Accounting Guidelines on Cryptocurrency and Tokens

1. Introduction. Definition of a cryptocurrency and tokens.

A cryptocurrency is usually defined as a virtual currency having itself characteristics of electronic money (hereinafter referred to as „e-money“) (so called digital money). Electronic money and they issuance are regulated by the Law on electronic money and electronic money institutions of the Republic of Lithuania. They should not be confused with the virtual currency. Following the Opinion of the Bank of Lithuania presented in 2017 (Minutes of the Meeting No. 01-32 of the Board of the Bank of Lithuania of 10 October 2017), a virtual currency is unregulated and uncontrolled digital money that may be used for payment, however put into circulation and guaranteed not by a central bank. There are available various forms of virtual currency: from currency used in online gaming environment and social networks to means of payment that may be used also in real life. Moreover, virtual currencies are used not only for payment, but may cover accumulation instruments for saving or investment purposes, e.g. financial derivatives, market commodities or securities.

Cryptocurrencies are distinguished from other virtual currencies and e-money:

Valuation. Anyone may issue cryptocurrencies. The value of e-money is equal to the value of FIAT money\(^1\) which a natural or legal person transferred to the account of e-money institution or credit institution. While the value of cryptocurrencies is usually established by the demand for and supply of these cryptocurrencies.

Structure. Digital money are centralised and there is a group of people or computers that control online transactions. Cryptocurrencies are decentralised and their functioning principles, development and functionality depend on the will of their majority community.

Anonymity. Transactions in digital currency require personal identification (e.g. presentation of a purchaser’s passport and photo). This is not required in purchase, investment of a cryptocurrency and in other processes. The data of the party of the cryptocurrency transaction does not cover any confidential information (name, surname, registered address and etc.), however each transaction is registered, the fact of making a transaction as well as the data of crypto-wallets of the parties are publicly known. This condition makes each transaction possible for identification; however transactions, basically, remain anonymous.

Transparency. Cryptocurrencies ensure transparency, as in ordinary cases everyone may see any transaction of each user, whereas he is registered in the decentralised public register (an exception to this rule are separate cryptocurrencies which, as Monero or Zcash, have been created for the purpose of disguising the records made in the decentralised register). While e-money and other virtual currencies, usually, do not ensure a full transparency, as external user cannot determine all transfers related to e-money or other virtual currencies, as this information is confidential.

Execution of transactions. The development and functioning of the execution of transactions in cryptocurrencies are controlled by the cryptocurrency community. Therefore, it is very unlikely that cryptocurrency users will consent to the proposal to change the Blockchain structure, though there were such cases (e.g. in case of trade in the DAO tokens in 2016). While digital currencies have a central authority which deals with the problems occurred. It may withdraw or freeze transactions that may be related to fraud, money laundering or terrorist financing.

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\(^1\) FIAT money – cash (EUR, USD and etc.) transferred by a natural or legal person to the account of e-money institution or credit institution.
Legal aspects. The majority of the countries have available legislation that regulates the use of digital money, e.g. Directive 2009/110/EC in the European Union. Transactions in cryptocurrencies are only in their infancy and majority countries have not made decisions on their legal recognition.

Tokens are a sort of cryptocurrencies which aims at ensuring functionality or maintenance of certain platform or application. Examples of such tokens could be Brave-coins tokens that are used in web browser Brave supported by Blockchain; Reputation (REP) tokens whose users may vote for the results expected in the decentralised Argur platform.

Whereas the tokens market is usually rather closed, persons willing to sell tokens may sell them only to individual members of the community willing to buy or exchange them to standard cryptocurrencies (e.g. Bitcoin, Ethereum and etc.).

Initial Coin Offering or ICO creates a possibility for its promoter to attract funds for the implementation of the defined project. Such distributed tokens, depending on the distributor’s terms and conditions defined in the White Paper, may be paid by the purchaser in common FIAT money or in other cryptocurrencies. ICO promoter usually creates a possibility for token purchasers to exchange tokens to other currencies or to sell them to others, and carries out administration of the token maintenance platform.

Due to their characteristics, such cryptocurrencies as Bitcoin, Ethereum, RailBlocks, Monero are also called cryptocurrencies coins, as they function in separate networks based on Blockchain principle and, usually, are used to pay for transactions. While tokens issued under ERC-20 or other similar protocol (e.g. 0x and Civic) are created by using already available Ethereum or other competitive Blockchain, they are less often named as cryptocurrencies coins even when they are used as means of payment, because their functionality depends on other Blockchain, and are not meant for implementation of the cryptocurrencies market functioning.

Chart 1. Cryptocurrencies and tokens, as compared with other virtual money

Tokens are used following the established conditions of the release of the measure granting to its holder the rights set by the promoter (e.g. the right to receive a part of the company’s profits, income, interest on invested funds, the right to receive certain goods or services and etc.).

Due to this characteristic, the following several types of tokens are distinguished: Payment Tokens are tokens designed for execution of payments between their holders within the community of the issuing company. Such tokens may be used as cryptocurrencies coins and their value usually depends on confidence in the issuing company. They also may be used for future
purchase of services of the issuing company under precondition that, due to increasing confidence in issuing company, their value will significantly increase and thus, the first purchasers of tokens will obtain economic benefits. Payment tokens do not grant other substantive rights to their purchaser, therefore, for the issuing company may serve an instrument to cover Blockchain creation costs ensuring the functioning of such tokens and to finance other activities of the company without assuming direct legal obligations against the investors purchasing them.

Utility Tokens grant a possibility for their holder to use goods or services accessible only on the network of the issuer of such tokens. For instance, the issuer of Filecoin tokens plans to provide decentralised cloud storage service, which will allow to use the unused hard disk memory available in other computers. ICO purchasers received tokens that can be used for payment for Filecoin storage services when the service is launched. Whereas the supply of utility tokens is usually of fixed volume, the value of these tokens may grow in the future if the demand for services rendered on their basis increases.

One type of utility tokens is called Asset Tokens – tokens designated to acquire a real product or asset in the future. For instance, a “TV token” may grant a possibility for its holder to obtain or purchase at a lower price a new generation TV set planned to be issued by the token distributor. Such type tokens are fairly widely exploited, however investors often elude from acquisition of such tokens, as asset that they will be able to acquire for them in the future, and asset tokens related to its value may lose their value if a long period of time passes between the issue of tokens and a possibility of using them.

Securities Tokens is a broadly defined type of tokens that grants the right to assets held for trade or grants a possibility of getting a pre-defined financial benefit (interest or etc.). The promoters of such tokens may be committed to exchange them into precious metals or to take out the mortgage against the real estate as a guarantee of their value. Usually, the countries for such tokens apply legislation regulating securities and they are the most strictly regulated as compared with other types of tokens. One type of utility tokens is called Equity Tokens that grant the right to their holder to the share of the company’s profit. In this they are like equity instruments, therefore, the more people purchase them the more they grow in value. Though they are not recognised as equity (e.g. shares), they offer a possibility of attracting fixed capital in more flexible manner and may create new business management models.

