</b>; and</li> <li>(e) <b>do not have a value that depends on, or is derived from, the value of anything else</b>; and</li> <li>(f) do not give an entitlement to receive, or to direct the supply of, a particular thing or things, unless the entitlement is incidental to: <ul style="list-style-type: none"> <li>(i) holding the digital units of value; or</li> <li>(ii) using the digital units of value as consideration;</li> </ul> </li> </ul> <p>but <b>does not include</b>:</p> <ul style="list-style-type: none"> <li>(g) money; or</li> <li>(h) a thing that, if supplied, would be a financial supply for a reason other than being a supply of one or more digital units of value to which paragraphs (a) to (f) apply.</li> </ul> </li> </ul>

<sup>3</sup>Reserve Bank Act 1959. The RBA defines central bank as: "A non-commercial bank, which may or may not be independent of government, which has some or all of the following functions: conduct monetary policy; oversee the stability of the financial system; issue currency notes; act as banker to the government; supervise financial institutions and regulate payments systems."

(Reserve Bank of Australia, "Glossary" <<https://www.rba.gov.au/glossary/>> (accessed 20 March 2018)).

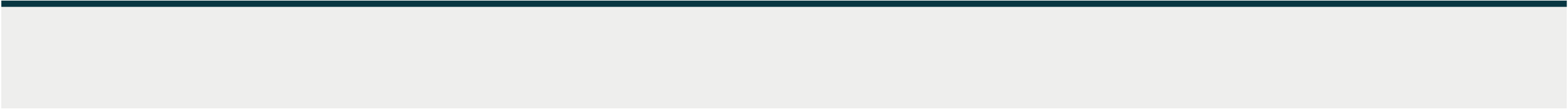
<sup>4</sup>A New Tax System (Goods and Services Tax) Act 1999, Part 6, Division 195.

<sup>5</sup>Payment Systems (Regulations) Act 1998.

<sup>6</sup>Australian Prudential Regulatory Authority, "Authority to carry on banking business" granted in favour of Pay Pal Australia Pty Limited (26 October 2006) <<http://www.apra.gov.au/adi/Documents/cfdocs/PayPal-auth-and-conditions-2006.pdf>> (accessed 16 March 2018).

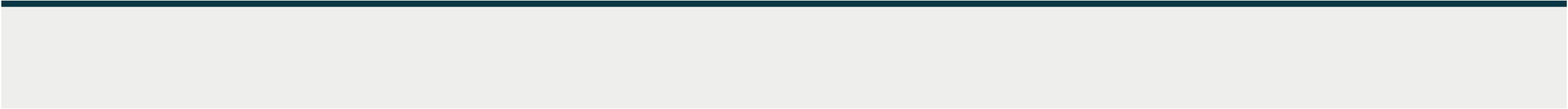
<sup>7</sup>Australian Securities and Investments Commission, "Regulatory Guide 185: Non-cash payment facilities" (Issued 15 November 2005, updated March 2016) <<http://asic.gov.au/regulatory-resources/find-a-document/regulatory-guides/rg-185-non-cash-payment-facilities/>> (accessed 17 March 2018).

<sup>8</sup>See note 4.



Country	Fiat currency	E-Money	Virtual currency
Australia	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.	<ul style="list-style-type: none"><li>▪ Both PPF and NCP are widely defined and can include electronic toll payment, loyalty cards, gift cards and mobile top-ups. Such products are either exempt from regulation or lightly regulated.</li><li>▪ Though terms such as 'electronic money' and 'electronic cash' are used, they are not defined specifically.</li></ul>	<ul style="list-style-type: none"><li>▪ <b>Treatment like money:</b> Purchase of virtual currency not subject to GST. Only purchases using virtual currency will be subject to GST.<sup>9</sup></li></ul>

<sup>9</sup>Australian Budget 2017 website, "Budget 2017-18 - Factsheet - Backing innovation and FinTech" <[http://www.budget.gov.au/2017-18/content/glossies/factsheets/html/FS\\_innovation.htm](http://www.budget.gov.au/2017-18/content/glossies/factsheets/html/FS_innovation.htm)> (accessed 20 March 2018).

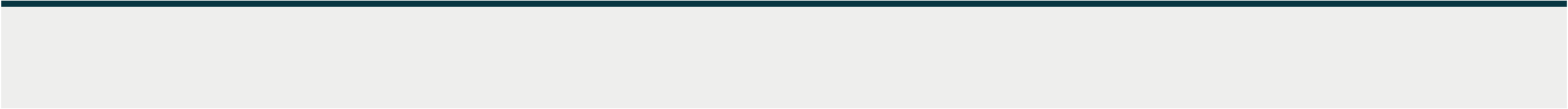


Country	Fiat currency	E-Money	Virtual currency
Brunei	<ul style="list-style-type: none"><li>▪ <b>Brunei Dollar</b></li><li>▪ Central Bank: <b>Autoriti Monetari Brunei Darussalam (AMBD)</b></li><li>▪ Central Bank is the sole issuer of currency.</li><li>▪ <b>Brunei and Singapore</b> currencies are exchangeable at par and without charge under the <b>Currency Interchangeability Agreement</b>.</li><li>▪ Currency issued by AMDB is legal tender while Singapore currency is 'customary tender'.<sup>10</sup></li></ul>	<ul style="list-style-type: none"><li>▪ E-money does not appear to be defined and/or regulated as a separate category.</li><li>▪ However, banks do seem to offer e-money products – e.g., Bank Islam Brunei Darussalam's 'Virtual Card'.<sup>11</sup></li></ul>	<ul style="list-style-type: none"><li>▪ Virtual currencies are <b>not defined or regulated</b>.</li><li>▪ The AMDB recently issued a caution against cryptocurrencies and stated that they are not legal tender in Brunei.<sup>12</sup> The caution described cryptocurrencies in the following manner: 'ryptocurrency, such as Bitcoin, Bitcoin Cash and Ether, is a <b>form of digital currency</b> which <b>operates independently from monetary authorities or central banks</b>.'</li></ul>

<sup>10</sup>Autoriti Monetari Brunei Darussalam, 'Frequently Asked Questions: Monetary Policy and Management Department' <<http://www.ambd.gov.bn/faqs>> (accessed 18 March 2018).

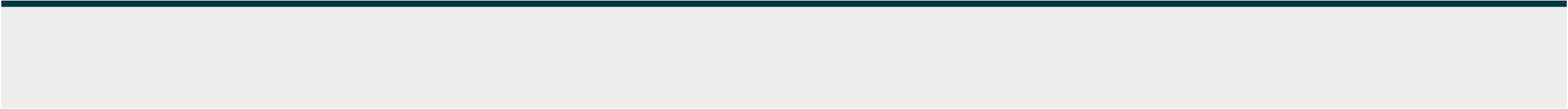
<sup>11</sup>See Bank Islam Brunei Darussalam, 'Virtual Cards' <<http://www.bibd.com.bn/personal/cards/virtual-card/>> (accessed 10 March 2018).

<sup>12</sup>Autoriti Monetari Brunei Darussalam, 'Public to Exercise High Caution with Cryptocurrencies' (22 December 2017) <<http://www.ambd.gov.bn/Lists/News/DisplayItem.aspx?ID=324&Source=http%3A%2F%2Fwww%2Eambd%2Egov%2Ebn%2Fambd%2Fnews-archive&ContentTypeld=0x01040013E26435B72C28499D11105B93AD3652>> (accessed 18 March 2018).



Country	Fiat currency	E-Money	Virtual currency
Cambodia	<ul style="list-style-type: none"><li>▪ <b>Khmer Riel</b></li><li>▪ Central Bank: <b>National Bank of Cambodia</b></li><li>▪ Central bank is the sole issuer of currency.<sup>13</sup></li><li>▪ The US\$ is commonly used and the Riel is used for smaller transactions and rural areas.<sup>14</sup></li></ul>	<ul style="list-style-type: none"><li>▪ E-money is regulated under Prakas No. B14-107-161 on the Management of Payment Service Provider.<sup>15</sup></li><li>▪ Allows both banks and non-bank entities to obtain license for providing payment services including e-money issuance.</li></ul>	<ul style="list-style-type: none"><li>▪ Virtual currencies are <b>not defined or regulated</b>.</li></ul>

<sup>13</sup>National Bank of Cambodia, 'Overview' <[https://www.nbc.org.kh/english/about\\_the\\_bank/overview\\_of\\_functions\\_and\\_operation.php](https://www.nbc.org.kh/english/about_the_bank/overview_of_functions_and_operation.php)> (accessed 20 March 2018).  
<sup>14</sup>National Bank of Cambodia, 'Ten Frequently Asked Questions about the NBC' <[https://www.nbc.org.kh/english/about\\_the\\_bank/faqs.php](https://www.nbc.org.kh/english/about_the_bank/faqs.php)> (accessed 20 March 2018).  
<sup>15</sup>An English translation of this regulation is currently unavailable. Some information about the Prakas is available in Hor Kimsay and Matthieu de Gaudemar, 'New rules for digital payments' Phnom Penh Post (26 June 2017) <<http://www.phnompenhpost.com/business/new-rules-digital-payments>> (accessed 20 March 2018).



Country	Fiat currency	E-Money	Virtual currency
China	<ul style="list-style-type: none"><li>▪ <b>Renminbi</b></li><li>▪ Central Bank: <b>People's Bank of China</b></li><li>▪ Central bank is the sole issuer of currency<sup>16</sup></li><li>▪ Renminbi is legal tender within People's Republic of China (excluding the special administrative regions of Hong Kong &amp; Macau).<sup>17</sup></li></ul>	<ul style="list-style-type: none"><li>▪ Regulated as an 'online payment service' or 'electronic payments' by 'non-bank institutions'<sup>18</sup></li><li>▪ News reports suggest that 100% ring-fencing of e-money is not required.<sup>19</sup> At present, 20% of the funds have to be kept in reserve at a state-approved commercial bank, and the percentage is likely to be increased over time.</li><li>▪ China has set up a central clearing house through which third party payments have to be routed.<sup>20</sup></li></ul>	<ul style="list-style-type: none"><li>▪ Virtual currencies are <b>not defined or regulated</b>.</li><li>▪ China is developing its own 'digital currency' to act as digital legal tender which will have the same acceptance as physical fiat currency.<sup>21</sup></li><li>▪ At present, virtual currency exchanges that exchange virtual currency for legal tender are not allowed to operate.<sup>22</sup></li></ul>

<sup>16</sup>Law of the People's Republic of China on the People's Bank of China (Mar 18, 1995).

<sup>17</sup>Norman Chan, 'China: One Country, Two Financial Systems' (12 September 1997) <[http://www.hkma.gov.hk/eng/key-information/speech-speakers/ntlchan/speech\\_220997b.shtml](http://www.hkma.gov.hk/eng/key-information/speech-speakers/ntlchan/speech_220997b.shtml)> (accessed 20 March 2018).

