



INLAND REVENUE
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IRAS e-Tax Guide

Income Tax Treatment of Digital Tokens



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1. Aim

- 1.1 This e-Tax Guide provides guidance on the income tax treatment of transactions involving digital tokens. The types of digital tokens within the scope of this e-Tax Guide are payment tokens, utility tokens and security tokens.
- 1.2 This e-Tax Guide will be relevant to you if you transact in digital tokens. Such transactions include:
- (i) receiving digital tokens as payment for goods and services;
 - (ii) receiving digital tokens as employment remuneration;
 - (iii) using digital tokens as payment for goods and services;
 - (iv) buying and selling digital tokens; or
 - (v) issuing digital tokens through an Initial Coin Offering (ICO).

2. At a Glance

- 2.1 This e-Tax Guide is organised into two parts. **Part A** discusses the tax treatment for digital tokens, while **Part B** explains the tax treatment for ICOs.
- 2.2 The tax treatment set out in this e-Tax Guide is based on the application of existing income tax provisions. Where a tax treaty is applicable, existing treaty rules will apply.
- 2.3 The general tax treatment for transactions involving the use of payment tokens, utility tokens and security tokens are as follows:

Type of digital token	Tax Treatment
Payment token	Payment token is regarded as an intangible property. Consequently, transactions involving the use of payment tokens as payment for goods or services are viewed as barter trade and the value of goods or services transferred should be determined at the point of transaction.
Utility token	The use of a utility token to exchange for goods or services is unlikely to create an income subject to tax on the user at the point of exchange. It may, on the other hand, give rise to a deductible expense subject to usual deduction rules.
Security token	The taxability of the return derived from a security token depends on the nature of the return, for example, whether it is in the form of interest, dividend or other distributions.

- 2.4 With regards to ICOs, the taxability of the ICO proceeds depends on the rights and functions of the tokens issued to the investors. The proceeds from

the issuance of payment tokens may be taxable depending on its specific facts and circumstances; while proceeds from the issuance of utility tokens will generally be regarded as deferred revenue. Proceeds from the issuance of security tokens is akin to proceeds from the issuance of securities or other investment assets/instruments which is capital in nature and thus not taxable.

- 2.5 For guidance on GST treatment of transactions involving digital payment tokens, please refer to IRAS e-Tax Guide “GST: Digital Payment Tokens”.

3. Glossary

3.1 Digital token

A digital token refers to any cryptographically-secured digital representation of value that can be transferred, stored or traded electronically.

3.2 Payment token

A payment token represents a digital right that can be used or is intended to be used as a means of payment for goods and/or services. Common payment tokens include Bitcoin and Ether.

3.3 Initial Coin Offering (ICO)

The first issue of a digital token to the general public. It is commonly used as a method to raise funds for new projects.

3.4 Mining

A process by which digital token transactions are verified and added to the blockchain, and the means through which new digital tokens are released.

3.5 Security token

A digital token that represents a stake or an investment in an underlying asset e.g. shares in company, bonds, etc.

3.6 Utility token

A digital token that represents a right to a good or service.

4. Background

- 4.1 A digital token is a digital representation of a token holder’s right to receive a benefit or to perform specified functions.

- 4.2 Generally, there are three types of digital tokens:

- (i) Payment token - synonymous with cryptocurrencies and has no further function apart from being used as a mode of payment;

- (ii) Utility token - gives the token holder a specified or implied right to use or benefit from services in exchange for that token; and
- (iii) Security token - gives the token holder a fractional ownership or rights to an underlying asset and usually comes with a specified or implied degree of control or economic entitlement.

4.3 This e-Tax Guide provides guidance on the income tax treatment of transactions involving the above digital tokens. The Guide is organised into two parts: Part A discusses the tax treatment for digital tokens, while Part B explains the tax treatment for ICOs.