2. Evaluation of cryptocurrencies used as payment means according to Business Accounting Standards

As legal regulation of cryptocurrencies is pending, all online payment units should be accounted for in accordance with their economic benefits. Paragraph 28 of Business Accounting Standard 1 “Financial reporting” indicates that a company has to select and to apply such an accounting policy that financial statements would correctly specify the financial position of the company, outcomes of activities and cash flows. A company should set the accounting rules of a cryptocurrency in its accounting policy with regard to which balance sheet item the cryptocurrencies should be attributed to, its economic sense measured according to the terms and conditions specified in the White Paper, probability of economic benefits or liabilities.

According to the provisions of paragraph 24 of BAS 18², financial assets should be accounted for only in case when a company receives or under the contract acquires the right to receive cash or other financial assets. The acquisition cost of the financial assets includes also direct transaction costs.

² Business Accounting Standard 18 “Financial assets and financial liabilities“
Before attributing cryptocurrencies to financial assets, it is important to identify the extent these means comply with the definition of financial assets.

Paragraph 4 of BAS 18 establishes the following definition of financial assets:

4. Financial assets shall include:

4.1. Cash in the company’s cash reserves and settlement accounts.

4.2. Cash equivalents. Cash equivalents may be short-term (up to three months from the acquisition date) liquid investments to securities (with the exception of equity instruments), travellers’ checks and other financial assets that may be quickly exchanged to a known amount of cash, the risk of changes in value of which is insignificant.

4.3. The contractual right of a company to receive cash or other financial assets, exchange financial assets or financial liabilities, which in financial statements is indicated as gains from sales of production, services rendered or loans, prepaid amounts for financial assets and other financial company debts accounted for under contracts.

4.4. Securities issued by other economic entities: shares, bonds and other securities purchased to achieve economic benefits.

Cryptocurrencies, of which particularly called cryptocurrencies coins, may be used as payment means not only for payment for services rendered, but also to exchange (sell) into common currency (FIAT money) or store for a sale in anticipation of the growth of its value. By nature, cryptocurrencies, despite their incorporeality, have the same characteristics as foreign currency; therefore, they could be attributed to cash. Presence of cryptocurrencies is confirmed with a private key granted only to their holder which has to comply with a public key of this cryptocurrency known to others. A private key is stored in the crypto-wallet of the holder’s media device (computer, mobile phone and etc.) or may be printed out and stored in a hard copy (e.g. produced on paper). Brokers acting in the cryptocurrencies market may assist their purchaser in acquiring cryptocurrencies indirectly by opening the account for each purchaser for storage of cryptocurrencies acquired by the purchaser. In this aspect, these payment means are also similar to cash held on settlement account, as in current financial markets the holder of common FIAT money often stores it also on electronic accounts opened by a financial institution, intermediary or a distributor of electronic money for this purpose.

Cryptocurrencies coins may also have characteristics of cash equivalents, as they similarly as liquid investments or other financial assets may be quickly exchanged into known cash amounts. The only handicap for their recognition as cash equivalents is a significant risk of change in their value, as considerable changes in value of cryptocurrencies currently are often observed as compared to the value of common currencies. However, it can be concluded that after the risk of change in value diminishes, this type of virtual currency could be equated also to cash equivalents if it would be possible to transfer them quickly in the market without high additional costs.

Under further assessment, these payment means do not meet the requirements laid down in paragraph 4.3 of BAS 18, as at present there is no clearly expressed contract on the right to receive or to exchange financial assets. Transactions in cryptocurrencies are made following the protocol applicable to a specific Blockchain and the approval of individual transactions is accrued out through decentralised register, but not on the basis of the contract. It is also call into question whether cryptocurrencies as payment means are in conformity with the provisions of paragraph 4.4, as they are not securities. However, knowing that often such financial assets as investment and pension fund units, participant’s contributions in crowdfunding financing platforms and etc. are attributed to this category, it is debatable whether the acquisition of cryptocurrencies to achieve economic benefits, e.g. analogically as in case of acquisition of listed shares on securities market or derivatives, is not identical. The cryptocurrency acquired, if the investor intends to store it for a long period of time expecting the growth of its value, has all essential characteristics attributable to such financial assets.
Stating that cryptocurrencies used as payment means are attributable to financial assets, it is necessary to evaluate what accounting method could be used when recognising them in financial statements. BAS 18 excludes two accounting methods: fair value and amortized cost method. The latter accounting method is applicable when financial assets are held to maturity and it is possible to uniformly distribute future economic benefits during this assets eligibility period.

Whereas cryptocurrencies as payment means usually are not held to maturity and such a maturity is not established in the Blockchain protocol, it may be assumed that the amortised cost accounting method cannot be applied to accounting of such cryptocurrencies.

While the fair value accounting method is applied to other financial assets, therefore, it could be applied also to accounting of cryptocurrencies. Evaluating such assets by fair value on the date of financial statements which would depend on a specific value of cryptocurrency well-established in cryptocurrencies markets, it would possible to reflect the real change in value of such payment means during the reporting period, as according to BAS, it should be indicated directly in the profits/loss statement. This would help to reflect a real and correct company’s financial situation at the end of the reporting period, as, despite a limited legal recognition of cryptocurrencies and occurring set restrictions on their exchange into common FIAT money, usually, it is possible to exchange this cryptocurrencies coins into other cryptocurrency or common currency quickly and without significant additional costs.

However, it should be noted that not all cryptocurrencies are liquid and can be quickly sold through cryptocurrency exchanges or otherwise be transferred. More steady and liquid cryptocurrencies market is specific only to the largest in capitalisation cryptocurrencies (e.g. Bitcoin, Ethereum, Ripple, Bitcoin Cash, Litecoin and etc.). Other cryptocurrencies are often not liquid, cannot be directly transferred for common FIAT money and may be only exchanged to other cryptocurrencies. In such situation, designation of a cryptocurrency as at fair value may be hardly possible, as on designation date the established market price on the market may not exist. Paragraph 33 of BAS 18 provides for that available-for-sale investments to securities whose price on active market is not announced and whose fair value cannot be measured, should be evaluated in financial statements at acquisition cost minus impairment amount. Therefore, cryptocurrencies that are not actively traded in the market and the fair value of which is impossible to be reliably measured, should also be evaluated at acquisition cost minus impairment amount. In this case, after the change in the situation and after occurrence of a possibility of reliably measuring the fair value, afterwards cryptocurrency should be further measured at fair value. If the value of cryptocurrency measured at fair value before cannot be further reliably measured, the acquisition cost newly recorded in its balance should be equal to the last recorded fair value.

It can be debated whether cryptocurrencies as assets without material property expression should not be attributed to intangible assets. Section II of BAS 13 “Intangible assets” presents the following definition of intangible assets:

Intangible assets are non-monetary assets without a material form disposed by the undertaking which in using them expects to receive direct and/or indirect economic benefits and the value of which is not less than the minimum value of intangible assets set by the undertaking.

