

LEGAL REGULATION OF THE GENESIS OF DIGITAL IDENTITY**Oleg A. Stepanov, Mikhail M. Stepanov***Institute of Legislation and Comparative Law under the Government of the Russian Federation, Moscow, Russia***Article info**

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The article deals with a new phenomenon for the legal science – the institute of legal regulation of the genesis of digital identity.

The subject of the research is the relations that emerge in the process of such regulation.

The aim of the research is to analyze the legal regulation of the institute of digital identity at the international, regional and national levels, including in the Russian Federation.

The methodological basis of the research is the logical and systematic methods of scientific knowledge, as well as methods of analysis and synthesis, formal-dogmatic and comparative-legal methods.

International, foreign and domestic experience in the genesis of digital identity is studied.

The features of legal regulation of each of the elements of digital identity – digital profile, digital image, digital footprint – are analyzed. At the same time, the legal regulation of the relevant relations is considered in their dynamics. As a result of the study, conclusions were made about the peculiarities of international legal regulation of relations related to the genesis of a legal identity, the legal regulation of these relations in the European Union and China. It is noted that international legal regulation of relations related to the genesis of legal personality is carried out, as a rule, only in connection with the need to protect human rights and freedoms in the digital age, including in virtual space; in the European Union the legal regulation is mainly subject to the digital profile of the person, based on his personal data; at the level of individual states the most holistic and systemic regulation of relations related to digital identity is carried out in the People's Republic of China on the Special attention is given to the problems of legal regulation of the genesis of digital identity in the Russian Federation. It is noted that the problems of legal regulation of the genesis of digital identity are becoming particularly relevant at the present time. Its theoretical comprehension is a prerequisite for improving current legislation and law enforcement practice in the Russian Federation.

It is pointed out that there are significant gaps in the legal regulation of relations related to the digital footprint in Russia, the most regulated relations in the area of digital profile and digital image; further lack of legal regulation of the collection and processing of information that constitutes the content of the digital identity footprint in Russia will lead to a massive violation of individual rights and freedoms.

The study also found that the international legal regulation of relations related to the genesis of the legal personality is usually carried out only in connection with the need to protect human rights and freedoms in the digital age, including in virtual space, and in the European Union the legal regulation is mainly subject to the digital profile of the person, which is based on his personal data.

1. Introduction

One of the results of the development of technology in the XXI century was the digitization of the world around us by creating various digital copies in the virtual world. At the same time, not only digital twins of physical objects and processes, which are their digital profiles (models) [1, p. 56; 2], but also the digital personality, which is characterized by a set of encoded information about a particular person (personal data, individual needs, activity results, relations, biography, personal characteristics and habits), which has the properties of transferability in virtual space and processing by artificial intelligence [3, p. 51], become widespread. Other characteristics of this concept are also noted [4, p. 64; 5, p. 88; 6, p. 230].

The structure of a digital personality includes three main elements: digital profile, digital image and digital trace. The digital profile is the most important part of the digital identity, which is a set of personal and other related data of an individual in the Internet space, contained in the information bases of subjects authorized to process them. Given this, the infrastructure of the digital identity is even proposed to be classified as critical information infrastructure, which must meet all the requirements of information security [7, p. 6]. A digital image is a construct, independently and creatively created by an individual in the virtual world and containing information about his or her own image, image, biography, identity, self-presentation, etc. (accounts and profiles in social networks, messengers, computer games, etc.). The third and most significant element of the structure of the digital identity is understood in the narrow sense of the digital footprint - the totality of information left by the subject in the virtual space when he performs any actions in the Internet environment¹.

The genesis of the digital person entailed the need for legal regulation of related relations. This

regulation is carried out both at the international and national levels. At the interstate level, acts regulating only certain aspects of relations related to digital identity are adopted, as a rule, concerning its rights and freedoms. At the domestic level, legal regulation is much more extensive, but there is no systematic legal regulation even here (probably with the exception of the People's Republic of China, whose experience will be discussed below). Normative legal acts are adopted situationally and haphazardly, regulating the most important and currently relevant social relations, implementing fragmentary legal regulation. At the same time each state goes its own way, solving tasks that are relevant to it. Features of national regulation of the Internet are determined by the culture of society in the broadest sense of the word [8].

