# Chapter 30 Concept and Types of Distance Digital Investment Transactions in the Information Space



Denis E. Matytsin (1)

**Abstract** In this chapter of the monograph, the author develops the concept and types of investment transactions in the information and telecommunications network Internet. Transactions are made and executed, using computer algorithms based on the autonomy of the will of subjects, who are located at a significant mutual distance. In this regard, investment transactions in the information space can be called remote. It is proved that for these transactions, both at the preparatory stage and at the stage of video negotiations, and at the stage of subsequent execution by the parties of the agreements reached, the use of computer programs by the participating entities is mandatory. The programs provide the transmission of data and commands by working out algorithms, the movement inside of which is carried out at the digit 1, not carried out at the digit 0. In this regard, investment transactions in the information space can be called digital. According to the author, a remote digital investment transaction in the information space is a remote interaction on the Internet between an investor and (or) an investment intermediary and (or) an investment recipient regarding the investment of funds in an object of civil rights (property) that has a monetary valuation. This interaction is carried out in order for the investor to acquire the right of temporary ownership of the object and terminate it after a certain period to make a profit. The author proposes a classification of investment transactions in the information space on several grounds.

# 30.1 Introduction

In the legal literature, sufficient attention has always been paid and is currently being paid to the topic of transactions, including the level of doctoral monographic research. At the same time, colleagues in civil studies of the dissertation format have

D. E. Matytsin (⋈)

Reasearcher of Insitute of Law, Volgograd State University, Volgograd, Russia e-mail: Dmatytsin@ya.ru; gimchp@volsu.ru

Department of Civil Law and Procedure, Volga Branch of the International Law Institute, Volzhsky, Russia

280 D. E. Matytsin

not considered remote digital investment transactions in the information space until recently. The remote sign of the studied transactions is a positive achievement of computerization and internetization of investment relations. First of all, the circle of potential private investors is expanding indefinitely, who do not need to come to the Capital from distant places of the vast Russian Federation to meet with a professional investment intermediary and discuss the terms of an agreement on services that will be provided to him.

Participation in investment relations of a professional business entity-intermediary of special legal capacity does not at all reduce the risks and responsibility for the decisions made for the investor. A private investor is not legally an entrepreneur and does not become a de facto entrepreneur even in cooperation with a licensed broker and/or asset manager. The key substantive feature that reveals the definition of investments is the property that has a monetary valuation. Moreover, its dynamics of involvement in the transaction is mandatory in order to increase the cost (profit) in the process of implementing a certain entrepreneurial idea and executing the transaction itself. In addition, the immanent characteristic of investing is risk.

# 30.2 Methodology

The development of the content of this chapter is based on the materialistic worldview and the universal scientific method of historical materialism. General scientific methods of cognition are applied: dialectical, hypothetical-deductive method, generalization, induction and deduction, analysis and synthesis, and empirical description. The research also uses private scientific methods: dogmatic, comparative-legal, hermeneutic, structural–functional, etc.

# 30.3 Results

Justifying the scientific interpretation of remote digital investment transactions is necessary first to identify the distinctive features characteristic of them.

Firstly, in order to carry out the transaction and the occurrence of this legal fact in the legal field, special devices are needed to ensure the contact of interacting entities: computers or smartphones that must necessarily have a cable or wireless connection to the Internet, as well as a connection to an energy source (stationary AC network or battery). In addition, special programs must be installed on some devices that allow you to communicate with a certain website on which the transaction will be carried out and recorded. Such a special program is the browser. It allows you to find, view, read, listen to text, audio, video information on websites on the Internet, and download files (texts, images, audio, and video) from websites to your computer (smartphone). The browser is the main link between the user subject and the global information space.

