



Biomedical Profile of a Convict Serving Imprisonment: Issues of Meaningful Interpretation and Prospects for Legal Regulation

PAVEL V. TEPLYASHIN

Siberian Law Institute of Ministry of Internal Affairs of the Russian Federation, Krasnoyarsk, Russia, pavlushat@mail.ru, <https://orcid.org/0000-0002-6737-749X>

ELENA A. TEPLYASHINA

Professor V.F. Voyno-Yasenetsky Krasnoyarsk State Medical University, Krasnoyarsk, Russia, elenateplyashina@mail.ru, <https://orcid.org/0000-0001-7544-3779>

Abstract

Introduction: the article substantiates introduction of the category “biomedical profile of a convict” into scientific and practical circulation as a promising digital model for modernizing the penitentiary system. The relevance of the study is related to technological trends, the need for objective data for individualization of punishment, correctional and preventive effects on convicts, and the presence of significant legal gaps in the field of biomedical data turnover. *Purpose:* to propose a model of the biomedical profile of a convicted person, to determine its substantive structure and purpose, as well as to formulate a draft comprehensive legislative regulation of its formation and use to improve the effectiveness of convict correction and risk management. *Methods:* the study was conducted using the analysis and synthesis of socio-legal phenomena, system-structural and formal-logical analysis, hermeneutics of legal norms and the comparative method, which has provided an interdisciplinary approach at the junction of penal doctrine, criminology and biomedical sciences. *Results:* the author’s definition of a convict’s biomedical profile is formulated as a dynamic multilevel digital model integrating genomic, biometric, physiological, biochemical and behavioral data. The structural blocks and objectives of its application are substantiated: from identification and risk management to rehabilitation planning. The authors suggest a model of legal regulation, in particular, a federal law based on the principles of data minimization, transparency and “digital oblivion”. *Conclusion:* the proposed model is a tool for the transition to the “precision” execution of punishments. Practical implementation of the model is possible only within the framework of a large-scale legislative reform designed to ensure a balance between innovative capacities of biomedical technologies and the inviolability of human rights.

Key words: biomedical data of convicts; digital model; individualization of punishment; resocialization; bioethics; algorithmic solutions; post-penitentiary support.

5.1.4. Criminal law sciences.

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Introduction

Currently, human biometric data is being actively collected using advanced advances in genetics, neurobiology, biometrics, and biochemistry. This is an institutional trend of modern science, which is on the periphery of the practical significance of relevant research and promising areas of development of theoretical knowledge. The goals of such activities are extremely diverse, ranging from predicting human health to evaluating human behavior. It seems that the science of penal law should not remain aloof from this trend.

The expediency of researching scientific and practical aspects of the biomedical profile of a convicted person serving a criminal sentence in the form of imprisonment fully complies with the provisions of the Concept for the Development of the Penal System of the Russian Federation for the period up to 2030, which actually declares the introduction of innovations and scientific approaches to optimizing comprehensive processes for the execution of criminal penalties. In particular, Section XIV of the Concept points to “the development of scientific potential of the penal system, contributing to the production of high-quality scientific and technical results, including the use of new technologies and their implementation in practice”. At the same time, it should be noted that the introduction of such innovations, but mainly from the standpoint of biometric identification of persons in custody and convicted persons, has been the subject of scientific research for quite a long time [1; 2]. However, the comprehensive analysis of the convict’s biomedical profile is still at the initial stage of conceptualization, fragmented and has a predominantly narrow content character. Existing research focuses on individual components (genomic databases [3], facial recognition systems [4]), but does not offer a holistic legal and ethical model that would consider the totality of biomedical data as a single profile with a special regime of legal regulation. Developing such a model requires an interdisciplinary approach that synthesizes achievements of criminology,

law, bioethics, medicine, and information technology.