Currently in legal science there are no special studies devoted to the problems of legal regulation of the institute of the digital person. Among the scientific works touching on this issue is the article by A.K. Zharova "Legal provision of digital profiling of human activity" [9], which deals with the problem of legal provision of requirements to inform the subject of personal data during his profiling. N.A. Zhiltsov and O.I. Cherdakov investigated the effectiveness of using legal tools in cyberspace [10]. The work of N.A. Zhiltsov, O.I. Cherdakov and S.B. Kulikov studied the legislative regulation of relations in cyberspace [11]. V.B. Naumov investigated information and legal problems of digital profile formation in the context of identification processes [12].

In light of the above, the problem of legal regulation of the genesis of digital identity currently acquires particular relevance. Its theoretical comprehension is a prerequisite for improving the current legislation and law enforcement practice in the Russian Federation.

2. International Legal Regulation of Relationships Related to Digital Identity

Among the international legal acts regulating the genesis of the digital person, we must first of all refer to the UN Human Rights Council resolution A/HRC/RES/20/8, dated June 16, 2012, which states that the same rights that one has offline should also

¹ In a broad sense, the digital footprint refers to any action of an individual in a virtual space that has made changes to it. From this point of view, the digital footprint includes, among other things, the digital identity as a whole, as it represents the encoded information that resides in the Internet environment.

be protected online². Thus, it is enshrined that the digital person in virtual space has at least the same rights as the person in the real world.

UN General Assembly Resolution A/RES/68/167 of 18 December 2013 is devoted to the right to privacy in the digital age. It notes that the rapid pace of technological development allows people in all regions of the world to use new information and communication technologies and at the same time increases the ability of governments, companies and individuals to monitor, intercept and collect information. This can lead to the violation or infringement of human rights, especially the right to privacy³.

UN General Assembly Resolution A/RES/69/166 of 18 December 2014 stated that the aggregation of certain types of metadata may reveal personal information and data relating to human behavior, social relationships, individual preferences and identity; that digital surveillance must be conducted in compliance with international human rights legal obligations and under an appropriate legal framework; that States must ensure compliance with international legal obligations in the field of human rights; and that States must ensure compliance with international legal obligations in the field of surveillance⁴.

The result of the adoption of these Resolutions was not only the protection of the rights of the real person, but also its digital counterpart, as new possibilities of obtaining information about it, new ways of violating the rights of the individual are associated primarily with the development of technologies for obtaining data in the virtual environment.

3. Regulation of relations related to digital identity at the regional level

In addition to international normative legal acts, relations related to digital identity are also regulated by regional legislation. As an example, the relevant acts of the European Union may be mentioned. The most important of these is the "Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data", which came into force on October 1, 1985 (in the Russian Federation it was ratified in 2005⁵)⁶. The purpose of the Convention was to ensure respect for the rights and fundamental freedoms of every natural person, in particular his right to privacy regarding the processing of personal data concerning him. At the same time, personal data under Article 2 of the Convention was understood as any information about an identified or identifiable natural person.

The significance of the Convention is that it established guarantees of the rights of the personal data subject. For example, it enshrined that any person must be able to know the existence of an automated personal data file; to obtain confirmation as to whether personal data concerning him or her is stored in the automated data file, and to obtain such data in an intelligible form; to seek correction or destruction of such data; and to pursue remedies if necessary.

In October 2018 in Strasbourg the "Protocol amending the Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data" (CETS N 223)⁷ was signed, to which

² UN Human Rights Council Resolution A/HRC/RES/20/8 of 16.07.2012 "Promotion, protection and realization of human rights on the Internet". - URL: <https://undocs.org/ru/A/HRC/RES/20/8> (accessed 14.09.2021).

³ UN General Assembly Resolution of 18.12.2013 A/RES/68/167 "The right to privacy in the digital age". - URL: <https://undocs.org/ru/A/RES/68/167> (accessed 14.09.2021).