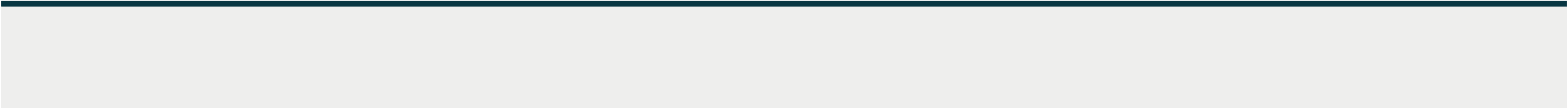
<sup>18</sup>Xinhua News Agency, 'China central bank details rules on online payment' (28 December 2015) <[http://www.xinhuanet.com/english/2015-12/28/c\\_134959185.htm](http://www.xinhuanet.com/english/2015-12/28/c_134959185.htm)> (accessed 20 March 2018). See also, Becky Miles, 'China issues new rules on online payment in a tightening of regulatory control' Osborne Clarke (9 February 2016) <<http://www.osborne-clarke.com/insights/China-issues-new-rules-on-online-payment-in-a-tightening-of-regulatory-control/>> (accessed 20 March 2018).

<sup>19</sup>Reuters, 'China's central bank to raise reserve funds ratio of third-party payment firms to 50 percent' (30 December 2017) <<https://www.reuters.com/article/us-china-pboc/chinas-central-bank-to-raise-reserve-funds-ratio-of-third-party-payment-firms-to-50-percent-idUSKBN1EO02K>> (accessed 20 March 2018).

<sup>20</sup>Jinshan Hong, 'How China's Central Bank Is Clamping Down On The Mobile Payment Industry' Forbes (18 August 2017) <<https://www.forbes.com/sites/jinshanhong/2017/08/18/how-chinas-central-bank-is-clamping-down-on-the-mobile-payment-industry/>> (accessed 20 March 2018).

<sup>21</sup>Zheping Huang, 'China's central bank thinks digital currency can do one thing cash can't' Quartz (27 March 2017) <<https://qz.com/942413/peoples-bank-of-china-pboc-wants-to-replace-cash-with-its-cryptocurrency-in-case-interest-rates-go-negative/>> (accessed 20 March 2018).

<sup>22</sup>People's Bank of China, 'Public Notice of PBoC et al on Preventing Risks of Fundraising through Coin Offering' (8 September 2017) <<http://www.pbc.gov.cn/english/130721/3377816/index.html>> (accessed 20 March 2018).



Country	Fiat currency	E-Money	Virtual currency
Colombia	<ul style="list-style-type: none"><li>▪ <b>Colombian Peso</b></li><li>▪ Central Bank: <b>Banco de la República – Colombia</b></li><li>▪ Central bank is the sole issuer of currency.<sup>23</sup></li></ul>	<ul style="list-style-type: none"><li>▪ Allows non-bank entities, including mobile network operators to offer 'electronic deposits' under a simplified financial license.<sup>24</sup></li><li>▪ Such entities are called 'Specialised Companies in Electronic Deposits and Payments'.</li><li>▪ E-money is covered by the Deposit Guarantee Fund and may be interest bearing.<sup>25</sup></li><li>▪ However, 100% of the funds have to be held in bank deposits and the providers cannot conduct financial intermediation.</li></ul>	<ul style="list-style-type: none"><li>▪ Virtual currencies are <b>not defined or regulated</b>.</li></ul>

<sup>23</sup>Banco de la Republica – Colombia, 'Banknotes and Coins' <<http://www.banrep.gov.co/en/temas-a/6617>> (accessed 17 March 2018).

<sup>24</sup>María del Rosario Moreno Sánchez, 'New Financial Inclusion Innovation in Colombia: Electronic Deposits' Alliance for Financial Inclusion (11 February 2015) <<https://www.aifi-global.org/blog/2015/02/new-financial-inclusion-innovation-colombia-electronic-deposits>> (accessed 17 March 2018).

<sup>25</sup>Pablo Urbiola, 'E-money regulation in Colombia' BBVA Research, Digital Economy Outlook (September 2015) <<https://www.bbva.com/en/public-compuesta/digital-economy-outlook-september-2015/>> (accessed 17 March 2018).



Country	Fiat currency	E-Money	Virtual currency
European Union	<ul style="list-style-type: none"><li>▪ <b>Euro</b></li><li>▪ Adopted by several European Union ('EU') nations.</li><li>▪ Central Bank: <b>European Central Bank ('ECB')</b>.</li><li>▪ ECB together with the national central banks in the Eurozone form the European System of Central Banks.<sup>26</sup></li><li>▪ Euro has <b>legal tender status</b> in the Eurozone.<sup>27</sup></li></ul>	<ul style="list-style-type: none"><li>▪ EC has issued a directive on supervision of business of e-money institutions.<sup>28</sup></li><li>▪ 'Electronic money institution' is defined as a legal person that has been granted authorisation to issue e-money.</li><li>▪ '<b>electronic money</b>' means: 'electronically, including magnetically, <b>stored monetary value as represented by a claim on the issuer which is issued on receipt of funds for the purpose of making payment transactions [...], and which is accepted by a natural or legal person other than the electronic money issuer.</b>'</li><li>▪ Credit institutions, as well as other financial and non-financial institutions, may issue e-money.</li><li>▪ E-money cannot earn interest.</li><li>▪ E-money is not to be treated like deposits or other repayable funds (though e-money may be redeemable).</li><li>▪ Member nations to determine how to safeguard e-money funds.</li></ul>	<ul style="list-style-type: none"><li>▪ <b>Virtual currency</b> is defined as: <b>'A digital representation of value, not issued by a central bank, credit institution or e-money institution, which, in some circumstances, can be used as an alternative to money.'</b><sup>29</sup></li><li>▪ Notably, the ECB amended its earlier definition of virtual currencies to exclude the term 'money' from the definition. The earlier definition was: 'A virtual currency is a type of <b>unregulated, digital money, which is issued and usually controlled by its developers, and used and accepted among the members of a specific virtual community.</b>'<sup>30</sup></li><li>▪ Considered 'private money' that parties can agree to use</li><li>▪ Bitcoin is treated as a supply of services for consideration for VAT purposes. However, as Bitcoin is a '<b>contractual means of payment</b>' and '<b>accepted as an alternative to legal tender and has no other purpose than being a means of payment</b>', it amounts to a financial transaction and is therefore exempt from VAT.<sup>31</sup></li></ul>

<sup>26</sup>European Central Bank, 'Overview' <[https://europa.eu/european-union/about-eu/institutions-bodies/european-central-bank\\_en](https://europa.eu/european-union/about-eu/institutions-bodies/european-central-bank_en)> (accessed 21 March 2018).

<sup>27</sup>European Commission, 'The euro as legal tender' <[https://ec.europa.eu/info/business-economy-euro/euro-area/euro/use-euro/euro-legal-tender\\_en](https://ec.europa.eu/info/business-economy-euro/euro-area/euro/use-euro/euro-legal-tender_en)> (accessed 21 March 2018).

<sup>28</sup>Directive 2009/110/EC of the European Parliament and Council (16 September 2009).

<sup>29</sup>European Central Bank, 'Virtual currency schemes – a further analysis' (February 2015) <<https://www.ecb.europa.eu/pub/pdf/other/virtualcurrencyschemesen.pdf>> (accessed 21 March 2018).

<sup>30</sup>European Central Bank, 'Virtual currency schemes' (October 2012) <<https://www.ecb.europa.eu/pub/pdf/other/virtualcurrencyschemes201210en.pdf>> (accessed 21 March 2018).

<sup>31</sup>Judgment of 22 October 2015 (Case C-264/14, ECLI:EU:C:2015:718), at para. 31, 49, and 57.

Country	Fiat currency	E-Money	Virtual currency
France	<ul style="list-style-type: none"><li>▪ <b>Euro</b><sup>32</sup></li><li>▪ Central Bank: <b>Banque de France</b>, which is a part of the European System of Central Banks. Only Banque de France is authorised to issue legal tender within France.</li><li>▪ Euro banknotes be printed by the Banque de France, under the authority of the European Central Bank<sup>33</sup>. Coins are issued by the Monnaie de Paris institute – Paris Mint.</li><li>▪ Euro is legal tender. However, extent of payments in cash are restricted by law depending on nature of payment and amount.<sup>34</sup></li></ul>	<ul style="list-style-type: none"><li>▪ <b>E-money is defined</b> in the French Monetary and Financial Code<sup>35</sup> (incorporating EC's directive) as:<ul style="list-style-type: none"><li>(1) 'A <b>stored monetary value</b>, either as electronic or magnetic form representing a claim on the issuer which is <b>issued upon receipt of funds for the purpose of making payment transactions</b> as defined in article L133-3 [of the same code] ,and which is <b>accepted by a natural or legal person other than the electronic money issuer</b>'.</li><li>(2) 'Units of e-money are deemed units of value, each one constituting a debt incorporated in a security'.</li></ul></li><li>▪ E-money businesses require an 'electronic money institution license' from the Autorité de contrôle prudentiel et de résolution ('<b>ACPR</b>').<sup>36</sup></li><li>▪ Transaction limits apply to e-money as well.</li></ul>	<ul style="list-style-type: none"><li>▪ Virtual currencies are not defined. They may come under the purview of some regulations.</li><li>▪ The Autorité des Marchés Financiers ('<b>AMF</b>') (the Financial Markets Authority) and the ACPR have issued warnings regarding the purchase of Bitcoin<sup>37</sup> which they describe as: 'a 'speculative asset' and that it is 'wrongly referred to as virtual 'currencies' or 'crypto currencies' and that Bitcoin '<b>cannot be</b> classified as currencies or <b>considered a means of payment in the legal sense</b> of the term.'</li><li>▪ <b>AML regulations:</b><ul style="list-style-type: none"><li>▪ Intermediation with respect to the purchase or sale of virtual currencies in exchange for a currency with legal tender is that of a financial intermediary and may be subject to regulation.<sup>38</sup></li></ul></li><li>▪ <b>Payment services regulations:</b><ul style="list-style-type: none"><li>▪ The French authorities consider that virtual currency exchange platforms are subject to payment institutions' authorisation.</li></ul></li><li>▪ <b>Tax</b><ul style="list-style-type: none"><li>▪ Virtual currencies may be exploited as speculative assets and their trading is subject to taxation, either as professional /non-professional income depending on how the activity is performed.<sup>39</sup></li></ul></li></ul>

<sup>32</sup>Treaty on the European Union (2012/C 326/01), at Art 3(4).

<sup>33</sup>Treaty on the Functioning of the European Union (2012/C 326/01), at Article 128(1).

<sup>34</sup>French Monetary and Financial Code, Article L.112-6. See also, Banque de France 'Where, under what conditions and how much can I pay in cash?' <<https://www.banque-france.fr/en/banknotes/how-recognise-and-use-euro-banknotes-and-coins/where-under-what-conditions-and-how-much-can-i-pay-cash>> (accessed 22 March 2018).

<sup>35</sup>French Monetary and Financial Code, Article L.315-1.

<sup>36</sup>Autorité de contrôle prudentiel et de résolution, 'Licensing, authorisation and registration: Electronic money institution' <<https://acpr.banque-france.fr/en/authorisation/banking-industry-procedures/licensing-authorisation-and-registration/electronic-money-institution>> (accessed 22 March 2018).

<sup>37</sup>Autorité des Marchés Financiers, 'Buying Bitcoin: the AMF and the ACPR issue a warning to savers' (4 December 2017) <[http://www.amf-france.org/en\\_US/Actualites/Communiqués-de-presse/AMF/annee-2017?docId=workspace%3A%2F%2FSpacesStore%2Fc2dfeaab-35c0-4fdf-9a1b-d4601eff2097](http://www.amf-france.org/en_US/Actualites/Communiqués-de-presse/AMF/annee-2017?docId=workspace%3A%2F%2FSpacesStore%2Fc2dfeaab-35c0-4fdf-9a1b-d4601eff2097)> (accessed 22 March 2018).

