

DIGITAL ASSETS - CREATION AND ACCOUNTING RECORDS

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Abstract: The Law on Digital Assets (here in after: the Law) entered into force at the end of 2020, but due to a six-month postponement its implementation started on 31.06.2021. In the meantime, the National Bank of Serbia and the Securities Commission (as the two main regulatory authorities established by the Law) have adopted 19 secondary legislation acts in the form of decisions and bylaws. With reference to that, the Ministry of Finance adopted amendments to the Law on Corporate Income Tax and Law on Individual Income Tax regarding taxation of digital assets transactions. In addition to regulation of the legal framework and taxation, this issue also requires regulation of the accounting method, i.e. recognition and measurement of digital assets - which is the topic of this paper.

Keywords: Digital assets, accounting records, digital currencies, digital tokens.

1. Introduction

Owing to the adoption of the above-mentioned Law, the Republic of Serbia was one of the first countries in the world to establish the regulatory framework applicable to digital assets, not only by providing a clear framework and legal safety for investors and users of digital assets but also by signalling to the world that Serbia is becoming a country of fintech.

By adopting the Law on digital assets, the Republic of Serbia has shown that it is keeping pace with the development of IT technologies, with innovations and changes in the digital world. It has become a part of the growing digital economy segment and a member of the exclusive club of countries such as France and Malta that have regulated this area comprehensively. Due to that, many people, primar-

ily the young ones, are given the opportunity to use new, alternative and legally regulated sources of finance and can therefore stay in Serbia to implement their professional, innovative ideas.

In line with the aforesaid, the Law on Digital Assets governs the issuance of digital assets and secondary trading in digital assets in the Republic of Serbia, the provision of services related to digital assets, pledge and fiduciary rights over digital assets, the competences of the Securities Commission and of the National Bank of Serbia as well as supervision over the application of the Law. [the Law on Digital Assets, Official Gazette 153/2020]

At the beginning of 2021 (01.02.2021) the Ministry of Finance published the announcement concerning accounting recognition, valuation and manner of making book entries for digital assets in business records of the reporting entities. The matter of accounting records for virtual currencies was considered by the Board for IFR Sinterpretation and the following explanation was provided: In compliance with the current considerations by the Board, virtual currencies shall be included in accounting records in compliance with the provisions of IAS 38 - Intangible Assets and IAS 2 - Inventories.

2. The creation of digital assets

Every digital asset is originally created in the process known as the initial offering of digital assets, after which the secondary trading in that digital asset begins. Similarity with primary emission and secondary trade in securities is obvious.

Initial offering of digital assets is made by its issuer - person (legal entity) that created and devised that asset. By way of initial offering, the issuer usually receives money or other (already issued) digital assets - most often virtual currencies - from primary buyers.

In certain cases, the issuer might receive goods or services from the primary buyer (third party) i.e. his/her work (the employee) - meaning that the part of earnings is paid in the form of digital assets issued in the initial offering. In other words, the issuer keeps records of the received goods or costs of services or earnings, or possibly of an expense paid in advance and also keeps records of liabilities to the third party - which he/she/it then settles by transferring digital asset in the initial offering.

Example 1:

A domestic legal entity has made a successful initial offering of the first Serbian virtual currency, earning in that way 2 million RSD, 30,000 EUR (3,527,000 RSD according to the middle exchange rate of NBS on that day) and bitcoins credited to issuer as 10 million RSD measured at fair value on

offering day. [Djordjevic, 2021, 42]

Taking into account that virtual currency does not entail any guarantee for transfer of goods or services, or any right to residual, i.e. share in issuer’s profit, or any other payment, and that there is no guarantee for its conversion into any other asset value - issuer shall record it as other operating income.

No.	Account		Description	Amount	
	Debit	Credit		D	C
1.	204		Buyers in the country	6,000,000	
		205	Buyers abroad	9,527,000	
		659	Income from initial offer as per the initial offer report		15,527,000
1a.	241		Current account	2,000,000	
		204	Buyers in the country As per dinar account statements		2,000,000
1b.	244		Foreign currency account	3,527,000	
		205	Buyers abroad As per foreign currency account statements		3,527,000
1c.	131		Bitcoin balance	10,000,000	
		204	Buyers in the country		4,000,000
		205	Buyers abroad		6,000,000
			As per the hosted digital wallet report		

3. Types of digital assets

Every issuer of the actual digital asset defines the intended use of that asset in advance - based on which the manner of use, exchange and measurement of that asset will be determined.