⁴ UN General Assembly Resolution of 18.12.2014 A/RES/69/166 "The right to privacy in the digital age". - URL: <https://undocs.org/ru/A/RES/69/166> (accessed 14.09.2021).

⁵ Federal Law dated December 19, 2005 № 160-FZ "On ratification of the Council of Europe Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data" // *Sobranie zakonodatelstva RF*. 2005. № 52 (1 ч.). Art. 5573.

⁶ Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data of 28.01.1981 // *Collection of Laws of the Russian Federation*. 2014. № 5. Art. 419.

⁷ Protocol amending the Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data of 10.10.2018 // *Bulletin of the European Court of Human Rights*. Russian edition. 2018. № 12.

Russia also joined⁸. The aim of the Protocol was to adapt the provisions of the Convention to new challenges in the protection of individuals with regard to the processing of personal data, taking into account the diversification, intensification and globalization of data processing and personal data flows. At the same time, the Protocol stressed that it recognized the primary role of the Convention in the protection of individuals with regard to automatic processing of personal data and, more generally, in the protection of human rights and fundamental freedoms.

The Convention and its Protocol have played a huge role in formalizing the legal status of the digital person. Their content became the legal regulation of the relations connected with the presence and processing of personal data in the networked space. Thus, the most important element of the digital identity - the digital profile - has been legally regulated.

Another significant legal act in the regulation of relations related to the digital person (digital profile) is the Regulation No. 2016/679 of the European Parliament and of the Council of the European Union on the protection of individuals with regard to the processing of personal data and on the free movement of such data and the repeal of Directive 95/46/EC (General Data Protection Regulation (GDPR)), adopted in Brussels on 27 April 2016⁹.

The Regulation pointed out that due to the rapid development of technology and globalization, new challenges related to the protection of personal data have emerged. The scope of personal data collection and exchange has increased significantly.

Technology allows private companies and public authorities to use personal data on an unprecedented scale as part of their activities. At the same time, individuals have increasingly begun to make personal information available.

The most important feature of the Regulation was the extraterritorial principle of its application (Article 3). Regardless of who processes personal data and where, if it has to do with residents of the European Union, these activities are subject to the GDPR. This includes the processing of data related to monitoring the behavioral activities of European Union citizens, including research into the online activities of individuals. This is because this information, after applying the methods of personal data processing, constitutes a profile of the subject for making related decisions or analyzing or predicting their personal preferences, behaviors and attitudes (paragraphs 22-24 of the Preamble).

According to the Regulation, personal data means any information related to an identified or identifiable natural person. An identifiable person is a person who can be identified, directly or indirectly, through such identifiers as name, identification number, location information, online identifier or through one or more characteristics specific to the physical, psychological, genetic, mental, economic, cultural or social identity of the said natural person.

The innovation of the regulation was the introduction of the notion of "profile formation". This refers to any form of automated processing of personal data for the purpose of evaluating certain individual attributes of a natural person, in particular those related to the production performance of that person, the economic situation, health, individual preferences, interests, reliability, behavior, location or movement.

Legality has become an essential principle of personal data processing, one of the main elements of which is the subject's consent to the processing of his/her personal data. According to Article 7 of the Regulation, the person processing the subject's personal data must be able to prove that the subject has consented to the procedure. The personal data subject has the right to withdraw his or her consent. In addition, in accordance with Article 16 of the Regulation, the personal data subject has the right to request the modification and completion of the

⁸ Order of the President of the Russian Federation of 10.10.2018 № 294-рп "On signing the Protocol amending the Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data" // Collection of Laws of the Russian Federation. 2018. no. 42 (part II). Art. 6455.

⁹ Regulation of the European Parliament and of the Council of the European Union of 27.04.2016 No. 2016/679 on the protection of individuals with regard to the processing of personal data and on the free movement of such data and the repeal of Directive 95/46/EC (General Regulation on personal data protection) // Official Journal of the European Union. 2016. № L 119. P. 1.

inaccurate personal data concerning him/her. The personal data subject also has the right to have them deleted ("right to be forgotten").