4.4 The general income tax treatment for digital tokens is to be determined based on the nature and use of digital tokens, rather than the label that the tokens take. We recognise that the technology for digital tokens is constantly evolving and the nature of digital tokens may vary over time. Where a digital token has unique characteristics, a case-specific review may be required to determine the corresponding tax treatment.

Part A: Tax treatment for digital tokens

5. Tax treatment of payment tokens

Characterisation of payment tokens

5.1 While a payment token serves as a mode of payment, it is not a fiat currency as it is not issued by any government and is not legal tender. For income tax purpose, IRAS views a payment token as an intangible property as it usually represents a set of rights and obligations and does not have a physical form. Hence, transactions involving the use of payment tokens as payment for goods or services are viewed as barter trade and the value of goods or services transferred should be determined at the point of transaction.

5.2 Consequently, where a business receives payment tokens for the goods or services it has provided, the business would be taxed on the value of the underlying goods provided/services performed. Conversely, where a business uses payment tokens to pay for goods and services, a deduction for the goods purchased or services received is allowable, subject to general deduction rules. The value of the deduction will be based on the value of the underlying goods purchased/services received.

5.3 Please refer to **Annex A** for more details on the tax treatment of a receipt and a disposal of payment tokens under various scenarios.

Valuation of payment tokens

5.4 There could be situations where the value of a payment token has to be determined for tax purposes. For example, where a person contracts to perform services for an agreed number of payment tokens, he needs to

record his income based on the value of the payment tokens received. Currently, IRAS does not prescribe any methodology to value payment tokens. Taxpayers can use an exchange rate that best reflects the value of the tokens received, provided that the following two conditions are satisfied:

- (i) The exchange rate must be reasonable and verifiable e.g. it is determined using an average of exchange rates available on payment token exchanges, such as Coinbase and Binance. Where the exchange rate is not available on exchanges, taxpayers can use other means to support their claim that the basis of the exchange rate used is reasonable.
- (ii) The methodology used to determine the exchange rate should be consistently applied year on year.

5.5 IRAS retains the right to enquire into the valuation method used by taxpayers and taxpayers should be able to substantiate their valuation method with the relevant supporting documentation.

5.6 Payment tokens may appreciate or depreciate. If a change in fair value of the payment tokens is recognised in the financial statements for accounting purposes, such fair value gain/ loss will not be taxable/ deductible under current tax rules as the gain/ loss is not realized.

5.7 In addition, there may be situations where the gain/ loss on disposal of payment tokens is taxable, which are acquired over a period at different values/prices, e.g. when the taxpayer is a trader in payment tokens. For the purposes of computing the gain/ loss on disposal, IRAS will accept the First in first out (FIFO) or weighted average cost methods of valuing the payment token disposed¹. This is in line with the Financial Reporting Standard for Inventories (FRS 2)/Singapore Reporting Standards (International) for Inventories (SFRS (I) 1-2).

Source of income

5.8 Where a gain from a transaction involving payment token is subject to tax, the issue of source of the income could arise. IRAS will consider the whole operation of the taxpayer's trade or business when determining what the taxpayer has done to derive the income in question, and where those activities are performed. If the bulk of the business operations are performed in Singapore, then income derived from such activities would likely to be regarded as sourced in Singapore and hence taxable in Singapore.

5.9 Having said the above, there is no single factor that is conclusive. All facts should be considered holistically to determine if the activities that gave rise to the income are mainly carried on in Singapore. Some relevant factors to consider are:

¹ Last in first out (LIFO) method will not be acceptable.

- (i) Whether the company has any physical presence in Singapore (e.g. office, employees); and
- (ii) Whether the key activities (e.g. operating and maintaining a token exchange platform in Singapore) are carried out in Singapore.

