## Applying IFRS for accounting of cryptocurrencies

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#### **Abstract**

This article addresses issues related to recognition, evaluation and reflection in accounting cryptocurrency in accordance with IFRS. Should be noted, that there is currently no specific IFRS standard that would disclose these issues. The article also discusses the debatable issues of recognition in the accounting of crypto-currencies. However, this article discusses the possibility of recognizing cryptocurrency as an asset and the way of application of IFRS for evaluation and recording of the cryptocurrencies. In this situation, it becomes necessary at the regulatory level to consolidate the rules for accounting for cryptocurrencies. This can be done in various ways, for example: to introduce additions to a number of International financial reporting standards, or to elaborate a separate IFRS that would disclose the features of accounting for cryptocurrencies.

*Key-words: Asset, cryptocurrency, IFRS, recognition, evaluation.* 

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#### 1. Introduction

It should be noted, that cryptocurrency is a kind of digital currency, theformation and control of which is based on cryptographic methods. Recently, cryptocurrencies have found wide implementation in the modern economy. This term was established after the publication an article about the

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Bitcoin system "Cryptocurrency" (Cryptographic currency), in issued 2011 in the magazine Forbes.

The economic essence and legal status of cryptocurrencies are being discussed. In different countries, cryptocurrencies are reckoned as a means of payment, a specific product, may have restrictions in circulation (for example, a ban on transactions with them for banking institutions). A distinctive feature of cryptocurrencies is the absence of any internal or external administrator.

Thereby, public or private bodies (banks, state body, etc.) can not affect the transactions of any participants of the payment system. Cryptocurrency transfer is irreversible-no one can cancel, block, dispute or force (without private key) to make a transaction. However, the participants of the transaction can voluntarily temporarily mutually block their cryptocurrencies as collateral or establish that the completion/cancellation of the transaction requires the consent of all (or optional additional) parties.

The term "cryptocurrency" has been used after the appearance of such system for making payments as" Bitcoin", which was released in 2009. After Bitcoin began to appear new cryptocurrencies, which are called Altcoin (alternative coin), such as: IOTA, Litecoin, Stellar, etc.

In connection with the widespread use of cryptocurrencies, questions arose regarding the reflection in the accounting of such transactions applying the provisions of IFRS. It should be noted that there are already some developments in the field of accounting for cryptocurrency, for example:

- Accounting Standards Board of Japan in March 2018 issued Accounting for Virtual Currencies, (Accounting Standards Board of Japan, 2018)
- Charted professional accountants Canada issued "An Introduction to Accounting for Cryptocurrencies in 2018". (Charted profesional accountants Canada, 2020)

It is necessary to note, that IFRS do not provide for a specific standard that would relate to the reflection in the accounting of crypto-currencies. In this regard, first of all, the question arises how to reflect in the accounting of cryptocurrency, whether to recognize them as an asset. It is necessary to emphasize that in the company's accounting policies must specify the procedure for accounting, evaluation and recognition of cryptocurrencies. In

modern economy there are over 1,500 cryptocurrencies and more are being developed.

However different cryptocurrencies can have various characteristics, and the reasons for acquiring them can be different, thus, the reflecting in the accounting of such operations may have different results and consequences. Thereby, certain conditions reflected in the accounting policies of the enterprise for the recognition and evaluation of some crypto-currencies may not be acceptable to others.

Therefore, enterprises should evaluate each cryptocurrency reflecting separately based on their circumstances and the characteristics of the market for it

First of all, it is necessary to determine whether the cryptocurrency is an asset. The definition of an asset is given in the IASB's Conceptual Framework as a resource controlled by the entity as a result of past events and from which future economic benefits are expected to flow to the entity (IASB, 2018).

#### 3. Research

Based on the definition, we can conclude that the cryptocurrency, if the conditions of this definition are met, is an asset, but in each new case, when dealing with a new cryptocurrency, the company must independently determine whether it is possible to recognize the new cryptocurrency as an asset. If the crypto currency is recognized as an asset, the second question arises in accordance with what IFRS it should be recognized?

In accordance with the paragraph 7 of IAS 8 "Accounting Policies, Changes in Accounting Estimates and Errors" if it is applicable, the company can use a specific IFRS Standard (IFRS 2.)