This definition stresses that such assets should be non-monetary. Based on the analysis of cryptocurrencies as tangible assets presented above, it must be considered that such means of payment cannot be attributed to non-monetary assets, as, basically, they have all features typical to monetary assets. It should be also noted that even not attributing such assets to intangible, its accounting on the basis of the acquisition cost method for intangible assets, which is amortised over the useful life, would misstate the financial position of the undertaking: for such assets it would be impossible to establish a specific useful life, and in accounting of such assets at acquisition cost when their value
fluctuates significantly day on day basis, the financial results would not reflect fair and true performance indicators of the undertaking.

**Conclusion**

Due to the aforementioned reasons, cryptocurrencies used as means of payment (cryptocurrencies coins) should not be considered as intangible assets, and should be attributed to financial assets (BAS 18), which is measured at fair value by presenting the change in fair value in the profits/loss statement.

In the absence of the possibility of a reliable measuring of the fair value of the cryptocurrency, this cryptocurrency should be registered at acquisition cost minus impairment amount.

Depending of acquisition purposes (to use as means of payment or hold as an investment with the aim of receiving income due to the increase in value), cryptocurrencies in the balance sheet of the undertaking might be considered to be registered in current assets accounts “271 Bank accounts” or “262 Other investments”.

Though cryptocurrencies used for payment purposes have the features characteristic more to cash than short-term investments, considering their virtual nature and in order to separate them from funds with a traditionally low risk of changes in value on the accounts of financial institutions, it is proposed though to record cryptocurrencies not in the account “271 Bank accounts”, but in the accounts “262 Other investments “ by using a separate account “2625 Cryptocurrencies” and by disclosing the risk of the change in their value in the explanatory notes.

3. Accounting of cryptocurrencies used as payment means

1) **Acquisition of cryptocurrencies used for payment purposes**

Initially a cryptocurrency is recognized in accounting at **acquisition cost**, which is established based on the amount paid or payable for a cryptocurrency or the value of other transferred assets (paragraphs 25-26 of BAS 18). If the value of acquired cryptocurrency is established in foreign currency, then the provision of paragraph 4 of BAS 22\(^3\) should be applied and when recording a cryptocurrency in accounting initially, it should be evaluated in the currency of financial statements subject to the foreign exchange rate on the date of acquisition of a cryptocurrency. The acquired cryptocurrency could be recorded in the accounting using the following entry:

\[
\begin{align*}
\text{Dr} & \quad 2625 \text{ Cryptocurrencies} \\
\text{Cr} & \quad 271 \quad \text{Bank accounts (euros)}
\end{align*}
\]

**Data sorce for the establishment of fair value of a cryptocurrency**

In recording the acquisition of a cryptocurrency at initial recognition and in evaluating it in other reporting periods, it is important to define in the undertaking’s accounting policy the source to be used to measure the fair value of a cryptocurrency. Whereas under increasing demand for a

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3 Business Accounting Standard 22 “Changes in Foreign Exchange Rates”
cryptocurrency more and more stock exchanges are established to trade these cryptocurrencies, setting different prices of a cryptocurrency, in measuring fair value of a cryptocurrency, it is important to follow the consistency principle and in each reporting period to establish this value based on the data of the same source. The best data source is considered to be Internet websites that regularly publish the average market prices from the main global cryptocurrency stock exchanges.

During the acquisition a considerable amounts may be paid to intermediaries that provide support services of storage of cryptocurrencies, transactions in inter-exchange of cryptocurrencies and transactions in direct acquisition of cryptocurrencies for a common currency. For instance, in purchasing a cryptocurrency Ripple for EUR 2,000 through intermediary platform, the fee of EUR 70 is paid to the intermediary. Also, considering a time lag between the transfer of the application for purchase and factual acquisition of a cryptocurrency, the undertaking established that the fair value of the acquired cryptocurrency on the market at the moment of its acquisition was overstated by EUR 20 and made up EUR 1,950.

Following paragraph 25 of BAS 18, the undertaking, when recognising a financial asset initially, has to measure its acquisition cost by including into it also direct transaction costs. Due to this reason, even a significant amount of fees to intermediaries for acquisition of a cryptocurrency is included into the acquisition cost of a cryptocurrency. Also, following paragraph 26 of BAS 18, the acquisition cost is established based on the paid or payable amount for a financial asset or the value of other transferred assets; therefore, during the initial recognition the acquisition cost of a cryptocurrency is not equal to its fair value. Only during its subsequent evaluation, a cryptocurrency has to be measured at fair value by registering the difference between the acquisition cost and fair value in the profits/loss statement.

In the previous example, the acquisition of a cryptocurrency should be registered as follows:

\[
\begin{align*}
\text{Dr} & \ 2625 \ \text{Cryptocurrencies} & \ 2,000 \\
\text{Cr} & \ 271 \ \text{Bank accounts (euros)} & \ 2,000 \\
\end{align*}
\]

During the subsequent evaluation of a cryptocurrency, the change in its value should be registered as follows:

\[
\begin{align*}
\text{Dr} & \ 6808 \ \text{Losses from decrease in fair value of investment} & \ 50 \\
\text{Cr} & \ 2625 \ \text{Cryptocurrencies} & \ 50 \\
\end{align*}
\]

In preparing the financial statements, a cryptocurrency is measured at fair value (Sections VII and X of BAS 18). Profits or losses, due to the change in fair value of a financial asset, are specified in the profits/loss statement (Section XI of BAS 18). Profits, due to the increase in fair value, are recorded under such accounting entry:

\[
\begin{align*}
\text{Dr} & \ 2625 \ \text{Cryptocurrencies} \\
\text{Cr} & \ 5808 \ \text{Gains from increase in fair value of investment} \\
\end{align*}
\]

Losses, due to decrease in fair value, are registered by the following accounting entry:

\[
\begin{align*}
\text{Dr} & \ 6808 \ \text{Losses from decrease in fair value of investment} \\
\end{align*}
\]
2) Acquisition of a cryptocurrency aiming at receiving income due to the increase in its value

After acquisition of a cryptocurrency used for payment purposes, in order to hold it as long as its fair value grows up, it is registered in the accounting at acquisition cost which is established based on the paid or payable amount for a cryptocurrency or the value of other transferred assets (paragraphs 25-26 of BAS 18). In the accounting a cryptocurrency acquired with the aim at receiving income due to the increase in its value, as in case of its acquisition for payment purposes, may be registered by the following accounting entry:

Dr 2625 Cryptocurrencies  
Cr 271 Bank accounts (euros)

The subsequent change in fair value of a cryptocurrency acquired with the aim at receiving income due to the increase in its value is registered in the accounts “5808 Gains from increase of fair value of investment” or “6808 Losses from decrease of fair value of investment”.

