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The twenty-ninth collection issue presents relevant content on criminalistics, theory and methods of forensic science, as well as work on practical issues of different classes, kinds, species and subspecies of forensic science. Content regarding VI Kharkiv International legal forum is also provided. Our authors are representatives of forensic science institutions, higher education institutions, law enforcement agencies of Ukraine and other countries.

For students and employees of educational institutions. The collection can of aducation be used in activities of law enforcement agencies, legal experts and researchers.

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Development Prospects of Forensic Expertology in Ukraine in Light of International Experience

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Forensic science in Ukraine is an essential component of justice in all types of proceedings, including in criminal proceedings. In order to ensure fairness and efficiency in court judgements, it is important to continually improve forensic examination procedure in light of international experience. The modern world is changing increasingly rapidly, and technologies are developing faster than ever. This poses new challenges and tasks for forensic expertology. Thus, particular emphasis should be placed on forensic computer examination since malicious users quickly implement the latest achievements of scientific and technological progress in criminal activities. Law enforcement and judicial bodies should stay ahead criminals by possessing a high level of expertise in technical and technological innovations and skills in working with them. That is why a strong awareness of forensic experts and researchers about the latest achievements and international experience in the forensic science field is highly important. This requires regular skill upgrading, exchange of developments and experience between Ukrainian and foreign experts. The *Theory and Practice of Forensic Science and Criminalistics* Research Paper Collection always contributes to such exchanges, publishing research of Ukrainian and foreign scientists on its pages.

This article is translation of the original Ukrainian content, which source is available at the link: *https://khrife-journal.org/index.php/journal* (translated by Daryna Dukhnenko). The author acknowledges translation as corresponding to the original.

There is also a need to increase the level of technical support in forensic science institutions by upgrading forensic lab equipment in order to improve quality, reduce execution time and enhance credibility of forensic examination results. In this connection, it is essential to develop new methods and methodologies for forensic expert research which will help to enhance the efficiency of carrying out forensic examinations through the use of modern equipment and technologies. The improvement of forensic science in Ukraine is a fundamental component of expert support for justice in general and in criminal proceedings in particular. In recent years, the role of forensic science as an incredibly important tool for detecting, investigating and resolving crimes in Ukraine has grown significantly; therefore, a purposeful development of this field is one of the essential tasks of our state. In conditions of Ruscism (Russian fascism) aggression against Ukraine, forensic experts, as much as law enforcement agencies, participate in inspections of ruined buildings and other infrastructure facilities in order to help seize and record evidence in a professional manner. Moreover, they investigate various consequences of the use of weapons that have caused harm to the state, its citizens and legal persons.

At the end of the 20th and the beginning of the 21st century, the world's scientific thought substantially contributed to improving quality and obtaining accurate results concerning expert research. For this reason, to ensure efficiency and enhance quality of forensic expert activities, it is vital to observe international standards and take into account experience gained by world science and research practice.

One of the major steps towards the development of forensic science in Ukraine is to raise funding to improve material and technical support of the forensic science field. There is also a need to ensure proper training of specialists for work on new equipment, constantly improve their professional development, and maintain a high level of professional expertise, abilities, and skills of forensic scientists. The content included in the *Theory and Practice of Forensic Science and Criminalistics* Research Paper Collection will help you acquire a required expertise within the latest theoretical developments and practical research.

National Scientific Center «Hon. Prof. M. S. Bokarius Forensic Science Institute» actively promotes exchange of experience between specialists by reaching out to foreign forensic science institutions. The domestic legislation stipulates the right of state specialized institutions where forensic examinations are conducted to establish international scientific contacts with forensic science institutions of other states, to hold joint scientific conferences, symposia, seminars, to exchange trainees, scientific information, printed and electronic editions, as well as to issue joint periodicals in the field of forensic science and criminalistics.

Currently, the *Theory and Practice of Forensic Science and Criminalistics* Research Paper Collection is indexed in the following online abstract and citation databases: Academic Scientific Journals Indexing, Bielefeld Academic Search Engine (BASE), Directory of Open Access Journals (DOAJ), Directory of Open Access Scholarly Resources (ROAD), Directory of Research Journals Indexing (DRJI), ERIH PLUS, Eurasian Scientific Journal Index (ESJI), Europub, Index Copernicus International, Google Scholar, MIAR, Polska Bibliografia Naukowa, RefSeek, ResearchBib, Ulrich's, WorldCat, the Register of Scientific Publications of Ukraine. Full-text online versions of the collection are available on Internet on the platforms of the V. I. Vernadskyi National Library of Ukraine, libraries of forensic science institutions of Ministry of Justice of Ukraine, higher education institutions of Ministry of Internal Affairs of Ukraine, etc. The collection is also indexed by Crossref: registrar of digital object identifiers (DOIs) registration. All this contributes to exchange of scientific developments between authors of our edition and scientists worldwide.

Referring directly to the content of the *Theory and Practice of Forensic Science and Criminalistics* current issue (No. 29), let's briefly summarize its main provisions.

The article authored by ***Snieguolė Matulienė*** (Lithuania), Doctor of Law, Professor, ***Viktor Shevchuk*** (Ukraine), Doctor of Law, Professor, Honored Lawyer of Ukraine, and ***Jurgita Baltrūnienė*** (Lithuania) is dedicated to the European and domestic experience of using artificial intelligence in activities of law enforcement and justice agencies. Specifically, the research paper outlines current issues of the application of artificial intelligence technologies in law enforcement and justice bodies in the conditions of martial law and global threats; identifies the main trends, issues and forensic research prospects using artificial intelligence through the prism of European integration processes; highlights gaps in the normative and legal regulation of the use of digital technologies; outlines directions for its improvement. The European development vector of modern criminalistics and forensic science in Ukraine significantly affects directions of formation of modern forensic knowledge. Under such circumstances, the time has come for formation, introduction and active application of a new scientific field of forensic science: *Digital Criminalistics*. At present, digital criminalistics tools help identify, document and investigate war crimes committed by Russian occupation troops in the territory of Ukraine. The paper substantiates the need to revive scientific research in the field of digital criminalistics, which today is becoming a strategic direction in the development of modern criminalistics as a European science. Authors singled out and analyzed new scientific approaches to resolving debatable issues and identified promising directions for further scientific developments.

The research paper authored by ***Boivob Majumder*** (India) presents results of comparative study related to plea bargaining's application in India and some foreign countries. Plea bargaining is known as a means of settling court disputes around the world. Application, scope and operation of plea bargaining significantly change depending on peculiarities of common and civil law in each particular state. The author has analyzed these differences on the example of various jurisdictions of such pleas in the USA, Italy and India and put forward the thesis as to introduction of a structure which would ensure timely justice administration. Indian courts are being battered by the rise in criminal cases. Prisons are now overflowing with inmates who are being held without a trial due to the ongoing delays in case resolution. India has developed plea bargaining (as a response to this sad status of the judicial system), which was acknowledged as a trustworthy strategy for concluding open cases and accelerating the criminal justice system. However, despite years of conceptualization, the Indian criminal justice system has yet to adopt plea bargaining. The paper by Indian colleague attempts to research whether plea bargaining in India in its present form and structure is adequate to achieve that goal by weighing its advantages and disadvantages in the context of the Indian judicial system. Given the above, it is proposed to introduce changes to this contemporary dispute resolution mechanism.

The article by ***Ivan Yatsenko*** (Ukraine), Doctor of Veterinary Medicine, Professor, studies into legal status of a forensic expert as a subject of forensic science activity in the context of the latest legislation of Ukraine. It has been proven that elements of legal status of forensic expert, provided for by civil, economic, administrative and criminal legislation of Ukraine, as well as by departmental regulatory legal acts, do not fully correlate with each other: they have different rights, obligations, prohibitions, restrictions and the legal responsibility of forensic expert, that can negatively affect implementation of the principles of forensic expert activity, in particular impartiality of conducting forensic veterinary examination, as well as the provision of a substantiated, objective, reliable, correct and truthful expert conclusion. In view of these shortcomings, there is a need to unify the mentioned norms for their uniform application in order to comprehensively implement principles of forensic expert activity: regardless of the type of court proceedings and grounds for carrying out forensic examination. Amendments and additions to mentioned normative legal acts of Ukraine are proposed with the aim of unifying the legal status of forensic expert.

The following article authored by ***Ihor Bohdaniuk*** (Ukraine), PhD in Law, Senior Researcher, concludes research paper section. It is proposed to differentiate the tasks of engineering and technical research according to four groups that define the system as general (generic). Based on the developed general structure of tasks of forensic engineering and technical research, a general list of tasks of forensic engineering and technical research have been formed, which will further contribute to unification and timely modernization of relevant sections of Research guidelines concerning preparation and appointment of forensic examinations and researches in accordance with the main task lists and approximate lists of issues to be resolved in forensic researches in all expert specializations of engineering and technical types of forensic researches. It is expedient to consider a developed general list of tasks resolved by conducting forensic engineering and technical researches as the basic for new species (subspecies) of forensic engineering and technological researches.

The section of the collection with case notes begins with an article by ***Daria Davydenko*** (Ukraine), PhD in Economics, Senior Researcher, ***Karina Palkova*** (Latvia), PhD in Law, Docent, ***Yuliia Shpak*** (Ukraine). The issue of ensuring forensic expert training in conditions of online education with the help of open educational resources have been analyzed by the authors. The paper studies the issue of the need to introduce open educational resources in order to ensure forensic expert training in offline learning conditions. The paper presents research and development of National Scientific Center «Hon. Prof. M. S. Bokarius Forensic Science Institute» within the framework of the *Open Educational Resource: Forensic*

Science project implementation. The research results include educational materials on forensic science collected in order to freely use them during forensic expert training in Ukraine and abroad. International experience of European partners regarding the application of available educational resources while training experts in the field of law has been considered. Expediency of applying experience gained in this field to the practice of conducting such training in Ukraine in other expert specializations has been emphasized. The research suggests continuing to expand capabilities of free access under conditions of forensic expert distance learning, introducing international educational resources into mandatory educational and methodological support of educational programs.

The research by ***Anna Szyszka*** (Poland), PhDr, is dedicated to the model of judicial proceedings used by Polish administrative courts. Administrative justice in Poland consists of voivodship administrative courts, which hear cases in the first instance, and the Supreme Administrative Court as a court of second instance. The author assumes that the introduction of a mixed model of judicial practice of administrative courts effectively fulfils the main goal of administrative proceedings, which is to protect individual rights from the arbitrariness of public administration bodies. The intrusion of the administrative court into the sphere of powers of the authorities is justified by the effectiveness and efficiency of the judiciary. This allows the complainant to get a decision on the merits much faster. The mixed model of judicial practice of Polish administrative courts allows more effective implementation of the protection of individual rights.

The research paper by ***Mykola Dementiev*** (Ukraine) determines grounds, essence, conditions and coverage of the forensic expert's internal conviction in conclusions of performed research. The essence of internal conviction is the psychological state of a forensic expert, his/her confidence in obtained findings, and readiness to word conclusions. The procedural prerequisite for ensuring objectivity, impartiality of internal conviction is guaranteed by the forensic expert's independence. External manifestation of the forensic expert's inner conviction is answers to addressed questions (in the form of categorical judgments). The lack of internal conviction may be embodied by the forensic expert while formulating a conclusion as to possibility of existence (availability) of circumstances and facts. The author stresses that a possible conclusion should be distinguished from a probable one. A possible conclusion is a form of the expert version which probability or credibility is determined stemming from results of evaluation of all pieces of evidence as a whole by the investigator, prosecutor, investigating judge, and court.

The article authored by ***Kostiantin Kapustnik*** (Ukraine), Honored Economist of Ukraine, ***Olexiy Khomutenko*** (Ukraine), PhD in Economics, Senior Researcher, and ***Pavlos Kipouras*** (Greece), Professor, is devoted to the need to develop scientific and methodology basis on the issues of carrying out forensic economic examinations while considering other types of forensic examinations. The authors attempted to study the development of scientific and methodological guidelines on conduct of forensic economic examinations taking account other types of forensic examinations, substantiate the relevance of issues associated with carrying out forensic economic examinations that consider other types of forensic examinations. As forensic economic examinations involve the use of other types of forensic examinations but do not fall under the concept of multidisciplinary forensic examination, and conclusions of other types of forensic examinations are not the research object of forensic economic examination, this paper emphasizes the need to develop an algorithm for conducting forensic economic examinations that take into account other types of forensic examinations. This will help forensic economists to use conclusions of other types of forensic examinations in multidisciplinary research without their evaluation, which in turn will enable to reduce time for conducting forensic examinations and contribute to obtaining objective and unbiased expert conclusions.

The research paper by ***Alexei Horlachuk*** (Ukraine), PhD in Economics, who constantly publishes his research papers in our collection, is dedicated to problematic aspects of classifying forensic economic examinations. The theoretical-methodological foundations of the development of forensic economic examination regarding the determination of classification features of its species composition have not only theoretical-methodological, but also direct practical significance in the activities of expert economists, as well as judicial investigative bodies in the event that the latter appoint this type of examinations. It has been found that the criterion for systematization of the species composition of forensic examinations is located in the economic plane, namely in the distribution of social production into the spheres of material and immaterial production. The next stage of the distribution of economic examinations is to the relevant industries according to certain types of activity with the definition of the main criterion of classification — according to the type of production activity. Thanks to this, compliance with the set of requirements for the scientifically based selection of classification criteria with the distinction of sorts and types of economic examinations is ensured.

The content published by ***Iryna Sivchuk*** (Ukraine), PhD in Economics, is dedicated to research on peculiarities of carrying out forensic merchandising examination while investigation of crimes related to illegal logging in Ukraine. The negative impact of illegal logging on the environment is substantiated as well as changes taking place in the territories of logging are stressed. Conducted research is built on application of comparative approach involving the analysis of prices of sale and offers of this type of timber. The definition of the terms *timber, round timber*, their classification and characteristics are also provided. Merchandising research of round timber presupposes obtaining raw data on measurement of wood parameters and applying a certain algorithm of actions in order to assess its market value. The new national wood quality standards have been analyzed and the need to attract a forest industry specialist in the course of forensic merchandising examination is justified.