This topic is relevant due to a number of factors. First, there are significant legal gaps in regulating the process of obtaining, processing, and evaluating (meaningfully interpreting) a convict’s biomedical data (after all, it is extremely difficult to assess the fact that a person has, for example, low serotonin levels or certain genetic polymorphism). In addition, the provisions of the federal law No. 242-FZ of December 3, 2008 “On state genomic registration in the Russian Federation” reflect only a small part of such data. Second, the biomedical profile of a convicted person is a scientifically based map of individual vulnerability, since the contours of biological, psychological and social factors of negative influence on the personality of a convicted person are outlined by neurocognitive and mental disorders, disorders of neurotransmitter metabolism and other pathologies of the body. The fact that the person whose biomedical profile is being established is a convicted person makes it possible to transform state coercion from an act of formal reaction that ignores the complexity of human nature into an act of responsible, scientifically based and individualized risk and resource management. Thus, it is absolutely true about more general but similar problems, E.P. Radchenko and S.A. Bazhanov note that “the involvement of convicts in the process of digital transformation can increase its benefits for convicts, while minimizing risks” [5, p. 660]. Third, the creation and use of a convict’s biomedical profile falls into the epicenter of ethical disputes about the permissibility of personal biomedical dossiers, which may contribute to his/her stigmatization and even discrimination. So, J. Ryberg states the need to introduce into scientific circulation a specialized research discipline “Implementation Science for the Ethics of Punishment” (ISEP) [6, pp. 244–245]. We back the expediency of this proposal, since in the context of the introduction of a biomedical profile of a convict, an applied research program will be required that studies and designs mechanisms for the

implementation of normative and ethical principles in penitentiary practice, relevant legislation and judicial decisions.

Therefore, it is important not only to take these difficult points into account, but also to formulate scientifically sound proposals that would not infringe on the moral sphere of the convict's personality and would not lead to the violation of his/her rights, but would contribute to his/her correction and safety.

It is of fundamental importance that the primary research and possible practical implementation of the category "biomedical profile of a convicted person" should be focused exclusively on persons serving a custodial sentence. Extrapolating this concept to convicts without isolation from society is premature and methodologically vulnerable for a number of reasons: 1) it is the conditions of the correctional institution that create a unique environment for comprehensive monitoring and data collection necessary for the validation of biomedical markers in correlation with behavioral patterns. The closed nature of the correctional facility, round-the-clock supervision and structured regime allow for longitudinal research, recording not only static biomedical indicators, but also their dynamics. In conditions of non-custodial sentences, such a level of control and monitoring is objectively unattainable; 2) the theoretical and applied significance of the convict's biomedical profile is revealed precisely through risk management in conditions of forced isolation. Persons serving sentences in correctional facilities and prisons are dependent on the state, which assumes responsibility not only for their correction, but also for their physical and mental well-being. The identification of neurocognitive dysfunctions, disorders of neurotransmitter metabolism or genetic polymorphisms in this category of convicts allows not only to forecast risks of deviant behavior, but also to promptly adjust detention conditions and to apply targeted medical and psychological-pedagogical interventions. For prisoners without isolation who retain autonomy and access to the general health care system, there is no need for such a level of personalized government intervention or it is optional; 3) institutional risks associated with possible stigmatization and discrimination based on biomedical data, in conditions of isolation, can be more strictly controlled and mini-

mized due to the closeness of the system and the availability of departmental supervision. Extrapolating a convict's biomedical profile to a wide range of non-custodial convicts would create uncontrollable risks of leakage of relevant data into an open social space, where the mechanisms for protecting personal information and ethical control are much weaker.

Results

Based on the current legislation of the Russian Federation, criminological doctrine, technological trends, and ethical risk assessment, we propose the following prognostic-critical definition of the category under consideration. The biomedical profile of a convicted person is a dynamic, multi-level digital model that integrates unique biological, physiological, genomic and behavioral and medical-psychological data derived from them, created during the execution of a custodial sentence and designed to achieve the following goals:

- 1) authentication and verification of the identity in a penitentiary environment;
- 2) predictive and analytical management of individual and collective risks based on the correlation of biological and behavioral personality markers;
- 3) personalized planning and adjustment of corrective measures based on objective physiological, psycho-emotional and other indicators;
- 4) construction of probabilistic models of resocialization and post-penitentiary support, where the data of the convict's biomedical profile (for example, the dynamics of stress tolerance, the results of cognitive tests) serve as the basis for recommendations on the content of probation measures or administrative supervision;
- 5) formation and maintenance of forensic records that ensure the detection and investigation of crimes by conducting identification and diagnostic studies of physical evidence of biological origin.