The most widely used browsers are Google Chrome, Opera Mini, Firefox, Safari, Yandex, and Internet Explorer. The mechanism of working on the Internet is the same for all browsers. 1. The subject-the user opens the browser on his computer (smartphone) and enters the unique name of the website. 2. The browser searches for the server on the Internet by IP address and domain name, which are individual for each website, referring to the Domain Name System (DNS). 3. When the browser has found the IP address, it establishes a connection with it via a special TCP/IP protocol that provides data transmission on the Internet. 4. The browser sends an http://-request to the server. 5. The server processes this request and sends a response to the browser. 6. The browser, in turn, processes the response received from the server, as a result, the subject-user sees on the monitor of his computer a loaded page of a certain website with text and (or) a video image of the counterparty of the investment relationship.

Here, it is necessary to clarify that computer programs function on the basis of processing units of information (called bits) and binary code, in which there are only two digits 1 (one) and 0 (zero). Moreover, 0 means that there is no command, 1 means that there is a command (signal). The computer perceives any number in a binary system (for example, the number 2,000 = 0,000,011,111,010,000). The computer also translates letters into numbers, then turns the number into signals and writes them down, as well as numbers (for example, the letter B-193-11,000,001). Similarly, an image is formed on a computer monitor, on a smartphone. Each dot, depending on the color, has its own code (for example, black dot 0, 0, 0; brown: 153, 102, 51), transmitting colors in three bytes (1 byte is equal to 8 bits); you can encrypt more than 16 million colors. Sound and video information are also translated into bits and bytes (that is, into signals consisting of two digits, 1 and 0). It is in this technically correct sense that the correct term digitization exists. However, the derivative expressions "digitalization", "digital rights", and "digital economy" are nonsense. Since digits (zero and one) in computers, algorithms are only code tools of the programming language currently used.

Secondly, a private investor (an individual) how does an initiative entity look for opportunities to increase the available capital. He must have physical and intellectual abilities reflecting his satisfactory health (capacity) and a high level of training in order to conduct an analysis on the Internet investment segment and identify an acceptable investment option for himself in a certain investment object. This training includes, first of all, sufficient vision and hearing, knowledge, skills, and skills of an individual in handling a modern computer (smartphone). As well as his intellectual abilities in terms of understanding the order and conditions of functioning of the Internet investment segment to choose from a mass of investment proposals a promising investment object for himself.

The Indication of the Bank of Russia dated April 29, 2015, No. 3629-U (here-inafter referred to as the Indication) establishes the procedure for recognizing persons as qualified investors and maintaining a register of persons recognized as qualified investors [1]. If an individual meets one of the five requirements of the Indication, he can be recognized as a qualified investor. For example, requirement 2.1.2: a citizen

has worked for 3 years or more for an organization that made transactions with securities and (or) concluded contracts that are derivative financial instruments. Such a requirement looks very strange if a citizen worked, for example, as a driver or electrician in this organization. For example, requirement 2.1.4: a citizen owns property worth 6 million rubles or more (money in bank accounts, securities, etc.). This is also a very strange requirement. The question immediately arises, why exactly 6 million rubles, and not 8 and not 10 million rubles? Further, suppose a citizen who has been working as an installer on a construction site all his life receives a 10 million inheritance in the form of a bank deposit—this random event automatically makes him a qualified investor.

A natural person receives recognition as a qualified investor upon his application from a broker, asset manager, and a management company of a mutual investment fund, who disclose the Rules of such recognition on their websites on the Internet. It should be clarified that according to paragraph 3.4 of the Indication, the Decision to recognize a person as a qualified investor records in respect of which types of securities, and (or) derivative financial instruments, and (or) types of services the applicant is recognized as a qualified investor. Such a very narrow qualification, in our opinion, rather represents the admission of a private investor to a closed list of investment objects. In 2020, amendments concerning qualified investors were made to Federal Law No. 39-FZ of April 22, 1996, "On the Securities Market" [2]. Currently, we can say that modern Russian society contains a special social stratum of people—qualified investors with a special legal position in investment relations. At the same time, we believe that the qualification of investors is based not on the amount of money in the bank, not on the length of work experience in a certain organization, but on professional education, which is not easy and cannot be quickly obtained in higher educational institutions of the Russian Federation. In addition, in our opinion, investment transactions in the information space are a type of complex and risky entrepreneurial activity, and high qualifications (specialized higher education) are mandatory for this.