The *News of Scientific Life* section finalizes Issue No. 29 of the *Theory and Practice of Forensic Science and Criminalistics* Research Paper Collection. Its content covers the VI Kharkiv International Legal Forum: one of the most significant events in the legal field in 2022. The Kharkiv International Legal Forum is a national legal event organized thanks to close and fruitful cooperation of the Ministry of Economy, Ministry of Education and Science, Ministry of Justice, National Academy of Legal Sciences of Ukraine and Yaroslav Mudryi National Law University. A number of the most pressing legal issues in conditions of war and global threats of the 21st century were discussed. These discussions involved a range of thematic areas and various forms of implementation, such as panel discussions, satellite events, round tables, presentations, master classes, and lectures. The forum was held for the sixth time, despite difficulties associated with Ruscism invasion of Ukraine. More than 1,000 experts specialized in various fields of law from all regions of Ukraine and 30 countries of the world (including Great Britain, the USA, France, the Netherlands, Germany, Italy, Switzerland, Denmark, Norway, Lithuania, Slovenia, Slovakia, Serbia, Azerbaijan, Kazakhstan, Uzbekistan, Taiwan, Malaysia, Brazil, etc.) attended the event. More than 40 speakers joined the discussion: distinguished Ukrainian and foreign legal scholars, employees of state law enforcement agencies, representatives of leading international courts (in particular, the International Criminal Court, European Court of Human Rights) and scientific institutions, as well as non-governmental human rights organizations, etc. You can find a more detailed summary of the topics of the Forum participants' reports on the pages of the *News of Scientific Life* section.

The Editorial Board of the *Theory and Practice of Forensic Science and Criminalistics* Research Paper Collection expresses gratitude to authors of research papers who adhere to ethical and formal requirements at an adequate level before submitting their scientific articles for publication. The indicated standards are based on the quality standards for research papers and rules for their presentation established by the global scientific community. These entail publishing principles of the Publishing Ethics Resource Kit (PERK), the guidelines of Elsevier, and the Committee on Publication Ethics (COPE), Ethical Code of Ukrainian Scientist, as well as work experience of foreign and Ukrainian professional communities, scientific organizations, editorial boards and editorial offices of editions. We highly appreciate contribution of each scientist to the development of the *Theory and Practice of Forensic Science and Criminalistics* Research Paper Collection: by ensuring legal support for forensic expert activities, we strengthen the foundations of the rule of law in modern and future Ukraine.

We invite everyone to cooperate! Together we will win! Glory to Ukraine!

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Artificial Intelligence in Law Enforcement and Justice Bodies: Domestic and European Experience

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The primary concerns of this research paper are to reveal current issues of the application of artificial intelligence technologies in law enforcement and justice bodies in the conditions of martial law and global threats; to identify the main trends, issues and forensic research prospects using artificial intelligence through the prism of European integration processes; to highlight gaps in the normative and legal regulation of the use of digital technologies; outline directions for its improvement. In order to reach objectives, general scientific and special methods (in particular, dialectical, analytical, induction and deduction, and others) were applied. The domestic and European experience in the application of artificial intelligence technologies in law enforcement and justice bodies was analyzed, and their promising directions were determined. We consider that legal regulation of the application of artificial intelligence in Ukraine should be carried out according to European standards, rules and recommendations in

This article is translation of the original Ukrainian content, which source is available at the link: *https://khrife-journal.org/index.php/journal* (translated by Tetiana Droshchenko). The author acknowledges translation as corresponding to the original.

accordance with the European integration course chosen by our state. Note that introduction of the artificial intelligence into legal proceedings should be based preliminary on the principles of the rule of law, observance of basic human rights, respect for honor and dignity, equality before the law and the court, proportionality, competition between the parties, transparency, impartiality and justice. Artificial intelligence is not capable of completely replacing judges, however, its implementation will contribute to the optimization of the work of the judge and court. It is substantiated that in today's military realities, the issue on increasing the effectiveness of the investigation of modern war crimes and cybercrimes with the help of digital technologies has become acute.

Keywords: *artificial intelligence; criminalistics; criminalistic knowledge; specific expertise; digital criminalistics; forensic examination; digital evidence; war crimes investigation; crime prevention; trends in the development of criminalistics.*

Research Problem Formulation

With the development of information technologies and active digitalization of society, the beginning of the 21st century often called the era of innovation, one of the most relevant and significant achievements of which was artificial intelligence. Nowadays, humanity use artificial intelligence technologies quite widely in various fields of both everyday life and professional activity (in particular, in jurisprudence) [1]. Digital Revolution as a factor of the dynamic development of society has contributed to the creation of a digital economy, the formation of the foundations of digital law, new configuration of social relations due to the Internet, social networks, and information and communication technologies. Modern digital technologies form a new way of production, create prerequisites for transition to a new formation, digitalization of social relations and the law itself, which regulates these relations [2].

Today, the artificial intelligence is not just a technological trend, a buzzword, or a temporary fad, it is the third computer era, based on innovation and advanced technologies. We are at the stage of fundamental changes unlike that experienced by the generation of the first industrial [3]. The formation of a new type of industrial production is taking place, which is based on *Big Data* and their analysis, full automation

1 Пилипчук В. Г., Баранов О. А., Гиляка О. С. Проблема правового регулювання у сфері штучного інтелекту в контексті розвитку законодавства Європейського Союзу. *Вісник Національної академії правових наук України*. 2022. Т. 29. № 2. С. 35–62. DOI: 10.37635/jnalsu.29(2).2022.35-62 (date accessed:17.10.2022).

2 Petryshyn O. V., Hyliaka O. S. Human rights in the digital age: Challenges, threats and prospects. *Journal of the National Academy of Legal Sciences of Ukraine*. 2021. Vol. 28. No. 1. Pp. 15–23. DOI: 10.37635/jnalsu.28(1).2021.15-23 (date accessed:17.10.2022).

3 Вебб Е. Велика дев'ятка. Як IT-гіганти та їхні розумні машини можуть змінити людство / пер. з англ. І. Возняка. Харків, 2020. С. 9.

of production, virtual and augmented reality technologies, etc.[4], that is a society of digital technologies is being formed. In this regard, S. Pichai, Head of *Google* remarked that the achievements in the field of artificial intelligence will do more for humanity that the discovery of fire or electricity [5].

Digital technologies in modern realities are an integral component integrated into all spheres of human activity. Digitalization is becoming by far the most significant factor in the economic growth of any state and a new, innovative way of the development of any society. Digitalization is the newest reality of advanced countries of European and the whole world, therefore also of Ukraine, which has chosen the European vector of development [6]. New digital reality presents legal practice and science with many fundamentally new tasks related to the development of effective tools and models of legal regulation of various spheres of social life (in particular, in the field of combating crime).

On the other hand, digital reality has caused the emergence of new forms of crime: cybercrime, information fraud, a significant number of cyberattack on enterprises and institutions, which requires counteraction by law enforcement agencies, study and research of this phenomenon. Digital information (as an integral attribute of modern crime and activities of criminal justice bodies) determines the prospects for the development of legal science, in particular criminology [7], which is at the forefront of the fight against crime in the realities of martial law, the digitalization of society and the active use of digital technologies in various spheres of human activity.

Artificial intelligence is a system that behaves intelligently, analyzing its environment and making fairly autonomous decisions to achieve a goal [8]. Artificial intelligence systems may be purely software-based and operate in a virtual world (e.g., voice synthesizers, video analysis software, search engines, speech and facial recognition systems) or may be integrated into hardware (e.g., robotics, unmanned vehicles means, drones or objects of the Internet of Things, IoT. Modern person uses artificial intelligence every day — for

4 Кривицький Ю. В. Штучний інтелект як інструмент правової реформи: потенціал, тенденції та перспективи. *Науковий вісник Національної академії внутрішніх справ*. 2021. № 2 (119). С. 90—101. DOI: 10.33270/01211192.90 (date accessed:17.10.2022).

5 Clifford C. Google CEO: A. I. is more important than fire or electricity / CNBC. Feb 1, 2018. URL: https://www.cnbc.com/2018/02/01/google-ceo-sundar-pichai-ai-is-more-important-than-fire-electricity.html (date accessed:17.10.2022).

6 Журавель В. А., Шепітько В. Ю. Розвиток криміналістики та судової експертизи в Україні: наближення до єдиного європейського простору / Правова наука України: сучасний стан, виклики та перспективи розвитку : монографія. Харків, 2021. С. 651—669 ; Шевчук В. М. Європейський вектор розвитку сучасної криміналістики. *Адаптація правової системи України до права Європейського Союзу: теоретичні та практичні аспекти* : мат-ли Всеукр. наук.-практ. конф. з наголи 20-ї річн. створ. Полтав. юрид. ін-ту НЮУ ім. Ярослава Мудрого (Полтава, 29.09.2022). Полтава, 2022. С. 320—323. URL: http://pli.nlu.edu.ua/wp-content/uploads/2022/12/Збірник-29.09.pdf (date accessed:17.10.2022).

7 Tymoshenko Y. P., Kozachenko O. I., Kyslenko D. P., Horodetska M. S., Chubata M. V., Barhan S. S. Latest technologies in criminal investigation (testing of foreign practices in Ukraine). *Amazonia Investiga*. 2022. Vol. 11. No. 51. Pp. 149—160. DOI: 10.34069/AI/2022.51.03.14 (date accessed:17.10.2022).

8 Baltrūnienė J. Dirbtinis intelektas ir duomenų apsauga kriminalistikos plėtros kontekste / Kriminalistikos teorijos plėtra ir teismo ekspertologijos ateitis: liber amicorum profesoriui Egidijui Vidmantui Kurapkai. Kolektyvinė monografija. Vilnius, 2022. P. 203.

example, to translate texts, create subtitles for videos or block e-mails (spam). Therefore, artificial intelligence as the latest scientific achievement needs new forensic ideas and methods related to its use in the fight against crime [9].

Under such circumstances, the main task of criminology is the development and application of innovative means, techniques and methods that make it possible to effectively collect, research, and use various evidentiary information [10] (in particular, digital) in the pre-trial investigation and during the trial. That is why, in the realities of wartime in Ukraine, the question of increasing the role of forensics and the use of artificial intelligence technologies in the activities of law and order bodies and justice in view of European experience and modern practice has become acute.

Analysis of Recent Researches and Publications

The scientific basis of the research was made up of the works devoted to the study and development of current problems of the use of digital technologies in the activities of law enforcement agencies and justice, such domestic and foreign forensic scientists as H. K. Avdieieva [11], R. Akerman [12], V. Bilous [13], O. Domashenko [14], O. Dumchykov [15],

9 Jackson C. Artificial Intelligence Changing the World of Forensics Science. EasyChair Preprint. 2021. No. 5815. 3 p. URL: https://easychair.org/publications/preprint/1Fmk (date accessed:17.10.2022).

10 Textbook of criminalistics. Vol. 1: General theory / Ed. by H. Malevski, V. Shepitko. Kharkiv, 2016. P. 89—93.

11 Авдєєва Г. К. Проблеми використання систем штучного інтелекту в роботі органів кримінальної юстиції. *Використання технологій штучного інтелекту у протидії злочинності* : мат-ли наук.-практ. онлайн-семінару (Харків, 05.11.2020). Харків, 2020. С. 6—10.

12 Ackermann V. R., Kurapka V. E., Malewski H., Shepitko V. Schaffung eines einheitlichen europaisehen Kriniinalistischen Raumes: Die Tatigkeit offentlicher Organisationen zur Starkung der internationalen Beziehungen. *Kriminalistik.* 2020. Is. 6. Pp. 355—363.

13 Білоус В. В. Роль засобів криміналістики у протидії кіберзлочинності. *Міжнародні стандарти з кібербезпеки та їх застосування в Україні* : мат-ли «кругл. столу» (Харків, 19.04.2016). Харків, 2016. С. 15—20. URL: http://dspace.nlu.edu.ua/handle/123456789/10885 (date accessed:17.10.2022).

14 Домашенко О. М. Проблемні питання використання цифрових доказів у криміналістиці. *Інноваційні методи та цифрові технології в криміналістиці, судовій експертизі та юридичній практиці* : мат-ли міжнар. «кругл. столу» (Харків, 12.12.2019). Харків, 2019. С. 52—55. URL: https://ivpz.kh.ua/wp-content/uploads/2020/01/%D0%97%D0%B1%D1%96%D1%80%D0%BD-%D0%9A%D1%80%D1%83%D0%B3%D0%BB%D0%B8%D0%B9-%D1%81%D1%82%D1%96%D0%BB_%D0%86%D0%BD%D0%BD%D0%BE%D0%B2-%D0%B0%D1%86%D1%96%D0%B9%D0%BD%D1%96-%D0%BC%D0%B5%D1%82%D0%BE%D0%B4%D0%B8_2019-%D0%97%D0%B1%D1%96%D1%80%D0%BD%D0%B8%D0%BA.pdf (date accessed:17.10.2022).

15 Думчиков М. О. Процеси діджиталізації і криміналістика: ретроспективний аналіз. *Криміналістика і судова експертиза*. 2020. Вип. 65. С. 100—108. DOI: 10.33994/kndise.2020.65.10 (date accessed:26.09.2022).

V. Zhuravl [16], I. Kohutycha [17], V. E. Kurapka and H. Malievski [18], V. Konovalova and V. Shevchuk [19], O. Musiienko [20], Yu. Chornous [21], V. Shepitko [22] etc.

At the same time, there are currently a number of debatable issues in the study of the mentioned issues, in particular regarding: determining the place of artificial intelligence in the activities of law enforcement and justice bodies, analyzing gaps in the regulatory and legal regulation of the use of digital technologies and the need for their improvement in the context of European integration processes, studying the prospects for the use of artificial intelligence in justice of Ukraine and the countries of the European Union and other important issues that require immediate resolution.

Under such conditions, the research of the theoretical and methodological principles of optimization of investigative and judicial activity through the use of artificial intelligence technologies for the effective solution of judicial tasks in martial law conditions and the further introduction of their main provisions and forensic recommendations into law enforcement practice are essential. Meanwhile, the analys of scientific publications on the mentioned issues shows that only separate works are devoted to the study of these issues (A. Idder and

16 Журавель В. А. Загальна теорія криміналістики: ґенеза та сучасний стан : монографія. Харків, 2021. С. 6—7.

17 Когутич І. І. Про окремі виклики криміналістиці та шляхи її усталення. *Криміналістика і судова експертиза*. 2020. Вип. 65. С. 5—19. DOI: 10.33994/kndise.2020.65.01 (date accessed:26.09.2022).

18 Курапка В. Э., Малевски Г. Научная концепция криминалистической политики в стратегиях органов правопорядка как инновационный прорыв в обеспечении создания общего европейского криминалистического пространства. *Інноваційні методи та цифрові технології в криміналістиці …* . С. 85. URL: https://ivpz.kh.ua/wp-content/uploads/2020/01/%D0%97%D0%B1%D1%96%D1%80%D0%BD-%D0%9A%D1%80%D1%83%D0%B3%D0%BB%D0%B8%D0%B9-%D1%81%D1%82%D1%96%D0%BB_%D0%86%D0%BD%D0%BD%D0%BE%D0%B2-%D0%B0%D1%86%D1%96%D0%B9%D0%BD%D1%96-%D0%BC%D0%B5%D1%82%D0%BE%D0%B4%D0%B8_2019-%D0%97%D0%B1%D1%96%D1%80%D0%BD%D0%B8%D0%BA.pdf (date accessed:17.10.2022).