Structurally, the biomedical profile of a convicted person includes (and the data obtained during the period of the person's detention should be taken into account) the following blocks:

- basic biometric data used for real-time identification and authentication. This block is formed on a mandatory basis upon admission

to a pre-trial detention center or correctional institution and includes results of state fingerprint registration, as well as parameters obtained through video surveillance systems with facial recognition (face geometry, auricle contour) and biometric access control (iris scanning, voice sample). The main function of this unit is to ensure the unconditional binding of all subsequent dynamic data to a specific individual, to prevent substitution and falsification, as well as operational control over movement within the correctional facility;

– genomic data obtained as a result of mandatory genomic registration (non-coding sections of DNA – “genetic fingerprints”). Moreover, there is a prospect for expanding such data from short identifying “fingerprints” (STR-loci) to genome-wide sequencing. The legal and organizational grounds for such an expansion may be, on the one hand, tasks of individualized medical care in places of detention (for example, for pharmacogenetic analysis or detection of hereditary pathologies). On the other hand, such detailed data open up opportunities for criminological and biosocial research aimed at finding statistical relationships between genetic variations and factors associated with deviant behavior or recidivism risks;

– physiological and functional data recorded in real time using wearable technical controls (electronic bracelets) or stationary sensors. These include basic vital signs (heart rate, blood pressure, body temperature), parameters of motor activity, and characteristics of the sleep-wake cycle (for example, the duration and phase structure of sleep). As part of the convict’s biomedical profile, these data are subjected to algorithmic analysis in order to identify anomalies and patterns associated with acute psychophysiological conditions;

– medical and psychological data generated during mandatory preventive examinations, medical examinations and clinical and psychological diagnostics. This block integrates information from medical records, psychiatric examinations (including when deciding whether to limit or release from criminal punishment), as well as results of standardized psychological testing (for example, on scales for assessing relapse risks, depression, aggression, or suicidal tendencies). In this regard, the results of the analysis of the psychoclinical personality

profile of convicts conducted by D.V. Sochivko and A.O. Burtsev are of scientific interest, which demonstrate that the corresponding “indicators included in the set of signs indicate the containment of criminogenic and psychopathic behavior of an unregistered convict. If some situational or personal changes lead to an increase in the central indicators, then as a result, all the indicators in the set grid will begin to rise, and this is fraught with uncontrollable psychopathic and socially dangerous behavioral manifestations” [7, p. 56]. It is also important to note that this data block may specialize in certain categories of convicts, which is confirmed by the results of special studies [8; 9];

– behavioral (digital footprint) data generated by accounting for financial and business transactions of the convicted person (in particular, transactions in the store, transfers) and metadata of authorized communication (for example, telephone logs). This information forms the primary proto-digital footprint. By the way, the behavioral “trace” of a convict can manifest itself in the identification of various mental addictions, which at first glance requires psychological content analysis, but it can also manifest itself in the fact that “the weakest sides of the personality profile of convicts with alcohol dependence are a high level of impulsivity (expressed in a tendency to towards automatic defensive behavioral response)” [10, p. 50]. In the future, if “digital sections” (places with limited or full, but controlled access to digital services of a correctional institution) are introduced, this practice can be scaled up by monitoring activities in a controlled digital environment, which is an innovative risk and a subject to regulation.

A special place in the structure of the convict’s biomedical profile is occupied by a group of biochemical and metabolic data reflecting the current and time-tracked state of metabolism and endocrine status of a particular convict. The data are generated by collecting bioliquids (in particular, blood, saliva, urine) or using non-invasive sensors and may include:

– the basic status, which includes indicators reflecting the activity of key neurohormonal systems of the body (cortisol, testosterone, concentration of metabolites of serotonin and dopamine), the dynamics of which may roughly and indirectly correlate with psychoemotional states. However, the use of these data for be-

havioral forecasting is unacceptable due to the simplification of models, ignoring environmental factors and high risks of discriminatory errors;

- the metabolic status, which is a qualitative and quantitative characteristic of a community of microorganisms, including bacteria, as well as archaea, fungi and viruses that make up the permanent microbiota of the body of a person serving a criminal sentence in isolation from society. It is formed on the basis of mandatory molecular genetic analysis of biological samples (at least the intestinal microbiota from a stool sample, potentially the microbiome of the skin and oral cavity) and reflects not only a unique individual “imprint”, but also the cumulative influence of environmental factors of the penitentiary institution (standardized nutrition, limited access to prebiotics, chronic psycho-emotional stress, and antibacterial environment);

- the microbiome status of a convicted person covering a set of qualitative and quantitative characteristics of a community of microorganisms (bacteria, archaea, fungi, and viruses) resident in the body of a person serving a criminal sentence in isolation from society. It is formed on the basis of mandatory molecular genetic analysis of biological samples (at least the intestinal microbiota from a stool sample, potentially the microbiome of the skin and oral cavity) and reflects not only a unique individual “imprint”, but also the cumulative influence of environmental factors of the penitentiary institution (standardized nutrition, limited access to prebiotics, chronic psycho-emotional stress, antibacterial environment).

