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HMRC Cryptocurrency Manual

CRYPTO10100 - Introduction to cryptoassets: what are cryptoassets
Cryptoassets (also referred to as 'tokens' or 'cryptocurrency') are cryptographically secured digital representations of value or contractual rights that can be:

- transferred
- stored
- traded electronically

While all cryptoassets use some form of Distributed Ledger Technology (DLT) not all applications of DLT involve cryptoassets. Further information on DLT is at CRYPTO10200.

There are different types of cryptoassets, which work in different ways. The main types of cryptoasset include:

Exchange Tokens

Exchange tokens are intended to be used as a means of payment and are also becoming increasingly popular as an investment due to potential increases in value. The most well-known token, bitcoin, is an example of an exchange token.

Utility Tokens

Utility tokens provide the holder with access to particular goods or services on a platform, usually using DLT. A business or group of businesses will normally issue the tokens and commit to accepting the tokens as payment for the particular goods or services in question. In addition, utility tokens may be traded on exchanges or in peer-to-peer transactions in same way as exchange tokens.

Security Tokens

Security tokens provide the holder of a security token particular rights or interests in a business, such as ownership, repayment of a specific sum of money, or entitlement to a share in future profits.

Stablecoins

Stablecoins are another prominent type of cryptoasset. The premise is that these tokens minimise volatility as they may be pegged to something that is considered to have a stable value such as a fiat currency (government-backed, for example US dollars) or precious metals such as gold.

How HMRC Treats Cryptoassets

The tax treatment of all types of tokens is dependent on the nature and use of the token and not the definition of the token.

HMRC does not consider cryptoassets to be currency or money. This reflects the position previously set out in the Cryptoasset Taskforce report.

On its own, owning and using cryptoassets is not illegal in the UK and does not imply tax evasion or any other illegal activities.

CRYPTO10150 - Introduction to cryptoassets: derivatives over cryptoassets
A derivative is a financial instrument where the performance is based on the movement of the price of the underlying asset. Under a derivative the holder does not hold the underlying asset. Some businesses offer the ability for individuals and companies to gain exposure to the movements in the cryptoasset market by using a derivative.

The nature of a derivative is typically very different to directly holding a cryptoasset. In particular, a derivative will give rise to contractual rights and obligations between the two parties. As a result, where a cryptoasset derivative has been entered into the guidance in this manual will not generally apply.

Where a company enters into a derivative over a cryptoasset this will typically constitute a 'derivative contract' within Part 7 of CTA09. Further guidance on derivate contracts is at CFM50000.

For the position of individuals and other cases where the Part 7 rules do not apply, see the guidance at CFM50070.

CRYPTO10200 - Introduction to cryptoassets: Distributed Ledger Technology
Distributed Ledger Technology (DLT) is a digital system that records details of transactions in multiple places at the same time. Unlike traditional databases, distributed ledgers have no central data store or administration functionality. The ledger acts as an immutable record of all the transactions that have happened within the network previously.

Due to its secure nature, the concept of DLT is generating interest in many sectors including banking and fintech. A well-known application of DLT is the Bitcoin blockchain, which acts as a public record of all the transactions that have ever taken place.

CRYPTO10250 - Introduction to cryptoassets: exchanges and exchange fees
An exchange is an online platform where people who wish to own cryptoassets can:

- exchange their fiat (government backed) currency for a particular token;
- exchange tokens for other tokens; and/or

- convert tokens into fiat currency.

There are a large number of exchanges offering a range of services. They can be:

- custodial (offering a wallet as part of their service), or
- non-custodial (not offering a wallet).

Using an exchange usually involves creating an account, which is a contractual agreement based on specific terms and conditions. Account holders can then propose/request and undertake transactions via the exchange.

The exchange will try to complete these transactions by matching the account holder's requested transaction with the requested transactions of other account holders. The exchange may hold some tokens and/or fiat currency itself to execute transactions and act as a 'market maker' in a limited sense.

Exchange fees are an important area when considering a person's tax position. It is necessary to consider the relevant tax as the rules for deductions for miscellaneous income and capital gains tax are restrictive. There are different types of exchange fees:

- Deposit fees are charged when fiat currency is deposited with the exchange. There may also be conversion fees if the fiat currency isn't supported by the exchange.
- Trading fees are the predominant income source for exchanges. These will normally form a percentage of the trade being requested and will be payable regardless of whether the trade is to acquire or dispose of tokens.
- Withdrawal fees may be applied for withdrawing fiat currency but may also apply to the withdrawal of tokens.

A person may only be entitled to a deduction for a minority or even none of the exchange fees depending on the type of fees incurred. Guidance on the deduction of fees for Capital Gains purposes is at CRYPTO22150 for individuals and CRYPTO41300 for companies.

CRYPTO10300 - Introduction to cryptoassets: consensus - proof of work and proof of stake
Many cryptoasset networks are not controlled by a single body or person. Typically, the network of users of a specific token play a role in verifying transactions or making technological changes.

This mechanism is often referred to as a 'consensus' because a sufficient proportion of the network must agree to a transaction or technological change before it can go ahead.

For example, if A wishes to send 500 tokens to B, it must first be verified that A does indeed hold that many tokens. If the network agrees that this is the case, the transaction is added to the distributed ledger.