For instance, in purchasing a cryptocurrency Bitcoin for EUR 4,500 through intermediary platform, the fee of EUR 300 is paid to the intermediary. Also, considering a time lag between the transfer of the application for purchase and factual acquisition of a cryptocurrency, the undertaking established that the fair value of the acquired cryptocurrency on the market at the moment of its acquisition was overstated by EUR 550 and made up EUR 4,750. Such acquisition of a cryptocurrency should be recorded without segregating separately costs incurred in its acquisition and the change in value:

Dr 2625 Cryptocurrencies  4,500  
Cr 271 Bank accounts (euros)  4,500

During the subsequent evaluation, the difference between the acquisition cost and fair value of a cryptocurrency is recorded as income in the profits/loss statement:

Dr 2625 Cryptocurrencies  250  
Cr 5808 Gains from increase in fair value of investment  250

3) Mining of a cryptocurrency

The undertaking may participate in the cryptocurrency transaction authorisation system ensuring registration and authentication of transactions registered in the Blockchain. For participation in this authorisation system, the undertaking, in return for those services, may get units of newly created cryptocurrencies which form a new block in Blockchain, i.e. may ‘mine’ a cryptocurrency. In case of Bitcoins and other similar cryptocurrencies, such a reward is paid only to the participant of the authorisation system which the first by the help of its hardware activates the creation of a new ‘empty’ block. In application of such a proof of work system, mining of a cryptocurrency is, usually, the activity requiring a lot of hardware and power resources, and income from such activities (mining of a unit of the new cryptocurrency) is not guaranteed. In another increasingly widespread proof of
stake system, the probability of mining a currency depends on already available amount of units of a cryptocurrency. The application of such a system increases a possibility of mining a cryptocurrency under higher volumes of already available cryptocurrency; however it also does not guarantee the final result of such mining. Considering the fact that in mining a cryptocurrency it is impossible to predict reliably how much and when it will be mined, in the accounting:

- a cryptocurrency is recorded only when following the rules on participation in its development system, the undertaking acquires the right to get money or other financial asset. (paragraph 24 of BAS 18)
- a cryptocurrency mined is recorded at fair value, which is established based on the price announced on the active market (BAS 32) and at the same time, the same-size income is recognised.
- as costs incurred by the undertaking in participation in the cryptocurrency authorisation system do not depend on acquired quantity of the cryptocurrency, all incurred such costs are recognised immediately as expenses (paragraph 11 of BAS 11)

For instance, the undertaking monthly incurses costs related to depreciation of hardware used for mining a cryptocurrency, amortisation of related software, use of electricity networks and other costs amounting to EUR 500. These regular costs may not be associated with the direct economic benefits embodied, as during different periods the undertaking mines a different quantity of a cryptocurrency, and during some periods it generally fails to mine it. Total incurred cryptocurrency mining costs are recorded directly in the profits/loss statement as incurred expenses:

| Dr   | General and administrative expenses | 500 |
| Cr   | Bank accounts / K 449 Other amounts payable | 500 |

When the undertaking has mined a new unit of cryptocurrency in the value of EUR 1,200 which is established following paragraph 15 of BAS 32 based on the market price of a cryptocurrency, it is recorded as a financial asset of the undertaking by showing total economic profits received as a result of its registration as gains from provided services:

| Dr   | Cryptocurrencies | 1, 200 |
| Cr   | Revenue from provided services / K 5401 Other income | 1, 200 |

4) Sale of a cryptocurrency and payments in a cryptocurrency

4.1. When a cryptocurrency is disposed (sold) for a common or other currency, in the accounting a cryptocurrency is written off and money or other currency received as well as the result of the transaction, i.e. profits or loss, are recorded as follows:

| Dr   | Bank accounts | |
| Cr   | Cryptocurrencies | |

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4 Paragraph 11 of Business Accounting Standard 11 “Expenses”: “Expenses in accounting are recorded during the same reporting period when they were incurred, in such cases, when they are impossible to be directly associated with particular income earned”.

5 Paragraph 15 of Business Accounting Standard 32 “Fair value measurement”: “In establishing the fair value of assets and liabilities, the measurement methods that are relevant to particular conditions are used, which are sufficient to establish the fair value of indicators and according to which a maximum of publicly available market data and less non-publicly available data is used. Due to this reason, publicly available price of assets would be sold on the date of the establishment of the value or the liability disposed under the transaction under normal market conditions in the chosen market, is also called a market price and is considered to be the best estimate of the fair value”. 

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4.2. By the agreement of the parties, a cryptocurrency may be used for payment for other assets (services) acquired. If the undertaking uses a cryptocurrency as means of payment for acquisition of assets (services), after the payment for these assets (services), a cryptocurrency is derecognized and the assets (services) received are recognized, including the result of the transaction, i.e. profits or loss, if any. The payments in a cryptocurrency are recorded in the accounting as follows:

4.2.1. in the accounting of a purchaser, a cryptocurrency is derecognized, the assets (services) received are recognized, including the result of the transaction, i.e. profits or loss, if any. For instance, when the undertaking acquires goods to be disposed, such a transaction is recorded as follows:

\[
\begin{align*}
\text{Dr} & \quad 20 \quad \text{Stocks} \\
\text{Cr} & \quad 2625 \quad \text{Cryptocurrencies}
\end{align*}
\]

Taking into consideration that cryptocurrencies used for payment purposes have all essential characteristics applied to money, following paragraph 11 of BAS 9\(^6\), such acquisition of stocks by a cryptocurrency may be equated to acquisition of stocks in foreign currency. Therefore, the stock acquisition cost should be established by applying the cryptocurrency rate valid on the date of purchase. This acquisition of stocks should be recorded as follows:

\[
\begin{align*}
\text{Dr} & \quad 20 \quad \text{Stocks (acquisition cost established according to the cryptocurrency rate valid on the date of purchase)} \\
\text{Cr} & \quad 2625 \quad \text{Cryptocurrencies} \\
\text{Cr} & \quad 58 \quad \text{Other interest and similar income} / \text{Dr} \quad 68 \quad \text{Interest and similar expenses}
\end{align*}
\]

4.2.2. in the accounting of a vendor, a cryptocurrency is recorded in total amount of the transaction and income are recognised and, if required, VAT:

\[
\begin{align*}
\text{Dr} & \quad 2625 \quad \text{Cryptocurrencies} \\
\text{Cr} & \quad 50X \quad \text{Revenue from sales} \\
\text{Cr} & \quad 4492 \quad \text{VAT payable}
\end{align*}
\]

4.2.3. when the support or financing is granted in a cryptocurrency, when direct economic benefits are not expected, total amount of a cryptocurrency disposed for that purpose is recorded as expenses:

\[
\begin{align*}
\text{Dr} & \quad 6302 \quad \text{Expenses of benefits to the third parties} \\
\text{Cr} & \quad 2625 \quad \text{Cryptocurrencies}
\end{align*}
\]

**Conclusion**

The acquisition cost of a cryptocurrency used as means of payment is established based on the paid or payable amount of money for it. If during its acquisition, fees to intermediaries are

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\(^{6}\) Paragraph 11 of Business Accounting Standard 9 ““Stocks acquired in foreign currency in the accounting should be recorded in the currency of financial statements by applying the exchange rate valid on the date of purchase – applied foreign currency exchange rate against the euro set following the Law on Accounting”
deducted, such deductions should not be shown separately, and following BAS 18 should be included into the acquisition cost of a cryptocurrency.

In establishing the fair value of a cryptocurrency during the subsequent measurement, a data source should be selected for the undertaking to use it regularly in establishing the value of a cryptocurrency. The best data source is considered to be Internet websites that regularly publish the average market prices from the main global cryptocurrency stock exchanges.