Thirdly, it is quite possible for an individual to invest sums of money without intermediaries, for example, when purchasing a package of issuer's bonds under an individual transaction. Similarly, it is also possible, without intermediaries, to acquire a block of shares by one of the shareholders of his business company. However, it should be borne in mind that such cases are isolated; there is no systematic turnover of investment objects here. In accordance with the requirements of the legislation, individuals with the participation of professional intermediaries mainly in electronic form, using electronic signatures, carry out the absolute majority of investment transactions. Intermediaries—legal entities of special legal capacity (having licenses and permits of the Bank of Russia) have been conducting business activities in the field of investments for many years, on organized platforms provided for this purpose exchanges, financial platforms, and investment platforms. A private investor will not be able to independently enter the auction, for example, Moscow exchanges in order to make a deal with any object of investment. On the exchange's website, there is information about the very professional intermediaries admitted by this exchange to participate in the auction, where each individual can implement his plans for investing

in cooperation with such an investment intermediary. Interaction is carried out based on an agreement between the parties, as a rule, with a broker, with an asset manager. Modern information technologies have saved the mentioned parties from the need to organize and hold meetings and negotiations in the office premises at the location of the legal entity. A video call has become completely ordinary, which is used easily and gratuitously even in the simplest e-mail services: @gmail.com; @mail.ru; @yandex.ru. During the pandemic of the new coronavirus infection, during 2020–2021, video services Zoom; Skype; Teams, Discord, etc. have become familiar, the use of which by the widest segments of the population has been brought almost to automatism.

In our opinion, the remote feature of the studied transactions is a positive achievement of computerization and internetization of investment relations. First of all, the circle of potential private investors is expanding indefinitely, who do not need to come to the Capital from distant places of the vast Russian Federation to meet with a professional investment intermediary and discuss the terms of an agreement on services that will be provided to him. On the contrary, a video call on the same occasion can be made even 10 times, while the costs of the parties in both time and material resources will be minimal. Let us clarify here that the participation in investment relations of a professional business entity—an intermediary of special legal capacity does not at all reduce the risks and responsibility for the decisions made for the investor. A private investor is not legally an entrepreneur and does not become a de facto entrepreneur even in cooperation with a licensed broker and/or asset manager.

Fourth, we believe that the remote version of the video communication of a private investor with the "sharks" of the investment sphere has a positive effect on the process of forming his will, which should be completely free and conscious. We agree with Yu. V. Kholodenko, according to whom the expression of will is an external expression of will in the form prescribed or permitted by law, making the will of the subject accessible to the perception of other persons [3, p. 37]. A private investor, being at a distance and negotiating with an investment intermediary in a video way, undoubtedly has a more balanced mental state, because "houses and walls help". He (she) can, without hesitation and false modesty, ask many times more questions of interest to him (her) and put forward favorable conditions for himself than being in the premises of the negotiation office of the organization. Modern Internet technologies provide for recording the process of video communication of the parties. This allows you to create an individual video in which to record that the visible expression of will accurately and completely reflects the inner will of each of the subjects, that the subjects saw it and took note of it. By agreement between them, the specified video can be recognized as proof of the free and conscious expression of the will of the subjects at the conclusion of the transaction.

Fifth, the legal purpose of the transaction in the information space is to ensure that in the process of translating an entrepreneurial idea into reality and bringing the investor's funds into a dynamic state, a certain investment object comes into a dynamic state and, following the results of the transaction, becomes the property of the investor. The recipient of the investment becomes an obligated person to him,

284 D. E. Matytsin

the investor who owns the investment object during the planned period becomes a creditor, a business participant, and a founder of a trust management. Thus, the planned legal result of the transaction is achieved: establishment, possible agreed modification, termination within the stipulated period, or termination of civil rights and obligations agreed before the deadline.