6. Tax treatment of utility tokens

6.1 A utility token gives the token holder a specified or implied right to use or benefit from goods or services in exchange for that token. It can come in different forms – akin to a voucher (to entitle the holder to future services from the ICO company), or a key (to entitle the holder to access the ICO company’s platform). When a person (referred to as “the user”) acquires a utility token to exchange for goods or services to be provided in future, the amount incurred by the user to purchase the relevant utility token will be treated as a prepayment. Subject to tax deduction rules, a deduction will be allowed on the amount incurred at the point the token is used to exchange for the goods or service. Tax treatments pertaining to the issuance of utility tokens during an ICO will be addressed in Part B below.

7. Tax treatment of security tokens

7.1 A security token gives the token holder a fractional ownership or rights to an underlying asset and usually comes with a specified or implied degree of control or economic entitlement. Thus far, the more common types of security token that have been issued are accounted for as a form of debt or equity. Nevertheless, as security tokens are essentially a tokenised form of traditional securities, they could also be in the form of any other securities or investment assets/instruments e.g. a unit in a collective investment scheme. The nature of a security token would depend on the rights and obligations tied to that token. This will, in turn, determine the nature of the returns derived by the security token holder from the security token, which could be interests, dividends or other distributions, and be taxed on the security token holder accordingly. Where the security token is disposed by the holder, tax treatment of the gain/ loss on disposal will depend on whether the security token is a capital or revenue asset to the token holder, and accordingly, whether the gain/ loss is capital or revenue in nature.

Part B: Tax treatment for ICOs

8. Taxability of ICO proceeds

8.1 An ICO involves the issuance of a new token, which is often issued in exchange for other payment tokens, or in some cases, fiat currency. ICOs are commonly used by the creator of the token to raise funds or to make available the means of access to an existing or future specific goods or service.

8.2 The taxability of the ICO proceeds in the hands of the token issuer depends on the rights and functions of the tokens issued to the investors. The proceeds from the issuance of *payment* tokens may be taxable depending on its specific facts and circumstances; while the proceeds from the issuance of *utility* tokens will generally be regarded as deferred revenue. Proceeds from the issuance of *security* token is akin to proceeds from the issuance of securities or other investment assets/instruments and is thus capital in nature and not taxable. Please refer to **Annex B** for more details.

8.3 For security tokens which pay interests, dividends or other distributions, the deductibility of such payments to the issuer follows the rules set out under Sections 14 and 15 of the Income Tax Act.

9. ICO failure

9.1 An ICO could fail, for example when a company issues utility tokens via an ICO and utilises the ICO proceeds to build a service platform but subsequently the company is unable to deliver the service platform. If the ICO proceeds are refunded to the token investors the company will not be subject to tax on the amount it refunded. On the other hand, if the ICO receipts are not refunded, the taxability of the amount would depend on whether the ICO is a capital or revenue transaction. The evaluation will consider, amongst other factors, the ICO company's principal business activities, the reasons for the ICO and the contractual obligations arising from the issuance of the tokens.

10. Pre-commencement expenses

10.1 A company may conduct an ICO prior to the commencement of its business. Current deduction rules relating to pre-commencement expenses will apply to any business expenses that are incurred before the commencement of business. Under Section 14U of the Income Tax Act, deductions may be claimed on expenses incurred in the basis period relating to the Year of Assessment immediately before the deemed date of commencement. Existing rules will also apply for unutilised loss items to be carried forward to future years or to be utilised under Group Relief.

11. Founder's tokens

11.1 An ICO company may set aside a percentage of the ICO tokens to be awarded to the founding developers of the ICO in recognition of their hard work in creating and implementing the tokens. Such tokens are commonly referred to as founder's tokens.

11.2 Where the token is used to remunerate a founder for the services he has rendered, it is regarded as revenue in nature and hence, the remuneration is taxable on the founder. However, if the token is not given as remuneration for services provided, the founder will not be taxed on the tokens as it will be

regarded as his capital asset. For example, if the founder has contributed money towards the formation of the company and the ICO, and the token was issued to him to confer an ownership right or a right to vote and participate in the business of the token-issuing entity, then the token will be treated as his capital asset.