Section 2 of the Regulation (Articles 13-15) deals with the obligations and rights of the persons processing the personal data of the data subject. According to Article 15 of the Regulation, the data subject has the right to request confirmation of whether his/her personal data is being processed and, if so, access to it and to additional information regarding the processing and use of the data. Another important right of the data subject is formulated in Article 22 of the Regulation, which states that he/she must have the right not to be subjected to a decision based solely on automatic processing, including profiling, which produces legal effects on him/her or which significantly affects him/her. Although there are a number of exceptions to this rule, the importance of this right at a time when artificial intelligence technologies are being actively introduced into all areas of public life cannot be overemphasized.

The Regulation has a separate section on personal data security. Among other things, it states that the persons concerned must implement pseudonymization (the processing of personal data in such a way that the personal data can no longer be attributed to a particular data subject without the use of additional information) and cryptographic protection of personal data, to guarantee at all times the confidentiality, integrity, availability and stability of systems and services related to their processing (Article 32 of the Regulation).

It should be noted that in recent years several legal acts in this area have been adopted in the territory of the European Union. They provide a fairly complete regulation of the relevant relations, and these relations refer to all elements of the digital identity - the digital profile, the digital image and the digital footprint. At the same time, more attention in the European Union is paid to the legal regulation and protection of the digital profile, personal and related data.

4. Regulation of relations related to digital identity in the People's Republic of China

At the national level, the most comprehensive

regulation of relations related to the genesis of digital identity is carried out in the People's Republic of China. This is due to the fact that on January 1, 2021 the national social credit system should have been fully operational throughout the PRC (its introduction has been postponed due to the COVID-19 pandemic and technical difficulties in implementing this project). The social credit system is a kind of indicator of the trustworthiness of all citizens and foreigners residing in the PRC, as well as legal entities¹⁰. The practical implementation of this project began on June 14, 2014, when the State Council of the PRC adopted the "Social Credit System Construction Plan (2014-2020)"¹¹. As a follow-up to the Plan, regulations were adopted at the local level. Examples of such lawmaking include the activities of regional lawmaking bodies such as the Hubei Provincial People's Congress, Hebei Provincial People's Congress, and Shanghai Municipal People's Congress[13].

The system of social credit is based on the collection and processing of information on individuals and legal entities in China¹². This activity is carried out both at the level of the Government of the People's Republic of China, which established the All-China Unified Credit Information Platform, and at the level of individual regions, which formed their own information platforms.

A personal identification code has been assigned to each individual for easy collection of information on subjects. According to the Personal Identification Law passed in 2003, its number is a lifetime identifier of a Chinese citizen. Identification code is required to receive government services, use electronic payment

¹⁰ In this case, the term "credit" refers not only to economic relations, but also to the social sphere, and is understood as the ability to trust the subject based on the availability of a variety of information characterizing it from different sides.

¹¹ Notification of the State Council of the People's Republic of China "Social Credit System Creation Program (2014-2020)" dated 14.06.2014. - URL: http://www.gov.cn/zhengce/content/2014-06/27/content_8913.htm (access date: 14.09.2021).

¹² Law of the People's Republic of China "On Identity Cards" of 28.06.2003. - URL: https://chinalaw.center/administrative_law/china_resident_identity_card_law_revised_2011_russian/ (access date: 14.09.2021).

systems, make purchases at online stores, issue travel documents, purchase SIM cards, register as Internet users, etc. [14; 15]. Nowadays a 18-digit identification code is used. It is used to collect data on individuals and form their dossier, which is then stored in the relevant credit platform [16, p. 151].

An important role in the regulation of relations in virtual space is played by the law of the PRC "On Cybersecurity", which came into force on June 1, 2017¹³. The law was adopted to protect national sovereignty in cyberspace and ensure the security of personal data of Internet users. It proclaimed the protection of personal information online as a fundamental right of Chinese citizens. It states that individuals' personal information is protected by law, and no one can abuse or misuse the right to use this information in online space. According to the law, online service providers must obtain the user's consent when collecting personal information; online service providers are prohibited from collecting personal information that is not related to those services; the user has the right to request that information about him or her be deleted, and if it is incorrect, to correct it. At the same time as the protection of personal data was strengthened, the anonymity of users was eliminated. According to the Law, in order to access the network, register domain names, provide information, exchange instant messages and receive other services, users must provide true identification information to the network operator, otherwise they will be denied the service. The law also facilitated state control over the activities of Internet companies and access to their data by public authorities. It obliged to store certain information, including personal data, in processing centers in China [17].