We believe that investing in the information space is the implementation of practical actions in the information and telecommunications network "Internet" to invest capital, namely on the use of objects of civil rights (property) that have a monetary value for profit and (or) increment of value in the process of implementing a certain entrepreneurial idea that has an external expression of the transaction.

The term investment transaction does not exist in Russian legislation. In Federal Law No. 211-FZ of July 20, 2020, "On Financial Transactions using a Financial Platform", as part of the basic concepts of the law, the legislator discloses the definition of "financial transaction". These are transactions specified in the law for the provision of financial services provided for by the rules of the financial platform (banking, insurance, securities market services, transactions with financial instruments) made between financial organizations or issuers and consumers of financial services. The consumer here is an individual who has joined the service agreement, which is provided by the operator of the financial platform for making financial transactions with financial organizations and issuers using the financial platform [4]. Unfortunately, in the specified normative act, the legislator does not fully disclose the key definition. Since the explanation "financial transactions are transactions for the provision of certain services" reflects only the nature of the process during which services are provided to the consumer. Nevertheless, what exactly these actions of the parties are, what their legal purpose and basic conditions are for implementation are not disclosed.

Differentiation by types of remote digital investment transactions in the information space is expedient for several reasons.

Firstly, transactions differ depending on the level of preparation of investors; it is necessary to distinguish transactions of qualified investors and those of unqualified investors. In December 2020, the Bank of Russia recommended professional investment intermediaries to not make transactions with complex and risky financial instruments with retail investors before the introduction of mandatory testing of unqualified investors. According to the alarming monitoring of the Bank of Russia, investment intermediaries offer citizens to invest in various bonds, the amount of payments which depends on specific circumstances (for example, on changes in the price of several underlying assets). They also offer to invest in other complex or structural instruments, as well as combined products, where an investment instrument is purchased simultaneously with the conclusion of a bank deposit agreement. Some intermediaries deliberately mislead individuals by presenting distorted characteristics of these investment objects, hiding the consequences of their acquisition or early sale. Thus, citizens replace savings products with investment objects contrary to their risk profile and the purposes of placing funds.

It is true that the Bank of Russia considers it unacceptable to offer complex investment instruments with high investment risk or difficult conditions for determining the

amount of income on them, the presence of advantage, or containing a foreign element to people who do not have special knowledge and have no investment experience. In the list not recommended for unqualified investors are derivatives and complex bonds, trust management strategies with investments in such objects, trading with advantage, and combined deposits.

Implementing a preventive approach to possible problems in the investment sphere, the Mega-Regulator supplemented Federal Law No. 39-FZ of April 22, 1996, "On the Securities Market" with Article 51.2–1. From April 1, 2022, mandatory testing of an individual—an unqualified investor will be introduced in accordance with the procedure established by the basic standard for protecting the rights and interests of investors. We regard the decision on testing as an event "for show", which in the process of a formal and ostentatious educational program does not at all ensure the appearance of knowledge about the investment sphere and the qualifications of an investor in an individual. In paragraph 4 of Article 51.2 of Federal Law No. 39-FZ of April 22, 1996, "On the Securities Market", the legislator discloses the characteristics of a qualified investor—this is an individual who meets one of the five requirements specified in the law. It should be noted with satisfaction that in 2019, in particular, requirement five was changed; now a citizen is recognized as a qualified investor by the level of his education: namely has an education or qualification in the field of financial markets established by the regulations of the Bank of Russia, confirmed by a certificate of qualification.

Secondly, transactions differ depending on the counterparty; it is necessary to distinguish transactions with commercial banks, transactions with investment intermediaries—non-financial organizations, and transactions with recipients of investments. At the beginning of 2021, there were 464 professional participants in the financial market of the Russian Federation. The number of investors in brokerage services in 2020 increased 2.3 times compared to 2019, to 9.9 million people (8.4 million people—commercial banks; 1.5 million people—non-financial organizations). In this increase, credit institutions added 85% of new investors (in 2019—73%). It is significant that the majority (about 70%) of clients in brokerage services are active users of mobile applications younger than 40 years [5]. At the same time, the leading operators, for example, on the Moscow Exchange in terms of the volume of client transactions are investment intermediaries—non-financial organizations: LLC "Brokerage company REGION"—more than 4,144 trillion rubles; Financial group "BrokerCreditService"—more than 2.174 trillion rubles; Renaissance Broker LLC—more than 1.125 trillion rubles, etc. VTB Bank is in the 4th place, SBER is in the 8th place, and VEB.RF is in the 10th place [6].