All costs related to mining activities of a cryptocurrency should be immediately recognised as expenses, and a mined cryptocurrency at the initial recognision is recorded at fair value by presenting the difference in fair value as income in the profits/loss statement.

4. Accounting of ICO tokens

Tokens are an instrument used following the established conditions for its issuance, granting the rights set by the promoter to its holder (e.g. the right to get profits, income of the undertaking, a part of interest on the invested funds, the right to obtain appropriate goods or services and etc.).

Transactions planned, guarantees obtained and warranties of the undertaking assets are not recognised till they do not comply with the definition of a financial asset. For instance, the cryptocurrency Ethereum received for tokens in the accounting of the undertaking should be recorded only when the undertaking has a reliable information (objective evidence) on the obtained quantity of the cryptocurrency Ethereum and may evaluate reliably its value, and if the undertaking has an effective control over the cryptocurrency Ethereum as well as risk and benefits related to its use.

The value of tokens circuled during ICO directly depends on the commitments of their dealer to the purchasers of tokens, rights or powers granted to the holders of tokens, period of their use and liquidity. Ususally, all essential ICO conditions, including also the rights granted to the purchasers of tokens, commitments of the ICO organiser to the the purchasers of tokens and other terms and conditions are specified in the White Paper, which could be considered as a prospectus\(^7\) equivalent when issuing securities. The promoter of tokens and their purchaser should measure token-related rights and commitments following the White Paper and other legal documents.

1) Circulation of cryptocurrency tokens

A company, having circulated cryptocurrency tokens, must record in the accounting all the liabilities concerned. The nature of liabilities depends on the rights granted to holdes of tokens and a type of the token.

1.1. Setting up the platform for circulation of tokens.

ICO is often carried out by issuing tokens by the company and selling them for the units of other cryptocurrency or, in rearer cases, for common FIAT money. Thus, the cryptocurrency received for tokens and its further sale the companies record in the accounting the same as transactions in cryptocurrencies used for payment purposes.

\(^7\)Following the Law on Securities, a prospectus is a document where investors and the public are presented the information on the issuer of securities and his publicly offered or included into trade on a regulated market securities.
Before the start of issue of tokens, a company should create a circulation of such tokens and the platform ensuring the payment by tokens, get licences necessary for this purpose, prepare a White Paper for their circulation, create a Smart Contract corresponding to appropriate login protocols and to perform other work. During such preparatory period, the costs of the company are covered from the own capital of the company or borrowed capital. If these costs do not satisfy the requirements set in paragraphs 5-7 of BAS 13 “Intangible assets”\(^8\), they are recognised as expenses. If costs satisfy these requirements for recognition of intangible assets, they may be shown as intangible assets. BAS 13 presents the following requirements for recognition of intangible assets:

5. Intangible assets are recognised if the expenses incurred correspond to the definition of intangible assets and meet the following recognition requirements:
   5.1. It might reasonably be expected that the company in the future will get direct and/or indirect economic benefits from the assets.
   5.2. The assets acquisition (production) cost may be reliably measured and segregated from the value of other assets.
   5.3. The undertaking may manage these assets, control them or restrict the right of others to use it.

6. In evaluating the feasibility of getting economic benefits, the reliable information available during the initial recognition should be guided and not only formal requirements, but also the principle of substance should be followed.

7. Future economic benefits from the intangible assets used by the undertaking may consist of revenue from sales of goods and services, cost decrease or other benefits.

In making the decision on recognition of incurred costs ensuring functionality of tokens as intangible assets, the undertaking should evaluate whether after expiry of the circulation stage of tokens, it is still capable to control the platform ensuring circulation of tokens and whether it may reasonably expect future economic benefits from the established company unifying token holders.

The tokens created on Blockchain basis should be traded in the open market under support of holders themselves to market functioning following the principle of distributed ledger. Therefore, ICO dealer following circulation of tokens, usually, loses control of the market of these tokens and may reliably expect additional funds only after the sale of tokens available on the account not publicly traded under market conditions. Due to these reasons, it is important to know beforehand whether the undertaking after circulation of tokens will be able to get further economic benefits from token holders by providing them intermediary or similar services that are not related only to the subsequent sale of uncirculated tokens.

If costs incurred for circulated tokens will not ensure further economic benefits for the company after circulation of tokens, they should be immediately recognised as expenses of the reporting period, e.g.:

\[
\begin{align*}
\text{Dr} & \quad 6003 \quad \text{Direct production costs} \\
\text{Cr} & \quad 27 \quad \text{Cash} \\
\text{Cr} & \quad 44 \quad \text{Amounts payable in one year and other short-term liabilities}
\end{align*}
\]

After circulation of tokens, a company may further control the platform supporting the market of circulated tokens (e.g. to annul purchased tokens, change the contents of smart contracts and etc.) and

\(^8\) Business Accounting Standard 13 “Intangible assets”. 
reasonably expect further economic benefits after circulation of tokens. In such case, such reasonably evaluated costs incurred for the establishment of the platform and circulation of tokens, following paragraphs 5-7 of BAS 13, maybe recognised as intangible assets and amortised during the useful life of these assets. The recognition of intangible assets may be recorded as follows:

\[ \begin{align*}
\text{Dr} & \ 1150 \quad \text{Acquisition cost of other intangible assets} \\
\text{Cr} & \ 27 \quad \text{Cash} \\
\text{Cr} & \ 44 \quad \text{Amounts payable in one year and other short-term liabilities}
\end{align*} \]

If during other reporting periods new circumstances are revealed, due to which it is impossible to reasonably expect that these assets will further create economic benefits as it was expected, and therefore, the value of intangible assets decreases, it should be recorded by the following entry:

\[ \begin{align*}
\text{Dr} & \ 63092 \quad \text{Impairment expenses of intangible assets} \\
\text{Cr} & \ 1159 \quad \text{Impairment of other intangible assets} (-)
\end{align*} \]

1.2. Circulation of payment tokens.

If payment tokens circulated by the company do not grant specific exceptional and clear rights in the future for their holders to get a specific service, goods or assets from the company circulating them, the funds generated during circulation of such tokens maybe designated for the establishment of the payment platform for the company further functioning on the basis of these circulated tokens and, if provided, to support its further functioning. The funds generated during circulation of such tokens are often necessary for the company to cover expenses concerned and/or foreseen expenses of future periods; however they are not directly linked to the size of such expenses.