19 Konovalova V. O., Shevchuk V. M. Modern criminalistics in the conditions of war: problems of adaptation and reload. *Modern research in world science* : Proceedings of the 5th International scientific and practical conference (August 7—9, 2022). Lviv, 2022. Pp. 896—903. URL: https://sci-conf.com.ua/wp-content/uploads/2022/08/MODERN-RESEARCH-IN-WORLD-SCIENCE-7-9.08.2022.pdf (date accessed:26.09.2022).

20 Мусієнко О. Л. Використання цифрових технологій при розслідуванні злочинів. *Інноваційні методи та цифрові технології в криміналістиці …* . С. 99—102. URL: https://ivpz.kh.ua/wp-content/uploads/2020/01/%D0%97%D0%B1%D1%96%D1%80%D0%BD-%D0%9A%D1%80%D1%83%D0%B3%D0%BB%D0%B8%D0%B9-%D1%81%D1%82%D1%96%D0%BB_%D0%86%D0%BD%D0%BD%D0%BE%D0%B2%D0%B0%D1%86%D1%96%D0%B9%D0%BD%D1%96-%D0%BC%D0%B5%D1%82%D0%BE%D0%B4%D0%B8_2019-%D0%97%D0%B1%D1%96%D1%80%D0%BD%D0%B8%D0%BA.pdf (date accessed:17.10.2022).

21 Чорноус Ю. М. Криміналістичне забезпечення розслідування злочинів : монографія. Вінниця, 2017. 492 с. URL: http://elar.naiau.kiev.ua/handle/123456789/16029 (date accessed:17.10.2022).

22 Шепітько В. Теоретико-методологічна модель криміналістики та її нові напрями. *Теорія та практика судової експертизи і криміналістики.* 2021. Вип. 3 (25). С. 9—20. DOI: 10.32353/khrife.3.2021.02 (date accessed:26.09.2022).

S. Kulo [23], Yu. Baltrunene [24], O. Dufeniuk [25], K. Dzhekson [26], A. Kolodina and T. Fedorova [27], I. Kohutych [28], L. Frimen [29], R. Stepaniuk and S. Perlin [30], V. Shepitko and M. Shepitko[31] etc.). Therefore, the issues of applying artificial intelligence technologies in the activities of law and order bodies and justice in modern conditions of global threats are very relevant and require thorough scientific research.

Research Purpose

To study the possibilities of applying artificial intelligence technologies in law enforcement and justice bodies in modern conditions of martial law and global threats, as well as to determine the main trends, issues and forensic research prospects using artificial intelligence through the prism of European integration processes.

Research Methods

To carry out the research, a system of scientific methods of scientific knowledge was applied, in particular general philosophical, general scientific (dialectical, analysis, synthesis, abstraction, analogy), private methods of scientific knowledge which are used in many branches of science (comparative, quantitative and qualitative analysis), as well as special legal ones (formal-legal, comparative-legal, systemic-structural). The methodological basis of the study is the dialectical method of scientific knowledge, which reflects the relationship between theory and practice, as well as the conceptual positions of forensics as a science.

23 Idder A., Coulaux S. Artificial intelligence in criminal justice: invasion or revolution? / International Bar Association. 13.12.2021. URL: https://www.ibanet.org/dec-21-ai-criminal-justice (date accessed:12.10.2022).

24 Baltrūnienė J. Op. cit. Pp. 201—220.

25 Дуфенюк О. Розслідування воєнних злочинів в Україні: виклики, стандарти, інновації. *Baltic Journal of Legal and Social Sciences.* 2022. № 1. С. 46—56. DOI: 10.30525/2592-8813-2022-1-6 (date accessed:12.10.2022).

26 Jackson C. Op. cit. URL: https://easychair.org/publications/preprint/1Fmk (date accessed:17.10.2022).

27 Колодіна А. С., Федорова Т. С. Цифрова криміналістика: проблеми теорії і практики. *Київський часопис права.* 2022. № 1. Pp. 176—180. DOI: 10.32782/klj/2022.1.27 (date accessed:12.10.2022).

28 Когутич І. І. Застосування цифрових технологій — новий напрям криміналістики. *Наукові читання пам'яті Ганса Гросса* : зб. тез міжнар. наук.-практ. конф. (Чернівці, 09.12.2021). Чернівці, 2021. С. 79—84.

29 Freeman L. Digital Evidence and War Crimes Prosecutions: The Impact of Digital Technologies on International Criminal Investigations and Trials. *Fordham International Law Journal*. 2018. No. 41. Is. 2. Pp. 284—336. URL: https://ir.lawnet.fordham.edu/ilj/vol41/iss2/1 (date accessed:12.10.2022).

30 Степанюк Р. Л., Перлін С. І. Цифрова криміналістика й удосконалення системи криміналістичної техніки в Україні. *Вісник Луганського державного університету внутрішніх справ ім. Е. О. Дідоренка.* 2022. № 3 (99). DOI: 10.33766/2524-0323.99.283-284 (date accessed:17.10.2022).

31 Шепітько В., Шепітько М. Формування цифрової криміналістики як стратегічний напрямок розвитку науки. *Kriminalistika a Forenzne Vedy: Veda, Vzdelavanie, Prax* : 17 Medzinarodny Kongres Zbornik Prispevkov (16—17 sept 2021, Bratislava, Slovenská republika). Bratislava, 2021. Pp. 187—198. URL: https://www.akademiapz.sk/sites/default/files/KKFV/2020/CrimCongres2021 zborník draft digit v6 202107.pdf (date accessed:26.09.2022).

The formal-logical method was applied during the analysis of the content of current European and domestic legislation regarding the use of artificial intelligence technologies in law enforcement and justice bodies in view of European experience and modern practice. Thanks to the comparative legal method, an analysis was carried out and the peculiarities of the legislative regulation of the use of artificial intelligence were studied in order to identify the most advanced legal means and mechanisms that can be implemented into the legislation of Ukraine in the relevant field of application of artificial intelligence technologies.

The theoretical basis of the research is mainly scientific works and conclusions of leading foreign experts, dedicated to the study of issues of the artificial intelligence functioning in law enforcement and justice bodies regarding the protection of human rights in the conditions of mass digitization of social relations. The normative base of this research includes acts of the European Parliament, recommendations of the European Commission, normative legal acts of European countries, international organizations, current laws and other normative legal acts of Ukraine, which regulate social and legal relations that arise in connection with the use of artificial intelligence. The analysis of the legal framework shows the presence in EU legislation of the necessary legal foundations and effective mechanisms for regulating social relations in the field of digital transformation and the development of information technologies in various spheres (in particular, in law enforcement and justice bodies), which Ukraine successfully applied in this field of knowledge.

Main Content Presentation

The modern stage of development of social relations is characterized by rapid activation and application of digital (information) technologies in all spheres of human life. Today, autopilots drive cars, smartphones distinguish their owners from outsiders, virtual assistants answer any question, street cameras recognize criminals, "cyber judges" make court decisions, robots perform surgical operations, high-precision military weapons and drones hit targets — and this is far from an exhaustive list of cases when modern artificial intelligence technologies help humans perform various complex tasks [32]. Under the influence of the achievements of scientific and technical progress and further digitization of society, people are moving step by step from the usual, material world to the digital space.

Under such conditions, our society is actively moving towards digital superintelligence, which is significantly superior to human intelligence. We see that artificial intelligence is capable not only of self-improvement: it knows the principles and mechanisms of its own functioning, the solution of complex intellectual tasks, which enables it to surpass human intelligence in some situations. The advantages of its use include, in particular: accuracy and speed of data processing; analysis of a significant amount of information in a short period of time; reducing errors and increasing the chances of achieving results of higher accuracy; cost reduction and labor productivity improvement; no need for sleep or a lunch break; fatigue; the ability to work in a potentially dangerous environment for humans [33].

32 Kosilova O. I., Rozghon O. V., Solodovnikova C. K., Stolbovyi V. M., Barabash O. O. Observance of Human Rights in the Use of AI as Technology. *Law, State and Telecommunications Review.* 2022. Vol. 14. No. 2. Pp. 38—67. DOI: 10.26512/lstr.v14i2.41558 (date accessed:17.10.2022).

33 Як діє штучний інтелект і перспективи його використання / AI Conference. Kyiv. 2020. URL: https://aiconference.com.ua/uk/news/printsipi-raboti-iskusstvennogo-intellekta-i-perspektiva-ego-ispolzovaniya-92238 (date accessed:17.10.2022).

Despite all the positive possibilities and potential, recently, artificial intelligence technologies are increasingly used by criminals inventing new ways of criminal activity using digital technologies and thus producing an increase in the level of crime. In addition, criminogenic factors of artificial intelligence cause new threats and new challenges to the legally protected interests of both individual citizens and the state and society in general, requiring adequate means of countering such criminal law [34] and forensic means [35].

Therefore, we also must admit the number of issues provoked by the use of artificial intelligence, the solution of which should become the primary task of the scientific community and the state. Thus, security, reliability, transparency, fairness, ethics and equality (impartiality), prevention of violations of basic human rights, especially when it is impossible to predict the consequences of the use of new technologies, require close attention in the development and introduction of artificial intelligence. As artificial intelligence spreads into the daily life of humanity, the problem of non-compliance and violation of basic human and citizen rights becomes more and more serious [36].

Among the current issues are the problems of determining the place of artificial intelligence in the activities of law enforcement and justice bodies, analyzing and defining the concept of artificial intelligence and the need for its improvement in the context of European integration processes, researching the legal prerequisites for the use of artificial intelligence in law enforcement activities and justice in view of European integration, analysis of gaps in the regulatory and legal regulation of the use of digital technologies, problems and prospects of the use of artificial intelligence in the justice system of Ukraine and the countries of the European Union, ensuring the protection of the rights and legitimate interests of individuals and legal entities from violations with the use of digital technologies, prosecution for damage caused by the use digital technologies, etc. Let's analyze the named problems and outline directions for their solution.

Legal prerequisites for the use of artificial intelligence in law enforcement and justice in the light of European integration.

It should be noted that the formation of the legislative framework in Ukraine on these issues is based on international standards and moves in the direction of the European strategy for the development of artificial intelligence [37]. Developing a legal framework based on human rights and fundamental values (as declared in this document), Ukraine, becoming a candidate for the EU, is obliged to form and implement

34 Radutniy O. E. Novel Criminal Delicts Related to Digital Human Being. *Вісник Асоціації кримінального права України.* 2020. Т. 1. № 13. С. 16—28. URL: http://vakp.nlu.edu.ua/issue/view/12594 (date accessed:17.10.2022).

35 Konovalova V. O., Shevchuk V. M. Op. cit. URL: https://sci-conf.com.ua/wp-content/uploads/2022/08/MODERN-RESEARCH-IN-WORLD-SCIENCE-7-9.08.2022.pdf (date accessed:26.09.2022).

36 Турута О. В., Турута О. П. Штучний інтелект крізь призму фундаментальних прав людини. *Науковий вісник Ужгородського національного університету. Серія Право.* 2022. Вип. 71. С. 50. DOI: 10.24144/2307-3322.2022.71.7 (date accessed:26.09.2022).

37 Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions — Coordinated Plan on Artificial Intelligence (COM(2018) 795 final) / European Commission. URL: https://digital-strategy.ec.europa.eu/en/library/coordinated-plan-artificial-intelligence (date accessed:19.10.2022).

an artificial intelligence system that will be useful to citizens, businesses and the national government. EU members, Ukraine and the European Commission should work together in this direction, ensuring advanced positions of artificial intelligence technologies and prospects for their implementation [38].

In view of the European integration course chosen by Ukraine, the formation and further improvement of domestic legislation regarding the legal regulation of the use of artificial intelligence should be based on already formed European standards, rules and recommendations [39]. Simultaneously, the European Commission defines as one of the three main goals of coordination in the field of artificial intelligence the mandatory consideration of all social values and fundamental rights of the EU in the use of new technologies of artificial intelligence, in particular, ethical and legal issues [40]. The development and formation of national legislation must necessarily be based on the advanced European experience of legal regulation of this field of activity, analyzing both positive and negative consequences, as well as the procedure for determining responsibility for mistakes that caused negative consequences [41].

A decisive step in choosing the direction of the European strategy regarding artificial intelligence in domestic politics was the Concept of the Development of Artificial Intelligence in Ukraine (hereinafter referred to as the Concept), the purpose of which is *"to determine the priority areas and main tasks of the development of artificial intelligence technologies to satisfy the rights and legitimate interests of individuals and legal entities, building a competitive national economy, improving the public administration system"* [42]. One of the tasks envisaged by this Concept for justice is to ensure *"judgment in cases of minor complexity (by mutual consent of the parties) based on the results of the analysis carried out using artificial intelligence technologies, the state of compliance with legislation and judicial practice"* [43].

An essential step for Ukraine was also the adoption of the European Ethical Charter on the use of Artificial Intelligence in judicial systems and their environment (hereinafter referred to as the Ethical Charter), which is considered a system of uniform principles and rules for the use of artificial intelligence in the judicial system and which specifies the main categories of the involvement of artificial intelligence, namely: advanced search systems of court practice; online dispute resolution; assistance in drafting claims; predictive analysis; categorization of the provisions of the law according to various criteria and

38 Пістракевич О. В. Стратегії розвитку штучного інтелекту в Європейському Союзі (на прикладі країн Вишеградської групи. *Міжнародні відносини, суспільні комунікації та регіональні студії.* 2021. № 1 (9). С. 162. URL: https://elibrary.kubg.edu.ua/id/eprint/39141/1/O_Pistrakevych_IRPCRS_1%289%29_2021.pdf (date accessed:17.10.2022).

39 Velykanova M. M. Artificial intelligence: legal problems and risks. *Journal of the National Academy of Legal Sciences of Ukraine.* 2020. Vol. 27. No. 4. Pp. 185—198. DOI: 10.37635/jnalsu.27(4).2020.185-198 (date accessed:17.10.2022).

40 Баранов О. А. Правові аспекти національних стратегій розвитку штучного інтелекту. *Юридична Україна*. 2019. № 7. С. 25—29.

41 Федоренко О. А., Стрільців О. М., Тарасенко О. С. Використання технологій штучного інтелекту у правоохоронній діяльності. Аналітичний огляд. Київ, 2022. С. 18—19.

42 Концепція розвитку штучного інтелекту в Україні : схвал. розпорядж. КМУ від 02.12.2020 р. № 1556-р (зі змін. та допов.). URL: https://zakon.rada.gov.ua/laws/show/1556-2020-%D1%80#Text (date accessed:19.10.2022).

43 Ibidem.

identification of discrepant or incompatible provisions; chatbots to inform parties or support them in court proceedings [44]. The adoption of the Ethical Charter settled the issues of the implementation of artificial intelligence to the transformation of information technologies in the justice system of Ukraine.

Ukrainian experts also consider the *"White Paper on Artificial Intelligence — European Approach to Excellence and Trust"* (2020) relevant, which states that artificial intelligence should work for the benefit of people and society. The purpose of this document is to outline possible changes that will contribute to the reliable and safe development of artificial intelligence in Europe, respecting the values and rights of EU citizens [45].