In the PRC there is legal regulation of relations related to all elements of the digital identity: the digital profile, the digital image and the digital footprint. However, the approach to this regulation

is fundamentally different from that adopted in the European Union and recommended by international regulations. Thus, the digital profile, which is based on personal data, is public in China and lacks the privacy that exists in democratic states. One of the specific elements of the Chinese version of the legal regulation of the digital profile was the decision to create a special information platform Credit China. On this platform, red and black lists of individuals are publicly available, and bans and restrictions on blacklisted individuals are reported. The "red" lists include individuals who are examples for the rest of China's citizens, and the "black" lists include individuals who have lost "credibility." [18]. Thus, the personal data of Chinese citizens are open to all; they, as well as the restrictions imposed on a particular person, can be found on the Internet. Similar lists exist locally, and they are also accessible online.

The most important feature of the legal regulation of the genesis of digital identity in the PRC has been the regulation of digital identity. Given the lack of anonymity on the Internet, the content of the digital image is monitored and evaluated by the social credit system. Data on the content of the social network profile, preference in the choice of online games, behavior and participation in communication in virtual space, etc. characterize the personality and influence the social rating of the subject. Therefore, already in the near future in the formation of the digital image by Chinese citizens its main features - individuality, creativity, freedom of self-expression - will disappear, and its content will be state-approved information.

The legal regulation of the digital footprint, as an element of the digital identity, in China seems to be the most complete in the world. Under current legislation, the country not only tracks any activity on the Internet, but also has the most developed video surveillance and citizen tracking systems on the planet using SMART gadgets.

In the PRC, the "Sharp Eyes" video surveillance project was planned to be implemented by 2020. Its task is to identify any Chinese citizen by his photo on the ID card within three seconds with an accuracy of about 90% [19]. For this purpose, 626 million video surveillance cameras were supposed to be installed in the PRC by 2020 (by 2017 there were 176 million)

¹³ Закон КНР «О кибербезопасности» от 07.11.2016. - URL: <https://baike.baidu.com/item/%E4%B8%AD%E5%8D%8E%E4%BA%BA%E6%B0%91%E5%85%B1%E5%92%8C%E5%9B%BD%E7%BD%91%E7%BB%9C%E5%AE%89%E5%85%A8%E6%B3%95/16843044?fr=aladdin> (дата обращения: 14.09.2021).

[20]. The predecessor of "Sharp Eyes" was the "China Skynet" program, which was completed in 2017. The content of this program was the creation of the world's largest video surveillance network with more than 20 million cameras connected into a single network, the information from which was processed by artificial intelligence [21].

As for the use of data from SMART gadgets, the main and most informative of them was the smartphone. In China, sold smartphones are equipped with mandatory applications that track a person's movements, purchases, orders, payments, health status, contacts, activity in social networks and the Internet, and so on. In this case, each smartphone is tied to its owner, whose identity is identified. To do this in 2010, all cell phone users had to register with their real name [22]. And in early December 2019, China enacted a law requiring its residents to undergo facial scanning when purchasing a SIM card [23]. Face scanning has also become mandatory when connecting new mobile services [24]. Thus, in the PRC each owner of a smartphone or SIM-card is identified and the information transmitted to a remote server about their user is "tied" to a specific person. Information about their owners is collected not only by smartphones, but also by other smart gadgets, such as smart watches (smartwatches) and modern televisions with Internet access. In this regard, it is noted that in today's world, any smart device in the home, office, on the street can be a potential window into a person's private life [25, p. 63]. Thus, in accordance with the legislation of the PRC almost any digital trace left by its citizen is recorded, stored and processed with the help of artificial intelligence technologies on the All-China Unified and Regional Credit Information Platforms.