- 11.3 Founder tokens issued as remuneration are taxable when they accrue to the founder, i.e. when the founder is entitled to the tokens. Sometimes, a moratorium may be imposed such that the founder is not allowed to sell the tokens before the end of a certain number of years from the date of the ICO. If there is a lock-in period or moratorium, the tokens will be regarded as being accrued to the founder when the lock-in period ends or when moratorium is lifted, and will only be taxable then. The amount to be taxed is the value of the token when the moratorium ends.

12. Record-keeping

- 12.1 Taxpayers should keep proper records of transactions and provide them to IRAS upon request. These supporting records should include information such as:

- Date of transaction
- Number of units of digital tokens received or sold
- Value of digital token at the time of the transaction
- Exchange rate used
- Purpose of the transaction
- Details of customers/suppliers (for buy-sell transactions)
- Details of the ICO
- Receipts/invoices of business expenses

13. Contact Information

- 13.1 For general enquiries or clarifications on this e-Tax Guide, please call 1800-356 8622 (Corporate Tax) or 1800-356 8300 (Individual Tax).

14. Updates and amendments

	Date of amendment	Amendments made
1	9 October 2020	Updated sections relating to security tokens to clarify that a security token can be in the form of any other security or investment assets/ instruments. Accordingly, the nature of the returns derived from the security token could be interests, dividends or other distributions.

Annex A – Income Tax Treatment of Receipt and Disposal of Payment Tokens

1. Receipt of Payment Tokens

Method of receipt	Explanation	Tax treatment
<p>A. Receiving payment token as payment for goods and services performed by business</p>	<p>Where a business is receiving payment tokens in exchange for the provision of goods or services</p>	<p>The transaction is regarded as a barter trade. The recipient of the payment tokens would be taxed on the value of the underlying goods provided/ services performed.</p> <p>Tax is a consequence of commercial arrangement and generally IRAS respects the form of the transaction (unless the form and substance are misaligned). In this respect, the contractual terms and value of the transaction should reflect the open market value of the goods or services. An examination of the contractual arrangement is required to determine the amount of taxable income from the receipt of payment tokens.</p> <p>For example, assuming both contracts below reflect the open market value of the services performed:</p> <p><u>A) Contractually due to receive an agreed value of fiat currency that is payable by payment tokens e.g. S\$100 worth of Bitcoins</u></p> <p>The taxable income in this case is S\$100</p> <p><u>B) Contractually due to receive an agreed number of payment tokens e.g. one unit of Bitcoin.</u></p> <p>The taxable income in this case is the value of the one unit of payment token at the time that the income accrues to the business.</p>

Method of receipt	Explanation	Tax treatment
B. Receiving payment token as payment for employment services performed by an individual	Employees may be remunerated in payment tokens (e.g. Bitcoins).	<p>Wages paid in the form of payment tokens are taxable in the hands of the employee based on the value of the employment services performed by the employee, when the income accrues to the employee. Similar to (A) above, an examination of the employment contract is required to determine the taxable amount.</p> <p>Where payment tokens given to employees include a moratorium, the payments will be taxable when the moratorium is lifted. This is on the basis that the income only accrues to the employee at the end of the moratorium.</p>
C. Purchasing payment token	-	The purchase of a payment token is not a taxable event. However, the intention at the point of purchase would be considered (through the application of the badges of trade) to determine if subsequent disposal of the payment token is a trading activity, and hence whether the resulting gain/ loss is revenue in nature.
D. Receiving payment token through mining	A miner may mine for payment tokens for his own use or for sale. When a miner successfully mines for payment tokens, he is rewarded with payment tokens from the system, which he may subsequently exchange for goods or services, or dispose of.	<p>The taxability of a miner's profits from the disposal of payment tokens (including those obtained from a mining pool) depends on whether the miner performs the mining activity with an intention to profit. Miners may perform mining as a hobby or to hold the tokens mined as a long-term investment. If so, the disposal gains/ losses of the payment tokens are not taxable/ deductible. On the other hand, gains/ losses from the disposal of payment tokens by a miner assessed to be trading in nature would be taxable/ deductible.</p> <p>Likewise, if a miner is paid a fee to perform the mining activity, he could be taxed on the fee received (see Scenario E below).</p>