<sup>38</sup>French Monetary and Financial Code, Article L.561-2. See also, Virtual Currencies Working Group, 'Regulating Virtual Currencies: Recommendations to prevent virtual currencies from being used for fraudulent purposes and money laundering' (June 2014) <<https://www.economie.gouv.fr/files/regulatingvirtualcurrencies.pdf>> (accessed 22 March 2018).

<sup>39</sup>BOI-BIC-CHAMP-60-50-20140711, XXIX, n°730.

Country	Fiat currency	E-Money	Virtual currency
Germany	<ul style="list-style-type: none"><li>▪ <b>Euro</b></li><li>▪ Central Bank: <b>Deutsche Bundesbank</b>, which is a part of the European System of Central Banks.</li><li>▪ The ECB along with the central bank(s) shall have the sole right to issue banknotes.</li><li>▪ Euro banknotes are unrestricted legal tender.<sup>40</sup></li><li>▪ Under EU legislation, coins are legal tender up to payment of 50 cents.<sup>41</sup></li></ul>	<ul style="list-style-type: none"><li>▪ E-money <b>is defined</b> under the Payment Services Supervision Act as follows: 'every monetary value [any means of payment], stored electronically, including magnetically [any electronic storage medium], in form of a claim on the issuer [monetary value must represent a claim of the customer on the issuer] which is issued against payment of an amount of money [legal tender or e-money] for the purpose of making payment transactions [any transfer of monetary value from the customer to the acceptor], as defined in section 675f (4) sentence 1 German civil code (BGB) and which is also accepted by natural or legal persons other than the issuer [third parties legally different from the issuer must accept the monetary value as a means of payment.]'<sup>42</sup></li><li>▪ E-money can be issued by credit institutions under the Banking Act, the Federal and State Government, all central banks as well as licensed 'e-money issuers'.</li><li>▪ E-money issuers require licensing from the Federal Financial Supervisory Authority ('<b>BaFin</b>').</li></ul>	<ul style="list-style-type: none"><li>▪ The BaFin defines virtual currencies as: <b>'digital representation of value that is neither issued by a central bank or public authority</b>, nor necessarily attached to a legal tender. VCs are accepted by natural or legal persons as a means of payment and can be transferred, stored or traded.'<sup>43</sup></li><li>▪ BaFin interprets Bitcoins as <b>units of accounts</b> ('Rechnungseinheiten') (and therefore as <b>financial instruments</b> within the meaning of section 1 (11) sentence 1 of the Banking Act). This applies to all virtual currencies, including 'coins' in initial coin offerings.</li><li>▪ To the extent that virtual currencies are units of account, they are comparable to foreign currencies, with the difference that virtual currencies do not amount to legal tender.</li><li>▪ Virtual currencies are considered a <b>private means of payment</b>.</li><li>▪ Virtual currencies do not represent a claim on the issuer as there is no issuer.</li><li>▪ Purchase and sale of virtual currencies for others can amount to broking services and require authorisation.</li></ul>

<sup>40</sup>Deutsche Bundesbank Act (BBankG), Section 14(1) sentence 2: 'Banknotes de-nominated in euro are the only unrestricted legal tender.'  
<sup>41</sup>Council Regulation (EC) No 974/98, Article 11.  
<sup>42</sup>Payment Services Supervision Act (Zahlungsdienstenaufsichtsgesetz), Section 1(2), Sentence 3.  
<sup>43</sup>Federal Financial Supervisory Authority, 'Virtual Currency (VC)' <[https://www.bafin.de/EN/Aufsicht/FinTech/VirtualCurrency/virtual\\_currency\\_node\\_en.html](https://www.bafin.de/EN/Aufsicht/FinTech/VirtualCurrency/virtual_currency_node_en.html)> (accessed 22 March 2018).

Country	Fiat currency	E-Money	Virtual currency
Hong Kong	<ul style="list-style-type: none"><li>▪ <b>Hong Kong Dollar</b></li><li>▪ Central Bank: <b>Hong Kong Monetary Authority ('HKMA')</b></li><li>▪ Bank of China (Hong Kong) Limited, Standard Chartered Bank (Hong Kong) Limited and The Hongkong and Shanghai Banking Corporation Limited are authorised to issue banknotes.<sup>44</sup></li><li>▪ In addition, the HKMA issues HK\$10 currency notes (coins are issued by order of the Chief Executive Council).</li><li>▪ All these banknotes and coins are <b>legal tender throughout Hong Kong</b>.</li><li>▪ HK currency in circulation are fully backed by foreign currency reserves.</li><li>▪ HK follows the Linked Exchange Rate System requiring that the issue and redemption of Certificates of Indebtedness (for backing the banknotes) by the note-issuing banks be made against US dollars at the fixed exchange rate of HK\$7.80 to US\$1.</li></ul>	<ul style="list-style-type: none"><li>▪ E-money is not defined under legislation. However, HKMA's glossary defines e-money as:<sup>45</sup> <b>'Electronic money products are defined as stored value or prepaid products in which a record of the funds or value available to the consumer is stored on an electronic device in the consumer's possession.</b> This includes both prepaid cards (sometimes called electronic purses) and prepaid software products that use computer networks such as the Internet (sometimes called digital cash). These products <b>differ from so-called access products that allow consumers to use electronic means of communication to access otherwise conventional payment services</b> (for example, use of the Internet to make a credit card payment or for general 'on-line banking').'</li><li>▪ E-money is regulated as a <b>Stored Value Facility ('SVF')</b> under the Payment Systems and Stored Value Facilities Ordinance.<sup>46</sup> This includes 'device-based' (such as cards, or electronic chip stored in watches etc.) and 'non-device' based (such as a network based account that can be accessed through the internet, computer or mobile networks).<sup>47</sup></li><li>▪ Banks do not require a separate SVF licence. Others wishing to undertake SVF services must acquire a licence.</li></ul>	<ul style="list-style-type: none"><li>▪ Virtual currencies are not <b>defined or regulated</b>.</li><li>▪ The HKMA has issued a warning<sup>48</sup> regarding bitcoin and described it in the following manner: <b>'Bitcoin is not a legal tender but a virtual 'commodity'. As Bitcoin does not have any backing - either in physical form or from the issuer – and its pricing is highly volatile, it does not qualify as a means of payment or electronic money.'</b></li><li>▪ The Hong Kong Financial Services and the Treasury Bureau has echoed the above definition in a recent press release, warning on the risk of cryptocurrencies and initial coin offerings:<sup>49</sup> <b>'Cryptocurrencies' are not actual currencies, but a type of virtual commodity.</b> They are not backed by any physical commodity nor by the issuers and are <b>not recognised as a medium of payment or electronic currency.</b></li></ul>

<sup>44</sup>Hong Kong Monetary Authority, 'Notes' <<http://www.hkma.gov.hk/eng/key-functions/monetary-stability/notes-coins-hong-kong/notes.shtml>> (accessed 16 March 2018).

<sup>45</sup>Hong Kong Monetary Authority, 'Guide to Hong Kong Monetary and Banking Terms: electronic money / e-money' <[http://www.hkma.gov.hk/gdbook/eng/e/elec\\_money\\_e-money.shtml](http://www.hkma.gov.hk/gdbook/eng/e/elec_money_e-money.shtml)> (accessed 16 March 2018).

<sup>46</sup>Payment Systems and Stored Value Facilities Ordinance (Cap. 584).

<sup>47</sup>Hong Kong Monetary Authority, 'Explanatory Note on Licensing for Stored Value Facilities' (November 2015) <[http://www.hkma.gov.hk/media/eng/doc/key-functions/finanical-infrastructure/infrastructure/retail-payment-initiatives/Explanatory\\_note\\_on\\_licensing\\_for\\_SVF.pdf](http://www.hkma.gov.hk/media/eng/doc/key-functions/finanical-infrastructure/infrastructure/retail-payment-initiatives/Explanatory_note_on_licensing_for_SVF.pdf)> (accessed 16 March 2018).

<sup>48</sup>Hong Kong Monetary Authority, 'The HKMA reminds the public to be aware of the risks associated with Bitcoin' (11 February 2015) <<http://www.hkma.gov.hk/eng/key-information/press-releases/2015/20150211-3.shtml>> (accessed 16 March 2018).

<sup>49</sup>Government of the Hong Kong Special Administrative Region Press Releases, 'Public education campaign on risks associated with initial coin offerings and 'cryptocurrencies' jointly launched by FSTB and Investor Education Centre' (29 January 2018) <<http://www.info.gov.hk/gia/general/201801/29/P2018012900374.htm>> (accessed 16 March 2018).

Country	Fiat currency	E-Money	Virtual currency
Hong Kong		<div>▪ Loyalty schemes, single-purpose use cards (such as transport cards) etc. are exempt from licensing.</div> <div>'A facility is a <b>Stored Value Facility</b> if:</div> <div>(a) it may be <b>used for storing the value of an amount of money</b> that—<div>(i) is paid into the facility from time to time; and</div><div>(ii) may be stored on the facility under the rules of the facility; and</div><div>(b) it may be used for either or both of the following purposes—<div>(i) as a <b>means of making payments</b> for goods or services <b>under an undertaking (whether express or implied) given by the issuer.</b> That means <b>an undertaking that</b>, if the facility is used as a means of making payments for goods or services, the issuer, or a person procured by <b>the issuer to accept such payments, will accept the payments up to the amount of the stored value</b> that is available for use under the rules of the facility;</div><div>(ii) <b>as a means of making payments to another person</b> (other than payments mentioned in sub-paragraph (i) above) <b>under an undertaking (whether express or implied) given by the issuer.</b> That means an undertaking that, if the facility is used as a means of making payments to another person (recipient) (other than payments mentioned in sub-paragraph (i) above), the issuer, or a person procured by <b>the issuer to make such payments, will make the payments to the recipient</b> up to the amount of the stored value that is available for use under the rules of the facility.'</div></div></div> <div></div>	

Country	Fiat currency	E-Money	Virtual currency
India	<ul style="list-style-type: none"><li>▪ <b>Indian Rupee</b></li><li>▪ Central Bank: <b>Reserve Bank of India ('RBI')</b></li><li>▪ Bank Notes: RBI is the sole authority to issue bank notes</li><li>▪ Coins: Coins are 'coined' at mint factories established by, and are issued under the authority of, the Central Government. 'Coin' is defined under the Coinage Act, 1906 to mean 'any coin which is made of any metal or any other material stamped by the <b>Government or any other authority empowered by the Government</b> in this behalf and which is a legal tender...'</li><li>▪ Bank notes have legal tender status under the Reserve Bank of India Act, and coins have legal tender status under the Indian Coinage Act.<sup>50</sup></li></ul>	<ul style="list-style-type: none"><li>▪ E-money is not defined.</li><li>▪ It is regulated under the Payment Settlement Systems Act 2007 as a 'Prepaid Payment Instrument' ('PPI').<sup>51</sup></li></ul> <p>PPIs are <b>payment instruments</b> that <b>facilitate purchase of goods and services, including financial services</b>, remittance facilities, etc., <b>against the value stored on such instruments</b>. PPIs that can be issued in the country are classified under three types viz. (i) Closed System PPIs, (ii) Semi-closed System PPIs, and (iii) Open System PPIs.</p>	<ul style="list-style-type: none"><li>▪ Virtual currencies are <b>not defined or regulated</b> at present</li><li>▪ RBI has issued cautions against risk in using/holding/trading virtual currencies<sup>52</sup> and noted that VCs are <b>not legal tender</b>.</li></ul>

<sup>50</sup>Reserve Bank of India Act 1934 (Act No. 2 of 1934 amended upto Act No. 28 of 2016).  
<sup>51</sup>Reserve Bank of India, 'Master Direction on the Issuance and Operation of Prepaid Payment Instruments' (issued 11 October 2017, updated 29 December 2017) <[https://rbi.org.in/Scripts/BS\\_ViewMasDirections.aspx?id=11142](https://rbi.org.in/Scripts/BS_ViewMasDirections.aspx?id=11142)> (accessed 25 March 2018).  
<sup>52</sup>Reserve Bank of India, 'Reserve Bank cautions regarding risk of virtual currencies including Bitcoins' (5 December 2017) <[https://rbi.org.in/scripts/BS\\_PressReleaseDisplay.aspx?prid=42462](https://rbi.org.in/scripts/BS_PressReleaseDisplay.aspx?prid=42462)> (accessed 25 March 2018).

