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Comparative Analysis of the Legal Regulation of Digital Financial Assets in Russia and Other Countries¹

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Abstract

Today, a crypto economy is actively developing throughout the globe based on the use of cryptographic technologies for the creation of new digital products, including the issuance of digital financial instruments. The topic of regulation of digital financial assets (DFA) is relevant in the world: since 2019, some countries, including Russia, began to introduce legal norms regarding the issuance of DFA, as well as the sale and turnover of such assets on the market. This article compares approaches to the regulation of DFA in Russia and globally, including the issue of determining financial instruments that will be related to these assets, aspects of the procedure for issuing, storing, and trading them, including the basic rights and obligations of issuers and investors in such assets, and the features of the operation of trading floors and platforms for issuing DFA.

In general, two approaches to the regulation of DFA can be distinguished. The first approach is the application of existing rules to tokenized assets (for example, laws on securities and financial instruments); this approach is used in the United States. The second is regulation through the introduction of a new framework for the application of distributed ledger technology in financial services, for example, in Russia, Germany, Luxembourg, the European Union (EU), and Switzerland. This article examines the second approach, which is currently implemented in Russia, to identify differences with foreign regulation, for example, the use of custodian institutions for accounting and storing digital assets, converting DFA into traditional financial assets, and creating rules for trading digital financial assets.

Keywords: cryptoeconomics, asset tokenization, digital financial assets, financial market, OECD

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Introduction

One of the trends in the crypto economy is the development of tokenized assets, which is causing considerable legal problems. According to an Organisation for Economic Co-operation and Development (OECD) report [2021], the tokenization of assets is the process of digitally representing real (physical) assets on distributed ledgers, or the issuance of traditional asset classes in tokenized form. In the first case, real assets, for example, securities and the rights to them, are linked to or embedded in tokens based on distributed ledger technology (DLT) which is a class of technology that supports distributed recording of encrypted data [Ali, 2019], and on blockchain technology in particular. The token acts as a store of value for real assets that exist outside of DLT, while the tokens exist as “digital twins” within DLT networks. In the second case, the tokenization of assets implies the creation of a trading instrument through a blockchain, and the issued tokens exist exclusively on the distributed ledger. Tokenized assets can include securities (for example, stocks and bonds), as well as commodities (such as gold) and other non-financial assets (such as real estate) [OECD, 2020].

At present, the volume of the tokenized assets market is increasing. According to STOMarket.com data for August 2021, more than 100 issuers of tokens in the form of securities or financial instruments have a combined market value of \$1.1 billion with an average daily trading volume of \$7 million [Ibid.]. Quinlan and Associates estimate that by 2030, the global trading volume of security tokens will reach \$162.7 trillion and the total volume of issuance of securities tokens will be more than \$4 trillion [Quinlan, Chung, Trehan, 2021]. The market is growing, and therefore, questions about the necessity of legal regulation of relations in the crypto market are emerging.

Two Approaches to the Regulation of Digital Financial Assets

Analyzing international practice, we can see a tendency for national legislators to decide in what way tokens (the main assets of tokenization) should be regulated [Leontieva, 2022] such that first regulation of the tokenization process is occurring at the national level, mainly in relation to securities and financial instruments—the subject of analysis in this article.

An analysis of the practice of foreign states indicates that they use one of two approaches to the regulation of tokenization. The first approach involves the application of current securities legislation to the regulation of securities tokens. This approach has been implemented in the U.S. [Levashenko, Ermokhin, Zubarev, 2019]. In July 2017, the U.S. Securities and Exchange Commission (SEC) published a report that explained how the current securities laws would apply to securities tokens [2017], in particular the Securities Exchange Act of 1934. The SEC became the first regulator to hold tokens, which, in their content and granted rights, are similar to securities in the meaning defined by Article 2 (a)(1) of The Securities Act of 1933, as well as Article 3(a)(10) of the Securities Exchange Act of 1934. According to the SEC, tokens must be registered as securities (namely, an investment contract). To determine in which cases the securities laws apply, the SEC uses the Howey Test (SEC v. Edwards, 2004, SEC v. W. J. Howey Co., 1946) [FinHub, n.d.], which considers four criteria to determine whether a token is an investment contract. The first is whether the token is raising capital in any form, that is, whether token issuance projects attract investors’ capital in any form (money, crypto-currencies, securities, or any other “value”). The second is whether the token creates a joint venture. Investors put resources into a project to create a product or develop a platform, and as a result, a joint venture is created between the token issuance project and the investors in which investors provide funds that the project uses for