The accounting treatment of assets in accordance with IFRS is reflected in the following standards:

- 1. IAS 7 Statement of Cash Flows; IFRS 9 Financial Instruments -for accounting of cash,
- 2. IAS 32 Financial Instruments: Presentation, IFRS 9 Financial Instruments- for accounting of non-cash financial assets,
- 3. IAS 40 Investment Property- for accounting of investment properties,

- 4. IAS 38 Intangible Assets -for accounting of intangible assets,
- 5. IAS 2 Inventories for accounting of inventory.

Therefore, it is necessary to consider which of them are applicable to the accounting of cryptocurrencies.

The essence of the cryptocurrency is not strictly applicable to the definition of currency, which is done in IAS 32 "Financial Instruments: Presentation" such as "currency (cash) is a financial asset because it represents the medium of exchange...". (IAS32) For example, some cryptocurrencies cannot be used as a medium of exchange, they have a limited medium of exchange compared to most traditional fiat currencies. In addition, a number of financial institutions in the world have banned the use of cryptocurrencies, as they represent an increased risk in financial transactions.

Cryptocurrency also does not correspond to the definition of the cash equivalent as which is "short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value".

In most cases, the cryptocurrency is not a short-term operation and is aimed at the long-term period. At the current time cryptocurrencies cannot be accounted for as cash or a cash equivalent. Consider the provisions if the cryptocurrency can be recognized as non-cash financial asset?

The main characteristic of a financial asset is that the holder of the financial asset has the contractual right to get cash or another financial asset from another company or to exchange financial assets or financial liabilities with another company under conditions that are potentially favorable to the holder. Mainly the holder of a cryptocurrency does not have any contractual right, however some contracts such as forward contracts or options to buy or sell cryptocurrencies in the future may meet the definition of a derivative and be subject to financial-instruments accounting.

Consideration should be given to situations where cryptocurrency can be recorded as an intangible asset. IAS 38 "Intangible Assets" defines "an intangible asset as an identifiable non-monetary asset without physical substance" (IFRS 2.). Indeed, cryptocurrencies generally meet this definition and can be recognized as non-monetary assets and are therefore within the scope of IAS 38 "Intangible Assets".

Thus, the cryptocurrency can be measured at either cost or at fair value (the revaluation method). Thus, cryptocurrency can be defined as intangible assets with an indefinite service life as indefinite lived intangibles, if there are no factors to indicate a definite useful life.

If the company will keep records of the cryptocurrency at cost, it must take into account the provisions of the IAS 36 "Impairment of Assets" and records the impairment in the statement of profit or loss.(IFRS 2.) To account for cryptocurrency at fair value, it is necessary an active market for it, to be able to measure it correctly. The accounting under the revaluation method, is more complex: increases in fair value are reflected in other comprehensive income (OCI), while decreases are registered in profit or loss.

To determine the fair value of the cryptocurrency, is applying the provisions of IFRS 13 "Fair Value Measurement". However, the current application of IAS 38 and the measurement of cryptocurrencies at cost, does not correspond to the economic substance and does not provide relevant information to users of financial statements.

Another standard considers asset accounting is IAS 2 ``Inventories``, indeed, its application can be justified if the company holds a cryptocurrency for sale. In accordance with the provisions of IAS 2 ``Inventories`` cryptocurrencies would be measured at the lower of cost and net realizable value. So as, decreasing in net realizable value would be registered in the statement of profit or loss.(IFRS 2.)

This accounting is applicable to "commodity broker-traders those who buy or sell commodities for others or on their own account, for the purpose of selling in the near future and generating a profit from fluctuations in price." They measure inventories of commodities at fair value less costs to sell and changes in value. But this is reflected in the accounting of inventory transactions only for a broker-trader.