Country	Fiat currency	E-Money	Virtual currency
India		<ul style="list-style-type: none"><li>▪ PPIs are categorised into three types, with 'Closed System PPIs' (which are only accepted by the issuer, e.g. gift vouchers), and which are exempt from licensing.</li><li>▪ <b>'Semi-closed System PPIs:</b> These PPIs are used for purchase of goods and services, including financial services, remittance facilities, etc., <b>at a group of clearly identified merchant locations/establishments which have a specific contract with the issuer</b> (or contract through a payment aggregator / payment gateway) to accept the PPIs as payment instruments. These instruments <b>do not permit cash withdrawal</b>, irrespective of whether they are issued by banks or non-banks.</li><li>▪ <b>Open System PPIs:</b> These PPIs are <b>issued only by banks</b> and are used at any merchant for purchase of goods and services, including financial services, remittance facilities, etc. Banks issuing such PPIs shall also <b>facilitate cash withdrawal</b> at ATMs / Point of Sale (PoS)/Business Correspondents (BCs).'</li><li>▪ PPIs in the form of <b>paper vouchers shall no longer</b> be issued (except meal paper vouchers).</li><li>▪ Non-bank PPI issuers are required to maintain their outstanding balance in an escrow account with any scheduled commercial bank.</li><li>▪ No interest is payable on PPI balances.</li><li>▪ PPI can only be loaded in Indian Rupees.</li></ul>	

Country	Fiat currency	E-Money	Virtual currency
Indonesia	<ul style="list-style-type: none"><li>▪ <b>Indonesian Rupiah</b></li><li>▪ Central Bank: <b>Bank of Indonesia</b></li><li>▪ Central bank is sole issuer of the currency.<sup>53</sup></li><li>▪ Rupiah has legal tender status.</li><li>▪ Mandatory use of Rupiah for cash transactions under Act No.7/2011.<sup>54</sup></li></ul>	<ul style="list-style-type: none"><li>▪ Defined and regulated under the Regulation Concerning Electronic Money:<sup>55</sup> 'In view that <b>Electronic Money has a function like money</b> [...] <b>Electronic Money</b> refers to <b>means of payment</b> in compliance with the following elements: issued <b>based on value of money deposited</b> first by a holder to an issuer; money value is stored electronically in a media such as a server or a chip; <b>used as means of payment to a Merchant</b> who is not an Issuer of electronic money; and value of electronic money deposited by a Holder and managed by an Issuer <b>is not savings as referred to in the law concerning banking.</b>'</li><li>▪ E-money issued <b>must use rupiah currency</b>.</li><li>▪ Not guaranteed by the Deposit Protection Agency.</li><li>▪ Prohibition from issuing value that is more or less than the money deposited by the holder.</li></ul>	<ul style="list-style-type: none"><li>▪ Bank of Indonesia recently issued a press release warning against virtual currencies.<sup>56</sup></li><li>▪ It suggests that using virtual currencies as a means of payment is banned in Indonesia.</li><li>▪ All payment systems operators as well as bank and non-bank financial institutions are forbidden from processing virtual currency transactions.</li><li>▪ An extract from the press release is set out: <b>'virtual currencies, including bitcoin, are not recognised as legitimate instrument of payment, therefore not allowed to be used for payment in Indonesia.</b> This is in line with Act No.7/2011 on The Currency, which states that currency shall be money of which issued by the Republic of Indonesia and <b>every transaction that has the purpose of payment, or other obligations which need to be fulfilled with money,</b> or other financial transactions conducted within the territory of the Republic of Indonesia, <b>has to be fulfilled with Rupiah.</b>'</li></ul>

<sup>53</sup>Bank Sentral Republik Indonesia, 'Role of Bank Indonesia in Payment System' <<http://www.bi.go.id/en/sistem-pembayaran/di-indonesia/peranbi/Contents/Default.aspx>> (accessed 17 March 2018).

<sup>54</sup>Bank Sentral Republik Indonesia, 'Bank Indonesia Circular Letter No. 17/11/DKSP regarding the Mandatory Use of Rupiah within the Territory of the Republic of Indonesia' (1 June 2015) <[https://www.bi.go.id/en/peraturan/sistem-pembayaran/Pages/se\\_171115.aspx](https://www.bi.go.id/en/peraturan/sistem-pembayaran/Pages/se_171115.aspx)> (accessed 17 March 2018).

<sup>55</sup>Bank Indonesia Regulation No.11/12/PBI/2009 Concerning Electronic Money (14 March 2009).

<sup>56</sup>Bank Sentral Republik Indonesia, 'Bank Indonesia Warns All Parties Not to Sell, Buy, or Trade Virtual Currency' (13 January 2018) <[http://www.bi.go.id/en/ruang-media/siaran-pers/Pages/sp\\_200418.aspx](http://www.bi.go.id/en/ruang-media/siaran-pers/Pages/sp_200418.aspx)> (accessed 17 March 2009).

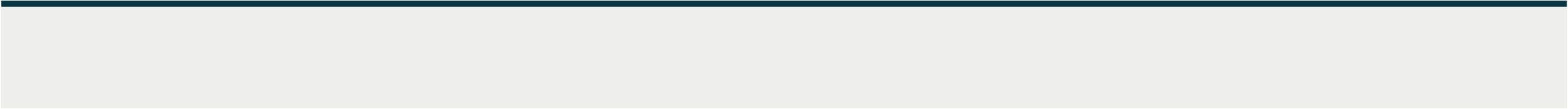


Country	Fiat currency	E-Money	Virtual currency
Japan	<ul style="list-style-type: none"><li>▪ <b>Yen</b></li><li>▪ Central Bank: <b>Bank of Japan</b></li><li>▪ Central bank is the sole issuer of banknotes and the yen is legal tender.<sup>57</sup></li></ul>	<ul style="list-style-type: none"><li>▪ Regulated under the Payment Services Act ('PSA') and subsidiary legislation thereunder.</li><li>▪ The PSA distinguishes between e-money that is redeemable for cash and e-money that is not redeemable. The former has stricter regulatory requirements.</li><li>▪ E-money issuers that allow e-money to be redeemed are regulated as non-bank fund transfer providers and must be licensed as such.</li><li>▪ E-money that cannot be redeemed is regulated as a prepaid payment instrument.</li></ul>	<ul style="list-style-type: none"><li>▪ Virtual currencies are defined under the PSA, after it was amended in April 2017:<ul style="list-style-type: none"><li>(1) Property value that <b>can be used</b> by unspecified persons <b>for payment</b> of equivalent value <b>for purchased goods, rental fees, or services</b>, that can be purchased by or sold to unspecified persons, and that is transferable via an electronic data processing system (limited to property values that are stored electronically on electronics, excluding currency and currency denominated assets); or</li><li>(2) Property value that can be <b>mutually exchangeable for 1 above</b> with unspecified persons and is transferable via an electronic data processing system.<sup>58</sup></li></ul></li><li>▪ The definition deals with VCs that are exchangeable with fiat currency as well as VCs that are only exchangeable with other VCs.</li></ul> <p><b>Tax treatment:</b></p> <ul style="list-style-type: none"><li>▪ Virtual currencies are treated like money for consumption tax purposes.</li><li>▪ Therefore, no consumption tax is applicable for exchange of virtual currency to fiat currency.</li><li>▪ Payments made by virtual currencies for goods or services will attract consumption tax.</li></ul>

<sup>57</sup>Bank of Japan, 'Outline of the Issuance and Circulation of Banknotes and Coins' <[https://www.boj.or.jp/en/note\\_tfjgs/note/outline/index.htm/](https://www.boj.or.jp/en/note_tfjgs/note/outline/index.htm/)> (accessed 19 March 2018).  
<sup>58</sup>Library of Congress, Japan: Bitcoin to Be Regulated' Global Legal Monitor (4 November 2016) <<http://www.loc.gov/law/foreign-news/article/japan-bitcoin-to-be-regulated/>> (accessed 19 March 2018).

Country	Fiat currency	E-Money	Virtual currency
Kenya	<ul style="list-style-type: none"><li>▪ <b>Kenyan Shillings</b></li><li>▪ Central Bank: <b>Central Bank of Kenya</b></li><li>▪ Central Bank of Kenya is the only authority with right to issue currency.</li><li>▪ Currency has legal tender status.<sup>59</sup></li></ul>	<ul style="list-style-type: none"><li>▪ E-money is defined and regulated under the National Payment System Regulations 2014.<sup>60</sup></li></ul> <p>'e-money' means monetary value as represented by a claim on its issuer, which is—</p> <ul style="list-style-type: none"><li>(a) electronically or magnetically stored;</li><li>(b) issued <b>against receipt of currency of Kenya or any other currency</b> authorised by the Bank [Central Bank of Kenya]; and</li><li>(c) <b>accepted as a means of payment</b> by persons other than the issuer'</li></ul> <ul style="list-style-type: none"><li>▪ E-money can be redeemed at par value.</li><li>▪ An e-money issuer shall not earn interest or any other financial return from the e-money holder or customer.<sup>61</sup></li></ul>	<ul style="list-style-type: none"><li>▪ Virtual currencies are <b>not defined or regulated</b>.</li><li>▪ Central Bank of Kenya has issued a caution in this regard.<sup>62</sup></li></ul>

<sup>59</sup>Central Bank of Kenya Act (Cap. 491), Part V.  
<sup>60</sup>National Payment Systems Regulations 2014, Regulation 2.  
<sup>61</sup>National Payment Systems Regulations 2014, Regulation 44(2).  
<sup>62</sup>Central Bank of Kenya 'Public Notice: Caution to the Public on Virtual Currencies such as Bitcoin' (December 2015) <[https://www.centralbank.go.ke/images/docs/media/Public\\_Note\\_on\\_virtual\\_currencies\\_such\\_as\\_Bitcoin.pdf](https://www.centralbank.go.ke/images/docs/media/Public_Note_on_virtual_currencies_such_as_Bitcoin.pdf)> (accessed 19 March 2018).