development. Third is whether there is an expectation of profit (dividends, other periodic payments, or an increase in the value of investments). Investors purchasing tokens expect to receive profits from the project in the future, or from the resale of tokens on the secondary market. Finally, the Howey test considers the level of participation in project management. That is, investors provide funds, but do not directly participate in project management and do not perform any administrative functions.

Thus, in the United States, the general securities rules apply to tokens, in addition to the initial coin offering (ICO) project that issues the tokens, which must therefore be registered as an exchange (or in some cases conduct broker-dealer activities) [Levashenko, Ermokhin, Zubarev, 2019, p. 60]. At the moment, a number of companies in the United States have issued token-investment contracts; for example, Blockstack has raised \$23 million from the sale of tokens to non-accredited investors who can trade on secondary markets (the issue is subject to exceptions to the securities rules, which allowed issuing tokens without registering a securities prospectus) [Ali, 2019]. The company INX, a crypto-exchange in Gibraltar, issued a token that became the first in history in respect of which a prospectus was published and registered with the SEC [Basar, 2022]. Today, the project has 7,542 investors, and the market value is \$371 million.

In general, this approach to the issue of tokenized securities is supported by Canada, the European Union (EU) [EC, 2014a], and other countries. However, since 2019, in a number of countries, especially in European ones, an alternative way of regulating securities tokens (qualified as financial instruments) has emerged, focused on the creation of a special procedure for issuing, storing, and transferring financial assets using DLT technologies, the so-called “DLT securities” approach [OECD, 2022]. This second approach has been implemented in Russia and will be considered in detail below.

Qualification of Digital Financial Assets

The first legal problem of the second approach is the question of the qualification of tokens issued in DLT ledgers as either securities or financial instruments. In 2021, Russia’s Federal Law No 259-FZ of 31 July 2020, “On Digital Financial Assets, Digital Currency” [Digital Financial Assets Law, 2020] (hereinafter referred to as the DFA Law), which allows issuing digital assets similar to securities, came into force. Thus, in accordance with paragraph 2 of Article 1, DFA are recognized as digital rights, including monetary claims, the opportunity of exercising rights under equity securities, the right to participate in the capital of a non-public joint stock company, and the right to demand the transfer of equity securities. The types of DFA covered by the securities laws are those providing the opportunity to exercise rights on equity securities, those granting the right to demand the transfer of equity securities, and those granting the right to participate in the capital of a non-public joint-stock company.

If it is necessary to apply to the person who maintains the register of securities holders for DFA that allows for the exercise of rights under equity securities or the right to demand the transfer of equity securities, then, in the case of the issue of shares in the form of a DFA, the registrar and custodian of the DFA becomes the operator of the platform for DFA issuance. In accordance with Article 5 of the DFA Law, the operator must maintain a registry of securities holders and tokenized assets in the information system [Leontieva, 2022].

Thus, two ways to tokenize assets are regulated in Russia, namely, the tokenization of assets by issuing DFAs for existing securities and the tokenization of assets by issuing shares in the DLT system that are registered and stored without the need to apply to traditional depositories. It is worth pointing out that DFAs are issued for securities, but DFAs and securities are regulated by different legal acts and are two different legal entities.