The group of biochemical and metabolic data in the structure of the convict’s biomedical profile actually “objectifies” the emotional and psychophysiological state of the convict, since it allows us to translate concepts such as “stress”, “aggressiveness”, “depression” from the sphere of psychological assessment and interpretation into the plane of measurable biochemical indicators. In addition, the identification of this group makes it possible to individualize a punishment regime and use the concept of “preventive medicine”, namely, to adjust daily routines, nutrition or physical activity based on deviations in biochemical parameters (for example, increased cortisol may lead to the appointment of rest or sedatives).

The integration of biochemical and metabolic data into the structure of the convict’s biomedical profile marks the transition from static bioidentification to dynamic biofunctional diagnostics. This component forms the semantic core of the entire model, since it operates not with archival (genomic) or formal (biometric) features, but with actual indicators of the current psychophysiological state of the body.

From a methodological point of view, this approach opens the way to the creation of precision (accurate) penitentiary medicine and psychology, where interventions (medical, psychocorrective, regime) can claim an objective biomarker basis. Scientific interest lies in testing hypotheses about the correlation between the dynamics of biochemical parameters (for example, stress hormone levels, inflammatory markers, neurotransmitter metabolites) and the adaptive potential of a person in isolation.

However, it is precisely this scientific validity and operability of the data that generates key regulatory challenges. The biochemical information array, unlike others, directly legitimizes continuous biomonitoring as the basis for management decisions. This transforms medical care from a goal into a tool, blurring the boundaries between therapy and preventive control. Therefore, the subject of legal regulation should not be the fact of data collection itself, but a strict algorithm for their interpretation and application. It is necessary at the legislative level to exclude the possibility of:

- a) automated adoption of punitive or restrictive decisions based on the deviation of biomarkers from the conditional norm;

- b) the use of this data outside the detention period, which poses a threat of lifelong “biochemical stigmatization”;

- c) substitution of complex psychological and pedagogical work with pharmacological correction of the condition.

Therefore, consideration of the biochemical data block is not just an addition to the model, but a critical stage in its conceptual design. This allows us to identify “red lines” in advance, at the stage of forming legal and ethical standards, and to develop preventive guarantees aimed at ensuring that the advanced biomedical methodology serves rehabilitation rather than total biological surveillance. A number of studies [11; 12] shows that the integration of

data from the biomedical profile of the released person, in particular information about neurobiological vulnerability (for example, due to traumatic brain injury), into rehabilitation programs can significantly increase their effectiveness. By focusing on individual risks, such programs place a targeted emphasis on cognitive rehabilitation, impulsivity management, and treatment of the somatic effects of trauma (such as chronic headaches or sleep disorders). This, in turn, helps to reduce chronic stress and background frustration, which are key factors in illegal behavior. As studies of extreme forms of deviant behavior, including mass violence, demonstrate [13], acute and chronic stressors (which include uncoupled consequences of organic brain damage) directly correlate with the likelihood of aggressive or auto-aggressive actions. Thus, a personalized approach based on biomedical and psychosocial data is becoming a critically important tool for reducing recidivism risks and successful rehabilitation of persons released from prison.

In general, the biomedical profile of a convict from the perspective of the outlined structural blocks is a logical and necessary response to the challenges of the modern penitentiary system, which still relies heavily on archaic, subjective methods of assessing personality and its dynamics. We believe that this profile is a tool for the technological modernization of the execution of sentences, allowing us to move from impersonal content to a truly individual approach to the treatment of convicts based on objective data. After all, scientific objectification as the basis for the individualization of biomedical profile of a convicted person allows us to supplement traditional psychological and pedagogical observations with accurate biomedical metrics, which contributes to a deeper understanding of the convict's condition. This creates the basis for: a) the prospects of implementing a personalized correction and rehabilitation program that takes into account not only the social history, but also actual psychophysiological characteristics of a person.; b) the development of precision penitentiary medicine, where the prevention of diseases and their treatment (including addictions and mental disorders) are based on the understanding of individual biological characteristics of the convict; c) strengthening guarantees of the con-

vict's rights and safety, since a structured and normatively regulated biomedical profile of the convict will act as a guarantor against subjectivity in assessing the degree of adaptation and dynamics of correction, provision of timely assistance, realizing the convict's right to health protection.