Country	Fiat currency	E-Money	Virtual currency
Laos	<ul style="list-style-type: none"><li>▪ <b>Lao Kip</b></li><li>▪ Central Bank: <b>Bank of Lao</b><sup>63</sup></li><li>▪ Central Bank has sole authority to issue currency.</li><li>▪ Currency is lawful tender.</li></ul>	<ul style="list-style-type: none"><li>▪ E-money does not appear to be fully regulated at present.<sup>64</sup></li><li>▪ Bank of Laos is working with the UN as a part of the 'MM4P – mobile money for poor' program to develop policy and regulations for e-money/ mobile payments.</li><li>▪ A new Payment Systems law dealing with e-money separately might soon come into force<sup>65</sup></li></ul>	<ul style="list-style-type: none"><li>▪ Virtual currencies are <b>not defined or regulated</b>.</li></ul>

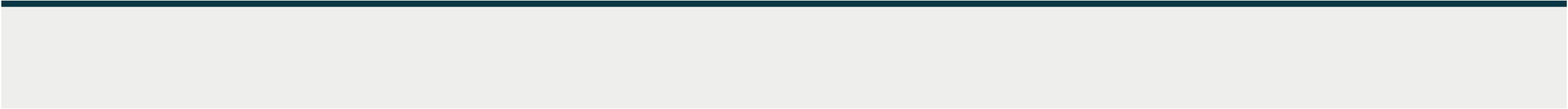
<sup>63</sup>An English translation of the law pertaining to Bank of the Lao PDR is available at <<https://www.bol.gov.la/english/bollaw.pdf>> (accessed 19 March 2018).

<sup>64</sup>'Making Access to Finance More Inclusive for Poor People, 'Bank of the Lao PDR grants permission for two mobile network operators to issue e-money' (19 October 2015) <<http://mafipp.org/bank-of-the-lao-pdr-grants-permission-for-two-mobile-network-operators-to-issue-e-money/>> (accessed 16 March 2018). See also, Making Access to Finance More Inclusive for Poor People, 'Bank of the Lao PDR announces draft agreement for mobile financial services' (8 April 2015) <<http://mafipp.org/bank-of-the-lao-pdr-announces-draft-agreement-for-mobile-financial-services/>> (accessed 16 March 2018).

<sup>65</sup>'Making Access to Finance More Inclusive for Poor People, '10th Digital Finance Working Group in Lao PDR is a clarion call for Digital Finance' (14 December 2017) <<http://mafipp.org/10th-digital-finance-working-group/>> (accessed 16 March 2018). The draft law is currently unavailable in English.

Country	Fiat currency	E-Money	Virtual currency
Malaysia	<ul style="list-style-type: none"><li>▪ Ringgit</li><li>▪ Central Bank: <b>Bank Negara Malaysia</b> ('BNM')</li><li>▪ BNM has is the sole authority to issue currency.</li><li>▪ Currency has legal tender status.<sup>66</sup></li></ul>	<ul style="list-style-type: none"><li>▪ E-money is regulated as a retail payments system under the Payment Systems (Designated Payment Instruments) Order 2003 and the Financial Services Act.</li><li>▪ E-money is defined as:<sup>67</sup> 'as a payment instrument, whether tangible or intangible that: stores funds electronically in exchange of funds paid to the issuer; and is able to be used as a means of making payment to any person other than the issuer.'</li><li>▪ E-money issuers require approval from BNM.</li><li>▪ E-money issuers cannot pay interest or extend credit or add any monetary value to the e-money.</li></ul>	<ul style="list-style-type: none"><li>▪ BNM has published draft guidelines for consultation on regulation of digital currency exchanges in light of AML/CFT risks.<sup>68</sup></li><li>▪ In the draft guidelines, digital currencies are defined as: 'digital currency' means a <b>digital representation of value</b> that – (a) <b>functions as a medium of exchange</b>; and (b) is <b>interchangeable with any money</b> (including through the crediting or debiting of an account) <b>but excluding electronic money</b>, as defined under the Financial Services Act 2013 [Act 758] and the Islamic Financial Services Act 2013 [Act 759], issued by an approved issuer of electronic money under those Acts.</li></ul>

<sup>66</sup>Central Bank of Malaysia Act 1958 (Act 519), Part III.  
<sup>67</sup>Bank Negara Malaysia, 'Guidelines on Electronic Money' (BNM/RH/GL 016-3) <[http://www.bnm.gov.my/index.php?ch=ps&pg=ps\\_legal\\_guide&ac=187&lang=en](http://www.bnm.gov.my/index.php?ch=ps&pg=ps_legal_guide&ac=187&lang=en)> (accessed 22 March 2018).  
<sup>68</sup>Bank Negara Malaysia, 'Anti-Money Laundering and Counter Financing of Terrorism (AML/CFT) – Digital Currencies (Sector 6) Exposure Draft' <<http://www.bnm.gov.my/index.php?ch=57&pg=538&ac=661&bb=file>> (accessed 22 March 2018).



Country	Fiat currency	E-Money	Virtual currency
Myanmar	<ul style="list-style-type: none"><li>▪ <b>Myanmar Kyat</b></li><li>▪ Central Bank: <b>Central Bank of Myanmar</b></li><li>▪ Central Bank is the sole issuer of banknotes and coins.<sup>69</sup></li><li>▪ Currency has legal tender status throughout Myanmar.</li></ul>	<ul style="list-style-type: none"><li>▪ Regulated as 'mobile financial services' under the Regulation on Mobile Financial Services:<sup>70</sup></li><li>▪ 'mobile financial services account' means a <b>store of value provided by a mobile financial services provider for the purposes of conducting mobile financial services transactions</b>.</li><li>▪ Mobile financial service providers are required to keep 100% of its outstanding liabilities to customers in a trust account.</li><li>▪ Cash in/cash out transactions permitted, along with transfers between individuals, businesses and individuals and businesses.</li><li>▪ Transactions shall be in Myanmar Kyat only.</li></ul>	<ul style="list-style-type: none"><li>▪ Virtual currencies are <b>not defined or regulated</b>.</li></ul>

<sup>69</sup>The Central Bank of Myanmar Law (The State Law and Order Restoration Council Law No. 15/90), Chapter VI, Issuance of Currency.

<sup>70</sup>Regulation on Mobile Financial Services (FIL/R/01/03-2016) (30 March 2016). In addition, prepaid cards may also be regulated, though the relevant regulation is unavailable in English; see Catherine Trautwein, 'Mobile money regulations released' Myanmar Times (6 April 2016) <<https://www.mmmtimes.com/business/technology/19851-mobile-money-regulations-released.html>> (accessed 20 March 2018).

Country	Fiat currency	E-Money	Virtual currency
Netherlands	<ul style="list-style-type: none"><li>▪ <b>Euro</b></li><li>▪ Central Bank: <b>De Nederlandsche Bank (DNB)</b> which is a part of the European System of Central Banks.</li><li>▪ The ECB along with the central bank(s) shall have the sole right to issue banknotes.</li><li>▪ Euro banknotes are unrestricted legal tender.<sup>71</sup></li><li>▪ Under EU legislation, coins are legal tender up to payment of 50 cents.<sup>72</sup></li><li>▪ 'Monies' (geldmiddelen) is defined in article 1:1 of the Dutch Financial Supervision Act ('<b>FSA</b>') as: cash money (chartaal geld); bank money (giraal geld); electronic money (elektronisch geld).</li></ul>	<ul style="list-style-type: none"><li>▪ E-Money ('elektronisch geld') is defined in article 1:1 FSA, implementing EU Directive in this regard:  '<b>monetary value</b> stored electronically or magnetically <b>representing a claim on the issuer, which is issued in exchange for fiat currency</b> in order to make payment transactions as referred to in Article 4(5) of the Payment Services Directive, and to allow payments to be made to another person than the issuer.'</li></ul>	<ul style="list-style-type: none"><li>▪ Virtual currencies are <b>not defined or regulated</b>.</li><li>▪ The DNB has come out with a position paper on virtual currencies and initial coin offerings, and has stated that 'cryptocurrencies' are not money.<sup>73</sup> The paper also observes:  'We alerted the general public to the risks of bitcoin and other cryptos as early as 2013 because there is <b>no supervision, no deposit guarantee scheme and no counterparties from which losses may be recovered.</b>'</li></ul>

<sup>71</sup>Deutsche Bundesbank Act (BBankG), Section 14(1) sentence 2: 'Banknotes de-nominated in euro are the only unrestricted legal tender.'  
<sup>72</sup>Council Regulation (EC) No 974/98, Article 11.  
<sup>73</sup>De Nederlandsche Bank, 'Position Paper: Roundtable Cryptocurrencies/ICO's' (24 January 2018) <[https://www.dnb.nl/en/binaries/TR17025%20Position%20paper%20Cryptocurrencies\\_tcm47-371493.pdf?2018040912](https://www.dnb.nl/en/binaries/TR17025%20Position%20paper%20Cryptocurrencies_tcm47-371493.pdf?2018040912)> (accessed 19 March 2018).

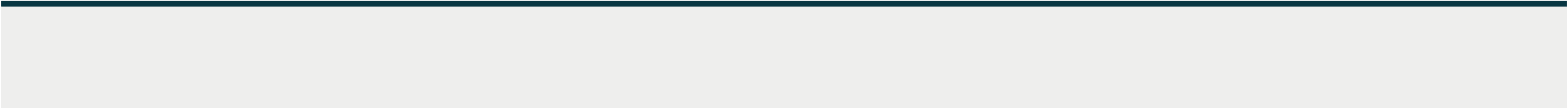
Country	Fiat currency	E-Money	Virtual currency
Philippines	<ul style="list-style-type: none"> <li>▪ <b>Philippine Peso</b></li> <li>▪ Central Bank: <b>Bangko Sentral ng Pilipinas</b> ('BSP')</li> <li>▪ BSP is the sole authority to issue currency.<sup>74</sup></li> <li>▪ Currency has legal tender status for all private and public debts.</li> <li>▪ The currency is described as <b>a liability of the BSP and issued against its assets.</b></li> <li>▪ In a circular dealing with virtual currency, fiat currency is defined as follows: <b>'Fiat currency refers to government-issued currency that is designated as legal tender in its country of issuance through government decree, regulation, or law.'</b></li> </ul>	<ul style="list-style-type: none"> <li>▪ E-money is defined as:<sup>75</sup> <b>'E-money shall mean monetary value as represented by a claim on its issuer, that is –</b> <ul style="list-style-type: none"> <li>(a) Electronically stored in an instrument or device;</li> <li>(b) Issued <b>against receipt of funds</b> of an amount not lesser in value than the monetary value issued;</li> <li>(c) Accepted as a <b>means of payment</b> by persons or entities other than the issuer;</li> <li>(d) <b>withdrawable in cash or cash equivalent;</b> and</li> <li>(e) issued in accordance with this Circular.'</li> </ul> </li> <li>▪ E-money instruments include cash cards, e-wallets accessible via mobile phones or other access device, stored value cards, and other similar products.</li> <li>▪ E-money <b>shall not earn interest and is not a deposit.</b></li> <li>▪ In the case of banks offering e-money, such e-money not be considered a deposit.</li> <li>▪ E-money is not insured with the Philippine Deposit Insurance Corporation.</li> <li>▪ E-money issuers required to hold liquid assets that equal the amount of outstanding e-money issued.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Virtual currency exchanges are regulated.<sup>76</sup> Virtual currencies are defined as: <b>'VC refers to any type of digital unit that is used as a medium of exchange or a form of digitally stored value created by agreement within the community of VC users. VCs are not issued nor guaranteed by any jurisdiction and do not have legal tender status. (1) have a centralised repository or administrator; (2) are decentralised and have no centralised repository or administrator; or (3) may be created or obtained by computing or manufacturing effort. It shall not be construed to include e-money as defined under Sec. X780 of the Manual of Regulations for Banks, digital units used solely within online gaming platforms and are not convertible to fiat currency or real-world goods or services, digital units with stored value redeemable exclusively in goods or services and limited to transactions involving a defined merchant such as rewards programs;'</b></li> <li>▪ The virtual currency definition <b>excludes:</b> e-money, rewards programs and non-convertible VCs including those in online games.</li> <li>▪ However, it accepts both <b>centralised and decentralised 'digital units of exchange'.</b></li> <li>▪ The BSP <b>does not endorse any VC as a currency</b>, since it is <b>neither issued or guaranteed by a central bank nor backed by any commodity.</b></li> <li>▪ Virtual currency exchanges require a license, and they are considered to be similar to <b>remittance companies.</b></li> <li>▪ The government has already begun issuing licenses for virtual currency exchanges.<sup>77</sup></li> </ul>

<sup>74</sup>Bangko Sentral ng Pilipinas, 'BSP Notes and Coins: Overview' <<http://www.bsp.gov.ph/bspnotes/overview.asp>> (accessed 17 March 2018).