5. Regulation of Relationships Related to Digital Identity in the Russian Federation

In recent years, Russia has also become active in the legal regulation of relations related to digital identity. As early as the end of 2019, more than 60 legal and bylaws, strategies and doctrines regulating the digital economy and the Internet communications environment in one way or another were adopted [10, p. 31]. Since then, their

number has increased significantly. Among other things, these acts regulate the genesis of digital identity.

Relations related to the digital profile in Russia are currently regulated primarily by Federal Law No. 152-FZ of July 27, 2006 "On Personal Data"¹⁴. Under this law, personal data refers to any information relating to a directly or indirectly identified or identifiable individual (the subject of personal data) (Article 3). This broad approach to the understanding of personal data allows for virtually any information on the Web to be associated with an individual and therefore subject it to the regime of personal data. Court practice confirms this. For example, as personal data (information about the subscriber) were recognized as search queries of the subscriber; Internet addresses of Web pages visited by the subscriber; subjects of information posted on Internet resources used by the subscriber; the IP address of the subscriber [26, p. 37].

Another important legislative act regulating relations in the field of digital personality profile in the Russian Federation was the Federal Law No. 168-FZ of June 08, 2020 "On the Unified Federal Information Register Containing Information on the Population of the Russian Federation"¹⁵. This law established the organizational and legal basis for the formation and maintenance of the federal register of information on the population of the Russian Federation, which is an aggregate of information formed on the basis of data on Russian citizens, foreign citizens and stateless persons, which is contained in the state information systems of public authorities of the Russian Federation and authorities managing state non-budgetary funds. The main purpose of creating the Register is to form a system of record-keeping of information on the population of the Russian Federation, which ensures its relevance and reliability. Article 7 of the Federal Law gives a closed list of the contents of the Register. It includes a wide range of information about an

¹⁴ Federal Law dated 27.07.2006 № 152-FZ "On Personal Data" // Collection of Laws of the Russian Federation. 2006. № 31 (1 ч.). Art. 3451.

¹⁵ Federal Law of 08.06.2020 № 168-FZ "On the unified federal information register containing data on the population of the Russian Federation" // Collection of Laws of the Russian Federation. 2020. № 24. Art. 3742.

individual and his identifiers. In accordance with the Federal Law, the Register is created and maintained by the Federal Tax Service. Until December 31, 2025, the Federal Law establishes a transitional period during which the Register will be formed and tested.

Another legislative act regulating relations related to the digital profile of a subject in Russia is Federal Law No. 264-FZ of July 13, 2015 "On Amendments to the Federal Law 'On Information, Information Technologies and Information Protection' and Articles 29 and 402 of the Civil Procedure Code of the Russian Federation"¹⁶. This law regulated relations related to a person's right to be forgotten. In accordance with it, the operator of a search engine at the request of the applicant is obliged, in certain cases determined by law, to stop giving out a link which allows access to information about him.

It should be noted that the term "digital profile" has become actively used in recent years in the legislation of the Russian Federation. So, it is contained in the Decree of the Government of the Russian Federation of June 03, 2019 № 710 "On conducting an experiment to improve the quality and connectivity of data contained in state information resources"¹⁷, which is devoted to the formation and testing of the infrastructure of the digital profile. The use of the digital profile is indicated in the "Roadmap of the Bank of Russia for the development of financing of small and medium-sized enterprises" (annex to the order of the Bank of Russia of December 28, 2020 № OD-2212), in the "Roadmap for the development of "end-to-end" digital technology "New Production Technologies", as well as in a number of other documents. At the same time, the current normative legal acts of the Russian Federation lack a definition of the concept

of "digital profile", and legal science has not developed a unified opinion on this issue [27, p. 29; 28; 12, p. 138].

At present, the legal regulation of relations connected with the digital image is carried out in the Russian Federation by a number of legislative acts regulating its individual aspects. The most important of them is Federal Law No. 149-FZ dated July 27, 2006 "On Information, Information Technologies and Information Protection".¹⁸ It establishes the most significant rules related to the content of a subject's profile in social networks, messengers, computer games, etc., as well as his communication with other users on the Internet. Over the past few years, the

Law has been supplemented by a number of new articles, and significant changes have been made to the existing ones. For example, Article 10.6 of the Law, with which it was supplemented at the end of 2020, fixes the peculiarities of dissemination of information in social networks¹⁹. Article 15.3 of the Law defines the types of information, the posting of which leads to the blocking of the corresponding information resource, such as a page in a social network.