Comparison of Russia’s Approach With Those of Foreign Countries

The EU, including Germany, as well as Switzerland and a number of other countries, are introducing special regulations for tokens issued in DLT that, similar to Russia’s regulations, allow for storing, accounting, and transferring securities tokens without using a central depository

[Basar, 2022]. In October 2020, the European Commission published a proposal for regulation of a pilot regime for market infrastructures based on DLT [EC, 2020]. The draft regulation proposed the issuance of DLT securities as a separate type of financial instrument with special issuance rules, conditioned on the type of technology used to store the corresponding financial assets [Cohen et al., 2018]. The regulation will apply to transferable securities within the meaning of Article 4(1) (44) (a) and (b) of Directive 2014/65/EU (MiFID II) [EC, 2014a], which are issued, registered, transferred, and stored using DLT. Accordingly, “transferable/transferable securities” means those classes of securities that can be traded on the capital market, with the exception of payment instruments such as “shares in companies and other securities equivalent to shares in companies, partnerships or other entities, and depositary receipts in respect of shares,” and “bonds or other forms of securitised debt, including depositary receipts in respect of such securities” [EC, 2014a]. Thus, the EU retains the general concept of transferable securities for the financial market, and such securities can be issued using DLT. Therefore, DLT systems are becoming one of the ways to issue securities, with separate rules of storage and settlement for this type [Haentjens, de Graaf, Kokorin, 2020].

In Germany, DLT securities are regulated by the Electronic Securities Act (eWpG) [2021], which entered into force in June 2021. The eWpG allows tokenization of bearer bonds (Schuldverschreibungen auf den Inhaber). According to the explanation of the Federal Financial Supervision Authority of Germany (BaFin), a bearer bond is a security on which the investor usually receives interest by ceding a certain amount to the issuer of the bond for a certain period of time (thus providing the issuer with a long-term loan) [BaFin, 2020]. The person becomes a creditor, not a shareholder, and the issuer of the bond undertakes to repay the debt to the creditor of the monetary claim at the end of the term. A security can be issued in the form of an electronic security through making an entry by the issuer in the register of electronic securities, or in the DLT ledger instead of issuing a security certificate (Article 2). Among electronic securities, a subtype of crypto securities (Kryptowertpapier) is distinguished. Thus, a security can be actually issued in three ways: in the form of a paper certificate, electronically, or by making an entry in the DLT ledger. eWpG provides that debt in DLT securities has the same legal consequences as securities represented by a paper certificate. Thus, for the purposes of civil legislation, eWpG made equal the status of a documentary and non-documentary DLT security [Schär, 2021].

A similar regulation was enacted in Switzerland. In 2021, the Federal Act on the Adaptation of Federal Legislation to Developments in DLT Ledger was adopted [“Federal Act,” 1911]. The Act amended Article 622 of the Swiss Civil Code, which regulates shares of a limited liability company. In accordance with Article 620, a company limited by shares is a company whose pre-determined capital is divided into specific amounts (shares), and the shareholders are liable within the company’s assets but are not personally liable for the company’s obligations. Shares can be issued in the form of negotiable securities, the transfer of which is simplified: the securities can be transferred to another person with a special instrument, for example, using an endorsement. That is, shares are issued in the form of negotiable securities in non-documentary form (Article 973c), or in the form of distributed (DLT) securities (Article 973d). This means that in Switzerland it is possible to issue negotiable (with a simplified transfer procedure by an endorsement) DLT securities in shares of limited liability companies (special or blank).

Not just shares can be issued in distributed ledgers. In accordance with Article 1153a, documents of title to goods (titres représentatifs de marchandises) in the form of negotiable instruments can also be issued in distributed ledgers. Thus, in Switzerland, warehousing businesses are regulated (Article 482) such that a warehouse owner who publicly offers warehouse services can apply to the competent authority for the issuing of a document of title to goods stored in the warehouse. Such documents are securities that give the right to accept the delivery of stored goods and can be issued and managed using the DLT ledger [Ushida, Angel, 2021].

Tokenized securities can also be issued in Luxembourg. The Law of 22 January [2021] amended paragraph 1 of Article 1 of the Dematerialized/Undocumented Securities Act of 6 April 2013. A new paragraph (1-1bis) was added, stating that securities can be stored, registered, and

transferred using DLT technology. While the act does not specify which non-documentary securities can be registered and stored in DLT, the list of securities is likely to be limited, taking into account European legislation.