Taking it into consideration, the funds generated from circulated tokens during the ICO at initial recognition could be recorded in the accounting of the company by the following accounting entry:

\[ \begin{align*}
\text{Dr} & \ 2625 \quad \text{Cryptocurrencies} / \text{Dr} \ 271 \quad \text{Bank accounts} \\
\text{Cr} & \ 4421 \quad \text{Advance payments received from service users}
\end{align*} \]

If all inflows received for tokens are designated to cover the expenses of the establishment of the payment platform (see Section “Establishment of the Platform for Circulation of Tokens”) and are not related to further commitments to holders of tokens, such inflows are considered as a reward to the ICO organiser for the established service platform, where the circulation of tokens will operate on the basis of Blockchains. In this case, after expiry of ICO, they should be recorded by the following accounting entry:

\[ \begin{align*}
\text{Dr} & \ 4421 \quad \text{Advance payments received from service users} \\
\text{Cr} & \ 50 \quad \text{Revenue from sales}
\end{align*} \]

However, inflows for tokens may be designated not only to cover the expenses related to the establishment of the payment platform (see Section “Establishment of the Platform for Circulation of Tokens”), but also to ensure further functioning of tokens in administering the established platform. In such case, such inflows are considered to be not only a reward to the ICO organiser for the established service platform, but also related to further duty to serve this platform. Such commitment of the company, for the fulfilment of which it is impossible to estimate precisely the amount of costs of wages, electricity and other costs to be incurred in the future in providing the service, should be
recorded as provisions according to paragraphs 6-7 of BAS 19⁹. After evaluation of which part of generated inflows is related to this future servicing of the platform, the residual part of inflows is recognised as a reward for the establishment of the service platform:

\[
\begin{align*}
\text{Dr 4231} & \quad \text{Advance payments received from service users} \\
\text{and/or} \\
\text{Dr 4421} & \quad \text{Advance payments received from service users} \\
\text{Cr 413} & \quad \text{Other provisions} \\
\text{Cr 50} & \quad \text{Revenue from sales (residual part of inflows after provisions)}
\end{align*}
\]

1.3. Accounting of tokens not circulated during ICO and which remain the property of the ICO promoter.

A part of tokens issued during ICO may remain in the crypto-wallet of a company which circulated the tokens. Such tokens at the initial recognition are registered in off-balance accounts of the company, as the undertaking does not incur direct expenses related to their acquisition, and may be registered as the assets of the company only after the active market of purchase/sale of tokens stabilises, when the possibility of selling them under normal market conditions occurs. In registering such tokens as assets of the undertaking designated for payments, the following accounting entries are made:

\[
\begin{align*}
\text{Dr 2625} & \quad \text{Cryptocurrencies (fair value of tokens)} \\
\text{Cr 5808} & \quad \text{Gains from increase in fair value of investments}
\end{align*}
\]

1.4. Circulation of utility tokens.

If cryptocurrency tokens circulated by the company grants a specific and clear right to their holders to acquire appropriate goods or services in the future on the platform established by the company, it is important to determine whether the company’s related liabilities are of constant or variable nature.

The company may by the Smart Contract to grant the right to the holders of tokens to pay a part of the price for future services or a product produced by the company, e.g. each holder of a token of EUR 100 is granted the right to cover by this token a part of the price of the new produced product after the period of 3 years, but not later than after 4 years, by giving a discount of EUR 180 for acquisition of this product. Taking into consideration that the company grants additional rights to the holder of a token, after circulation of such a token, it should record in the accounting the liabilities related to this particular right. At the initial recognition of the liability, the company has to evaluate which part of the holders of tokens may use this right by refusing the possibility of getting potential economic benefits when the price of a token exceeds the amount of the discount given. If the company

---

⁹ Paragraphs 6-7 of Business Accounting Standard 19 “Provisions, contingent liabilities and assets and post balance sheet events”:

“4.1. Provision – a liability, the final fulfilment amount of which or fulfilment time is impossible to be predicted precisely, however it is possible to be reliably estimated.

6. Provisions are recognised if they comply with all three general recognition characteristics:

6.1. The undertaking has a legal or irrevocable liability as a result of past events.

6.2. It is likely that for the fulfilment of a legal or irrevocable liability, the available assets will have to be used.

6.3. The amount of liabilities may be reliably estimated.

7. Provisions are recognised if they are the result of past events and they exist on the last day of the reporting period (par. 6.1) <!-->.”
evaluates that about 60% of the holders of tokens could use this right, it has to calculate the discounted level of liabilities of this part (180x0.6). If the market interest rate on the date of registration of liabilities is 10%, such a liability would constitute EUR 81 and it would be registered by the following accounting entry:

Dr 271  Bank accounts  100
Cr 413  Other provisions  81
Cr 5401 Other income  19

Each reporting period the company should evaluate the value of changed liabilities. If after a year the value of one token on the market fell down to EUR 25, the company should evaluate the risk that under such a low price the major part of the holders of tokens will choose them to pay for the company’s product and thus to pay a price lower by EUR 180. In such case, after recalculation of liabilities and evaluation that after 2 years 80% of their holders may use tokens, the discounted amount of liabilities under the same market interest rate would grow by EUR 38 and would increase up to EUR 119. Such an increase in provisions is recorded by the following accounting entry:

Dr 6204 Provision expenses  38
Cr 413  Other provisions  38

If after a year the fair value of one token grew on the market up to EUR 220, the company should consider this while evaluating the feasibility that the major part of the holders of tokens will not be willing to use them and receive a discount of EUR 180, as economically advantageous it would be to sell them for a higher price on the market. After evaluation that only about 20% of the holders of tokens after a year will use the possibility of getting the agreed discount, under the market interest rate of 10%, the provisions of the undertaking would decrease from EUR 119 to EUR 33 in recording it by the following entry:

Dr 413  Other provisions  86
Cr 5401 Other income  86

If when the period when the holders of a token may use a token to get a discount started, the fair value of one token on the market grew up to EUR 300 and it is not expected to decrease significantly in the future, the company recognises the previously recognised amount of provisions as income by the following entry:

Dr 413  Other provisions  33
Cr 5401 Other income  33

1.5. Circulation of securities tokens.

The right granted to the purchasers of tokens may be the same as the rights of the holders of securities. Therefore, the liabilities of a promoter of tokens registered in the accounting depend on the nature of the rights granted. They may be similar to the rights of the holders of debt, equity instruments or other financial instruments.

In case of equity tokens, the promoter of tokens may assume a liability to allocate a part of annual profits (with the exception of that incurred due to cash inflows after circulation of tokens during ICO)
to the holders of tokens, but not to redeem the tokens. In such case, at the initial recognition, such a right granted to the holders of tokens is recorded by the company as conditional open-ended liability, the value of which depends on the annual profit margin. While it can not be reasonably expected that the company will earn profits a part of which it will have to allocate to the holders of tokens, the level of this liability after ICO is equal to zero. During other reporting periods the liability should be increased when the company earns profits during the reporting period, i.e. similarly as in accounting of the company’s liability to shareholders after allocation of dividends from retained earnings.

For instance, a company circulates tokens for total amount of EUR 100 thousand and makes a commitment to the holders of tokens to pay annually for an indefinite period 30% of profits of an appropriate reporting period. The funds received for tokens during ICO could be recorded by the following accounting entry:

<table>
<thead>
<tr>
<th>Account Dr</th>
<th>Account Cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>2625 Cryptocurrencies</td>
<td>D 271 Bank accounts</td>
</tr>
<tr>
<td>4421 Advance payments received from service users</td>
<td></td>
</tr>
</tbody>
</table>

The funds paid for tokens to the holders of tokens grant only the right to get a 30% return from profits of each reporting period (with the exception of that incurred due to cash inflows after circulation of tokens during ICO) and they do not have the right to demand them to redeem or give them back. Due to this reason, the company should not record any inflows as a financial liability and after expiry of ICO it should record them as financial income by the following accounting entry.