The latest amendments to this article were made in the spring of 2019 in connection with the adoption of the so-called fake news ban laws²⁰. Article 15.1-1 of the Law, introduced as part of the "insult of

¹⁸ Federal Law of 27.07.2006 № 149-FZ "On Information, Information Technologies and Information Protection" // Collection of Laws of the Russian Federation. 2006. No 31 (Part I). Art. 3448.

Federal law of 09.03.2021 № 43-FZ "On amendments to certain legislative acts of the Russian Federation" // Sobranie zakonodatelstva RF. 2021. № 11. Art. 1708; Federal Law as of 01.07.2021 № 260-FZ "On Amending the Federal Law on Information, Information Technology and Information Protection" // Sobranie zakonodatelstva RF. 2021. No. 27 (Part I). Art. 5088.

¹⁹ Federal Law dated December 30, 2020 № 530-FZ "On Amending the Federal Law "On Information, Information Technology and Information Protection" // Collection of Laws of the Russian Federation. 2021. No. 1 (Part I). Art. 69.

²⁰ Federal Law of 18.03.2019 № 31-FZ "On Amendments to Article 15.3 of the Federal Law "On Information, Information Technology and Information Protection" // Collection of Laws of the Russian Federation. 2019. № 12. Art. 1221.

¹⁶ Federal Law of 13.07.2015 № 264-FZ "On Amendments to the Federal Law "On Information, Information Technologies and Information Protection" and Articles 29 and 402 of the Civil Procedure Code of the Russian Federation" // Collection of Laws of the Russian Federation. 2015. № 29 (part I). Art. 4390.

¹⁷ Decree of the Government of the Russian Federation of 03.06.2019 № 710 "On conducting an experiment to improve the quality and connectivity of data contained in state information resources" // Collection of Legislation of the Russian Federation. 2019. № 23. Art. 2963.

authority law," enshrines the procedure for restricting access to information that expresses in an indecent form, which offends human dignity and public morals, a clear disrespect for society, the state, the official state symbols of the Russian Federation, the Constitution of the Russian Federation or the bodies that exercise state power in the Russian Federation²¹. Other amendments were adopted as well²².

The legal regulation of relations related to the digital footprint in the Russian Federation is indirectly carried out by the legislation discussed above. However, there are a number of normative legal acts directly regulating these relations. Thus, Federal Law No. 374-FZ "On Amendments to the Federal Law "On Combating Terrorism" and certain legislative acts of the Russian Federation in terms of establishing additional measures to counter terrorism and ensure public safety" was adopted on July 06, 2016²³. Pursuant to article 13 of the Act, which amended Federal Act No. 126-FZ of 7 July 2003 on Telecommunications²⁴, telecommunications service providers were made responsible for implementing the following In accordance with article 13 of the Act amending Federal Act No. 126-FZ of 7 July 2003 on communications, operators were obliged to store information on the receipt, transmission, delivery and/or processing of voice communications, text messages, images, sounds, video or other

communications of communication service users in the territory of the Russian Federation for a period of three years and text messages, voice communications, images, sounds, video or other communications of communication service users for up to six months. Pursuant to Article 15 of the said Federal Law amending Federal Law No. 149-FZ dated July 27, 2006 "On Information, Information Technologies and Information Security", the organizers of information distribution in the Internet network became obliged to store in the Russian Federation the information on the facts of receipt, transmission, delivery and (or) processing of voice information, written text, images, sounds, video or other electronic messages of the network users and the information about these users for one year; and the information about the users of the network - for up to six months.

Thus, the sources of digital trace related to the subject's communications - e-mails, messages in messengers, calls, sms-messages, etc., as well as information about them became preserved in the relevant databases of telecommunications operators and organizers of information distribution in the Internet for a long time. In this regard, it should be noted that the collection of communication metadata can provide even a more complete picture of a person's behavior, social relationships, personal preferences and personality in general than what could be learned from the content of private communication itself.