In the conditions of total immersion of a modern person in the information space, both through a computer monitor and through a mobile smartphone, it is natural to appeal to him as a private investor, a variety of persons—initiators of development projects. For example, on the website of Maxim Arkadyevich Seryakov's sole proprietor, we see a sentence: "Get 22–30% per annum of fixed passive income with monthly payments. Invest from 500,000 rubles in profitable businesses operating for 3 years with an annual revenue of 15–500 million rubles, verified by Seryakov/Investments. It should be noted that without a license (an individual

entrepreneur and cannot have one), the said individual entrepreneur acts de facto as an investment intermediary. Consider his message on the website: "investors invest money directly in businesses, and companies pay us for completed transactions—either a share in the business or a commission from completed transactions. Today we have 7 companies in our portfolio, including a network of 47 women's clothing stores with an annual turnover of more than 500 million rubles and a 9-year history; clothing and beverage companies; dental network; commercial real estate with its own assets of 200 million rubles; vegetable supplier in "Vkusville" and "Magnit". Every month we receive more than 200 applications for financing from businesses and in total there are more than 6000 projects in our "funnel" looking for investments" [7]. In our opinion, such proposals may well be relevant, reasonable, and profitable, but investing, as noted above, is a type of difficult and risky business activity. Moreover, suggestions like "make a money transfer to us in debt, we will return everything to you on time and with interest" without deep professional study to make a positive decision are unacceptable.

Thirdly, transactions differ depending on the object of investment. We distinguish two groups of objects in this regard. Group I delimits the real objects of the material world. Investment recipient presenting one or another legally justified instrument for the investor put up received money in producing material goods, performing works, providing services, granting property rights. We include 13 such investment objects in the composition of the most common and most attracting the attention of private investors. Government securities of the Russian Federation (subjects of the Russian Federation); municipal securities; shares and bonds of Russian issuers; government securities of foreign states; shares and bonds of foreign issuers; Russian depositary receipts, as well as foreign depositary receipts for securities; investment units of mutual investment funds, as well as units (shares) of foreign investment funds; mortgage certificates of participation. For example, in March 2021, MTS PJSC fully placed bonds of the 001P-18 series with a 3-year maturity of 4.5 billion rubles. As part of the state contract, MTS must connect 4995 socially significant objects to the Internet—the cost budget is about 4.9 billion rubles. MTS will equip communication centers in settlements and provide the opportunity to connect everyone to them. According to MTS PJSC, the volume of the bond issue will not exceed the project cost budget. All funds from the bond issue will be used to finance the costs of connecting schools, institutions of secondary vocational education, medical and obstetric centers, state and local government bodies, military enlistment offices, election commissions, police stations, and fire stations in the Russian Federation to the Internet [8].

Group II distinguishes between electronic-virtual and crypto-objects [9]. The recipient of the investment, providing one or another legally sound instrument to the investor, invests the money received in certain ideas (contracts concluded at organized auctions that are derivative financial instruments), in cryptographic records—monetary surrogates (computer fiduciary "money") [10]. For example, the Moscow Exchange has permanent services for investing in contracts that provide for profit in the event of a change in the value of the so-called basic asset. The investor can choose to invest money in several ideas, for example: (1) the Moscow Exchange Index will increase/decrease by some amount; (2) the Blue-Chip Index will increase/decrease/

(3) the degree of volatility of the Russian market will increase/decrease; (4) the value of ordinary shares of PJSC Aeroflot will increase/decrease; (5) the value of ordinary shares of PJSC MTS will increase/decrease; (6) the value of "fifteen-year" federal loan bonds will increase/decrease; (7) the Euro/US dollar exchange rate will increase/decrease; (8) the credit MosPrime interest rate; (9) the price of Brent crude oil will increase/decrease; (10) the price of natural gas will increase/decrease; (11) the price of grade 4 wheat will increase/decrease, etc. [8].