The thesis that the biomedical profile of a convicted person is a tool for the technological modernization of the execution of sentences is consistent with the achievements of neuroscience, which is most closely related to the issues under study. So, A. McKay and J. Kennett argue that biomedical data do not cancel or undermine classical goals of criminal punishment, but, on the contrary, ensure their more accurate, "precision" achievement [14, pp. 273–274]. Within the boundaries of this logic, the biomedical profile of the convicted person does not act as a revolutionary tool, but as a natural development of the principle of individualization of punishment: the transition from external, behavioral assessments of "moral guilt" to its internal, objectified verification through biological correlates. This substantiates systemic and functional attractiveness of the profile for the law enforcement system, since it offers a scientific and measurable method for solving traditional tasks – from assessing guilt (this aspect is touched upon superficially and in connection with the appeal to studies of the aforementioned foreign researchers) to managing relevant risks in a correctional institution.

Moreover, the data of the convict's biomedical profile, provided they are used ethically and securely, can become the basis for building an effective model of post-rehabilitation support. Understanding individual biological risks (for example, predisposition to certain addictions or the specifics of stress response) allows us to develop targeted programs of socio-psychological support after release, reducing relapse risks. In this regard, it should be noted that the analysis of global recidivism data [15] indirectly indicates potential niches for the introduction of a biomedical profile of a convict. First, the revealed dependence of recidivism on the type of crime creates a demand for tools (which may be the profile under consideration) for targeted preventive action on cohorts of people with high risks of committing violent, mercenary violent crimes. Second, the correlation with mac-

rocriminological factors justifies for the correctional institution administration the need to obtain objective, internal data on convicts independent of the external environment. Thus, the biomedical profile of a convicted person can also be positioned as a response to modern criminal challenges.

In turn, creation of secure national systems for storing and processing biometric data of convicts within the framework of the convict's biomedical profile is a step towards the technological sovereignty of the penitentiary system. The implementation of advanced cybersecurity standards and strict access regulations is designed to ensure maximum protection of this sensitive information, turning it from a potential threat into a strategic resource for correction and security.

In terms of legal regulation of the formation and use of the biomedical profile of a convicted person, it will require not point adjustments to the current legislation, but the development and adoption of the federal law "On the use of biometric and biomedical data in the penal system of the Russian Federation" consolidating its scope (regulation of relations related to collection, processing, storage, use, interpretation and protection of biometric and biomedical data of persons serving sentences of imprisonment, as well as detainees) and basic concepts. The law shall fundamentally separate identification (fingerprinting, DNA profile) and evaluative-prognostic (physiological, behavioral data) components, establishing a more stringent legal framework for the latter. It is also crucial to fix the principles of data minimization (prohibition of future collection), transparency and human participation (the right of a person to explain and challenge decisions made using the biomedical profile of a convicted person), time limits (urgency of data), guaranteed security and confidentiality, biomedical expediency and proportionality (each parameter collected must be scientifically justified, necessary and proportionate to a specific, legitimate purpose). In accordance with these principles, a legal act shall establish an exhaustive list of grounds for accessing, processing, and interpreting biomedical profile data, as well as a clear time frame for storing predictive and analytical data, and introduce a mechanism for the "right to digital oblivion" (phasing out or depersonalizing

profile components) after serving a sentence and expiration of a certain period, with the exception of purely identifying data stored on the grounds provided for by federal law.