Currently, Russia does not legally regulate another source of the digital footprint - the subject's activity on the Internet and social networks (opened applications and files, purchases, requests, likes, etc.). Although this data can provide a significant amount of information about the person [29]. There is also no regulation for the collection of metadata about a person's online activities - information about his location, the content he views, the dynamics of keystrokes, typing speed, finger movements on the screen, etc. Processing of this information by means of artificial intelligence allows to reach a new level of knowledge about the subject, who left his digital footprint. As a result of its study it is possible to identify the psychological characteristics of the personality, its weaknesses, IQ level, family situation, addictions, diseases, intentions, etc. [30, c. 210]. In

²¹ Federal Law of 18.03.2019 № 30-FZ "On amendments to the Federal Law "On information, information technology and information protection" // Collection of Laws of the Russian Federation. 2019. № 12. Art. 1220.

²² Federal law of 09.03.2021 № 43-FZ "On amendments to certain legislative acts of the Russian Federation" // Sobranie zakonodatelstva RF. 2021. № 11. Art. 1708; Federal Law as of 01.07.2021 № 260-FZ "On Amending the Federal Law on Information, Information Technology and Information Protection" // Sobranie zakonodatelstva RF. 2021. No. 27 (Part I). Art. 5088.

²³ Federal Law No. 374-FZ of 06.07.2016 "On Amendments to the Federal Law 'On Combating Terrorism' and Certain Legislative Acts of the Russian Federation regarding the establishment of additional measures to combat terrorism and ensure public safety" // Sobranie zakonodatelstva RF. 2016. № 28. Art. 4558.

²⁴ Federal Law of 07.07.2003 № 126-FZ "On Communications" // Collection of Laws of the Russian Federation. 2003. № 28. Art. 2895.

this regard, it seems appropriate to regulate the relevant relations, thus protecting the information about the network users, their right to privacy. The lack of proper legal regulation in Russia is now actively used by social network owners and IT-companies collecting information about Internet users, in order to transfer (sell) it to advertising and other commercial organizations interested in it.

As another source of digital identity trace can be considered the data obtained as a result of video surveillance cameras. Legal regulation of this activity is carried out by the constituent entities of the Russian Federation independently. For example, Moscow Government adopted Decree No. 24-PP "On Approval of the Provision on the State Information System "Unified Data Storage and Processing Centre" dated February 7, 2012. The Unified Data Storage and Processing Center (hereinafter - UDPC) is a state information system containing²⁵, inter alia, a combination of information about the objects under video surveillance. It includes a video image of the monitored object, information about its location, date and time of video surveillance. The city video surveillance system is organized on the basis of the UCHD. Its cameras are installed in courtyards, entrances, crowded places and other places. In 2021, Moscow will be one of the top 30 megacities in the world in terms of the number of surveillance cameras per square kilometer [31]. The total number of cameras in Moscow exceeds 160 thousand, some of which are intelligent video cameras capable of recognizing a person's face. Thus, Moscow residents leave a significant digital footprint, getting into their coverage area, which is then processed and stored in the UCHD.

6. Conclusion

Thus, summing up, it is legitimate to note that at present:

1) international legal regulation of relations related to the genesis of the legal personality is generally

carried out only in connection with the need to protect human rights and freedoms in the digital age, including in virtual space;

2) in the European Union, the legal regulation is mainly concerned with the digital profile of the person, based on his/her personal data

3) at the level of individual states, the most holistic and systemic regulation of relations related to digital identity is carried out in the People's Republic of China through the implementation of the social credit system;

4) in the Russian Federation there are significant gaps in the legal regulation of relations related to the digital footprint, the most regulated relations in the field of digital profile and digital image

5) further lack of legal regulation of the collection and processing of information constituting the content of the digital footprint of an individual in Russia will lead to a massive violation of human rights and freedoms.

²⁵ Decree of the Government of Moscow from 07.02.2012 № 24-PP "On Approval of the Regulations on the State Information System "Unified Data Storage and Processing Center" // Bulletin of the Mayor and Government of Moscow. 2012. № 8.

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