Even though, as a principle, all digital assets are used as means of exchange and/or for investment

purposes, in general two types of digital assets are recognized based on their intended use: [the Law on Digital Assets, Official Gazette 153/2020]

- 1. Virtual currencies** - a type of digital assets that was not issued and whose value is not guaranteed by the national bank nor any other public authority, that is not necessarily attached to a

legal tender and does not have the legal status of money or currency, but the natural persons or legal entities accept it as means of exchange and can be bought, sold, exchanged, transferred and stored electronically;

2. Digital tokens - a type of digital assets that implies any intangible property representing, in digital form, one or more other property rights, which might include the right of a digital token user to provision of specific services.

It is important to understand this differentiation because, in practice, these two types of assets can receive different accounting treatments.

Behind any actual type of digital assets there is one issuer of those digital assets - domestic or foreign natural person, entrepreneur or a legal entity - that is most often a creator of the actual technical procedure and its functionality. i.e. the business model. In other words, any type of digital assets is initially created in the initial offering of digital assets - in compliance with the Law, if it is issued in the Republic of Serbia.

In addition to the issuer, the most important participants are legal entities and natural persons who

provide services of electronic confirmation of transactions in information systems referring to the actual digital asset - so called miners and validators.

The most numerous participants are certainly the owners of digital assets - natural persons and legal entities that have acquired a certain amount of digital assets in some way. It is important to mention that issuers, miners and validators can also be, and are, as a rule, the owners of a certain amount of digital assets. In that sense, all participants - issuers, miners and validators as well as all owners - apply basically the same rules for recording their own digital assets.

Additionally, there are also persons/entities who offer various services concerning digital assets - such as exchange offices that exchange digital assets for regular money or for other type of digital asset, custodians of third party's digital assets (so called hosted wallet providers), etc. Bearing in mind that these are very specific cases that most accountants shall never encounter - accounting records for such participants go far beyond the intended purpose of this text, so they will not be discussed any further.

4. Accounting records for virtual currencies

For the purpose of better understanding, we will identify virtual currencies Bitcoin, Ether and Litecoin as the best-known ones.

The applicable accounting regulations, primarily IFRS, do not recognize virtual currencies as a separate type of assets. In other words, recording of virtual currencies in the account balance in the form of acquisition and transfer transactions is done by adequate application of the existing rules that were originally made for older, standard analogue assets. Although the name refers to cash or cash equivalent or at least some type of financial asset (that is not cash) - the conclusion is nevertheless negative. In fact, virtual currencies are typically not supported by the monetary authorities and, more importantly, although they are used as means of payment, they are (still) not used for direct determination of price of goods and services - which are basic characteristics of money.

According to the point 11 IAS 32, [IAS 32, 2009, 16] financial instrument is any instrument that is cash, an equity instrument of other entity, a contractual right to receive cash or other financial asset from another entity or to exchange

financial assets or financial liabilities with other entity on potentially favourable conditions, or a contract that will or may be settled by entity's own equity instruments - so it is obvious that virtual currencies do not meet any of the specified requirements.

It is obvious that virtual currencies will not be immovables, plants and equipment, investment immovables, biological resources or advances, i.e. costs paid in advance. On the other hand, according to IAS 2 the inventories do not need to have physical form, but they need to be the asset held for sale in ordinary course of business. [IAS 2, 2009, 14] Typical (older) examples are music, films, and software licenses held by traders. It must be noted that CD, DVD or USB flash drive are only means of transfer (just like a packaging for any other goods), irrelevant for the value and the very substance of the music, film or a license. IAS 38 defines intangible assets as non-monetary assets without physical substance, identifiable, controlled by the entity as a result of past events and from which future economic benefits for the entity are expected - which are all requirements typically met by virtual currencies. In other words, if virtual currencies are held for further sale in ordinary course of business, they shall be

recorded as inventories, and in all other cases as intangible assets.

It is important to mention that the reporting entity has to define each acquired virtual currency as either inventories or intangible assets. For example, the reporting entity may decide to hold Bitcoin primarily for sale in ordinary course of business and will record it as inventories accordingly, and to hold Litecoin primarily as a long-term investment and will record it as intangible assets.

4.1. Virtual currencies as inventories

Typical examples of entities that hold virtual currencies for sale in

the ordinary course of business are exchange offices that we have already mentioned, but any person may decide to acquire and sell virtual currencies on a regular basis for the purpose of making profit quickly - most often in the form of exchange difference, meaning that the selling rate is higher than the buying rate.