Proof of Work

The most well-known consensus system is Proof of Work, which is used by Bitcoin (amongst others). Here, the right to add a new entry to the distributed ledger is only available to the first person to solve a randomly generated complex cryptographic puzzle. That person then creates the new entry and it is shared with all holders of the distributed ledger. The time and energy required to solve the puzzle is the proof of work, the right to add the entry is the primary reward. The person with that right will be entitled to any fees available for including transactions in that entry and they will be allocated with a quantity of new tokens that are released into circulation. This process is known as 'mining' and serves to maintain the network of a given cryptoasset.

Proof of Stake

This has developed as an alternative to Proof of Work due to the significant amount of energy and computing power that system requires. Under Proof of Stake, the ability to create a new entry is determined by a user's wealth in the cryptoasset (or 'stake') rather than them having the computer power to solve a puzzle before anyone else does. Here, those verifying transactions are rewarded with fees for facilitating the transaction instead of any new tokens.

CRYPTO10350 - Introduction to cryptoassets: public and private keys
Encryption keys are a vital aspect of cryptography. They make a message, transaction or data value unreadable for an unauthorised reader or recipient, so it can only be read and processed by the intended recipient.

Exchange tokens rely on a public and private key system:

- The private key is a randomly generated string and is used to authorise a transaction involving tokens held at a public address.
- A public key is mathematically generated from the private key, linking the two keys cryptographically.

For all practical purposes, a private key cannot be generated from a public key.

The public address is shared across the Distributed Ledger (DL). Anyone who knows that address can look at the DL and see all transactions to and from the public address. Any person who knows the public and private keys can authorise transactions involving tokens held at the relevant public address.

If a private key is lost, the tokens will continue to exist at the public address. However, the 'owner' would be unable to undertake any transactions in respect of those tokens. If private key details were kept only on a computer which was subsequently destroyed, then the tokens would be unreachable, although they would continue to exist.

CRYPTO10375 - Introduction to cryptoassets: wallets
A cryptoasset wallet is a user interface where the private key is stored.

There are two main types of wallet: cold wallet and hot (sometimes called 'software') wallet.

A cold wallet refers to a wallet that is not accessible via an internet connection. Examples of a cold wallet include:

- Hardware wallets - store key details offline on a piece of hardware such as a simple USB drive. It is possible to purchase hardware devices with the wallet already installed on them. More advanced versions of hardware wallets have additional security functions.
- Paper wallets - where the information of the private and public keys is simply printed or written on paper. This means it is always offline and its location known only by the holder.

A software wallet is one that is accessible via the internet. It can be further divided into online wallet and client-side wallets.

- Online wallets may be offered by cryptoasset exchanges as part of their services. They can be held on a server in a specific geographical location, on a cloud or the storage may be contracted out to a wallet provider. In this case the platform holds and controls the public key and private key.
- Client-side wallets are also known as desktop wallets. They are managed locally on a user's computer or mobile device.

Some token owners memorise their keys and do not use a wallet. Some people may also only store their private key as it is possible to reproduce the public key from that private key. In essence, anything that can store data could become the wallet. Where a wallet exists, it is the 'container' for the keys. The wallet/keys can be duplicated. The loss of a wallet does not affect the existence of the tokens themselves.

CRYPTO10400 - Introduction to cryptoassets: record keeping
Cryptoasset exchanges may only keep records of transactions for a short period, or the exchange may no longer be in existence when an individual completes a tax return.

The onus is therefore on the individual to keep their own records for each cryptoasset transaction.

Records of cryptoassets can be:

- paper (cold) wallets containing the individual's public and private keys
- electronic (hot) wallets on devices
- other records of their transactions and balances such as downloads of their wallet activity from a cryptoassets exchange
- hardware (cold) wallets looking like a USB, containing the individual's public and private keys.

Cryptoassets are digital assets and as such all records in a wallet should show balances and transactions, either in full or via reference to a public blockchain. The individual's access to fiat currency could come from:

- the point of deposits into a bank account; and
- use of a cryptoasset Automated Teller Machine (ATM)

These are records which should also be kept and produced for an enquiry. They form part of the audit trail from acquisition to disposal and therefore evidence of any gains made.

Cryptoasset transactions usually occur on a public blockchain (see CRYPTO10200), so can be viewed digitally and checked using records obtained from a wallet. A link to an open source blockchain transaction and acknowledgement of the individual owning the public key involved in the transaction is a record as is a download from their wallet provider or exchange.

Cryptoassets are obtained, administered, exchanged, used and linked to fiat currency electronically or digitally. It is therefore reasonable to request electronic records with full details of transactions and any supporting valuation records for the acquisition and disposal tax points.

Cryptoasset exchanges may only keep records of transactions for a short period, or the exchange may no longer be in existence when an individual completes a tax return.

The onus is therefore on the individual to keep their own records for each cryptoasset transaction, and these must include:

- the type of cryptoasset
- date of the transaction
- if they were bought or sold
- number of units involved
- value of the transaction in pound sterling (as at the date of the transaction)
- cumulative total of the investment units held

- bank statements and wallet addresses, in case these are needed for an enquiry or review.

CRYPTO10450 - Introduction to cryptoassets: why HMRC does not consider buying and selling cryptoassets to be gambling

HMRC does not consider the buying and selling of cryptoassets to be the same as gambling. The term 'gambling' is not defined in the Income Tax or Corporation Tax Acts, or in the Taxation of Chargeable Gains Act 1992. Whether a transaction can be characterised as betting or gambling is a question of fact. It will be down to the caseworker to consider the particular facts of any transaction involving cryptoassets and conclude whether that transaction had the character of betting or gambling. Where a customer considers that their transactions involving cryptoassets amounted to gambling please make a referral following the process at CRYPTO100500.