The federal law on biomedical data should provide for a separate chapter on the access, use, interpretation and protection of biomedical profile data of a convicted person. It should establish the procedure for applying predictive analytical models (algorithms), as well as the right of a convicted person in relation to his/her profile (in particular, the right to information about the composition of his/her biomedical profile of a convicted person, the purposes of its use and the main conclusions, to receive a reasoned explanation of any decision made using profile data in an accessible form, to challenge such decisions through a special commission at the institution or in court). A separate chapter shall be devoted to data storage and a post-penitentiary status of the biomedical profile of a convicted person. It shall fix the conditions and procedure for data storage, differentiated storage periods for identification and evaluative-predictive data, as well as to establish for evaluative-predictive data an automatic mode of phased depersonalization and destruction after serving a sentence ("the right to digital oblivion"), the procedure for using data after release from serving a criminal sentence. An independent chapter shall consolidate control, supervision and responsibility in the sphere of turnover of the convict's biomedical profile. Independent control over the use of biometric and biomedical data may be carried out, for example, by a specially created expert council on biomedical data in the penal system under the Commissioner for Human Rights). The aforementioned federal law shall provide for the structure and procedure for the formation of an appropriate control body, its powers (monitoring and verification, audit of algorithms, consideration of complaints, and law-making initiative monitoring of "digital oblivion"). In addition, it is advisable to consolidate the grounds and types of liability for violations of legislation in the field of the use of biometric and biomedical data.

These are just the main components of the structure of the proposed federal law on biometric data. Its development and adoption should be open and debatable, with the obligatory participation of the scientific community

(lawyers, criminologists, bioethicists, geneticists, and IT specialists), human rights organizations and representatives of public supervising commissions. A broad public discussion is necessary to legitimize such a sensitive area of regulation and to develop a public consensus on ethical boundaries of the use of biomedical data.

The implementation of the provisions of this law will require the publication of a set of subordinate regulatory legal acts (resolutions of the Government of the Russian Federation, orders of the Federal Penitentiary Service of Russia and the Ministry of Justice of Russia). These acts should detail specific lists and technical standards of collected biometric and biomedical data; methods of validation, testing and certification of predictive analytical models (algorithms) used in the penal system; model regulations and procedures for data collection, access to them, providing explanations to convicts and the work of commissions to challenge decisions; requirements for information security systems and protocols for actions in case of incidents related to the leakage of biomedical profile data of a convicted person.

In addition, in order to ensure the effectiveness of the law and establish real responsibility, it will be necessary to simultaneously make amendments to basic regulations, in particular, the Penal Code of the Russian Federation (to integrate procedures related to the formation and use of a convicted person's biomedical profile into the existing process of executing criminal penalties in the form of imprisonment), the Administrative Code of the Russian Federation (to introduce special administrative offences for violations of the rules for handling biomedical data established by law (unauthorized access, violation of retention periods, refusal to provide information, use of invalid or unapproved algorithmic models for decision-making, etc.)), the Criminal Code of the Russian Federation (to establish criminal liability for the most dangerous acts, such as falsification of biomedical data which has entailed grave consequences, or their deliberate disclosure out of self-interest or other personal interest).

Thus, the formation of a holistic legal regime for the biomedical profile of a convicted person is a comprehensive intersectoral legislative reform. Its core should be a special federal law

that sets the principles and framework, and its full functioning will be ensured by a number of accompanying amendments to regulatory legal acts and detailed departmental acts. Such a systematic approach will allow not only to regulate new technologies, but also to harmoniously integrate them into the existing legal system, ensuring a balance between innovations in the field of criminal punishment and the inviolability of fundamental human rights.

The issue of the relationship of the proposed federal law with the current federal law No. 152-FZ of July 27, 2006 "On personal data" is of fundamental importance. The proposed concept does not contradict the basic law in the field of personal data protection, but also develops its provisions in relation to the specifics of the penitentiary system.

First, the category of "biomedical profile of a convicted person" is fully covered by the generic concept of "personal data" enshrined in Article 3 of the federal law "On personal data", like any information relating directly or indirectly to a specific individual. At the same time, the proposed determination of identification and evaluative-prognostic components within the profile correlates with the differentiation of special categories of personal data in the regulatory legal act (articles 10 and 11 of the federal law "On personal data"). The establishment of a more stringent legal framework for evaluative and predictive components fully corresponds to the legislator's position enshrined in Part 2 of Article 11 of the federal law "On personal data", according to which the processing of biometric personal data is allowed only with the written consent of the subject, except in cases provided for by federal laws. The proposed law is intended to establish such special grounds and exceptional processing conditions, while maintaining the priority of the protective mechanism laid down in the general law.