Another significant achievement in determining the direction of the European strategy regarding artificial intelligence was that Ukraine (as a member of the Special Committee on Artificial Intelligence at the Council of Europe) joined the Organization for Economic Cooperation and Development, Recommendation of the Council on Artificial Intelligence, OECD/LEGAL/0449 in October 2019 [46]. The recommendations include suggestions for national policymakers for international cooperation in the development and safe use of artificial intelligence, namely: investment in research and development of artificial intelligence; promoting the development of a digital ecosystem for artificial intelligence; formation of a favorable political environment for artificial intelligence; building human potential and preparing for the transformation of the labor market.

In addition, Ukraine joined the *"Digital Europe"* Program (2021—2027) [47], aimed at the development of leading digital skills, introduction of digital technologies at enterprises, development of digital infrastructure, as well as the even greater availability of digital services for citizens and state institutions EU countries and associated countries. The *"Digital Europe"* Program provides funding for the digitalization of European countries in various directions, its goal is to accelerate economic recovery and digital transformation. Participation in the Program will bring Ukraine closer to the EU's Single Digital Market provides funding for the digitalization of European countries in various directions, its goal is to accelerate economic recovery and digital transformation. Participation in the Program will bring Ukraine closer to the EU's Single Digital Market [48].

Simultaneously, the lack of an appropriate legal framework for the use of artificial intelligence requires finding ways to overcome risks and threats to human rights, restore violated rights, and minimize

44 European ethical Charter on the use of Artificial Intelligence in judicial systems and their environment. Adopted at the 31st plenary meeting of the CEPEJ (Strasbourg, 3—4 December 2018) / Council of Europe. URL: https://rm.coe.int/ethical-charter-en-for-publication-4-december-2018/16808f699c (date accessed:16.10.2022).

45 White Paper on Artificial Intelligence: a European approach to excellence and trust / European Commission. URL: https://commission.europa.eu/publications/white-paper-artificial-intelligence-european-approach-excellence-and-trust_en (date accessed:17.10.2022).

46 Recommendation of the Council on Artificial Intelligence / OECD Legal Instruments. URL: https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449 (date accessed:19.10.2022).

47 Програма ЄС «Цифрова Європа» (2021—2027) / Дія.Бізнес. URL: https://business.diia.gov.ua/digital-europe-programme (date accessed:17.10.2022).

48 Україна долучилася до Програми «Цифрова Європа»: що це означає / Урядовий портал. 05.09.2022. URL: https://www.kmu.gov.ua/news/ukraina-doluchylasia-do-prohramy-tsyfrova-ievropa-shcho-tse-oznachaie (date accessed:19.10.2022).

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threats to the use of artificial intelligence technologies in various spheres of life (in particular, legal). Since digital technologies (as a kind of innovation) affect various spheres of human life, the states embody the understanding of the importance of their intensive implementation in the relevant development strategies aimed at sustainable economic growth and strengthening the competitive position of each country in the global economic environment. A significant role in innovation is played by digital technologies that use electronic equipment and make it possible to speed up and facilitate various processes [49]. This fully applies to the legal principles of the use of artificial intelligence in law enforcement and justice.

The European Union, trying to transform the policy of digital plans into concrete goals and ensure their implementation by 2030, proposes to establish a digital policy index. The basis of the indicator will be an improved surveillance system in EU, which will monitor the speed of digital transformation, the shortcomings of the digital strategy in Europe and the implementation of digital principles. The document will indicate the means of applying the vision and define the main orientations in four directions. The first two areas are digital capabilities, education and skills development, the rest are digital transformation of business and public services [50].

In view of this, it is worth noting that artificial intelligence, like any other emerging transformative technology, may raise new ethical and legal issues — for example, those related to liability or potentially biased decision-making [51]. Therefore, the EU must ensure the development and deployment of artificial intelligence within the framework of an appropriate legal framework that promotes innovation in accordance with the values and fundamental rights of citizens, as well as ethical principles such as accountability and transparency. The EU has every opportunity to manage such processes at the global level [52]. Therefore, the issues of further developments in the field of artificial intelligence, as well as the regulation of activities in this area, are relevant for modern European and domestic politics.

The controversial definition of the concept of artificial intelligence and the need for its improvement in the context of European integration processes

Analyzing legal prerequisites for the use of artificial intelligence in law enforcement and justice in the EU countries and Ukraine, it is necessary to pay attention to a certain debatability of the concept of *"artificial intelligence"*: it is the Concept of the Development of Artificial Intelligence in Ukraine as an organized *"a set of information technologies, with the use of which*

49 Kosilova O. I.; Rozghon O. V., Solodovnikova C. K., Stolbovyi V. M., Barabash O. O. Op. cit. C. 39. DOI: 10.26512/lstr.v14i2.41558 (date accessed:17.10.2022).

50 Komisijos Komunikatas Europos Parlamentui, Tarybai, Europos Ekonomikos ir Socialinių Reikalų Komitetui ir Regionų Komitetui 2030 m. skaitmeninės politikos kelrodis : Europos skaitmeninio dešimtmečio kelias (COM(2021) 118 final). Briuselis, 2021.03.09 / Infolex. URL: https://www.infolex.lt/teise/default.aspx?id=1929&crd=1243617&qi=7005421 (date accessed:19.10.2022).

51 Von der Leyen U. A Union that strives for more. My agenda for Europe / European Commission. URL: https://www.europarl.europa.eu/resources/library/media/20190716RES57231/20190716RES57231.pdf (date accessed:19.10.2022).

52 Baltrūnienė J. Op. cit. P. 204.

it is possible to perform complex tasks by using a system of scientific methods of research and algorithms for processing information obtained or independently created during work, as well as to create and use one's own knowledge bases, decision-making models, algorithms for working with information and to determine the ways of achieving the set tasks" [53]. At the same time, the field of artificial intelligence is defined as *"an area of activity in the field of information technologies that ensure the creation, implementation and use of artificial intelligence technologies"* [54].

We consider that he disclosure of the concept of "artificial intelligence" only at the level of a domestic by-law is to some extent debatable from the point of view of its practical application. Therefore, the absence of a normative legal act in the form of a law, which would regulate the use of artificial intelligence in the judiciary of Ukraine, is one of the gaps in our legislation [55]. As for today in Ukraine, unfortunately, the concepts, types (forms) of artificial intelligence, principles, limits, conditions and order of its application, etc., have not been defined at the legislative level: these and other problems are currently considered only on a theoretical level. On the other hand, international legislation and foreign doctrines also do not provide a clear answer to certain questions in the field of the application of artificial intelligence [56]. Therefore, in today's realities, it is important to prepare and adopt a regulatory act in the form of a law that would regulate the use of artificial intelligence in the judiciary of Ukraine.

In our opinion, when forming the definition of the concept of *"artificial intelligence"*, it is necessary to take into account the work of foreign scientists [57], the positive experience of the EU countries, the USA, Japan, China and Ukraine [58]. For instance, the experience of EU countries shows the importance of two components — digital competence and awareness of the population and high-quality Internet coverage. In addition, we see securing cyberspace as a priority in order to motivate consumers of the digital market. At the same time, it is important to support the development of information and communication provision of state platforms and stationary centers for receiving administrative services on the spot with the help of the Internet and information and communication-savvy civil servants [59].

Therefore, it is necessary to specify the definitions of artificial intelligence proposed in international documents.

53 Концепція розвитку штучного інтелекту … . URL: https://zakon.rada.gov.ua/laws/show/1556-2020-%D1%80#Text (date accessed:19.10.2022).

54 Ibidem.

55 Karmaza O., Koucherets D. Artificial intelligence in the civil process: prospects for use. The latest development of the modern legal sciences and education in Ukraine and EU countries: an experience, challenges, expectations : collective monograph. Riga, 2021. Pp. 233—262. DOI: 10.30525/978-9934-26-033-9-14 (date accessed:17.10.2022).

56 Кармаза О. О., Федоренко Т. В. Принципи штучного інтелекту в правосудді України. *Право і суспільство.* 2021. № 2. С. 20. DOI: 10.32842/2078-3736/2021.2.3 (date accessed:17.10.2022).

57 Freeman L. Op. cit. URL: https://ir.lawnet.fordham.edu/ilj/vol41/iss2/1 (date accessed:12.10.2022).

58 Федоренко О. А., Стрільців О. М., Тарасенко О. С. Op. cit. С. 8—26.

59 Чалабієва М. Р. Позитивний досвід цифровізації країн Європейського Союзу. *Україна і Європейський Союз: шлях до сталого розвитку* : зб. наук. ст. за мат-лами V Всеукр. наук.-практ. конф. з європ. права (Харків, 12.11.2021). Харків, 2021. С. 30. URL: https://ndipzir.org.ua/wp-content/uploads/2021/11/Conf_12.11.21.pdf (date accessed:19.10.2022).

Thus, according to the resolution of the European Parliament, artificial intelligence is a smart robot that has the following features: acquires autonomy with the help of sensors and/or data exchange; independently studies the experience or interaction; has weak physical support; adapts the behavior model to the environment; is inanimate in the biological sense [60]. In the message of the European Commission, artificial intelligence is interpreted as systems that demonstrate mental activity in the form of analyzing the environment and taking measures (with a certain degree of autonomy) to achieve a specific goal. AI-based systems are software used in the virtual world to analyze images; speech and face recognition systems; search engines, etc.; also, artificial intelligence can be embedded in hardware devices (for example, autonomous machines, drones or objects of the *"Internet of Things"* network) [61].

Analysis of modern concepts of artificial intelligence shows that artificial intelligence and human intelligence are interconnected phenomena, since the functioning of artificial intelligence (the main characteristics of which are the ability to think, perceive, solve problems, learn, etc.) is based on the principles of human functioning, the only difference is in their nature — artificial intelligence is created by people [62].

When formulating the definition of artificial intelligence, researchers rely on the *concept of rationality,* because in order to choose the most optimal actions necessary to achieve a certain goal, certain criteria should be optimized, and for this you need to have available resources [63]. The North Atlantic Treaty Organization (NATO) pays considerable attention to the technologies of artificial intelligence and the practical aspects of their application and use from the point of view of compliance with national priorities, and also fully takes into account the possible problems associated with the spread of relevant technologies in the world. The fundamental technologies of artificial intelligence are designed to contribute to the transformation of the economy, the labor market, state institutions and, as a result, society in general. The use of such technologies opens up immeasurable opportunities in various spheres of socio-economic life (increasing production efficiency, reducing costs, improving the quality of goods and services, etc.) [64].

Therefore, in any new legal document, the definition of artificial intelligence should be formulated flexibly, taking into account modern achievements and

60 European Parliament resolution of 16 February 2017 with recommendations to the Commission on Civil Law Rules on Robotics (2015/2103(INL)). *Official Journal of the European Union.* 18.7.2018. Pp. 239—257. URL: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52017IP0051&rid=9 (date accessed:19.10.2022).

61 Communication from the commission to the European Parliament, the European council, the council, the European economic and social committee and the committee of the regions. Artificial Intelligence for Europe. (COM/2018/237 final). Brussels, 25.4.2018 / EUR-Lex. URL: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2018:237:FIN (date accessed:19.10.2022).

62 Baltrūnienė J. Op. cit. Pp. 211.

63 A definition of Artificial Intelligence: main capabilities and scientific disciplines / European Commission. 08 April 2019. URL: https://digital-strategy.ec.europa.eu/en/library/definition-artificial-intelligence-main-capabilities-and-scientific-disciplines (date accessed:17.10.2022).

64 Kosilova O. I.; Rozghon O. V., Solodovnikova C. K., Stolbovyi V. M., Barabash O. O. Op. cit. C. 43. DOI: 10.26512/lstr.v14i2.41558 (date accessed:17.10.2022).

prospects of scientific and technological progress and digital technologies, and at the same time sufficiently precisely to ensure the necessary legal certainty. Certainly, there will also be risky cases of using artificial intelligence (due to the danger it creates or the purpose of such use), that is, regardless of the specific conditions, it should be subject to requirements, which we will consider further. As a strategic tool, artificial intelligence is able to predict future risks (in particular, hybrid ones) and overcome real threats, thus increasing the security of the EU [65]. It can also contribute to the fight against crime and terrorism by helping law enforcement agencies track the technologies used by criminals and cross-border criminal activity.

At the same time, despite the perception of artificial intelligence as a successful and popular digital technology, its application in various spheres of social life must comply with basic human rights in international documents. This is due to the presence of a certain conflict between the interests of subjects (those seeking economic growth, automation and personnel changes) and the observance of human rights, freedoms and interests in the case of the use of artificial intelligence technologies (in particular, with regard to the distribution of personal data, interference with the right to inviolability of private life, violation of freedom of expression, which is stipulated by the Convention on the Protection of Human Rights and Fundamental Freedoms [66], hereinafter referred to as *Convention on Human Rights*).

Since Ukraine is aimed at European integration, its information policy (in particular, the development of digital technologies and the use of artificial intelligence technologies) must necessarily become part of this process. It is necessary to develop artificial intelligence as one of the priority areas of scientific and technological research in the context of the processes taking place in this area in the EU countries, providing an appropriate domestic legislative framework and developing strategies taking into account the experience of both individual countries and European trends in general [67].

Also noteworthy is the approach of the Ukrainian scientific school to the definition of artificial intelligence [68], which is based on the application of on principles and mechanisms of the human

65 Komisijos Komunikatas Europos Parlamentui, Tarybai, Europos Ekonomikos ir Socialinių reikalų Komitetui ir Regionų Komitetui. Europos požiūrio į dirbtinį intelektą formavimas (COM(2021) 205 final). Briuselis, 2021.04.21 / Infolex. URL: https://www.infolex.lt/teise/default.aspx?id=1929&crd=1245300 (date accessed:19.10.2022).

66 Конвенція про захист прав людини і основоположних свобод (Європейська конвенція з прав людини) : від 04.11.1950 р.; ратифік. Законом України від 17.07.1997 р. № 475/97-ВР; чинна для України з 11.09.1997 р. (зі змін. та допов.). URL: https://zakon.rada.gov.ua/laws/show/995_004#Text (date accessed:21.10.2022).

67 Пістракевич О. В. Op. cit. URL: https://elibrary.kubg.edu.ua/id/eprint/39141/1/O_Pistrakevych_IRPCRS_1%289%29_2021.pdf (date accessed:17.10.2022).