<sup>75</sup>Bangko Sentral ng Pilipinas, 'Circular No. 649/2009: Guidelines on Use of Electronic Money' (9 March 2009) <<http://www.bsp.gov.ph/downloads/Regulations/attachments/2009/c649.pdf>> (accessed 17 March 2018). See also, Bangko Sentral ng Pilipinas, 'Media Release on Guidelines on Use of Electronic Money' (6 March 2009) <<http://www.bsp.gov.ph/publications/media.asp?id=2027>> (accessed 17 March 2018).

<sup>76</sup>Bangko Sentral ng Pilipinas, 'Circular 944/2017: Guidelines for VC exchanges' (6 February 2017) <<http://www.bsp.gov.ph/downloads/regulations/attachments/2017/c944.pdf>> (accessed 17 March 2018).

<sup>77</sup>Reuters, 'Philippine c.bank reviewing 12 applications for bitcoin exchange' (13 December 2017) <<https://www.reuters.com/article/philippines-cenbank-bitcoin/philippine-c-bank-reviewing-12-applications-for-bitcoin-exchange-idUSL3N1OD2QO>> (accessed 17 March 2018).



Country	Fiat currency	E-Money	Virtual currency
Singapore	<ul style="list-style-type: none"><li>▪ <b>Singapore Dollar</b></li><li>▪ Central Bank: Monetary Authority of Singapore ('<b>MAS</b>')<ul style="list-style-type: none"><li>▪ MAS is the sole authority to issue currency in Singapore.<sup>78</sup></li></ul></li><li>▪ Currency has legal tender status.</li></ul>	<ul style="list-style-type: none"><li>▪ MAS has begun consultation for a 'Payment Services Bill' and has proposed the following definition:<sup>79</sup>  'E-money is defined as <b>electronically stored monetary value represented by a claim on the e-money issuer</b> that has been <b>paid in advance for the purpose of making payment transactions</b> through the use of a payment account and is <b>accepted by another person other than the e-money issuer.</b>'</li><li>▪ Presently, e-money is regulated as a 'stored value facility' under the Payment Systems (Oversight) Act.<sup>80</sup></li></ul>	<ul style="list-style-type: none"><li>▪ The MAS proposes the following definition of virtual currency:<sup>81</sup> 'Virtual currency is defined as any digital representation of value that is not denominated in any fiat currency and is accepted by the public as a medium of exchange, to pay for goods or services, or discharge a debt.'</li><li>▪ <b>Tax treatment: GST</b><ul style="list-style-type: none"><li>▪ Virtual currencies (e.g. Bitcoins) are not considered as 'money', 'currency' or 'goods' for goods and services tax ('<b>GST</b>') purposes. Instead, the supply of virtual currency is treated as a <b>supply of services</b>, which does not qualify for GST exemption.</li><li>▪ Therefore, if Bitcoins are exchanged for goods and services, it is considered a <b>barter trade</b> for GST purposes.<sup>82</sup></li><li>▪ (Note – Fourth Schedule of GST Act exempts financial services from GST including exchange of currency).<sup>83</sup></li></ul></li></ul>

<sup>78</sup>Monetary Authority of Singapore, 'Currency' <<http://www.mas.gov.sg/Currency.aspx>> (accessed 15 March 2018).  
<sup>79</sup>Monetary Authority of Singapore, Consultation Paper on Proposed Payment Services Bill (November 2017), at para. 3.12.  
<sup>80</sup>Cap. 222A, 2007 Rev. Ed.  
<sup>81</sup>Monetary Authority of Singapore, Consultation Paper on Proposed Payment Services Bill (November 2017), at para. 3.13.  
<sup>82</sup>Inland Revenue Authority of Singapore, 'GST: E-commerce' <<https://www.iras.gov.sg/irashome/GST/GST-registered-businesses/Specific-business-sectors/e-Commerce/>> (accessed 15 March 2018).  
<sup>83</sup>Inland Revenue Authority of Singapore, 'GST: Supplies Exempt from GST' <<https://www.iras.gov.sg/irashome/GST/GST-registered-businesses/Working-out-your-taxes/When-is-GST-not-charged/Supplies-Exempt-from-GST/>> (accessed 15 March 2018).



Country	Fiat currency	E-Money	Virtual currency
South Korea	<ul style="list-style-type: none"><li>▪ <b>Korean Republic Won</b></li><li>▪ Central Bank: <b>Bank of Korea</b></li><li>▪ Bank of Korea has sole right to issue currency.</li><li>▪ Currency is legal tender.<sup>84</sup></li></ul>	<ul style="list-style-type: none"><li>▪ Regulated under the Electronic Financial Transaction Act.<sup>85</sup></li><li>▪ <b>'electronic currency'</b> means any certificate, or information on such certificate, of <b>transferable monetary values stored and issued in the electronic form</b>, which meets all the requirements of the following items:<ul style="list-style-type: none"><li>(a) To be used within the areas and by the chain stores which meet the standards prescribed by Presidential Decree;</li><li>(b) To meet the requirements of subparagraph 14 (a) [i.e., <b>To be used to purchase goods or services from a third person other than the issuer</b> (including specially related persons prescribed by Presidential Decree) and pay the prices thereof];</li><li>(c) To be used to purchase goods or services included in at least five business categories prescribed by Presidential Decree;</li><li>(d) <b>To be issued in exchange for the same value of cash or deposits;</b></li><li>(e) <b>To be exchanged for cash or deposits under guarantee of the issuer.'</b></li></ul></li></ul>	<ul style="list-style-type: none"><li>▪ South Korea has banned anonymous trading of cryptocurrencies as an anti-money laundering / countering terrorism financing measure.<sup>86</sup></li><li>▪ Cryptocurrency exchanges have to disclose information to their banks; otherwise they cannot operate their bank accounts, and can be denied bank accounts.</li><li>▪ Cryptocurrency is not legal currency – but South Korea is looking at possibility of developing its own digital currency, as a part of a Bank of International Settlements project.<sup>87</sup></li></ul>

<sup>84</sup>The Bank of Korea Act, Articles 47 to 53.

<sup>85</sup>An English translation of the Electronic Financial Transaction Act is available at <<http://www.moleg.go.kr/english/korLawEng?pstSeq=57381>> (accessed 17 March 2018).

<sup>86</sup>BBC News, 'S Korea bans anonymous cryptocurrency trades' (23 January 2018) <<http://www.bbc.com/news/business-42784384>> (accessed 17 March 2018).

See also: (1) Financial Services Commission, 'KOFIU and FSS inspect banks over cryptocurrency trading accounts' (8 January 2018) <<https://www.fsc.go.kr/downManager?bbsid=BBS0048&no=123388>> (accessed 17 March 2018).

<sup>87</sup>Reuters, 'Highlights: Bank of Korea Governor Lee's comments at news conference' (18 January 2018) <<https://www.reuters.com/article/southkorea-economy-rates/highlights-bank-of-korea-governor-lees-comments-at-news-conference-idUSL3N1PD1LG>> (access 17 March 2018).

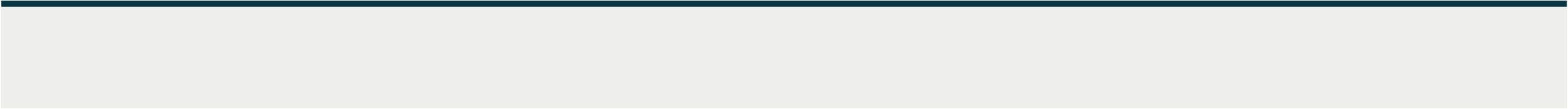
Country	Fiat currency	E-Money	Virtual currency
Spain	<ul style="list-style-type: none"><li>▪ <b>Euro</b></li><li>▪ Central Bank: <b>The Bank of Spain</b> which is a part of the European System of Central Banks.</li><li>▪ The ECB along with the central bank(s) shall have the sole right to issue banknotes.</li><li>▪ Euro banknotes are unrestricted legal tender.<sup>88</sup></li><li>▪ The Bank of Spain may also publish euro quotations in respect of currencies other than those considered by the European Central Bank.</li></ul>	<ul style="list-style-type: none"><li>▪ E-Money is defined as:<sup>89</sup> 'electronically, including magnetically, stored monetary value as represented by a claim on the issuer which is issued on receipt of funds for the purpose of making payment transactions as defined in Article 2.5 of Law 16/2009, of November 13, of Payment Services Act (PSA), and which is accepted by a natural or legal person other than the electronic money issuer.'</li><li>▪ A 'payment operation' under the Payment Services Act is defined as:<sup>90</sup> 'an act, initiated by the payer or by the payee, of placing, <b>transferring or withdrawing funds, irrespective of any underlying obligations between the payer and the payee</b>'</li></ul>	<ul style="list-style-type: none"><li>▪ The Bank of Spain published a joint report with the Spanish Stock Exchange Commission in which certain characteristics of virtual currencies are included as follows:<sup>91</sup><ul style="list-style-type: none"><li>(a) virtual currencies constitute a heterogeneous set of innovative payment instruments that, by definition, lack a physical support/ backend</li><li>(b) are not <b>supported/recognised by a central bank or other public authorities</b>, although they are sometimes presented as an alternative to legal tender money</li><li>(c) It is <b>not mandatory to accept them as a means of payment of debts or other obligations</b></li><li>(d) Its circulation is very limited</li><li>(e) Its value fluctuates strongly, so it cannot be considered a good deposit of value or a stable unit of account</li></ul></li></ul>

<sup>88</sup>Deutsche Bundesbank Act (BBankG), Section 14(1) sentence 2: 'Banknotes de-nominated in euro are the only unrestricted legal tender.'

<sup>89</sup>Spanish Law 21/2011 (26 July 2011).