Method of receipt	Explanation	Tax treatment
		<p>The miner’s profits (if any) will be taxed at the point of disposal of the payment token and not at the point when the payment token is successfully mined. This is because while the miner is entitled to a right to own a payment token at the point of successful mining, no income is derived by merely holding the payment token.</p> <p>Treatment for Companies: As a company is generally set-up with a profit-seeking motive, a company engaging in mining activities will be regarded as carrying on a business of mining and general tax rules will apply. It will be allowed to claim deduction on its mining expenses on an “incurred” basis from the date of commencement of business. This refers to the date that the business has established its profit-making structure and started its first commercial activity. Indications that a mining business has commenced include: Mining equipment purchased Sale of mined digital tokens</p> <p>A company will be taxed on profits from the sale of mined payment tokens upon disposal of the tokens.</p> <p>Treatment for Individuals: <i>Prima facie</i>, an individual engaging in mining activities will be considered as undertaking the activity as a hobby. Gains from sale of the mined payment tokens are treated as capital gains and are not taxable. Mining expenses will not be deductible.</p> <p>However, if an individual shows a habitual and systematic effort to make a profit from the activities, he may be considered as carrying on a vocation of a miner and his profits from the sale of the mined tokens will be subject to tax.</p>

Method of receipt	Explanation	Tax treatment
E. Receiving payment token through providing a mining service	A miner may mine for payment tokens on behalf of a customer who pays him a fee for mining services. The miner does not retain the mined tokens as they are for his customers.	The fees received by the mining service provider for the provision of mining services are taxable.
F. Receiving payment token through airdrop	An airdrop is the distribution of tokens without compensation (i.e. for free), generally undertaken as a marketing tool with a view to increase awareness of a new token, particularly amongst “influencers”, and to increase liquidity in the early stages of a new token project.	Provided that the payment token is not received in return for any goods or services performed, it would not be regarded as income of the recipient, and hence is not taxable. On the other hand, if the airdrop was given in return for, or in expectation of a service, it could be viewed as income subject to tax.
G. Receiving payment token through hard fork	A hard fork is the splitting of an existing payment token to create a second payment token which operates separately from and alongside the original token. The purpose of a hard fork is generally technical in nature and may be used to fix important security risks in older versions, add new functionality, or reverse certain transactions. Holders of the existing payment token might end up receiving a second payment token for free.	This can be viewed as a windfall to the recipient as he had received the additional token without doing anything in return. As this is not an income, it is not taxable on the recipient at the point of receipt. Where the recipient is trading in payment tokens, the gains from the subsequent disposal of the tokens (including tokens received through hard fork or through airdrop) will be taxable.

2. Disposal of Payment Tokens

Method of disposal	Tax treatment
<p>A. In exchange for goods/ services</p>	<p><u>When the exchange takes place, there are two implications:</u></p> <p><u>Implication 1: determining the quantum of tax deduction allowed for the expenses incurred</u></p> <p>A deduction for the goods purchased or services received is allowable based on the value of the underlying goods purchased/ services received, subject to general deduction rules as provided for under Sections 14 and 15 of the Income Tax Act. An examination of the contractual agreement is needed to determine the amount of expenditure allowed.</p> <p>Assuming both contracts below reflect open market value of the services performed,</p> <p>A) Where the contractual obligation is to pay an agreed value of fiat currency that is payable by an equivalent value in payment tokens (e.g. S\$100 payable in Bitcoins), a tax deduction may be allowed on the amount of agreed value (i.e. S\$100) of the transaction.</p> <p>B) Where the contractual obligation is to pay an agreed number of payment tokens (e.g. one unit of Bitcoin), a tax deduction may be allowed on the value of payment tokens (i.e. value of the one unit of Bitcoin) at the time the person providing the goods/services becomes entitled to the payment tokens.</p> <p><u>Implication 2: determining the taxability/ deductibility of the gain/ loss on disposal of the payment token</u></p> <p>Gain/ loss from the disposal of payment tokens will be taxable/deductible if the disposal is assessed to be revenue in nature. This will be determined based on the badges of trade. The timing of taxation is when the income is realised and has accrued to the person disposing the payment tokens.</p>