68 Баранов О. А. Інтернет речей: теоретико-методологічні основи правового регулювання. Т. 1: Сфери застосування, ризики і бар’єри, проблеми правового регулювання : монографія. Харків, 2018. 344 с. ; Karmaza O., Koucherets D. Op. cit. DOI: 10.30525/978-9934-26-033-9-14 (date accessed:17.10.2022) ; Radutniy O. E. Op. cit. URL: http://vakp.nlu.edu.ua/issue/view/12594 (date accessed:17.10.2022) ; Striltsiv O. M., Fedorenko O. A. Problems of legal regulation of the use of artificial intelligence technologies by the National Police of Ukraine. *Scientific Journal of the National Academy of Internal Affairs*. 2022. Vol. 27. No. 1. Pp. 30—39. DOI: 10.33270/0122271.30 (date accessed:17.10.2022).

brain's functioning (in particular, its consciousness). Experts consider the development of artificial consciousness as a global self-organized information product of the computer system that evaluates and controls the key processes that take place in it, distributes information between different parts of the system to coordinate their work and provides social and personal perception of reality. Based on the draft National Strategy for the Development of Artificial Intelligence in Ukraine [69] and preliminary analysis, artificial intelligence should be considered as an algorithm for solving creative problems, created and controlled by artificial consciousness of an artificial personality (machine).

The purpose of creating artificial intelligence is called copying (modeling) the work of the human brain, intelligence, mental activity, reproduction of cognitive function equivalent or identical in criteria, characteristics and indicators to human cognitive functions. Artificial intelligence is a set of methods, techniques, technologies and tools (in particular, hardware), computer programs that implement one, several or all cognitive functions equivalent to human cognitive functions [70]; it is a human-designed device or computer program for obtaining, processing and applying information and forming skills similar to actions consciously performed by a person [71].

Despite the discussions and certain doubts regarding the provision of a legal basis for artificial intelligence, on the way to European integration, Ukraine will not give up the achievements of scientific and technological progress. Therefore, legal regulation in the field of development and use of artificial intelligence remains relevant for the domestic legislator. European standards and recommendations for the protection of the rights and freedoms of developers of artificial intelligence and users of its achievements, contractual obligations and legal liability in this field should be the basis for the regulation of the latest technologies. Legislation reform in accordance with the requirements of the digital age must be comprehensive. There is an urgent need to unify the terminology, in particular, the legislative definition of the term *"artificial intelligence"* [72]. Therefore, the adoption of the law on the use of artificial intelligence in the activities of law enforcement agencies and the judiciary of Ukraine is very relevant today (taking into account the European experience).

69 Проєкт Національної стратегії розвитку штучного інтелекту в Україні (2021—2030) / МОН України, НАН України, Інститут проблем штучного інтелекту. Київ, 2021. С. 10—11. URL: https://www.naiau.kiev.ua/images/news/img/2021/06/strategiya-110621.pdf (date accessed:19.10.2022).

70 Баранов О. Ідентифікація робота зі штучним інтелектом як суб'єкта права. *Інтернет речей: проблеми правового регулювання та впровадження* : мат-ли друг. наук.-практ. конф. (Київ, 29.11.2018). Київ, 2018. С. 9. URL: http://ippi.org.ua/sites/default/files/zbirnik_tez_19.12.2018-maket_3-converted.pdf (date accessed:19.10.2022).

71 Мічурін Є. О. Правова природа штучного інтелекту. *Форум Права.* 2020. № 64 (5). С. 67—75. DOI: 10.5281/zenodo.4300624 (date accessed:19.10.2022).

72 Токарєва К. С., Савліва Н. О. Особливості правового регулювання штучного інтелекту в Україні. *Юридичний вісник.* 2021. Вип. 3 (60). С. 151. DOI: 10.18372/2307-9061.60.15967 (date accessed:19.10.2022).

Issues and prospects of using artificial intelligence in the justice system of Ukraine and EU countries

To consolidate the efforts of the state, scientists, educators, business, public and expert communities in the field of artificial intelligence, the Ministry of Digital Transformation of Ukraine created the Expert Committee on the Development of the Field of Artificial Intelligence [73], which proposed eight key areas of state policy in this area:

1) education and human capital;
2) science and innovations;
3) economics and business;
4) cyber security;
5) defense and security;
6) public administration;
7) legal regulation and ethics;
8) justice.

In the context of our research, from a scientific and practical point of view, the issue of the application of artificial intelligence, first of all, in justice, activities of law enforcement agencies, and the improvement of legal support for these types of activities are interesting.

The analysis of the sociological research conducted in Ukraine confirms the positive attitude of the majority of respondents to the active development of artificial intelligence. They see such positive moments primarily in: 1) freeing people from difficult, dangerous and unskilled jobs (69,5 %); 2) increase in productivity in all branches of industry (50,4 %); 3) prevention of diseases, prolongation of human life (19,9 %); 4) securing humanity from natural disasters and catastrophes (18,1 %); 5) prevention of crime and war (14,1 %). At the same time, 35,6 % of respondents believe that artificial intelligence should be entrusted with law enforcement functions, 46,0 % — development and improvement of legislation, 54,9 % — consideration of case in cour[74]. Such indicators indicate positive expectations and support for the implementation of artificial intelligence in the activities of law enforcement agencies and the judiciary.

The prerequisite for the introduction of artificial intelligence in Ukraine is the start of the Unified Judicial Information and Telecommunication System (hereinafter referred to as *UJITS*) [75] — a set of information and telecommunication subsystems (modules) that ensure the automation of the processes of the courts, bodies and institutions in the justice system.

UJITS modules:

- official web portal *"Judiciary of Ukraine"*;
- unified state register of court decisions;
- official email address (*"Electronic Cabinet"*);
- unified subsystem for managing financial and economic processes;
- single contact center of the judiciary of Ukraine;
- *"Automated distribution"*;
- *"Electronic court"*;
- *"Court statistics"*.

The system of automated seizure of funds within the scope of executive proceedings should also be part of the UJITS,

73 Експертний комітет з питань розвитку сфери штучного інтелекту при Міністерстві цифрової трансформації України. URL: http://ai.org.ua/ua.html (date accessed:19.10.2022).

74 Майже 50 % українців вважають, що штучний інтелект може допомогти забезпечити чесні вибори і перемогти корупцію,— опитування / LB.ua. 11.12.2018. URL: https://lb.ua/news/2018/12/11/414638_pochti_50_ukraintsev_schitayut.html (date accessed:10.11.2022).

75 ЄСІТС / Вища рада правосуддя. URL: https://hcj.gov.ua/page/yesits (date accessed:10.11.2022).

the administrator of which will have access to the information of the Unified State Demographic Register. In general, the implementation of such a system involves the use of an electronic digital signature and electronic document management (that is, completely paperless record keeping). Today, three of its modules are functioning in test mode *("Electronic cabinet", "Electronic court"* and the video conferencing subsystem) [76].

At the same time, it is important to note that the full implementation of this system is a matter of more than one year. Currently, only some courts operate separate modules, and electronic claims have to be duplicated in paper form. This is caused by a number of problems of martial law, however, if the government's policy on digital transformation is activated, we can expect rapid development in this area and an increase in the efficiency and transparency of the work of Ukrainian courts. Therefore, the problems and prospects of introducing modern digital technologies and artificial intelligence tools are very relevant today [77] and require further study and practical steps in the direction of digitization and digitization of justice in Ukraine.

On the other hand, the full-scale armed aggression of the russian federation against Ukraine actualized the issue of creating a domestic system of military justice. Recommendations of the Committee of Ministers of the Council of Europe to member states CM/Rec(2010)4 *"On human rights in relation to military personnel"* (adopted at the 1077th meeting on February 24, 2010), the Convention on Human Rights and the precedent practice of the European human rights court, which has developed approaches to the functioning of military courts. Turning to this practice, which (among others) considered the issue of ensuring the right to a fair trial in the context of possible violations of Art. 6 of the Convention on Human Rights by military courts, makes it possible to synthesize key approaches that should be taken into account for the functioning of military courts in Ukraine [78]. Therefore, the analysis of the problems and prospects of the use of artificial intelligence in the justice system of our country, taking into account the work of the European Court of Human Rights, shows the perspective of introducing certain elements of digitalization into the judiciary of Ukraine, in particular, into the activities of military justice in wartime.

The question of whether artificial intelligence can replace a judge is also quite debatable and important [79]. Some lawyers

76 ЄСІТС / Вища рада правосуддя. URL: https://hcj.gov.ua/page/yesits (date accessed:10.11.2022).

77 Shepitko V. Yu., Shepitko M. V. The role of forensic science and forensic examination in international cooperation in the investigation of crimes. *Journal of the National Academy of Legal Sciences of Ukraine*. 2021. Vol. 28. Iss. 1. P. 179—186. DOI: 10.37635/jnalsu.28(1).2021.179-186 (date accessed: 10.11.2022).

78 Капліна О. В. Військова юстиція у фокусі Європейського суду з прав людини. *Науковий вісник публічного та приватного права*. 2022. Вип. 2. С. 181—191. DOI: 10.32844/2618-1258.2022.2.29 (date accessed:12.10.2022).

79 Кібенко О. Чи може штучний інтелект замінити українського суддю? / Протокол. Юридичний інтернет-ресурс. 13.12.2019. URL: https://protocol.ua/ua/chi_moge_shtuchniy_intelekt_zaminiti_ukrainskogo_suddyu/ (date accessed:12.10.2022) ; Гришин-Грищук Р. Коли штучний інтелект замінить суддів в Україні? / NV. 27.03.2021. URL: https://biz.nv.ua/ukr/experts/koli-shtuchniy-intelekt-zaminit-suddiv-v-ukrajini-prognoz-50150409.html (date accessed:12.10.2022).

justify the need to use artificial intelligence as a cyber judge by the fact that it will make decisions like a person, only it will do it more quickly, consistently, without bribery, impartially and objectively [80]. We believe that such radical innovations require a thoughtful and balanced approach.

It should be noted that Art. 6 of the Human Rights Convention [81] enshrines the right to consider cases by an independent and impartial court. However, neither in Article 6 itself, nor in the commentaries to it, there is no direct prohibition of the use of artificial intelligence and no claim that justice should be administered only by a human judge. The Practice of the European Court on Human Rights in light of the violation of Art. 6 of the Human Rights Convention due to the use of artificial intelligence during decision-making is still missing. Domestic law details the norm of the Convention on Human Rights in Art. 127 of the Constitution of Ukraine, which stipulates that justice is administered by judges and that judicial power is vested in them. A similar legal position is contained in Art. 92 of the Basic Law of the Federal Republic of Germany [82].

Introduction of the idea of *"cyber courts"* is connected with the formalization, creation and offering of appropriate templates in the form of programs and algorithms [83], therefore, such an approach should not be contrasted with a creative approach and it should not deprive the trial of individuality and professional thinking, since the individuality and uniqueness of the trial of a specific criminal offense, administrative misdemeanor, civil dispute (on the one hand) and the inability to definitely typify all possible situations, tasks and proposals in relevant programs, algorithms, typical court decisions (on the other hand) does not allow us to claim complete *"technologicalness",* i.e. one hundred percent formalization of the trial process in general and the liability to objectively and legally resolve all court situations in particular. In this activity, a creative approach remains important, when the ability to adapt typical recommendations to the conditions of a specific court proceeding is more important, which is impossible without the participation and control of a human judge [84].

It is worth noting the idea that artificial intelligence systems in the activities

80 Токар Л. В. Штучний інтелект на варті справедливості: утопія чи перспектива людства. *Порівняльно-аналітичне право*. 2020. № 2. С. 275. URL: https://dspace.uzhnu.edu.ua/jspui/bitstream/lib/35614/1/%d0%a8%d0%a2%d0%a3%d0%a7%d0%9d%d0%98%d0%99%20%d0%86%d0%9d%d0%a2%d0%95%d0%9b%d0%95%d0%9a%d0%a2%20%d0%9d%d0%90%20%d0%92%d0%90%d0%a0%d0%a2%d0%86%20%d0%a1%d0%9f%d0%a0%d0%90%d0%92%d0%95%d0%94%d0%9b%d0%98%d0%92%d0%9e%d0%a1%d0%a2%d0%86.pdf (date accessed:19.10.2022).

81 Конвенція про захист прав людини … . URL: https://zakon.rada.gov.ua/laws/show/995_004#-Text (date accessed:21.10.2022).

82 Baltrūnienė J., Shevchuk V. Artificial Intelligence Technologies in Law Enforcement and Justice: Ukrainian and European experience. *Цифрова трансформація кримінального провадження в умовах воєнного стану* : мат-ли Всеукр. круглого столу (Харків, 16.12.2022). Харків, 2022. С. 81.

83 Idder A., Coulaux S. Op. cit. URL: https://www.ibanet.org/dec-21-ai-criminal-justice (date accessed:12.10.2022).

84 Шевчук В. М. Перспективи запровадження технологій штучного інтелекту у судову діяльність в сучасних умовах. *Використання технологій штучного інтелекту …* . С. 89—90.

of criminal justice bodies are most often used to solve standard tasks. Decisions obtained as a result of such a solution can only have an advisory nature because the final procedural decision will still be made by an authorized person (even if the result of the artificial intelligence system will be marked by a higher level of quality). At the same time, complex artificial intelligence systems also have certain shortcomings, which, in turn, can lead to erroneous court decisions [85]. In addition, according to Art. 6 of the Human Rights Convention, the participant in the legal process must be informed in clear language about all procedural aspects, as well as about the capabilities and functions of artificial intelligence. In order to increase public awareness during the implementation of new systems, it is worth organizing public discussions, following the principle of *"under user control"*.

When applying high information technologies in the judiciary, it is necessary to take into account the principles of the use of artificial intelligence in the administration of justice set forth in the Ethical Charter [86] (in particular: the principle of observing basic human rights; the principle of non-discrimination, namely the prevention of any discrimination between individuals or groups of individuals; the principle of quality and security regarding the processing of court decisions and data in a secure technological environment; the principle of *"under user control"*; the principle of transparency, impartiality and fairness).

Therefore, in our opinion, *artificial intelligence cannot replace judges, but nothing prevents optimizing the work of the judge and the court by involving artificial intelligence.* Thus, it is appropriate to note that the role of artificial intelligence should be defined not as a replacement for the judge during the administration of justice, but as a kind of assistance for him to administer justice. In this case, electronic technologies should be controlled by a person, not the other way around. First of all, artificial intelligence must adhere to the principles of the rule of law, respect for honor and dignity, equality before the law and the court, proportionality, competition between the parties, dispositiveness, etc. [87]. Accordingly, this direction of research requires a deep understanding, a critical attitude and further scientific developments and investigations.

Issues of using artificial intelligence in law enforcement

Recently, the use of artificial intelligence technologies in the practice of law enforcement has become extremely relevant: this is due to the need to confront criminals who increasingly using the most modern innovative technologies and achievements of the fourth industrial revolution, in particular, blockchain models, drones, robotics, etc.

Law enforcement of Ukraine, significantly increasing the efficiency of their work and optimizing the solution of crime prevention tasks, are actively using the following artificial intelligence technologies:

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85 Авдєєва Г. К. Op. cit. С. 6—10.

86 European ethical Charter ... . URL: https://rm.coe.int/ethical-charter-en-for-publication-4-december-2018/16808f699c (date accessed:16.10.2022).