<sup>90</sup>Spanish Law 6/2009 (13 November 2009), Art. 2.5.

<sup>91</sup>Banco de España, ' Comunicado conjunto de la CNMV y del Banco de España sobre 'criptomonedas' y 'ofertas iniciales de criptomonedas' (ICOs)' (8 February 2018) <[https://www.bde.es/f/webbde/GAP/Secciones/SalaPrensa/NotasInformativas/18/presbe2018\\_07.pdf](https://www.bde.es/f/webbde/GAP/Secciones/SalaPrensa/NotasInformativas/18/presbe2018_07.pdf)> (accessed 16 March 2018).



Country	Fiat currency	E-Money	Virtual currency
Sweden	<ul style="list-style-type: none"><li>▪ <b>Krona</b></li><li>▪ Central Bank: <b>Riksbank</b></li><li>▪ Central bank is the sole authority to issue currency.<sup>92</sup></li><li>▪ Krona is legal tender.<sup>93</sup></li><li>▪ Sweden is in the EU but has not joined the Eurozone.</li></ul>	<ul style="list-style-type: none"><li>▪ E-money is regulated by the Electronic Money Act (2011:755) which implements the EU directive</li><li>▪ E-money does not play a very important role in the retail payments market (though cashless means of payment such as debit cards and credit cards are prevalent).<sup>94</sup></li></ul>	<ul style="list-style-type: none"><li>▪ Virtual currencies are not regulated.<sup>95</sup></li><li>▪ The Riksbank describes virtual currency as: 'a <b>digital unit of currency</b> that is primarily used for Internet-based payments. The virtual currencies are <b>not issued by central banks</b>; they are normally issued and controlled by their developer. This could be a company or other private organisation.'</li><li>▪ The central bank is considering the possibility of introducing the 'e-krona' as a complement to cash.<sup>96</sup></li></ul>

<sup>92</sup>Sveriges Riksbank, 'Notes and Coins' <<https://www.riksbank.se/en-gb/notes-and-coins/>> (accessed 17 March 2018).

<sup>93</sup>Björn Segendorf and Anna Wilbe, 'Does cash have any future as legal tender?' Sveriges Riksbank, Economic Commentaries, Vol.9 (2014), at p 5.

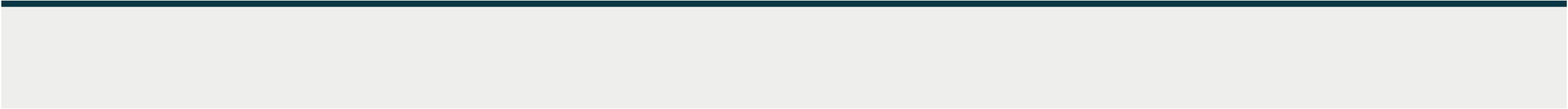
<sup>94</sup>Sveriges Riksbank, 'The Swedish retail-payment market: Riksbank Studies' (updated 1 February 2018) <<https://www.riksbank.se/en-gb/financial-stability/the-financial-system/payments/the-swedish-payment-market/>> (accessed 17 March 2018).

<sup>95</sup>Sveriges Riksbank, 'Virtual Currencies' (updated 1 February 2018) <<https://www.riksbank.se/en-gb/financial-stability/the-financial-system/payments/virtual-currencies/>> (accessed 17 March 2018).

<sup>96</sup>Cecilia Skingsley, 'Should the Riksbank issue e-krona?' Speech at FinTech Stockholm 2016, Berns (16 November 2016, revised 30 November 2016) <<https://www.bis.org/review/r161128a.pdf>> (accessed 18 March 2018).

Country	Fiat currency	E-Money	Virtual currency
Taiwan	<ul style="list-style-type: none"><li>▪ <b>New Taiwan Dollar</b></li><li>▪ Central Bank: <b>Central Bank of the Republic of China (Taiwan)</b></li><li>▪ Central bank is sole issuer of currency<sup>97</sup></li><li>▪ Has legal tender status</li></ul>	<ul style="list-style-type: none"><li>▪ Regulated under the Act Governing Electronic Payment Institutions<sup>98</sup> ('EPI') as well as the Act Governing Issuance of Electronic Stored Value Cards ('SVC')<sup>99</sup></li><li>▪ The regulations regarding EPIs seem to have been introduced to allow third party payments while SVCs could originally only be offered by certain institutions</li><li>▪ 'Electronic Stored Value Card':<sup>100</sup> 'shall mean an <b>IC chip, card, certificate or other forms of debt obligation</b> that uses electronic, magnetic or optical means to <b>store monetary value</b> and performs the function of data storage or computing, and <b>is used for multiple payment purposes.</b>' 'Use for multiple payment purposes' shall mean <b>using an electronic stored value card to pay for products and services provided by contracted merchants, or to pay for government fees and other fees as approved by the Competent Authority [...]</b></li><li>▪ However, the SVC definition excludes transportation cards as well as funds transfers.</li></ul>	<ul style="list-style-type: none"><li>▪ Virtual currencies are <b>not defined or regulated.</b></li><li>▪ News reports state that Financial Services Commission Chairman described cryptocurrencies as 'highly speculative virtual commodity'.<sup>101</sup></li></ul>

<sup>97</sup>Central Bank of the Republic of China (Taiwan), 'Currency Issuance' <<https://www.cbc.gov.tw/np.asp?ctNode=447&mp=2>> (accessed 14 March 2018).  
<sup>98</sup>Act Governing Electronic Payment Institutions (14 June 2017).  
<sup>99</sup>Act Governing Issuance of Electronic Stored Value Cards (14 June 2017), Art. 3.  
<sup>100</sup>Act Governing Issuance of Electronic Stored Value Cards (14 June 2017), Art. 3.  
<sup>101</sup>Ted Chen, 'FSC warns banks on bitcoin trade' Taipei Times (19 December 2017) <<http://www.taipeitimes.com/News/front/archives/2017/12/19/2003684231>> (accessed 14 March 2018).



Country	Fiat currency	E-Money	Virtual currency
Taiwan		<ul style="list-style-type: none"><li>▪ EPLs [...] use electronic equipment to convey the receipt/payment information via connection to engage in the following businesses in the <b>capacity of an intermediary between payers and recipients</b>: (1) Collecting and making payments for real transactions as an agent. (2) Accepting deposits of funds as stored value funds. (3) Transferring funds between e-payment accounts. (4) Other businesses approved by the competent authority.'</li><li>▪ Payments and settlements between users in Taiwan shall be completed in New Taiwan dollars only.</li><li>▪ EPLs are not allowed to convert currencies.</li></ul>	

Country	Fiat currency	E-Money	Virtual currency
Thailand	<ul style="list-style-type: none"><li>▪ <b>Thai Baht</b></li><li>▪ Central Bank: <b>Bank of Thailand</b></li><li>▪ Central bank is the sole issuer of currency.<sup>102</sup></li><li>▪ Currency has legal tender status under the Currency Act.<sup>103</sup></li></ul>	<ul style="list-style-type: none"><li>▪ Regulated under the two Electronic Payment Services decrees (one for banks, and another for non-banks).<sup>104</sup></li><li>▪ Electronic money is defined in both decrees as: <b>'electronic money'</b> means an electronic card issued by the service provider for its user, whether it is specified the name or not. The <b>user shall pay money in advance to the service provider in order to use such electronic money for the payment of goods, services or other payments in lieu of cash</b> and the value or amount of the prepaid money has been recorded.'</li><li>▪ Extent of regulation differs depending on the type of electronic payment (e.g., whether the electronic money is limited purpose or not).</li><li>▪ A new Payments Systems Act was published on 18 October 2017 and is expected to come into effect on 16 April 2018. This will replace the above decrees and it is likely that electronic money services will be categorised independently from other payment systems.</li></ul>	<ul style="list-style-type: none"><li>▪ Bank of Thailand has issued a circular banning banks from trading in cryptocurrencies.</li><li>▪ Banks are prohibited from investing or trading in cryptocurrency, offering cryptocurrency exchanges and creating platforms for cryptocurrency trading.<sup>105</sup></li></ul>

<sup>102</sup>Bank of Thailand, 'Roles and Responsibilities of the Bank of Thailand', at: <https://www.bot.or.th/English/AboutBOT/RolesAndHistory/Pages/RolesAndResponsibility.aspx>

<sup>103</sup>Currency Act B.E. 2501. An unofficial translation is available at <[https://www.bot.or.th/English/AboutBOT/LawsAndRegulations/SiteAssets/Law\\_E15\\_Currency.pdf](https://www.bot.or.th/English/AboutBOT/LawsAndRegulations/SiteAssets/Law_E15_Currency.pdf)> (accessed 18 March 2018).

<sup>104</sup>Royal Decree Regulating on Electronic Payment Services B.E. 2551 (an unofficial translation is available at <[https://www.bot.or.th/English/AboutBOT/LawsAndRegulations/SiteAssets/e\\_payment.pdf](https://www.bot.or.th/English/AboutBOT/LawsAndRegulations/SiteAssets/e_payment.pdf)> (accessed 18 March 2018)); Royal Decree Regulating on Electronic Payment Services of the Specialised financial institution B.E. 2559 (an unofficial translation is available at <[https://www.bot.or.th/English/AboutBOT/LawsAndRegulations/SiteAssets/e\\_payment\\_SFIs.pdf](https://www.bot.or.th/English/AboutBOT/LawsAndRegulations/SiteAssets/e_payment_SFIs.pdf)> (accessed 18 March 2018)).

<sup>105</sup>Reuters, 'Thai central bank bans banks from cryptocurrencies' (12 February 2018) <<https://www.reuters.com/article/thailand-economy-cenbank/thai-central-bank-bans-banks-from-cryptocurrencies-idUSL4N1Q234I>> (accessed 18 March 2018).

Country	Fiat currency	E-Money	Virtual currency
United Kingdom	<ul style="list-style-type: none"><li>▪ <b>Pounds sterling</b></li><li>▪ Central Bank: <b>Bank of England</b></li><li>▪ Central bank issues banknotes in England and Wales.</li><li>▪ Bank of England notes have legal tender status only in England and Wales.</li><li>▪ Seven banks in Scotland and Northern Ireland can also issue banknotes – however, these do not have legal tender status anywhere in the UK.</li><li>▪ They are 'legal currency' and regulated under the Banking Act 2009.<sup>106</sup></li><li>▪ Under Banking Act 2009, these notes are backed in full by a combination of Royal Mint coins, BoE notes and reserve account balances.<sup>107</sup></li><li>▪ Coins are issued by the Royal Mint and have legal tender status throughout the UK.</li></ul>	<ul style="list-style-type: none"><li>▪ Regulated under the Electronic Money Regulations 2011:<sup>108</sup> 'electronic money' means electronically (including magnetically) stored monetary value as represented by a claim on the electronic money issuer which—<ul style="list-style-type: none"><li>(a) is <b>issued on receipt of funds</b> for the purpose of making payment transactions;</li><li>(b) is <b>accepted by a person other than the electronic money issuer</b>; and</li><li>(c) is not excluded by regulation 3;</li></ul></li><li>...</li><li>electronic money <b>does not include—</b><ul style="list-style-type: none"><li>(a) monetary <b>value stored on instruments that can be used to acquire goods or services only—</b><ul style="list-style-type: none"><li>(i) <b>in or on the electronic money issuer's premises</b>; or</li><li>(ii) under a commercial agreement with the electronic money issuer, either <b>within a limited network of service providers or for a limited range of goods or services</b>;</li></ul></li><li>(b) monetary value that is used to make payment transactions executed by means of any telecommunication, digital or IT device, <b>where the goods or services purchased are delivered to and are to be used through a telecommunication, digital or IT device</b>, provided that the telecommunication, digital or IT operator does not act only as an intermediary between the payment service user and the supplier of the goods and services.<sup>1</sup></li></ul></li></ul>	<ul style="list-style-type: none"><li>▪ Virtual currencies are <b>not defined or regulated</b>.</li></ul> <p><b>Tax treatment:</b></p> <ul style="list-style-type: none"><li>▪ Following the European Court of Justice's decision on the Value-Added Tax ('VAT') Directive (see European Union entry above), no VAT is payable on acquisition of virtual currencies.</li><li>▪ VAT will be payable on purchases made with virtual currencies.</li><li>▪ Profits or losses on exchange movements between currencies are taxable and these rules apply for virtual currencies as well.<sup>109</sup></li></ul>

<sup>106</sup>Committee of Scottish Bankers, 'Legal Position' <<https://www.scotbanks.org.uk/banknotes/legal-position.html>> (accessed 25 March 2018).