### 30.4 Conclusion

A distance digital investment transaction in the information space is an intellectual and volitional behavioral act of capable, legally capable subjects (investor, investment intermediary, recipient of investments), forming a legal fact in their mutual contact and expression of will in the information and telecommunication network "Internet" by means of special software and hardware, expressed in an electronic form regulated by law. The legal purpose of their contact and expression of will—the receipt of the object of investment into the investor's property, funds to the recipient of the investment—is achieved and forms legal consequences: establishment, possible agreed change, within the stipulated time or termination of civil rights and obligations agreed before the deadline The essence, the internal content of a remote digital investment transaction, is a certain entrepreneurial idea, without which investing in the information space is impossible.

The types of remote digital investment transactions in the information space should be differentiated into three types: First, depending on the level of professional training of investors (qualified and unskilled investors); second, depending on the counterparty (commercial banks, investment intermediaries—non-financial organizations, direct recipients of investments); third, depending on the object of investment (real objects of the material world, electronic-virtual and crypto-objects). This typology should be taken as a basis for the development of similar subject blocks of an educational program for the training of private investors. The final mandatory certification of a citizen with a positive result should be completed by assigning the OKVED-2 code 64.99.1 (investments in stocks, bonds, promissory notes, securities of joint-stock funds and mutual investment funds, etc.), as well as granting the right of state registration in the status of an individual entrepreneur admitted to investing (with the issuance of an electronic document stored in his personal account on the website of GOSUSLUGI). It is necessary to make additions to the relevant legislation.

**Acknowledgements** The work was supported by Russian Science Foundation (project No. 20-18-00314).

### References

1. "On the recognition of persons as qualified investors and the Procedure for maintaining the Register of persons recognized as qualified investors": Indication of the Bank of Russia. 29.04.2015 No. 3629-U. Bulletin of the Bank of Russia 15.06.2015. No. 51 (2015)

- "On the Securities Market": Federal Law No.39-FZ of 22.04.1996. Rossiyskaya Gazeta. 25.04.1996. No. 79 (1996)
- 3. Kholodenko, Yu.V.: Invalidity of transactions with defects of will: problems of legal regulation Lambert Academic Publishing Saarbrücken 277 (2011)
- "On Making Financial Transactions using a Financial Platform": Federal Law No.211-FZ of 20.07.2020. Rossiyskaya Gazeta. 24.07.2020. No. 162 (2020)
- Overview of key indicators of professional participants of the securities market. Information and analytical material, 4 (2020). http://www.cbr.ru/collection/collection/file/32068/review\_ secur\_20.pdf
- The official website of Moscow Stock Exchange: Customer statistics for 2021 (2021). https:// www.moex.com/s719
- 7. Individual entrepreneur Maxim Arkadyevich Seryakov (2021). https://www.seryakovinvest.ru/
- 8. The official website of Moscow Stock Exchange. Information on futures contracts and options (2021). https://www.moex.com/ru/derivatives/select.aspx
- Inshakova, A.O., Goncharov, A.I., Ershova, I.V.: Digital blockchain registration of legally significant stages of complex good's export-import supplies by business entities of the EAEU and BRICS jurisdictions. In: Inshakova A., Inshakova E. (eds.) Competitive Russia: Foresight Model of Economic and Legal Development in the Digital Age. CRFMELD 2019. Lecture Notes in Networks and Systems, vol. 110, pp. 328–336. Springer, Cham (2020). https://doi. org/10.1007/978-3-030-45913-0 37
- Inshakova, A.O., Goncharov, A.I., Salikov, D.A.: Electronic-digital smart contracts: modernization of legal tools for foreign economic activity. In: Lecture Notes in Networks and Systems, vol. 91, pp. 3–13 (2020)