87 Кожевнікова А. В. Застосування штучного інтелекту у цивілістичному процесі. *Науковий вісник Міжнародного гуманітарного університету. Сер.: Юриспруденція.* 2022. № 55. С. 42. DOI: 10.32841/2307-1745.2022.55.9 (date accessed:12.10.2022).

- identification (in particular, of the Russian occupiers) thanks to facial recognition on social networks and records from surveillance cameras [88];
- ensuring traffic, detecting and recording violations of traffic rules [89];
- use of drones to counter the illegal trafficking of firearms and drugs [90], to conduct military operations [91] and to collect evidentiary information in war conditions and conduct active combat operations with the aim of recording war crimes;
- prevention of criminal offenses using intelligent security systems with various devices (sensors) for collecting information [92];
- prediction of criminal offenses by the method of crime mapping [93] (by means of which local crime and individual criminal behavior are predicted).

For instance, thanks to artificial intelligence technologies, it is possible to make reasonable forecasts regarding the temporal, territorial and qualitative indicators of crime, which will optimize the use of available resources by law enforcement agencies and the performance of police functions [94]. In addition, with the help of artificial intelligence technologies, it is possible to identify Russian military personnel from social networks and surveillance cameras [95]. Artificial intelligence destroys the myths about the supposedly immortal soldiers of the so-called special operation, recognizing the faces of the corpses of the occupiers, finding them on social networks and using auto-dialers to notify relatives of their death. The Ministry of Defense of Ukraine uses *Clearview AI*

88 Kryvoruchko O., Bebeshko B., Khorolska K., Desiatko A., Kotenko N. Artificial intelligence face recognition for authentication. *Technical Sciences and Technology*. 2020. № 2 (20). Pp. 139—148. URL: http://tst.stu.cn.ua/article/view/215780 (date accessed:12.10.2022).

89 Мисливий В. А. Штучний інтелект як фактор запобігання дорожньо-транспортної злочинності. *Використання технологій штучного інтелекту …* . С. 55—60.

90 Мовчан А. В., Мовчан М. А. Використання безпілотних літальних апаратів у діяльності правоохоронних органів. *Соціально-правові студії*. 2020. Вип. 3 (9). С. 104—110. DOI: 10.32518/2617-4162-2020-3-104-110 (date accessed:12.10.2022).

91 Мосов С. П., Хорошилова С. Й. Особливості застосування стратегічної безпілотної розвідувальної авіації у воєнних конфліктах XXI століття. *Збірник наукових праць Центру воєнно-стратегічних досліджень Національного університету оборони України імені Івана Черняховського*. 2018. № 2 (63). С. 104—109. URL: http://nbuv.gov.ua/UJRN/Znpcvsd_2018_2_19 (date accessed:17.11.2022).

92 Бугера О. І. Використання штучного інтелекту для запобігання злочинності. *Вчені записки ТНУ імені В. І. Вернадського. Серія: юридичні науки.* 2021. Т. 32 (71). № 6. С. 82—86. DOI: 10.32838/TNU-2707-0581/2021.6/13 (date accessed:17.11.2022).

93 Манжай О. В., Потильчак А. О. Особливості картографування злочинних проявів. *Право і безпека.* 2020. № 4 (79). С. 66—72. DOI: 10.32631/pb.2020.4.10 (date accessed:17.11.2022).

94 Юртаєва К. В. Використання технологій штучного інтелекту в реалізації стратегій «predictive policing»: можливості, проблеми та перспективи для України. *Використання технологій штучного інтелекту …* . С. 99—104.

95 Латиш К. Цифрова криміналістика у період війни в Україні: можливості використання спеціальних знань у сфері інформаційних технологій. *Kriminalistika ir teismo ekspertologija : mokslas, studijos, praktika.* 2022. T. 18. C. 32. URL: https://repository.mruni.eu/bitstream/handle/007/18524/XVIII%20Vilnius%202022_compressed-18-21.pdf?sequence=1&isAllowed=y (date accessed:17.11.2022).

facial recognition technology to combat disinformation, recognize and identify dead and war criminals [96]. As we can see, in the realities of military aggression, digital forensics tools significantly contribute to the detection, disclosure and investigation of war crimes [97].

Therefore, the use of artificial intelligence in law enforcement activities is an important tool for improving the efficiency of law enforcement agencies thanks to the development and implementation of the latest digital technologies in the following main areas:

1) *information and analytical support of law enforcement activities* (for example, the information and telecommunication system *"Information Portal of the National Police of Ukraine"* is intended for processing information generated in the process of police activities and information and analytical support of such activities) [98];
2) *information and reference provision of law enforcement activities* (in particular, the use of maps or plans for the formation of geo-information systems for the spatial location of objects);
3) *creation of specialized information intelligence systems* for operational and investigative purposes (for example, development and implementation of an automated system for conducting operational and investigative activities and covert investigative (detective) actions in telecommunications networks of general use (similar to the American *Eshelon* and *DCS-1000 (Carnivore)* and the European *RES* system);
4) *formation and development of intelligent video surveillance systems* by two functional groups: a) recognition and classification of video surveillance objects; b) tracking the path of the video surveillance object);
5) *ensuring the protection of objects* (for example, by the systems *"Orlan", "Kronos", "AI-Gryphon",* etc., which are complexes of technical means and software for centralized monitoring of the state of security and fire alarm devices);
6) *creation of departmental specialized intelligent information systems* (for example, for the police — automated dactyloscopic information systems: Ukrainian *"Dakto-2000"*, French *MORFO*, American *PRINTRAK*, Japanese *NEX* etc.; for Boarder Guard Service — integrated information and telecommunication systems *"Arkan"* and *"Gart"*; for Customs Service — multifunctional complex information system *"Electronic Customs"*);
7) *development and implementation of intellectual information educational systems* (in particular, modeling of knowledge, communication, interpretation, self-improvement, interaction [99]);

96 Федоров М. Технології з розпізнавання облич та штучний інтелект дозволяють знайти кожного / SUNDRIES. 09.04.2022. URL: https://sundries.com.ua/tekhnolohii-z-rozpiznavannia-oblych-ta-shtuchnyi-intelekt-dozvoliaiut-znaity (date accessed:12.10.2022).

97 Мамедов Г. Цифрова криміналістика. Як це допомогло зібрати докази злочинів у Бучі? / New Voice. 08.06.2022. URL: https://nv.ua/ukr/opinion/viyna-v-ukrajini-yak-cifrova-kriminalistika-vikrivaye-zlochini-rf-v-ukrajini-novini-ukrajini-50248411.html (date accessed:12.10.2022).

98 Положення про інформаційно-комунікаційну систему «Інформаційний портал Національної поліції України» : затв. наказом МВС України від 03.08.2017 р. № 676 (зі змін. та допов.). URL: https://zakon.rada.gov.ua/laws/show/z1059-17#Text (date accessed:04.10.2022).

99 Ковтун В. О., Рвачов О. М. Огляд та перспективи використання технологій штучного інтелекту в правоохоронній діяльності. *Використання технологій штучного інтелекту ...* . С. 46—47.

8) *introduction of information and telecommunication system of pre-trial investigation* [100] as an important step in the improvement of investigative (detective) activity (the use of artificial intelligence will significantly save time, money, means, resources; it will shorten the terms of consideration of relevant procedural documents; it will simplify the access of participants within their competence to the relevant materials of criminal proceedings, digitization of document flow, etc. [101]).

It is important to note: European practice and experience indicate that law enforcement agencies must be able to act in the changing modern conditions of the transformation of crime in order to ensure the protection and safety of citizens [102]. To implement the competences of law enforcement agencies, programs and algorithms created by elements of artificial intelligence are used. In addition, institutions performing law enforcement functions have various types of systems, the components of which are artificial intelligence algorithms [103].

The use of artificial intelligence in the investigation of war crimes and issues of the formation of digital forensics

Modern forensics corresponds to the development of digital technologies creating means and methods of extracting forensically significant information from new types of media. The development of scientific and technical progress makes it possible to use digital technologies in law enforcement activities, which increases the efficiency and accelerates the process of pre-trial investigation, contributes to a more complete formation of the evidence base in the investigation of criminal offenses, and this, in turn, improves the quality of consideration of criminal proceedings in court. Under such conditions, the defining trend of criminology is the integration of knowledge and the application of the latest, innovative scientific developments aimed at combating crime. The natural result of the informatization of the social environment is the *"technologicalization"* of forensics, the development and implementation of information,

100 Про внесення змін до Кримінального процесуального кодексу України щодо запровадження інформаційно-телекомунікаційної системи досудового розслідування : Закон України від 01.06.2021 р. № 1498-IX. URL: https://zakon.rada.gov.ua/laws/show/1498-20#Text (date accessed:18.10.2022).

101 Глобенко Г. І. Інформаційно-телекомунікаційна система досудового розслідування: міжнародний досвід і шляхи запровадження. *Вісник Харківського національного університету внутрішніх справ*. 2021. Т. 95. № 4. С. 188—198. DOI: 10.32631/v.2021.4.16 (date accessed:18.10.2022).

102 Europos Komisija „Priedas prie Komisijos komunikato Europos Parlamentui, Europos Vadovų Tarybai, Tarybai, Europos ekonomikos ir socialinių reikalų komitetui ir Regionų komitetui Europos požiūrio į dirbtinį intelektą formavimas“/EUR-Lex, 2018 m. balandžio 25 d., 237 galutinis, žiūrėta 2023 m. URL: https://eurlex.europa.eu/legal-content/LT/TXT/?uri=COM:2018:237:FIN (date accessed:16.10.2022).

103 Europos Komisija, „Feasibility study on a forecasting and early warning tool for migration based on artificial intelligence technology“ / Europos Sąjungos leidinių biuras Ecorys, 2021 m. vasario 15 d., žiūrėta 2023 m. URL: https://op.europa.eu/lt/publication-detail/-/publication/5afa29f0-700a-11eb-9ac9-01aa75ed71a1/languageen/format-PDF/source-191372680 (date accessed:16.10.2022).

digital, telecommunication and other technologies in law enforcement practice and judicial proceedings [104].

In the conditions of war and global threats, all practitioners in the field of international criminal justice need to expand their understanding of the essence of the latest digital technologies (for example, in social networks, geolocation and mobile communication systems, computer information and in the rest of digital traces) and the possibilities of their application in war zones [105]. Taking into account the mass murders, rapes, looting, etc. committed by the Russian military on the territory of Ukraine, today the problem of collecting evidence of these crimes has become acute, which requires the activation and spread of the use of artificial intelligence for the purpose of detecting, documenting and investigating war crimes, crimes against humanity and genocide [106].

The use of artificial intelligence in the investigation of war crimes in Ukraine can be useful in many aspects, in particular in the following directions:

1) *analysis of satellite images.* Artificial intelligence is able to quickly detect changes in the landscape, in particular buildings, roads, infrastructure objects that can be associated with war crimes, as well as help in identifying the burial places of victims of war crimes;
2) *analysis of video&photo materials.* Artificial intelligence can be used to identify objects, suspects and witnesses from video and photo materials made at war crimes sites;
3) *processing of audio materials.* By recording, for example, telephone conversations, artificial intelligence can help identify voices and determine the location of subscribers during such a conversation;
4) *analysis of social networks.* By analyzing social networks, artificial intelligence can help identify links between suspects who may be associated with war crimes and identify individuals who may witness or have information about war crimes;
5) *analysis of data from medical institutions.* Artificial intelligence can assist in determining the cause of death, in identifying the bodies of victims of war crimes, as well as prisoners of war, and war criminals and their search for data on the disease and information about their identification characteristics in order to identify a specific person;
6) *face recognition.* Artificial intelligence can be used to recognize faces in photos and videos of war crimes. This can help identify suspects involved in the commission of such crimes and find witnesses who can provide important information about the war crime event under investigation;
7) *analysis of textual information.* Artificial intelligence analysis of textual information (for example, messages on social networks and other sources) related to war crimes will help identify suspects and witnesses and find out criminalistically significant information about war crimes under investigation.

104 Шепітько В. Ю. Формування доктрини криміналістики та судової експертизи в Україні — шлях до єдиного європейського криміналістичного простору. *Право України.* 2022. № 2. С. 83.

105 Freeman L. Op. cit. P. 335. URL: https://ir.lawnet.fordham.edu/ilj/vol41/iss2/1 (date accessed:12.10.2022).

106 Дуфенюк О. Op. cit. DOI: 10.30525/2592-8813-2022-1-6 (date accessed:12.10.2022).

Thus, the use of artificial intelligence can be useful for effective investigation of war crimes in Ukraine and help to identify the perpetrators and bring them to justice for what they have done. However, it should be noted that the use of artificial intelligence in the investigation of war crimes has its challenges and limitations. One of the biggest challenges is that during the war it is difficult to obtain reliable information due to the high degree of conflict and unpredictability of the situation on the spot. There is also the risk of using artificial intelligence to persecute political opponents or incorrectly display data due to certain algorithmic imperfections. In addition, it is important to take into account legislative restrictions on the use of artificial intelligence to investigate crimes (in particular, the ban on the use of certain types of data that may violate human rights). All these factors require careful analysis and planning before using artificial intelligence to investigate war crimes. At the same time, artificial intelligence is a powerful tool for investigating war crimes in Ukraine, capable of promoting the victory of justice and bringing those responsible to justice.

The use of artificial intelligence and modern digital technologies in military realities makes it possible to significantly increase the efficiency and speed up the investigation of war crimes and cybercrimes. It is known that almost any activity of people (in particular, criminals and their groups) in the modern world is accompanied by a kind of *"trace picture"*, a special place in which digital traces occupy [107] as an important source of criminalistically significant information. It is digital, not electronic traces, that today form the basis of the evidence base during the investigation of such criminal offenses. In digital footprints (despite the ever-changing form of information storage), one thing remains constant — it is a digital encoding of information that has given way to an analog signal. With this in mind, it is worth talking about digital traces left in virtual space.

Application of European standards of proof in criminal proceedings testifies to the European vector of development of criminalistics and forensic examination in Ukraine [108]. In such circumstances, it can be argued about the activation of trends in the formation and application of a new scientific direction — Digital Criminalistics [109].

In the special literature, there are different approaches to the definition of the concept of digital criminalistics and its place in the system of criminology and judicial sciences. Some scientists call digital criminalistics a separate branch of the judicial sciences, a system of scientific methods for researching digital evidence in order to facilitate the detection and investigation of criminal offenses [110].

107 Крицька І. О. «Доріжка цифрових слідів»: доказове значення й окремі аспекти збирання та дослідження у кримінальному провадженні. *Цифрові трансформації України 2020: виклики та реалії* : зб. наук. пр. НДІ ПЗІР НАПрН України № 1 за мат-ми кругл. столу (Харків, 18.09.2020). Харків, 2020. С. 92—97. URL: https://ndipzir.org.ua/wp-content/uploads/2020/12/Tezy_18_09_2020_17.pdf (date accessed:12.10.2022).