<sup>107</sup>Banking Act 2009 (Cap. 1), Section 217.

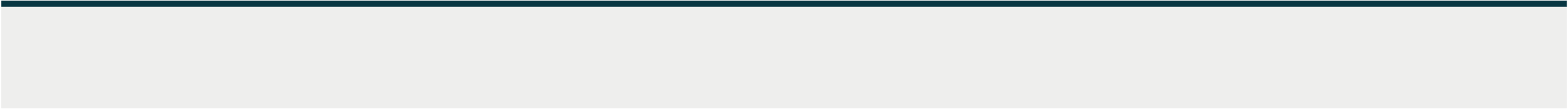
<sup>108</sup>Electronic Money Regulations 2011.

<sup>109</sup>HM Revenue and Customs, 'Revenue and Customs Brief 9 (2014): Bitcoin and other cryptocurrencies' (3 March 2014) <<https://www.gov.uk/government/publications/revenue-and-customs-brief-9-2014-bitcoin-and-other-cryptocurrencies/revenue-and-customs-brief-9-2014-bitcoin-and-other-cryptocurrencies>> (accessed 25 March 2018).

Country	Fiat currency	E-Money	Virtual currency
USA	<ul style="list-style-type: none"><li>▪ <b>United States Dollar</b></li><li>▪ Central Bank: 12 regional Reserve Banks together with the Board of Governors in Washington, D.C., serve as the central bank for the United States. It is known as the Federal Reserve System.</li><li>▪ The Federal Reserve System is the issuing authority for all notes and coins under the Federal Reserve Act.<sup>110</sup></li><li>▪ Currency has legal tender status.<sup>111</sup></li></ul>	<ul style="list-style-type: none"><li>▪ E-money is regulated at the state level and not the federal level.</li><li>▪ The Uniform Law Commission<sup>112</sup> has proposed a 'Money Services Act' which regulates e-money as a money transmission service.</li><li>▪ The Money Services Act sets out the following definitions: <b>'Monetary value'</b> means a medium of exchange, whether or not redeemable in money.  'Money' means a medium of exchange that is authorised or adopted by the United States or a foreign government. The term includes a monetary unit of account established by an intergovernmental organisation or by agreement between two or more governments.  <b>'Stored value' means monetary value that is evidenced by an electronic record.</b>  <b>'Money transmission' means selling or issuing payment instruments, stored value,</b> or receiving money or monetary value for transmission. The term does not include the provision solely of delivery, online or telecommunications services, or network access.'</li></ul>	<ul style="list-style-type: none"><li>▪ Virtual currencies are not defined or regulated at the federal level presently.</li></ul> <p><b>New York</b></p> <ul style="list-style-type: none"><li>▪ New York has set up a regulatory framework for virtual currency businesses and uses the following definitions:<sup>113</sup> <b>'Fiat Currency'</b> means <b>government-issued currency</b> that is <b>designated as legal tender</b> in its country of issuance through government decree, regulation, or law  Virtual Currency means any type of <b>digital unit that is used as a medium of exchange or a form of digitally stored value.</b> Virtual Currency shall be broadly construed to include digital units of exchange that<ul style="list-style-type: none"><li>(i) have a centralised repository or administrator;</li><li>(ii) are decentralised and have no centralised repository or administrator; or</li><li>(iii) may be created or obtained by computing or manufacturing effort</li></ul></li></ul>

<sup>110</sup>The Federal Reserve Act of 1913.  
<sup>111</sup>Board of the Governors of the Federal Reserve System, 'What is lawful money? How is it different from legal tender?' <[https://www.federalreserve.gov/faqs/money\\_15197.htm](https://www.federalreserve.gov/faqs/money_15197.htm)> (accessed 26 March 2018).  
<sup>112</sup>The Uniform Law Commission drafts proposed legislation that can be adopted by different states in the USA. The Money Services Act can be found at <<http://www.uniformlaws.org/Act.aspx?title=Money%20Services%20Act>> (accessed 26 March 2018).  
<sup>113</sup>Department of Financial Services, New York State, 'BitLicense Regulatory Framework' <[http://www.dfs.ny.gov/legal/regulations/bitlicense\\_reg\\_framework.htm](http://www.dfs.ny.gov/legal/regulations/bitlicense_reg_framework.htm)> (accessed 26 March 2018).





Country	Fiat currency	E-Money	Virtual currency
USA			<p><b>Virtual Currency shall not be construed to include any of the following:</b></p> <p>(1) digital units that (i) are used solely within <b>online gaming platforms</b>, (ii) have no market or application outside of those gaming platforms, (iii) <b>cannot be converted into, or redeemed for, Fiat Currency or Virtual Currency</b>, and (iv) may or may not be redeemable for real-world goods, services, discounts, or purchases.</p> <p>(2) digital units that can be redeemed for goods, services, discounts, or purchases as part of a <b>customer affinity or rewards program with the issuer and/or other designated merchants</b> or can be redeemed for digital units in another customer affinity or rewards program, but <b>cannot be converted into, or redeemed for, Fiat Currency or Virtual Currency</b>; or</p> <p>(3) digital units <b>used as part of Prepaid Cards.</b>'</p> <p><b>Tax treatment:</b><sup>114</sup></p> <ul style="list-style-type: none"><li>▪ Treated as property for federal tax purposes.</li><li>▪ Virtual currency is not treated as currency that could generate foreign currency gain or loss for U.S. federal tax purposes.</li><li>▪ Virtual currency that is mined will be taxable as income at the fair market value as of date of receipt.</li></ul>

<sup>114</sup>Internal Revenue Service, 'Notice 2014-21: IRS Virtual Currency Guidance' (14 April 2014) <[https://www.irs.gov/irb/2014-16\\_IRB#NOT-2014-21](https://www.irs.gov/irb/2014-16_IRB#NOT-2014-21)> (accessed 26 March 2018).

Country	Fiat currency	E-Money	Virtual currency
Vietnam	<ul style="list-style-type: none"><li>▪ <b>Vietnam Dong</b></li><li>▪ Central Bank: <b>State Bank of Vietnam</b></li><li>▪ Central bank is the sole issuer of currency.<sup>115</sup></li><li>▪ Currency is legal tender in Vietnam.</li></ul>	<ul style="list-style-type: none"><li>▪ State Bank of Vietnam notes that non-cash payments are prevalent and introduced amendments to its regulations on non-cash payments.<sup>116</sup></li><li>▪ E-money could be covered under two possible definitions – digital e-wallets as well as prepaid cards.</li><li>▪ Digital e-wallet services are defined as: 'Digital wallet service is the practice that a provider of payment intermediary services provides a customer with an nominal electric account on an information carrier (such as electronic chip, mobile phone sim, computer, etc.) that <b>enables the customer to store a sum of money in the form of deposit</b> equivalent to the sum of money <b>transferred from the customer's payment account at a bank to a secured payment account of the provider of digital wallet service with the ratio of 1:1.</b>'</li><li>▪ Circular No. 19/2016/TT-NHNN on Bank Card Operations provide the following definitions: <b>'Prepaid card</b> means a card that authorise its holder to conduct card transactions <b>within the value limit deposited to the card corresponding to the amount of money already prepaid by its holder to the card issuer.</b> <b>Physical card</b> means a card with existing forms of material, usually made of plastic, fitted with a magnetic strip or electronic chip to store card data. <b>Non-physical card</b> means a card without existing form of material but contain the information prescribed in Article 12 of this Circular, which is <b>issued by a card issuer to conduct transactions via Internet, cell phones, or other electronic devices that accept the card.</b> A non-physical card may be converted into physical card at the request of the cardholder.</li></ul>	<ul style="list-style-type: none"><li>▪ Virtual currencies are not defined or regulated.</li><li>▪ State Bank of Vietnam issued a press release<sup>117</sup> warning bitcoin users and stated: 'bitcoins (and other virtual currencies) <b>is neither money nor legal form of payment in Vietnam.</b> That is why, utilisation of bitcoins (and other virtual currencies) as a form of payment is not lawfully approved and protected.'</li><li>▪ Credit institutions are not allowed to use bitcoins (and other virtual currencies) as money or a form of payment in providing services to clients.</li></ul>

<sup>115</sup>The State Bank of Vietnam, 'Tasks and Mandates of SBV' <<https://www.sbv.gov.vn/webcenter/portal/en/home/sbv/bac/>> (accessed 24 March 2018).  
<sup>116</sup>The State Bank of Vietnam, 'Non-cash payment performance gained significant improvement' (3 February 2017) <<https://www.sbv.gov.vn/webcenter/portal/en/home/sbv/bac/>> (accessed 24 March 2018).  
<sup>117</sup>The State Bank of Vietnam, 'Press release on bitcoins and other virtual currencies' (28 February 2014) <<https://www.sbv.gov.vn/webcenter/portal/en/links/cm411?dDocName=CNTHWEBAP0116211755916&keyword=bitcoin>> (accessed 24 March 2018).

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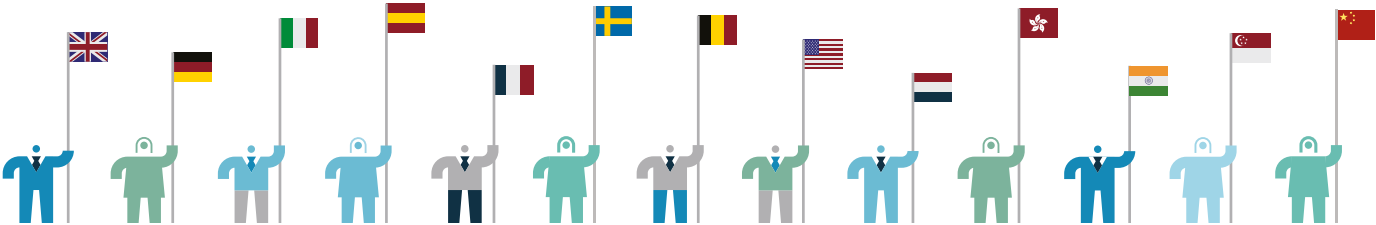
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