Based on the analysis of the legislation of foreign countries, the following conclusions about the similarities and differences with the Russian approach can be made. Both foreign countries and Russia are enacting regulation of securities issued using DLT technology. At the same time, countries have different approaches to what securities can be issued in the DLT ledger: the EU includes transferable securities (both shares and bonds), Germany permits only debt instruments (it is planned to create regulation also for the issue of shares), Switzerland allows shares of limited liability companies (although there are no restrictions for issuing bonds), and Luxembourg includes all securities. In Russia, only shares granting the rights to participate in the capital of a non-public joint-stock company can be issued in the form of DFA [Takanashi, 2020].

As for the issue of tokens and DFA for existing securities, in Russia, according to the DFA Law, it is possible to issue DFA that provide the opportunity to exercise rights on equity securities or the right to demand the transfer of equity securities, whereas in foreign countries (Germany, Switzerland, the EU), collective investment law may apply to such tokens. Such types of DFA can be called stablecoins, since their value can be linked to the exchange rate of a basket of securities.

Issuance and Storage of Digital Financial Assets

Consider the following block of legal problems related to the issue of DLT securities. In Russia, in accordance with Article 2, the issuance of the DFA is carried out by entering a record crediting the DFA to the specified person into the information system in which the DFA is issued. In other words, the issuance can be carried out by a simple entry in the DLT ledger. Storage is similarly carried out in the DLT ledger (however, if the DFA are issued on existing securities, such securities will be stored with traditional depositories). Further, in accordance with Article 3, the DFA issuer must publish a decision on the DFA issue, specifying information about the issuer, about the operator of the information system in which the DFA issue is carried out, the type and scope of rights granted to the DFA, the number and cost of the DFA, the start date of the DFA allocation, and payment method.

However, examining the experience of foreign countries, we can conclude that a different approach is being practiced. In accordance with the eWpG, in order to issue a debt security in the DLT ledger, it is enough to make an appropriate entry in the DLT ledger, creating a special registry for crypto securities, which performs the functions of registration, recording, and storage.

In general, it is proposed to issue DLT securities in Switzerland and Luxembourg in a similar way. For example, in Switzerland, in order to hold shares of limited liability companies issued through DLT, the issuer enters into an agreement with the lender (investor) on registration of distributed securities in the distributed ledger. All aspects of the registry are prescribed in the registration agreement, and the debtor must ensure that the registry is organized in accordance with the requirements of the agreement. At the same time, unlike the German approach, the issuer does not need to have a special license to store and record assets in the registry; however, the issuer must comply with the certain requirements, for example, the use of technological processes that permit investors, not the issuer, to dispose of their rights and the publication of information about the scope of rights within assets, the functioning of the registry and so on. It is worth noting that, similar to Germany, for the issue of DLT securities, it is necessary to comply with the ordinary rules regarding the prospectus of securities and the protection of investors' rights.

Thus, comparing the Russian approach with those of other countries, it is possible to identify some similarities and differences. In Russia, as well as in Germany, Switzerland, and Luxembourg, the issuance occurs by making appropriate entries in the DLT ledger. However, in Russia the issuance of DFA is carried out through the information system of the DFA issuance operator, whereas in Germany, Switzerland, and Luxembourg there are no such operators—the issuer can either independently act as a registrar and custodian of DLT securities or apply to professional depositories/custodians. Interestingly, in Switzerland and Luxembourg, DLT

securities can be held by banks or central depositories, which potentially creates the opportunity of trading securities on traditional securities exchanges, whereas in Germany, a central depository is not involved in the crypto securities registry, which makes it possible to trade on the stock exchange, limiting such trading for crypto securities.

Another difference between Russia and Germany, Switzerland, and Luxembourg is the procedure of publishing a document on the issue of securities. In Russia, in order to issue a DFA, it is sufficient to publish the decision to issue a DFA on own website and on the operator's website, while in the listed countries issuers must comply with the requirements for registration of a securities prospectus with the relevant authorities, as well as comply with other requirements of securities and financial instruments laws.