108 Шепітько В. Ю. Формування доктрини ... . С. 87.

109 Латиш К. Op. cit. С. 31—37. URL: https://repository.mruni.eu/bitstream/handle/007/18524/XVIII%20Vilnius%202022_compressed-18-21.pdf?sequence=1&isAllowed=y (date accessed:17.11.2022).

110 Степанюк Р. Л., Перлін С. І. Op. cit. DOI: 10.33766/2524-0323.99.283-284 (date accessed:17.10.2022).

Others believe that digital criminalistics is associated with the process of collecting, obtaining, storing, analyzing and submitting electronic (digital) evidence in order to obtain operational-search information, evidentiary information and the investigation and criminal prosecution of various types of criminal [111] (in particular, cybercrimes and war crimes). Some sources note that digital criminalistics concerns the process of collecting, receiving, storing, analyzing and presenting electronic (digital) evidence in pre-trial and trial proceedings. Therefore, digital forensics should become a strategic direction in the development of forensic science.

According to our opinion, the subject of digital criminalistics is the laws of detection, fixation, preliminary research, the use of computer information, digital traces and means of their processing in order to solve the problems of detecting, disclosing, investigating and preventing criminal offenses, as well as the development (based on knowledge of these laws) of technical means, techniques and methodological recommendations aimed at optimizing activities to counter criminal offenses in the digital space. Thus, digital criminalistics is a branch of criminalistics, which studies the patterns of occurrence and use of digital traces, development on the basis of knowledge about these patterns of technical means, techniques and methods for identifying, fixing, extracting and studying digital information (evidence) and means of its processing in order to disclose, investigate and prevent criminal offenses [112].

During the war, the arsenal of traditional forensic tools and forms of collecting evidence on war crimes is quite limited due to the danger to all participants of investigative (search) actions and the impossibility of direct access to the scene [113], thus, there is a need to use digital forensic tools.

Modern approaches to the investigation of war crimes make it possible to determine the sources of digital information, which determine the directions of collecting and studying digital traces to obtain information:

- from mobile devices seized from participants in criminal proceedings;
- from personal computers of individuals and legal entities;
- from servers and other information storage devices in organizations and institutions;
- from radio frequency identifiers, *GPS*-tackers, sensors, stationary and mobile measuring devices using geolocation, video surveillance and positioning systems;
- from network services that provide voice and video communication between computers via the Internet (*ICQ, Skype, WhatsApp, Viber, Telegram* and others);
- from banking systems on digital media (*HDD, SSD,* flash drives, etc.);

111 Колодіна А. С., Федорова Т. С. Op. cit. DOI: 10.32782/klj/2022.1.27 (date accessed:12.10.2022).

112 Шевчук В. М. Цифрова криміналістика: воєнні виклики сьогодення та нові завдання у сучасних умовах. *Правові виклики сучасності* : мат-ли Всеукр. круглого столу (Харків, 20.12.2022). Харків, 2022. С. 35—39.

113 Дуфенюк О. Розслідування воєнних злочинів: логістичні, криміналістичні та судово-медичні питання. *Юридичний науковий електронний журнал*. 2022. № 4. С. 369—374. DOI: 10.32782/2524-0374/2022-4/88 (date accessed:17.11.2022).

- from mobile operators regarding the details of subscriber communication and determining the location of the subscriber using geolocation;
- from recordings of surveillance cameras of commercial and state structures;
- from cameras and video cameras seized from participants in criminal proceedings.

No less important in today's conditions of the active spread of digital technologies is the connection between the application of specific expertise during the collection of digital traces, the possibilities of forensic research, the evaluation and use of the results of examinations in proving and transforming the competencies of forensic experts in most types of forensic examinations [114]. Today, objects in digital form are submitted for examination both on individual data carriers and in the form of complete computer systems, therefore, in order to legally obtain digital traces, it is necessary to use appropriate specific expertise and to appoint and conduct forensic computer-technical examination and examinations of telecommunication systems and means (research of digital and analog devices) [115].

We consider that the application of artificial intelligence and the process of digitization of forensics is a natural stage in the development and formation of modern forensic knowledge, which involves the introduction of digital technologies in various fields of forensic science, forensic expertise and legal practice, which requires further research into the issues of digital criminalistics. Particular attention should be paid to increasing the role of forensic didactics [116], in particular to the forensic training of investigators, prosecutors, judges, detectives, forensic investigators, forensic experts in the field of digital technologies. It's time to start a new profession and train a digital *forensic scientist* [117]. Under such circumstances, it is expedient to direct the modern paradigm of criminology to the formation and further development of digital criminalistics in order to effectively solve new tasks in the conditions of martial law and the digitalization of society.

Conclusions

As an integral attribute of the modern activity of criminal justice bodies, digital information determines the prospects and trends of the development of criminology. In today's realities, an important task of criminology is the development and application of innovative means, techniques and methods that allow for the effective collection, research, and use of various (in particular, digital) evidence

114 Zhuravel V. A., Konovalova V. E., Avdeyeva G. K. Reliability Evaluation of a Forensic Expert's Opinion: World Practices and Ukrainian Realities. *Вісник Національної академії правових наук України*. 2021. Vol. 28. No. 2. Pp. 252—261. DOI: 10.37635/jnalsu.28(2).2021.252-261 (date accessed:17.11.2022).

115 Шепітько В., Шепітько М. Доктрина криміналістики та судової експертизи: формування, сучасний стан і розвиток в Україні. *Право України*. 2021. № 8. С. 12—27.

116 Malevski H., Kurapka V. E., Tamelė I. Motivation and expectations of students — an important factor in the implementation of the new bachelor's degreeprogram "Law and Criminalistics". *The Criminalist of the First Printing*. 2021. № 21—22. Pp. 12—26.

117 Шевчук В. М. Цифрова криміналістика: формування та роль у забезпеченні безпекового середовища України. *Нова архітектура безпекового середовища України* : зб. тез Всеукр. наук.-практ. конф. (Харків, 23.12.2022). Харків, 2022. С. 146—150.

in pre-trial investigation and court proceedings. That is why the question of increasing the role of forensic knowledge is urgent because the issue of applying artificial intelligence technologies in the activities of law enforcement and justice bodies is of particular importance and requires special scientific research in view of European experience and modern practice. The formation of a new field of knowledge — digital forensics as a strategic direction in the development of modern forensic science — is urgent.

At the same time, a significant problem in the case of the use of artificial intelligence technologies during the investigation of offenses is a possible violation of human rights (regarding the protection of personal data confidentiality and interference in private life). Therefore, it is important not to exaggerate the potential and advantages of artificial intelligence: it is worth considering its individual shortcomings. We see that the use of artificial intelligence in judicial proceedings and law enforcement activities is permissible only under the condition of mandatory observance of the principles of the rule of law, basic human rights, respect for honor and dignity, equality before the law and the court, proportionality, competition between the parties, transparency, impartiality and justice etc. As of today, it is impossible to completely replace the judge with artificial intelligence in the administration of justice, on the other hand, there are no legal prohibitions on optimizing the work of the judge and the court by involving artificial intelligence technologies. Therefore, the leading role of artificial intelligence is not to replace the judge in the administration of justice, but only a kind of high-tech assistance. In addition, in order to prevent the uncivilized (illegal) use of artificial intelligence, it is necessary to form a global (mandatory) international legal framework for its development and implementation. Governments and private companies must be aware of the imperfection of the raw data and technologies on which artificial intelligence is based, and therefore take care to prevent discrimination and human rights violations. It is advisable to direct further research to the development of issues related to the development and use of artificial intelligence as a component of information technologies in law enforcement and justice in view of international experience and modern practice.

Штучний інтелект в діяльності органів правопорядку та юстиції: вітчизняний та європейський досвід

Сніґоля Матуелєне, Віктор Шевчук, Юрґіта Балтрунене

Мета статті — дослідити актуальні проблеми застосування технологій штучного інтелекту в діяльності органів правопорядку та юстиції в умовах воєнного стану і глобальних загроз; визначити основні тенденції, проблеми й перспективи криміналістичних досліджень із використанням штучного інтелекту крізь призму євроінтеграційних процесів; висвітлити прогалини в нормативно-правовому регулюванні використання цифрових технологій, окреслити напрями його вдосконалення. Для досягнення поставленої мети застосовано загальнонаукові та спеціальні методи наукового дослідження (зокрема, діалектичний, аналітичний, індукції й дедукції та ін.). Проаналізовано вітчизняний і європейський досвід застосування технологій штучного інтелекту в діяльності органів правопорядку та юстиції, визначено їхні перспективні напрями.

Убачаємо, що правове регулювання використання штучного інтелекту в Україні доцільно здійснювати за європейськими стандартами, правилами й рекомендаціями — згідно з обраним нашою державою євроінтеграційним курсом. Зауважено, що запровадження штучного інтелекту в судочинство має передусім ґрунтуватися на принципах верховенства права, дотримання основних прав людини, поваги до честі й гідності, рівності перед законом і судом, пропорційності, змагальності сторін, прозорості, неупередженості та справедливості. Штучний інтелект не здатний цілком замінити суддів, однак його застосування сприятиме оптимізації роботи судді й суду. Обґрунтовано, що у воєнних реаліях сьогодення гостро постало питання про підвищення ефективності розслідування сучасних воєнних злочинів і кіберзлочинів за допомогою цифрових технологій.

Ключові слова: *штучний інтелект; криміналістика; криміналістичні знання; спеціальні знання; цифрова криміналістика; судова експертиза; цифрові докази; розслідування воєнних злочинів; протидія злочинності; тенденції розвитку криміналістики.*

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Plea Bargaining — A Comparative Study of India with Foreign Countries

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Plea bargaining has become more popular as a means of settling court issues all around the world. Plea bargaining's application, scope, and operation change significantly between common law and civil law regimes. To analyze these differences in regard to different jurisdictions, a comparison between India and the USA (their plea bargaining) has been done in this study. The relative benefits and drawbacks of plea bargaining are up for debate. This is because it is argued that plea bargaining calls into question the primary goals of a trial, which are to establish the truth and uphold justice. It is without dispute that India needs a framework for speedy justice administration. Indian courts are being battered by the rise in criminal cases. Prisons are now overflowing with inmates who are being held without a trial due to the ongoing delays in case resolution. India has developed plea bargaining (as a response to this sad status of the judicial system), which was acknowledged as a trustworthy strategy for concluding open cases and accelerating the criminal justice system. According to the then-Chief Justice of India, Y. K. Sabharwal (2005-2007), the introduction of plea bargaining in India would not only expedite the criminal justice system but also serve as a restorative form of justice where victims would be equal stakeholders and receive sufficient compensation. However, despite years of conceptualization, the Indian criminal justice system has yet to adopt plea bargaining. The paper attempts to research whether plea bargaining in India in its present form and structure is adequate to achieve that goal by weighing its advantages and disadvantages in the context of the Indian judicial system. Given the above, it is proposed to introduce changes to this contemporary dispute resolution mechanism.

Keywords: *pre-trial concessions; negotiations; plea bargaining; punishment; Law Commission; judicial system.*

Research Problem Formulation

Criminal law is practiced all over the world and includes unique methods that are created to achieve a certain goal. These might be specific instructions to help the police make arrests or the exact method used by the courts to decide cases and provide verdicts. These mechanisms grow over time, making it easier for novel procedures to regularly materialize. One such process is plea bargaining, a relatively recent way to be found guilty in court.

In a plea agreement, the defendant admits guilt in exchange for a reduced sentence after the prosecution and defence counsel establish an amicable agreement. Criminal trials are taking longer and longer to resolve by the time they are finished. In many cases, the trial process does not start until many years after the accused has been placed in judicial custody. This is due to the criminal courts' increasing use of administrative procedures to expedite the process of conducting criminal trials. The criminal justice system in India stipulates that numerous inmates who are awaiting trial are compelled to remain in jails around the nation. According to the National Crime Records Bureau, there were almost 50,000 more people in jails in 2011 than there were beds available, and most of them were awaiting trial or had been there for more than five or six years [1]. Many people who are charged with crimes are unable to post bail for a variety of reasons, one of which is that they have been detained in jail for a long time as prisoners awaiting trial, where they have to deal with a great deal of mental stress and burden. One of the additional factors is that the accused is ultimately found not guilty if there is insufficient proof that he committed the crime.

As a result, the courts established an informal system of pre-trial settlement and bargaining, which was used in the United States and is now more commonly known as plea bargaining. In this system, the suspect or the accused may admit all or some of the charges against him, and instead of waiting for the trial to end, may request a lesser punishment.

Analysis of Essential Researches and Publications

Plea bargaining is a procedure where the accused is asked to admit guilt in return for the judge being lenient when determining the severity of the penalty or the nature of the offence. It comes from the Latin expression "Nolo Contendere" which translates to "I do not desire to contend" or a "No contest" plea [2]. In a plea bargain, the defendant agrees that the accusations against him are true and that he will not challenge the court's decision regarding his guilt [3].

Plea bargaining was first used in the American court system, not the Indian legal system. However, the Law Commission's efforts via its 142nd and 154th reports encouraged the inclusion of the Plea-Bargaining provisions. Based on the Law Commission's recommendations for some crimes, a new chapter on "Plea Bargaining" was added to the Criminal Procedure Code.

While the idea of "Plea Bargaining" is used in both India and the USA, the actual implementation varies. To make a meaningful comparison between the two legal

1 Prison Statistics India 2019 / National Crime Records Bureau (Ministry of Home Affairs). URL: https://ncrb.gov.in/sites/default/files/PSI-2019-27-08-2020.pdf (date accessed: 08.12.2022).

2 Merriam-Webster Dictionary. URL: https://www.merriam-webster.com/dictionary/nolo%20contendere (date accessed: 08.12.2022).

3 Babasaheb Bhimrao Ambedkar University. URL: https://www.bbau.ac.in/dept/HR/TM/LL.M.%20203%20Unit%204.Plea%20Bargaining.RM.pdf (date accessed: 08.12.2022).

systems, it is important to understand the concept of plea bargaining and significant cases connected to it in each system separately.

Plea bargaining cannot be perfectly or plainly defined. Black's Law Dictionary defines it as "the process by which the accused and the prosecution in a criminal case work out a mutually satisfactory disposition of the matter subject to court approval". In exchange for a sentence that is less severe than the one that could be given for the more serious crime, the defendant frequently enters a plea of guilty to a lesser charge or to only some of the counts in a multi-count indictment [4].

Due to the overcrowding of criminal courts and case dockets, plea bargaining frequently entails "mutual admission" rather than "mutual satisfaction" regarding the merits or deficiencies of both the accusations and the defences. Plea negotiations often take place before a trial, while in certain jurisdictions they can happen at any point until a decision is made. Additionally, the parties may agree to a plea deal after a jury is deadlocked during a trial in order to avoid having to hold another trial.