It should be noted that Accounting Standards Board of Japan in its issue Accounting for Virtual Currencies proposed to classify cryptocurrencies as a new independent category of assets, it gives the following arguments: *Virtual currencies did not fit into any of the existing categories* (Accounting Standards Board of Japan, 2018)

Table 1: Characteristics of cryptocurrencies in relation to assets according to Accounting Standards Board of Japan

Assets	Characteristics of cryptocurrencies
Foreign currencies	Foreign currencies generally refer to fiat currencies, and virtual currencies may have characteristics different from foreign currencies
Financial assets	Virtual currencies do not meet the definition of financial assets (other than cash)
Inventories held for trading	Virtual currencies are not always held for trading
Intangible assets	Virtual currencies do not have physical substance but intangible assets generally are not intended to be held for trading

Source: Accounting Standards Board of Japan Accounting for Virtual Currencies March 2018 https://www.asb.or.jp/en/wp-content/uploads/20180315-01\_e.pdf

Also, Accounting Standards Board of Japan in its issue Accounting for Virtual Currencies proposed to evaluate the cryptocurrency as follows (Accounting Standards Board of Japan, 2018):

Table 2: Assessment at the balance sheet date of Virtual Currencies Held by an Entity on Its Own Behalf

An active market for the virtual currency			
Exists	Does not exist		
Market price	Cost, written down to the estimated		
	disposal value if such value is lower than		
	cost		

Source: Accounting Standards Board of Japan Accounting for Virtual Currencies March 2018 https://www.asb.or.jp/en/wp-content/uploads/20180315-01\_e.pdf

From the point of view of taxation in most countries of the world, transactions for the purchase of goods for a cryptocurrency are transactions subject to taxable income tax. Charted professional accountants Canada in its issue An Introduction to Accounting for Cryptocurrencies notes that if any company disposes of cryptocurrencies, whether through a barter transaction

or simply through trading, the company must determine whether gains or losses are on account of income or capital.(Charted profesional accountants Canada, 2020)

Table 3: Recognition and assessment at the balance sheet date of Virtual Currencies Held by a Virtual Currency Dealer on Behalf of Its Customers

Assets Liabilities	Assets Liabilities
Virtual currencies should be measured at market price at the date they were deposited by the customer	The same amount as the corresponding asset should be recognized as a liability to represent the obligation to return the virtual currency to the customer
Same as virtual currencies	The same amount as the
held by an entity on its	corresponding asset
	Virtual currencies should be measured at market price at the date they were deposited by the customer

Source: Accounting Standards Board of Japan Accounting for Virtual Currencies March 2018 https://www.asb.or.jp/en/wp-content/uploads/20180315-01\_e.pdf

In particular, the cryptocurrency could be inventory, or investment property, or intangible assets acquired in the nature of transaction and any future gain or loss must be recorded in accordance with the relevant IFRS standard. It should be noted that some companies hold cryptocurrencies for capital appreciation, but cryptocurrencies are not property as specified in the definition of investment property.

Therefore, it does not seem that a cryptocurrency is investment property within the scope of IAS 40 `Investment Property`.

IFRS require disclosure of information, in addition, some standards require additional disclosure in the financial statements, which must be also relevant. In terms of cryptocurrency, the most appropriate disclosure in the financial statements is the following information:

- a description of the cryptocurrency, its important characteristics and the purpose of holding it (e.g., investing, buying goods and services, etc.),
- the number of units of the cryptocurrency held at year end,

- disclosure of information in the accounting policy in terms of cryptocurrency,
- if the cost model is used, the fair value for the cryptocurrency together with the appropriate IFRS 13 disclosures.
- Information on the market risk associated with the cryptocurrency.

### 4. Conclusions

Further expansion of the digital economy will lead to the accelerated development of various types of digital payment instruments. However, the accounting rules for cryptocurrency transactions are not set out in IFRS. Along with it, it is already necessary to reflect correctly in accounting the cryptocurrency transactions.

It should be noted that at the IASB's January 2018 meeting, the IASB discussed the possibility of having a research project relating to cryptocurrencies and the need to develop a new standard on the accounting of crypto-currencies. The US Financial Accounting Standards Board (FASB) staff are researching this topic.

In the present, the authors analyzed the provisions of various IFRSs for the possibility of recognizing cryptocurrencies as an element of financial statements.

In conclusion, the authors would like to emphasize that the issues of reflection in the accounting are not currently disclosed in any particular standard, so companies should reflect in their accounting policies as in the accounting will be recognized and evaluated cryptocurrency.

The authors are of the opinion that cryptocurrency is a special type of asset that is at the junction of long-term and current assets, so for its accounting it is necessary to conduct research and elaborate an International Financial Reporting Standard that would reflect the particularities of operations with cryptocurrency.

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