Conversion of DFA Into Securities and Vice Versa.

An important legal problem relates to the issue of converting securities into DLT securities and vice versa. In Russia, Article 13 of the DFA Law prohibits non-public joint-stock companies from converting shares issued in the form of DFA into shares of a non-public joint-stock company, the issue of which is not carried out in the form of digital financial assets. This creates restrictions on the possibility for companies to obtain the status of a public company in the future and to conduct an initial issue of classic securities on the stock exchange in order to expand their activities.

In Germany, in accordance with the eWpG, an issuer can replace a DLT security by issuing a paper certificate for the security with the consent of the beneficiaries, or if the terms of the asset issue directly allow such a replacement without the consent of the beneficiary. In this case, the electronic security is excluded from the DLT ledger, and the DLT ledger indicates a record about the issuance of a paper certificate and the cancellation of the DLT security. Similarly, the issuer can replace the classic documentary security by issuing it in the DLT ledger.

In Switzerland, in accordance with Article 622, companies can also convert existing documentary securities into DLT securities and vice versa. This issue is not regulated in Luxembourg.

Thus, it can be concluded that foreign countries allow converting DLT securities into traditional ones and vice versa, which makes it possible to conduct an initial issue of securities and go to traditional exchanges, especially for young innovative companies. Therefore, in order to develop legal regulation in Russia, we recommend that Russia should provide for the procedure of converting DFA by amending the DFA Law. It is also recommended to recognize in paragraph 1 of Article 13 the opportunity of a non-public joint stock company whose shares are not issued in the form of DFA to convert its shares into shares in the form of a DFA. And, it is recommended in paragraph 3 of Article 13 to recognize the possibility of a non-public joint-stock company whose shares are issued in DFA to acquire the public status only after converting shares previously issued in the form of DFA into shares issued not in the form of DFA.

Further, the DFA Law and Federal Law No. 208-FZ of 26 December 1995 "On Joint Stock Companies" should be amended, setting such requirements for the conversion of ordinary shares into shares in the form of DFA, including the need to issue a decision on the conversion and issue of shares of a non-public joint stock company in the form of DFA, making appropriate amendments to the Articles. It is also necessary to regulate, by the DFA Law and the Federal Law "On the Securities Market" of 22 April 1996 N 39-FZ, the opportunity of transferring the register of securities owners from the person who stores and records exchange-traded securities to the register of DFA owners in the information system of the DFA issue operator, and vice versa. In other words, as part of the conversion, to provide for the procedure for replacing the holder of the securities register with the register of the information system of the operator of the DFA issue operator.

The proposed changes will allow companies to use the DFA instruments more efficiently, make conversions depending on current business tasks, and raise capital both in new and traditional markets.

Trading Digital Financial Assets

A number of legal issues are raised by trading DLT securities. In Russia, in accordance with Article 10 of the DFA Law, the sale of DFA is carried out through the DFA exchange operator (including the DFA issue operator, who can simultaneously become an exchange operator).

The operator of the exchange of digital financial assets can be credit organizations, trade organizers, and other legal entities. Only a Russian legal entity can become an operator, which must have a predetermined capital of at least 50 million rubles. The operator must create a corporate board, an internal control service, and a risk management service. Members of executive bodies—the senior accountant, the head of the internal control service—must meet qualification requirements (for example, higher education and experience in managing a financial organization), and have a solid business reputation (for example, do not have an unexpunged or outstanding conviction for committing an intentional crime).

The exchange operator of the DFA is obliged to ensure the storage of information about transactions with the DFA and about the participants of transactions for at least five years. The operator also approves the DFA exchange rules, which it coordinates with the Bank of Russia. Such rules contain the procedure for making transactions with DFA, the types of DFA that can be traded, the procedure for interaction of the DFA exchange operator with DFA issue operators, requirements for information protection and operational reliability, and so on.

In the European Union's pilot regime proposal [EC, 2020], trade in transferable DLT securities is regulated. There are two main subjects involved in trading: multilateral trading platforms and a securities settlement system.