<table>
<thead>
<tr>
<th>Account Dr</th>
<th>Account Cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>4421 Advance payments received from service users</td>
<td>5810 Other financial and investment operational income</td>
</tr>
</tbody>
</table>

If during the next reporting period a company earns EUR 60,000 of profits, thus increasing the amount of distributable profits, an undertaking records financial liability to the holders of tokens:

<table>
<thead>
<tr>
<th>Account Dr</th>
<th>Account Cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>341 Retained earnings (losses) of the reporting year</td>
<td>4494 Other amounts payable</td>
</tr>
<tr>
<td>18,000</td>
<td>18,000</td>
</tr>
</tbody>
</table>

It may be the case that during ICO a company commits to the holders of tokens to pay annually a certain percentage of interest from the contractual liquid fair value of a cryptocurrency. Such liabilities should be recognised as a financial derivative which on each date of financial statements is measured by fair value following BAS 2610.

For instance, a company issues 100 tokens AAA by selling each for one Bitcoin and making a commitment to pay annually 5% from the fair value of Bitcoin predominating on the last day of that reporting year. In this case, as similarly to the previous one, a company does not have a commitment to redeem the issued tokens at a negotiated price or to refund inflows received for tokens at a later period. On the date of the issue of tokens the fair value of a Bitcoin was EUR 4,000, while on the last day of the reporting year it grew up to EUR 10,000. Thus, a company after the expiry of ICO (see above), registers not only income, but also a financial liability as a result of a financial derivative. If due to the issuance of the financial derivative, the acquisition cost of the liability at the initial recognition equals EUR 150,000, the undertaking records it by the following accounting entry:

<table>
<thead>
<tr>
<th>Account Dr</th>
<th>Account Cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>4421 Advance payments received from service users</td>
<td>5810 Other financial and investment operational income</td>
</tr>
<tr>
<td>250,000</td>
<td>150,000</td>
</tr>
</tbody>
</table>

---

10 Business Accounting Standard 26 "Financial derivatives"
Considering the increased fair value at the end of the year, the likelihood that the undertaking will pay in the future significantly higher amounts increases, therefore, the level of liabilities before the payment of the first annual interest grew by EUR 85,000, i.e. up to EUR 235,000. Such an increase in liabilities to the holders of tokens is recorded by the company by the following accounting entries:

Dr 6805 *Losses from financial derivatives* 85,000
Cr 4213 *Liabilities from financial derivatives* 85,000

At the beginning of the next reporting period 86% of holders of tokens applied for payment of contractual interest. After settlement with the holders of tokens, the paid amount of interest of EUR 43,000 (EUR 50,000 x 0.86) a company will record by the following accounting entry:

Dr 4213 *Liabilities from financial derivatives* 43,000
Cr 271 *Bank accounts* 43,000

2) **Acquisition of cryptocurrency tokens**

### 2.1. Acquisition of payment tokens.

During initial circulation of tokens a purchaser of tokens may be not granted separate rights to get additional services, discounts for acquisition of goods or other rights from the company circulating tokens. In such case, a purchaser of tokens usually buys tokens circulated by a company in order to finance the company’s activity important to him or project implementation hoping to regain invested amounts after increase in the value of tokens acquired and later selling them on the cryptocurrencies market.

In acquiring these payment tokens, as in case of acquisition of cryptocurrencies coins, a purchaser records them at acquisition cost by the following accounting entry:

Dr 2625 *Cryptocurrencies (acquired tokens)*
Cr 271 *Bank accounts*

or

Cr 2625 *Cryptocurrencies (cryptocurrency paid for tokens)*

In drafting financial statements, the tokens acquired are measured at fair value (Sections VII and X of BAS 18). Profits or losses, due to the change in fair value of a financial asset, are entered in the profits/loss statement (Section XI of BAS 18). Profits as a result of the increase in fair value are recorded by the following accounting entry:

Dr 2625 *Cryptocurrencies (tokens)*
Cr 5808 *Gains from increase in fair value of investment*

Losses, due to decrease in fair value, are recorded by the following accounting entry:

D 6808 *Losses from decrease in fair value of investment*
K 2625 Cryptocurrencies (tokens)

2.2. 2.1. Acquisition of utility tokens.

Utility tokens may grant various rights to the purchaser of a token, depending on the nature of which an appropriate recording is applied.

If a purchaser of a token is granted the right after the expiry of the period specified in the White Paper to acquire with a discount a product produced (services rended) by the token promoter, such a future discount is recorded when it is used.

For instance, BBB tokens are circulated during ICO by selling one BBB token for two units of the cryptocurrency Ripple, where the fair value of one unit equals EUR 0.6. Each holder of the BBB token circulated is granted the right after 2 years following the expiry of ICO to acquire once per year a hardware produced by the company with the discount of EUR 1 per one unit of the BBB token. After use of the right to get the discount, a token is not annulled and it further remains the ownership of its holder, however next time to receive a discount it will be thereby possible only during the next reporting period.

In this case, a purchaser acquiring 1,000 units of BBB tokens records it by the following accounting entry:

\[
\begin{align*}
\text{Dr 2625 Cryptocurrencies (acquired BBB tokens)} & \quad \text{Cr 2625 Cryptocurrencies (cryptocurrency Ripple)} \\
\end{align*}
\]

After the initial recognition moment, BBB tokens are further valued as a financial asset at fair value, by indicating the change in fair value in the profits/loss statement as specified in Section 2.1. “Acquisition of payment tokens”.

After 2 years, when the holder of 1,000 units of BBB tokens decides to purchase the hardware sold by the company for EUR 7,500, he uses the right granted by the token to get the discount of EUR 1,000 by recording it by the following accounting entries:

\[
\begin{align*}
\text{Dr 1220 Machinery and equipment acquisition cost} & \quad \text{Cr 271 Bank accounts} \\
6,500 & \quad 6,500 \\
\end{align*}
\]

A purchaser of a token may be granted the right to use additional services of the token promoter, to make use of exclusive offers and etc. In such case, if a holder of a token intends to make use of these rights and does not use a token only as a cryptocurrency for saving or payment purposes. The use of a token giving direct economic benefits to the holder of a token is shown in the accounting by recording profits or loss of the use of such a right in the profits/loss statement.

For instance, a company supplying private home security and cyber security services plans to develop available security technologies and to adapt them for improving the services. During ICO CCC tokens of the company are circulated by selling 1 CCC token for one unit of the cryptocurrency Bitcoin, the fair value of which during the purchase is equal to EUR 7,500. Each holder of a CCC token circulated is granted the right at any time to use a token in paying by it the annual security and cyber security fee for any territory not exceeding 25 ares. After the use of a token, a company annuls it.

In this case, a purchaser acquiring 1 CCC token shows it by the following accounting entry:
After the initial recognition moment, CCC tokens are further valued as a financial asset at fair value, by indicating the change in fair value in the profits/loss statement as specified in Section 2.1. “Acquisition of payment tokens”.