Example 2:

Company A acquired 10 ethers at the price of 330,000 RSD (converted from USD, which was the payment currency) and it soon sold them in dinar currency at the unit price of 340,000 RSD. [Djordjević & Tatić, 2020, 47-50]

No.	Account		Description	Amount	
	Debit	Credit		D	C
1.	131		Ether balance	3,300,000	
		244	Foreign currency account		3,300,000
			Purchase of 10 ethers as per foreign currency account statement and hosted digital wallet report		
2.	241		Current account	3,400,000	
	501		Costs of goods sold	3,300,000	
		131	Ether balance		3,300,000
		604	Income from goods sold		3,400,000
			Sale of 10 ethers as per dinar account statement and hosted digital wallet report		

The example has been extremely simplified - 10 pieces acquired and then all 10 pieces sold. In practice things are different as large

amounts are acquired - at different purchase and selling prices, so it is debatable how to record this in practice. The answer is that the

requirements for applying one of the cost formulas - FIFO or weighted average cost - are definitely met, which will be defined in each reporting entity's accounting policy. [IAS 2, 2009, 17] This all seems familiar and fairly simple, but the problem occurs on Balance sheet reporting date. To be specific, the basic requirement of IAS 2 is that the inventories shall be measured at the lower of cost and net realizable value. In other words, if net realizable value, i.e. selling price (reduced for selling costs) of virtual currencies classified as inventories on the Balance sheet reporting date is lower than the current (typically cost) value, impairment of these inventories needs to be recorded. [the Law on Corporate Income Tax, "Official Gazette" 25/01, 80/02, ... 68/14 ... 86/19 and 153/20] We must mention that the respective impairment is definitely pursuant to article 22 of the Law on Corporate Income Tax.

This basic IAS 2 principle also implies that previously recognized impairment shall be discontinued due to selling price growth but not above the cost value. In other words, these inventories cannot be adjusted to the market value on Balance sheet reporting date if that value is higher than costs - which implies that Balance sheet will present them as undervalues.

Companies that are actively involved in trading and/or mediation in virtual currencies trading - which implies only the reporting entities that are using complete IFRS - have the option to measure their own virtual currencies at fair value reduced for costs of sales - which is defined by the adopted accounting policy. All the effects of change of this value are recognized in the Profit and Loss Statement in the respective period - via accounts 584 and 684. In practice, this would imply the following: if the market value is higher than the costs on Balance sheet reporting date - the value of inventories will be adjusted upwards, via account 684. From the accounting aspect, i.e. from the aspect of presenting financial position and results in financial statements, this is the option that the majority of virtual currency owners would probably opt for. However, in this case as well, any reduction recorded via account 584 is characterized as impairment pursuant to the article 22 of the Law on Corporate Income Tax - which in the case of a large transaction scope and considerable instability of market value may cause considerable technical problems in the sphere of accounting and compliance with the impairment, i.e. proving the fulfilment of conditions for subsequent recognition of impairment charges.

4.2. Virtual currencies as intangible assets

Bearing in mind the specified requirements for recognition within inventories, it can be assumed that the majority of reporting entities will record virtual currencies as intangible assets in the account 014. Based on practical experience so far, we can conclude that those are intangible assets within definite life, i.e. the assets for which depreciation is not calculated. [IAS 38, 2009, 51] Since the majority of reporting entities will hold these assets for over a year, the issue of subsequent measurement is of extreme significance. The basic model is measurement at cost reduced for potential impairment. Since depreciation is not calculated, the only required procedure is to record the impairment one very Balance sheet reporting date - if fair value (reduced for disposal costs) is smaller than the book value. If the fair value grows in the subsequent period, previously formed provisions for impairment

will be discontinued, and adjustment of book value with fair value above costs will not be possible. To put it another way, this is basically the same measurement method as the one used for inventories (excluding the exception for traders - mediators). Only the methods of recording sales differ - instead of gross income and expenses, net profit or loss on sale are recorded on account 670, i.e. 570.

Example 3:

For the purpose of comparison with recording within inventories, the setting is the same as in Example 2, with the difference that the company A does not acquire Ether to hold it for sale in ordinary course of business, but instead as a type of investment, and then records it as intangible assets. However, soon after acquisition the price increases, and the management decides to realize this profit by selling all 10 ethers via domestic exchange-shop that will pay them out dinars in return.

No	Account		Description	Amount	
	Debit	Credit		D	C
1.	014		Ether balance	3,300,000	
		244	Foreign currency account		3,300,000
			Purchase of 10 ethers as per foreign currency account statement and hosted digital wallet report		
2.	241		Current account	3,400,000	
		014	Ether balance		3.300.000
		670	Income from sale of intangible assets		100.000
			Sale of 10 ethers as per dinar account statement and hosted digital wallet report		

Virtual currency is a rare type of intangible assets that usually meets the strict requirements for measurement by revaluation model. It must be mentioned that this applies to reporting entities who use complete IFRS or (new) Rulebook for micro and other enterprises, while IFRS for small and medium-sized enterprises does not allow revaluation of intangible assets at all, thus compelling these reporting entities to apply previously explained cost model. Since those are assets that are not depreciated, application of revaluation model is basically the same as for revaluation of land. Every increase and decrease is recorded with in revaluation reserves, i.e. account 330, while the fair value is above the initial cost value, i.e. via ac-

counts 581 and 681 while the fair value is under the initial cost value. [Djordjević, 2020, 36]