The multilateral trading facility (MTF) of DLT is a system managed by an investment company (providing investment services) or a market operator (a special entity managing MTF as a regulated market), which allows trading only of transferable securities on the basis of transparent, non-discretionary, uniform rules and procedures to ensure an initial recording of transferable DLT securities, settle transactions against payment, and provide storage services. In other words, an exchange for trading DLT securities must register as an MFT DLT [Walch, 2019].

The securities settlement system using DLT is managed by the central securities depository and performs settlements on transactions with transferable DLT securities against payment. The Central Securities Depository (Article 2(1) of Regulation (EU) No 909/2014 [EC, 2014b]) is a legal entity that manages the securities settlement system and provides primary recording services, securities accounts and more.

Therefore, an MTF DLT can either independently register and keep records of DLT securities (observing the requirements for depositories) or turn to the services of the central depository. It is subject to all the requirements applicable to a classic MTF in accordance with MiFID II and Regulation No 2014/600 on markets in financial instruments. However, an MTF can be exempted from compliance with the MiFID requirement if it complies with the requirements for DLT market infrastructure operators set out in Article 6. Particularly, the MTF platform should design a clear and detailed business plan with a description of services and activities. It should also have detailed, publicly available written documentation setting the rules of the DLT market infrastructure, including legal conditions defining the rights, duties, responsibilities, and obligations of the market infrastructure operator, participants, issuers, and customers; Additionally, it should establish rules for the functioning of the DLT ledger (access to technology, participation of validating nodes, elimination of potential conflicts of interest, and risk management) and implement information security and protection measures against cyber risks [Quinlan, Chung, Trehan, 2021].

As for the organization of trading in DLT securities, trading is limited in volume: the total market value of transferable DLT securities should not exceed 2.5 billion euros. The total market value should be determined daily and equal to the amount of 2.5 billion euros at the daily closing price, taking into account the value of transferable DLT securities. Admission to trading takes place either through the registration of securities in the central depository or through the DLT ledger MTF. In the latter case, the MTF must implement accounting for transferable DLT

securities, guarantee the safety of securities and means of making payments, and ensure accurate and timely confirmation of transaction details.

In order to launch an MTF DLT it is necessary to obtain a special operating permit (Articles 7–8). The application for a permit must include information about: the intended activities and organizational structure; the composition of managers (individuals must have a sufficiently good reputation, sufficient knowledge, skills and experience, and devote enough time to performing duties); the business plan and legal agreements; the functioning, services, and activities of the MTF DLT; and the functioning of the DLT system itself (information technology (IT) and cybersecurity measures and mechanisms for storing transferable DLT securities of clients).

Switzerland has amended the Financial Market Infrastructure Act of 19 June 2015. Similar to the EU approach, Switzerland is enacting regulation of the DLT trading system (it is a multilateral trading platform – MFT). The system is a commercially managed organization for multilateral trading in DLT securities, the purpose of which is the simultaneous exchange of applications between several participants and the conclusion of contracts based on non-discretionary rules. At the same time, the platform is suitable not only for trading DLT shares of limited liability companies, but also for trading other rights stored in DLT ledgers, and which, through technical processes, gives investors the right to dispose of their rights.

Within the meaning of Article 4, the DLT trading system must obtain authorization from the Financial Market Operations Supervision Authority (FINMA). Such a system should be organized according to Swiss law and have its headquarters in Switzerland (Article 8); set corporate governance rules (appoint specific bodies responsible for managing its business, for management, supervision, and control); manage risks and conflicts of interest; ensure guarantees of impeccable business conduct (have a good reputation and have qualified specialists) (Article 9); pay the minimum capital set by FINMA (Article 12); ensure business continuity (Article 13), including the ability to maintain or restore operations in the case of failures in a timely manner; ensure transparency of trading (publish in real time the purchase and sale prices of securities, as well as the size of trading positions at these prices) (Article 29); and issue rules for admission of securities to trading (Article 36).

If a trading DLT system performs the functions of a central depository, then the system must comply with the requirements similar to those for central depositories, in particular, with respect to sufficient capital and risk diversification and segregation (that is, to separate its own assets from the securities of its participants).