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B. In exchange for fiat currency	The taxability of the gain/ loss from disposal of payment token for fiat currency will depend on whether the payment token is a capital or revenue asset, and consequently, whether the gain/ loss is capital or revenue in nature.
C. In exchange for a different type of payment token	Applying the same principle as above, the taxability of the gain/ loss from conversion of one payment token to another payment token will depend on whether the payment token is a capital or revenue asset, and consequently whether the gain/ loss arising from the conversion is capital or revenue in nature.

Annex B –Treatment of ICO Proceeds

	Proceeds from issuance of payment tokens	Proceeds from issuance of utility tokens	Proceeds from issuance of security tokens²
Taxability of proceeds	<p>Generally, the ICO company is treated to be carrying on a trade of trading in payment tokens and the tokens will be treated as its trading stock. Hence, the proceeds from the issuance of payment tokens will be taxable.</p> <p>Nonetheless, as the issuance of payment tokens through an ICO is uncommon, an examination of the case facts may be required to determine the tax treatment.</p>	<p>The issuance of a utility token comes with an obligation for the issuer to provide a service in the future. Hence, the proceeds from the issuance represent consideration for the payment of the service, and is taxable, being revenue in nature.</p> <p>Generally, it is necessary for the ICO company to complete the development of a service platform, before it can fulfil its performance obligations. As such, the proceeds from the issuance of utility tokens is regarded as a form of deferred revenue.</p>	<p>The issuance of security tokens confers certain contractual rights and economic entitlements to the investor. These can be akin to those conferred to an equity shareholder, a debt holder or other holder of the securities or investment assets/instruments. In this respect, the proceeds from the issuance of security token is akin to those from the issuance of securities or other investment assets and is thus capital in nature and not taxable.</p>
Taxing point	<p>Taxed at the point of issuance. This is on the consideration that so long as there is a willing buyer and willing seller, it is possible to trade in the payment token that has been issued.</p>	<p>Taxed when the performance obligation is fulfilled (e.g. services are performed, goods delivered).</p>	<p>The ICO company will not be taxed on the proceeds at the point of issuance. However, general income tax rules/withholding tax obligations³ apply to the dividend, interest and other distributions derived by the investor/token holder.</p>

² Where security tokens are issued, the offering is referred to as a Security Token Offering (STO).

³ if the income is paid to a non-resident

<p>Source of income</p>	<p>The source of income from ICO proceeds might not be easily determined as transactions may be executed digitally without a physical location and activities giving rise to the income may be carried out in different countries. Nonetheless, the factors listed below (non-exhaustive) will be considered in totality to ascertain if the activities giving rise to the income are carried on in Singapore and if the income would be determined to be sourced in Singapore:</p> <ul style="list-style-type: none"> • Whether the company has a physical presence in Singapore; • Where and how the marketing and promotion of the ICO is conducted; • Whether the <u>participants</u> in the ICO are predominantly based in or out of Singapore; • Whether the <u>developers</u> behind the blockchain technology are based in or out of Singapore, etc. 	<p>The general source rules will apply. For example,</p> <ul style="list-style-type: none"> • For interest income, reference is usually made to where the lending takes place; • For dividend income, reference is to where the company paying the dividend is a tax resident. <p>However, there may be instances where such information for an ICO company is not easily available and an examination of the case facts will be required to determine the source of the income(s).</p>
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