Even though the model of intangible assets revaluation is not the ideal solution for virtual currencies because the changes in fair value need to be recorded partly in Other results (within account 330), and partly in Profit and Loss Statement - for the majority of reporting entities, since there is no better option, that is probably the best solution (except for those applying IFRS for small and medium-sized enterprises). To be specific, it is not necessary to engage the analyst for the needs of revaluation because majority of reporting entities can establish the fair value on their own by referring to the price as of Balance sheet date which that virtual

currency has at the market where it is usually traded - in the local exchange office for virtual currencies, for example.

5. Conclusion

There are two types of digital assets: virtual currency and digital token. Digital tokens are particularly important as form of alternative financing of young and innovative companies and start-ups. Virtual currencies, with Bitcoin as their best-known representative on a global level, are the innovative means of exchange that are not issued or guaranteed by the national banks like ordinary money is.

The Law on Digital Assets enables financing by investment tokens, improves and develops equity market due to the use of digital technology and strengthens the framework for fighting against misuses at the digital assets market, money

laundering and terrorism financing.

Concerning the issuance of digital assets, the Law has introduced the "white paper" which, in compliance with the international practice, represents a document that the issuer must publish, and which contains information that allow investors to decide on investing and estimate the risks related to investment in digital assets.

Concerning providers of digital assets services, the Law has also introduced the licence as well as a minimum capital that the company must have when submitting the application for a licence to provide digital assets services.

The National Bank of Serbia and Securities Commission have been appointed as supervisory bodies in compliance with the Law on Digital Assets.

References:

- Dorđević, P. (2021). *Digitalna imovina - pravila računovodstvenog evidentiranja*, Beograd, Porezi i računovodstvo.
- Dorđević, P. & Tatić, I. (2020). *Zalihe - Pravila početnog priznavanja i naknadno vrednovanje*, Beograd, Porezi i računovodstvo.
- Dorđević, P. (2020). *Pravila priznavanja i vrednovanja stalne imovine*, Beograd, Porezi i računovodstvo.
- MRS 2 Zalihe, (2009). - prevod Saveza računovođa i revizora Srbije, Beograd.

MRS 38 Nematerijalna imovina, (2009). - prevod Saveza računovođa i revizora Srbije, Beograd.

MRS 32 Finansijski instrumenti, (2009). - prezentacija, prevod Saveza računovođa i revizora Srbije, Beograd.

Zakon o porezu na dobit pravnih lica, "Službeni glasnik RS", broj 25/01, 80/02 - dr. zakon, 80/02, 43/03, 84/04, 18/10, 101/11, 119/12, 47/13, 108/13, 68/14 - dr. zakon, 142/14, 91/15 - dr. propis, 112/15, 113/17, 95/18, 86/19, 153/20)

Zakon o digitalnoj imovini, "Službeni glasnik RS", broj 153 od 21. decembra 2020.

<https://www.neobilten.com/objasnjenje-u-vezi-sa-racunovodstvenim-priznavanjem-vrednovanijem-i-nacinom-knjizenja-digitalne-imovine-u-poslovnim-knjigama-obveznika/> (pristupljeno 11.10.2021. god.)

https://www.mfin.gov.rs/upload/media/MSeNlh_601679c48a04a.pdf (pristupljeno 25.10.2021. god.)

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NASTANAK I RAČUNOVODSTVENA EVIDENCIJA DIGITALNE IMOVINE

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Rezime: Krajem prošle godine stupio je na snagu Zakon o digitalnoj imovini (nadalje: Zakon), čija je primena odložena 6 meseci, odnosno započela je 31.06.2021. godine. U međuvremenu su Narodna banka Srbije i Komisija za hartije od vrenosti (kao dva glavna regulatorna organa utvrđena Zakonom) usvojile 19 podzakonskih akata u formi odluka i pravilnika. S tim u vezi, Ministarstvo finansija usvojilo je dopune Zakona o porezu na dobit pravnih lica i Zakona o porezu na dohodak građana u vezi sa oporezivanjem transakcija digitalnom imovinom. Ovo pitanje osim regulisanja pravnog okvira i oporezivanja nameće i rešavanje načina računovodstvenog evidentiranja, odnosno priznavanja i odmeravanja digitalne imovine - što je tema ovog rada.

Ključne reči: Digitalna imovina, računovodstveno evidentiranje, digitalne valute, digitalni tokeni.