Thus, the following conclusions can be made by comparing the Russian approach to those of other states. In Russia, the EU, and Switzerland, there are generally similar requirements for platforms that give access to trading in tokenized securities in terms of taking security measures, risk management, the availability of authorized capital, the creation of asset trading rules, business reputation and professionalism of management and shareholders, and so on. Nevertheless, Switzerland and the EU have special multilateral platforms for trading certain types of financial assets under special rules, whereas there are no similar platforms in Russia. Nevertheless, a kind of MFT platform has been created in Russia—a DFA exchange operator with special rules for DFA trading. Unlike an MFT DLT, the DFA exchange operator does not need to contact depositories for storing and recording DFA; making calculations, the operator performs such functions independently.

As for the general conclusions and recommendations, we notice several similarities and differences in the regulation of DFA in Russia and DLT securities in the EU, Switzerland, Luxembourg, and Germany. Regarding the similarities, first, the DFA Law allows a non-public joint-stock company to issue shares in the form of DFA using a DLT ledger, which is actually analogous to DLT securities on the EU, German, Luxembourg, and Swiss markets. Second, DFA trading is carried out in DFA exchange operators, and the multilateral DLT trading platforms of other states operate according to the similar principles. In Russia, compliance with the securities laws is not required when issuing DFA, for example, requirements for the publication of a

prospectus, as in foreign countries; however, the decision to issue DFA is very similar in content and purpose to a prospectus for securities.

Regarding differences, it is not necessary to involve depositories or custodians for the storage and recording of DLT securities in Russia as such functions are performed by the DFA issue operator, whereas in foreign countries, in some cases, a central depository may be involved, including for organizing settlements against payment.

But the main difference is that in Russia it is impossible for a non-public joint-stock company to convert shares in the form of DFA into ordinary shares for trading on the stock exchange, which limits the company's ability to become a public joint-stock company and trade on the stock exchange, whereas companies abroad can freely convert their DLT securities into ordinary securities for trading on exchange. Table 1 presents a comparison of approaches to the regulation of digital financial assets in Russia and in foreign countries.

Table 1. Comparison of Approaches to the Regulation of Digital Financial Assets in Russia and in Foreign Countries

Parameter	Russia	UC	Germany	Switzerland	Luxembourg
Qualification of tokens issued in the form of securities or financial instruments	<ul style="list-style-type: none"> – DFA with the opportunity of exercising rights on equity securities – DFA with the right to demand the transfer of equity securities – DFA-shares of a non-public joint stock company 	DLT transferable securities (stocks, bonds)	DLT bonds	<ul style="list-style-type: none"> – negotiable DLT securities shares of limited liability companies – documents of title to goods 	tokenized securities
Issuance process	simple entry in the information system (as DLT ledger)	-	entry in the DLT ledger	entry in the DLT ledger	entry in the DLT ledger
Publication of release information	decision on issuance	-	prospectus (as for securities)	prospectus (as for securities)	prospectus (as for securities)
Operator of issuance	through the operator of the information system	-	<ul style="list-style-type: none"> – in the issuer's DLT ledger (license required) – from a commercial DLT custodian with a license 	<ul style="list-style-type: none"> – in the issuer's DLT ledger (NO license required) – at the bank/central depository 	<ul style="list-style-type: none"> – in the issuer's DLT ledger (NO license required) – at the bank/central depository
Custody at issuance	– DFA – in the DLT ledger	-	in DLT ledger	– in DLT ledger	in DLT ledger

	– securities for which DFA is issued - from traditional depositories				
Ability to convert into ordinary securities and vice versa	No, direct ban	-	yes	yes	yes
Trade operator	DFA exchange operator	multilateral Trading System (MTF LT)	multilateral Trading System (MTF LT)	EU regulation	
Recording and storage of DFA when trading	in the register of the DFA exchange operator	in the MTF DLT registry or at the central depository	in the MTF DLT registry or at the central depository		

Source: Compiled by the authors.

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