After a year a holder of a CCC token decides to acquire from the company the annual security and cyber security services of the newly constructed warehouse, which costs to the company EUR 30,000. On the date of the use of a token the fair value of the CCC token made up EUR 8,300.

The increase in the value of the cryptocurrency is recorded by the following accounting entry:

Dr 2625 Cryptocurrencies (tokens) 800
Cr 5808 Gains from increase in fair value of investment 800

The payment by a token is recorded by the following accounting entry:

Dr 291 Deferred charges 30,000
Cr 4430 Debts to suppliers for goods and services 30,000
and
Dr 4430 Debts to suppliers for goods and services 30,000
Cr 5401 Other income 21,700
Cr 2625 Cryptocurrencies (CCC tokens) 8,300

2.3. Acquisition of securities tokens.

Securities tokens may grant similar rights to the holder of a token as financial instruments, e.g. debt or equity instruments.

If acquired cryptocurrency tokens grant the right to their purchaser to get periodically a fixed return (coupon) from the amount specified in the White Paper, such a right to get coupons is recorded in the accounting as a financial asset.

For instance, during ICO DDD tokens were circulated for the price of EUR 200. Each holder of the circulated DDD token, which had this token on the last day of the reporting period, within the period of 30 days from the expiry of the reporting period, gets a 5% interest from the nominal amount of EUR 1,000. Interest is transferred directly to the crypto-wallet of the holder of such token of the last day of the reporting period by paying in Bitcoin or other liquid cryptocurrencies coins. In this case, a purchaser of a token records a purchase by the following accounting entry:

Dr 2625 Cryptocurrencies (acquired DDD tokens) 200
Cr 271 Bank accounts 200

At the end of the reporting period, the fair value of a token considering a due date of granting interest increased up to EUR 350. This is recorded by the following accounting entry:

Dr 2625 Cryptocurrencies (DDD tokens) 150
Cr 5808 Gains from increase in fair value of investment 150
Also, for that date the accumulated receivable amount of the interest coupon value of EUR 50 (1,000 x 0.05) is recorded:

\[
\begin{align*}
\text{Dr 2446 Other debts receivable (coupon amount)} & \quad 50 \\
\text{Cr 2625 Cryptocurrencies (DDD tokens)} & \quad 50
\end{align*}
\]

At the beginning of the next reporting period when the right to get annual market interest on a token expires, the fair value of a token decreases from EUR 350 to EUR 310. A company records such change in the value of a token (EUR 310 – EUR 200 + EUR 150 – EUR 50) by the following accounting entry:

\[
\begin{align*}
\text{Dr 2625 Cryptocurrencies (DDD tokens)} & \quad 10 \\
\text{Cr 5808 Gains from increase in fair value of investment} & \quad 10
\end{align*}
\]

After the company circulating tokens pays the agreed coupon amount, it is recorded as follows:

\[
\begin{align*}
\text{Dr 2625 Cryptocurrencies (Bitcoin)} & \quad 50 \\
\text{Cr 2446 Other debts receivable (coupon amount)} & \quad 50
\end{align*}
\]

Conclusion:

If ICO promoter expenses for the establishment of the platform functioning on Blockchains basis are not related to the receipt of reasonably expected economic benefits from the further management of this platform after ICO issue, they are recorded as costs in the profits/loss statement. If such economic benefits are reasonably likely, as ICO promoter has the possibility of receiving intermediation and other income from the users of the established platform, such expenses may be recognised as the acquisition cost of intangible assets. Tokens circulated by the token promoter during ICO that remain in the crypto-wallet of the token promoter are recorded in the off-balance account and recognised as units of a cryptocurrency accounted at fair value only after the active market of purchase/sale of tokens stabilises, when the possibility of selling them under normal market conditions occurs.

Accounting of tokens circulated by the token promoter depends on whether they are attributed to payment, utility and securities tokens:

- A company after circulation of payment tokens, usually, does not have to recognise any additional related liabilities; therefore, the inflows received after the expiry of ICO are immediately recognised as income. However, when a company during circulation of such tokens assumes a liability to further serve the established service platform free of charge, it also should record and the provisions.
- After circulation of utility tokens, it, usually, has to recognise the provisions that reflect the variable part of the company's liabilities.
- After circulation of securities tokens, a company depending on their nature, usually, additionally records financial liabilities, the accounting method and type of which depends on the nature of the liabilities assumed.

After acquisition of tokens, a company at initial recognition in the accounting records them at acquisition cost, and during the subsequent evaluation – at fair value.

Accounting of acquired tokens also depends on the type of tokens:

- A holder of tokens, usually, recognises payment tokens in the accounting in the same way as cryptocurrencies coins used for payment purposes.
• Acquired utility tokens may be used for various services, discounts or goods. Before the use of tokens, holders of tokens record them as payment tokens. After the holders of utility tokens make use of the rights granted, received additional economic benefits are recorded depending on the nature of benefits and a possibility of further use the token. When after the making use of the rights granted by a token it is annulled, a company which used it should record the difference between the value of services/products received and fair value of the utility token as profits/loss.
• The holder of the securities tokens records additional rights granted by tokens to financial return or other additional reward, usually, as a financial asset.

5. Intermediary on the cryptocurrencies market

An undertaking performing intermediary services on the cryptocurrencies market between purchasers and vendors of cryptocurrencies, records in the accounting the cryptocurrencies acquired for trading purposes as stocks at net realisable value. Selling cryptocurrencies acquired for trading purposes, their carrying value is registered in the profits/loss statement as cost of sales, and the price of sales – as revenue from sales.

For instance, a company performing intermediary services buys in 10,000 units of the Ripple cryptocurrency for EUR 6,000 and records it in the accounting by the following entry:

\[
\begin{align*}
\text{Dr} & \ 2040 & \text{Acquisition cost of purchased goods for resale} & \ 6,000 \\
\text{Cr} & \ 271 & \text{Bank accounts} & \ 6,000 \\
\end{align*}
\]

On the other date of financial statements after the fair value of Ripple decreases down to EUR 0.5, the undertaking performing intermediary services records the decrease in the stock value as follows:

\[
\begin{align*}
\text{D} & \ 63091 & \text{Impairment expenses of stocks value} & \ 1,000 \\
\text{Cr} & \ 2040 & \text{Acquisition cost of purchased goods for resale} & \ 1,000 \\
\end{align*}
\]

After sale of 8,000 units of the Ripple cryptocurrency stored for sale purposes for EUR 5,800, the following entries are recorded in the accounting:

\[
\begin{align*}
\text{Dr} & \ 6002 & \text{Cost of acquired goods and services} & \ 4,000 \\
\text{Cr} & \ 2040 & \text{Acquisition cost of purchased goods for resale} & \ 4,000 \\
\text{and} & & & \\
\text{Dr} & \ 271 & \text{Bank accounts} & \ 5,800 \\
\text{Cr} & \ 5000 & \text{Revenue from sales of goods} & \ 5,800 \\
\end{align*}
\]

**Conclusion:**

An undertaking performing intermediary services records in the accounting the cryptocurrencies acquired for trading purposes as stocks at net realisable value. After sale of cryptocurrencies acquired for trading purposes, revenue from sales and cost of sales are recorded.