Second, the principles of personal data processing enshrined in Article 5 of the federal law "On personal data" are developed and specified in the proposed principles of the biomedical profile of a convicted person: data minimization, transparency, limitation of storage by time (urgency), biomedical expediency and proportionality. The proposed "right to digital oblivion" (gradual removal or depersonalization of evaluative and predictive components of a convicted

person's biomedical profile after serving his/her sentence) is a logical development of the requirement of Part 2 of Article 5 of the federal law "On personal data" to the extent that personal data must be destructed upon achievement of the purposes of processing.

Third, the rights of a convicted person in relation to his/her biomedical profile, including the right to information, the reasoned explanation of decisions made using algorithms, and their challenge, correspond to the general rights of a personal data subject established by Chapter 3 of the federal law "On personal data" (in particular, the right to access, appeal against the actions of the operator). At the same time, the federal law on biomedical data introduces increased standards of protection, taking into account the vulnerable position of the convict and the complexity of the predictive analytical models used. The creation of a special expert council under the Commissioner for Human Rights complements the existing system of state control and supervision over the processing of personal data carried out by the Federal Service for Supervision of Communications, Information Technology, and Mass Media in accordance with Article 23 of the federal law "On personal data", providing additional, independent and specialized public control specifically in the sensitive area of penal relations.

Fourth, the proposed synchronization with the Administrative Code of the Russian Federation and the Criminal Code of the Russian Federation by introducing special compositions offences for violations in the sphere of biomedical trafficking does not replace, but strengthens the responsibility provided for in Article 24 of the federal law "On personal data". This will make it possible to take into account the specifics of the penitentiary system (in particular, increased public danger of acts in a closed institution, the special status of subjects and objects of encroachment) when qualifying acts and sentencing.

Thus, the proposed federal law on biomedical data should be developed as *lex specialis*. This regulatory legal act is based on fundamental principles and norms of the federal law "On personal data", adapts and details them in relation to the conditions of isolation, the specifics of penal relations and modern challenges of digitalization. It forms a specialized, more de-

tailed and strict legal regime within the general framework of personal data protection, which fully corresponds to the logic of the development of Russian legislation and international standards.

Conclusions

From a promising perspective, the biomedical profile of a convict is a dynamic digital model capable of becoming the core of a precision penitentiary system. This approach opens the way to the creation of a "smart" system of execution of sentences, where regime, educational, medical and other measures are adapted to the current psychophysiological state of the convict. This directly responds to criminological tasks related to countering recidivism and corresponds to the trend towards digitalization and personalization in the activities of the penal system.

From a formal legal point of view, the technological potential of the convict's biomedical profile requires not a point adjustment, but a comprehensive intersectoral legislative reform. Its core should be a special federal law that establishes a strict legal framework for the collection, processing and interpretation of biomedical data. The law should be based on the principles of data minimization, targeted use, transparency, human participation, and guaranteed digital oblivion after serving a sentence. The key task is to fundamentally separate legal regimes for static identification data (genomic profile) and dynamic evaluative and predictive indicators (hormone levels and biometric data). This will create the necessary balance between innovation and the protection of fundamental human rights, integrating the achievements of biomedical sciences into the legal field.

As a conceptual model, the biomedical profile of a convicted person acts as a tool for the correction and re-socialization of persons serving their sentences. Objectification of the convict's condition through biochemical, physiological and psychological markers makes it possible to personalize the correction process: from choosing methods of psychocorrection and regime conditions in places of detention to building targeted probation work programs. Such an approach should be based on the creation of specific legal regulators that will ensure the ethical and legitimate implementation of biomedical innovations in penitentiary practice.

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INFORMATION ABOUT THE AUTHORS

PAVEL V. TEPLYASHIN – Doctor of Sciences (Law), Professor, professor at the Department of Criminal Law and Criminology of the Siberian Law Institute of Ministry of Internal Affairs of the Russian Federation, Krasnoyarsk, Russia, pavlushat@mail.ru, <https://orcid.org/0000-0002-6737-749X>

ELENA A. TEPLYASHINA – Candidate of Sciences (Biology), Associate Professor, associate professor at the Department of Biological Chemistry with Courses in Medical, Pharmaceutical and Toxicological Chemistry of the Professor V.F. Voyno-Yasenetsky Krasnoyarsk State Medical University, Krasnoyarsk, Russia, elenateplyashina@mail.ru, <https://orcid.org/0000-0001-7544-3779>

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