Plea bargaining involves negotiations in three different areas [5]:

- *Charge Bargaining:* As the term implies, the accused enters a plea of guilty to a less serious accusation as opposed to a more serious one. Sentence negotiating and charge bargaining are distinct from one another because sentence bargaining is done to negotiate the length of time for which the sentence would be pronounced, whilst charge negotiation is done to negotiate the charge that is levied. Punishment for a term of seven or ten years is an example of the former. An illustration of the latter is accusing the defendant of kidnapping or murder. They are fundamentally two separate things. This type of plea is typical and well-known. It entails negotiating the particular accusations (counts) or offences the defendant will be prosecuted for. A prosecutor may frequently drop the higher or additional charge(s) or counts in exchange for a plea of guilty to a lower charge. For instance, a prosecutor would accept a "guilty" plea to manslaughter in exchange for dropping charges of first-degree murder (subject to court approval).
- *Sentence Bargaining:* When negotiating a sentence, parties agree to enter a plea of guilty (for the original offence rather than a lesser one). It spares the prosecution from having to go to trial and make its case. It offers the chance for the defendant to get a lesser punishment. Pledging for a lesser punishment is the goal of this plea negotiation. A lesser sentence is promised in exchange for the accused's admission of guilt to the alleged offense.
- *Fact Bargaining:* As the name implies, it makes an effort to negotiate for the case's facts. Alternative claims on the pertinent facts to the current case are covered by this sort of plea bargaining. The facts that must be accepted by both parties are the subject of negotiation between the parties. According to some, this kind of plea bargaining is against the principles of the criminal justice system. This is so

4 Black's Law Dictionary / ed. B. A. Garner. West Publishing Company, 7th Ed., 1999.

5 Plea Bargaining / USLegal. URL: https://criminallaw.uslegal.com/plea-bargaining/ (date accessed: 08.12.2022).

because it is against the principles of criminal justice to negotiate the fundamental facts of the case. A fact is a fact and cannot be modified in a case. If we compromise on altering the case's core facts, it becomes nothing less than a fabrication. The least common negotiation involves admitting to some facts in exchange for a promise not to introduce others into evidence. This eliminates the necessity for the prosecution to provide evidence by stipulating to the truth and existence of particular facts.

Three crucial factors determine whether a plea agreement is legitimate:

- a knowing waiver of rights;
- a voluntary waiver;
- a factual foundation for the accusations the defendant is pleading guilty to.

Plea negotiations typically take place over the phone or in the courtroom prosecutor's office. With very few exceptions, judges are not engaged. Plea agreements that the judge accepts are subsequently made on the record in front of the whole court. There must be a defendant present.

One crucial distinction is that a prosecuting attorney lacks the power to compel a judge to accept a plea deal reached between the parties. Only recommendations for the court to accept a plea deal are allowed from the prosecution. The court will often request evidence to confirm that the aforementioned three requirements have been met before accepting the prosecution's suggestion.

Plea negotiating is also more complicated than it first appears. In order to successfully negotiate a criminal plea agreement, the attorney must possess technical knowledge of each element of a crime or charge, understanding of the actual or potential evidence that is already present or could be developed, technical knowledge of lesser included offences versus separate counts or crimes, and a reasonable understanding of sentencing guidelines.

Article Purpose

The aim of the research is to study and compare the concept of plea bargaining in two different jurisdictions. The objectives are to study the relative drawbacks and benefits, the historical perspective and the contemporary ongoings with respect to plea bargaining.

Research Methods

The research methodology used for the project is doctrinal method of research wherein secondary sources of data have been used by the researcher.

The study is limited only to the concept of plea bargaining in these different jurisdictions. It discusses the history, the contemporary scenario, the benefits and drawbacks and compares relatively the difference in the laws relating to plea bargaining in these jurisdictions. The limitation of the research project is that it does not take into account the in depth study of the ground realities of how powerful plea bargaining is a tool used in these States in order to combat high rates of pending cases. The research project thus is limited to the secondary data bases and no survey or empirical study has been done in the process of comparison.

Main Content Presentation

India

Applicability of Plea Bargaining and Procedure under the Code of Criminal Procedure

In India, the practice of plea bargaining is still in its infancy. The criminal law reforms made by the Criminal Law (Amendment) Act of 2005 resulted in the implementation of the system (Act 2 of 2006). Although the Act was passed on January 11, 2006, the provisions were not announced or went into effect until July 5.

The inclusion of plea bargaining in the Criminal Procedure Code was met with strong criticism. Also rejecting the premise of plea bargaining, the Supreme Court ruled that it is inappropriate to bargain in criminal matters. In *State of Uttar Pradesh vs Chandrika* [6] a court cannot make decisions regarding criminal cases based on the concept of plea bargaining, it was decided. The court must decide each case on its own merits; if the accused admits guilt, the appropriate punishment must be carried out. In the same instance, the court additionally concluded that a sentence reduction should not be based only on an individual's acknowledgement of guilt. Additionally, the accused is not permitted to request a lesser sentence from the court in exchange for his guilty plea.

In civil proceedings, concessions are actually promoted as a more agreeable alternative to a formal trial for resolving conflicts between parties. However, "law enforcement" rejects the concept of compromise as unethical or, at best, a necessary evil if the conflict finds itself in the area of criminal law.

Further, according to the Supreme Court in *Kasambhai Abdulrehtnanbhai Sheikh v. State of Gujarat And Anr.* [7], convictions based on the appellant's guilty plea, which was the product of a plea agreement, cannot be upheld. It is against public policy to allow an accused person to be convicted by luring him with the promise that he will be treated properly in exchange for pleading guilty. Such a procedure, which would also be obviously unreasonable, unfair, and unjust, would clearly violate the new activist dimension of Article 21 of the Constitution that emerged in Maneka Gandhi's case. Even if the procedure is supported by statute, it might still not be legal if it violates the spirit of Article 21 as stated above. Because it could persuade an innocent defendant to plead guilty in order to avoid a drawn-out and challenging criminal trial, it would have the effect of tainting the pure fountain of justice. The second obstacle that might prevent it is that, according to Indian law, which is prohibited in the case of *Bashesher Nath v. Commissioner of Income Tax Delhi & Rajasthan and Ors* [8], plea bargaining equates to waiving a constitutional right to a trial that is inherent in Article 21.

Nevertheless, the Government ultimately decided that it was appropriate and added Sections 256-A to 265-L to the Criminal Procedure Code to create Chapter XXIA of the Code, which provides for the raising of the plea of plea bargaining in specific categories of criminal cases. The division bench of the Gujarat High Court commented on this issue in *State Of Gujarat v. Natwar Harchandji Thakor* [9] and stated that given the existing actual profile of the pendency and delay in the settlement of criminal cases, fundamental adjustments are required. The very goal of the legal system is to offer quick, low-cost, and straightforward justice through the trial of criminal cases and other types of disputes.

Chapter XXIA's application is covered in Section 265-A. Plea negotiations can be advantageous in two situations. One is when a police station's station house officer sends the magistrate a report following the conclusion of an inquiry. The second scenario

6 2000 Cr.L.J. 384(386).
7 AIR 1980 SC 854.
8 AIR 1959 SC 149.
9 2005 CriLJ 2957.

occurs when the magistrate determines that an offence has occurred "based on a complaint filed in accordance with Section 190(a), which is followed by the examination of a complainant and witness in accordance with Sections 200 or 202, and the issuance of a summons in accordance with Section 204. Following the commencement of judicial proceedings stemming from a private complaint made in accordance with section 190(a) of the Code, it so indicates.

However, if the accused committed a crime that entails a death sentence, a life sentence, or a term of more than seven years in jail, the benefit cannot be extended. Additionally, crimes that affect the socioeconomic standing of the country as well as those that the Central Government has recognized as crimes against women or crimes against children under the age of 14 are not eligible for the benefit of a plea deal. Any juvenile or child as those terms are defined in the Juvenile Justice (Care and Protection of Children) Act of 2000 is exempt from the requirements of plea bargaining under Section 265-L. In the event of contradiction with other Code provisions, the Chapter has been given a separate life by the saving provisions under Section 265-J [10].

The procedure of plea negotiations is initiated by an application from the accused in accordance with Section 265-B. Only the trial court should receive the application. "The application must be in writing and include a concise summary of the case's facts as well as information on the accused's prior convictions and an affidavit signed by the defendant attesting to the application's sincerity as one that was voluntarily made. Upon receiving the application, the trial court is required to notify the prosecution, the accused, and in situations under Section 190(a), either the complainant or the public prosecutor, of the day the application will be heard.

Historical Background

In Vedic Period. Since the beginning of time, India has used the notion of plea bargaining. Evidence from several ancient treaties and documents indicates that this concept was used as a means of self-purification by erasing or lessening the repercussions of sins caused by committing an offence. Hindu law holds that delaying a decision in a lawsuit amounts to denying justice. The Dharam Sastras also offer a notion in a different chapter named Prayaschita where it suggests many models of self-purification via confession of wrongdoing. This was used as a justification for the imposition of a lighter penalty and was supported by numerous smritis experts. Even Manu Smriti calls for a less sentence in exchange for a guilty plea.

Therefore, several smritis in the Vedic era permitted and supported the idea of reducing penalty by voluntary confession. This is comparable to the idea of a plea agreement. This leniency in sentencing was intended to allow the guilty a chance to recover his standing in society.

In Medieval Period. The Quisas system in the Muslim Criminal Code might be seen as an analogue to the Mughal practice of plea bargaining. According to this law, if a person commits an offence against a deity, God will punish them accordingly, but if they commit an offence against the government or a private individual, they have the choice of compounding their offence along with the offender. Quisas is a form of "blood money" in which the accused pays a sum of money to the legally entitled heirs or surviving relatives. If a relative of the dead or his legal heirs decides to settle with

10 Chandrasekharan Pillai K. N. R. V. Kelkar's Criminal Procedure. Eastern Book Company, 2008. 1429 p.

the accused in return for money, the king or the Quazi cannot intervene. Muslim jurists supported this practice on the grounds that the rights of God's creation should take precedence and that the accused could not be put to death until the child's species had reached adulthood in cases where the next deceased victim was a child.

Due to the fact that the family of the victim in a murder case received compensation, Quisas at this time period only applied the notion of plea bargaining in a limited sense.

During British Rule. The adversarial system, which was adopted in India from the British Colonial authorities, was used to resolve cases. The East India Company founded the Court in 1672, which sentenced offenders to punishment or required them to labor for the owner. In the year 1860, both this premise and the principle of plea bargaining were dropped. Instead of negotiating with recompense, the British people's principal goal was to punish. When Lord Cornwallis issued a suggestion on 3 December, 1790 stating that there could not be a consensual settlement between the heir of the deceased and the accused in murder cases, the practice of plea-bargaining as it was common during the Mughal era suffered a setback. They were not allowed to offer forgiveness or compensation as payment for the blood. The Muslim Criminal Code was completely abolished when the Indian Penal Code was given legal form in the year 1860.

In Modern Era. The Criminal Law (Amendment) Act, 2005 [11], which went into effect in 2006, marked the Code of Criminal Procedure, 1973 relatively recent introduction of the plea-bargaining concept. By virtue of this amendment, Chapter XXIA of the Criminal Procedure Code was added, and the idea of plea bargaining was established [12].

But the history of plea agreements are much older. The first mention of it was made in the 142nd Report of the Law Commission of India, which Justice MP Thakkar oversaw [13]. The difficulty India was experiencing with the way trials and appeals were conducted, which frequently led to the accused and those awaiting trial being detained for an inordinate period of time, was recognized by this research. In a model modelled by the already-existing American system, it was advised that pleas be granted to the guilty without haggling in order to provide them a concession and permit the reduction of their convictions. The cost of holding such offenders in jail for astronomically long periods of time was also discussed in the report. Sentence and charge negotiations were the subjects of discussion. In the former, the prosecution offers a specific conviction recommendation in return for the defendant's guilty plea. In the latter, in exchange for the promise that the remaining charges will be dropped, the defendant consents to enter a plea of guilty to some of the charges.

The 154th Report of the panel [14], presided over by Justice K Jayachandra Reddy, which explained how precisely the provision of plea bargaining would function in the Indian system, broadened the scope

11 The Criminal Law (Amendment) Act, 2005 / Goa Police. URL: https://citizen.goapolice.gov.in/documents/10184/1794152/law2005.pdf/f1e0e3ac-f97c-4a08-a5b2-de304d6613a2#:~:text=Page%201-,THE%20CRIMINAL%20LAW%20(AMENDMENT)%20ACT%2C%202005%20NO.,%3A%2D%20CHAPTER%20I%20PRELIMINARY%201 (date accessed: 08.12.2022).

12 The Code of Criminal Procedure (India, 1973). Chapter XXIA. Sections 265 A to 265 L. URL: https://legislative.gov.in/sites/default/files/A1974-02.pdf (date accessed: 08.12.2022).

13 Bare Acts Live. URL: http://www.bareactslive.com/LCR/LC142.HTM (date accessed: 08.12.2022).

14 Ibidem. URL: http://www.bareactslive.com/LCR/LC154.HTM (date accessed: 08.12.2022).

of this topic. The 142nd Report's defence of the plea-bargaining system was supported by the Report, which also established that it should be applied to offences that carry a sentence of seven years in prison or less, which is the current model. Additionally, it stipulated that this would not apply to habitual or repeat offenders, those who committed socioeconomic crimes, or those who broke the law against women and children.

The 2003 Malimath Committee Report conducted the final deliberation on the matter prior to the passage of the 2005 Amendment [15]. It emphasized that an accused person should receive special treatment and be given various concessions anytime he or she feels contrite and wants to atone for his or her wrongdoings. In order to swiftly and efficiently determine a sizable number of Court matters, the processes suggested in the 142nd and 154th Law Commission Reports should be put into place, according to this study. It contributed to bolstering the notion that plea bargaining was essential, which helped shape the 2005 Amendment's structure and the current legal system.

Present Scenario

The Criminal Procedure Code's Sections 265A through L now govern plea bargaining. It does not apply to crimes against women or children under the age of fourteen, or to cases that have an impact on the socioeconomic situation of the country. It only applies to offences that result in a prison term of seven years or less [16]. Additionally, if the application was made against the accused's will or if he had previously been found guilty of the same crime by a court of law, he would not be eligible to use the plea-bargaining option [17]. The application must be accompanied by a synopsis of the case and an affidavit from the suspect stating that he voluntarily offered a plea bargain. The court would be aware of this and conduct a private interview with the defendant without the presence of the other party before deciding on a conviction sentence that was less severe than the charges that were actually appropriate to bring [18]. The victim would be entitled to compensation while the court could reduce the sentence of the accused by up to one-fourth of the minimum punishment specified for the offence committed [19].

Therefore, negotiating a plea offers a speedy legal remedy that requires no arguments other than the presentation of the evidence and the prosecution's suggested penalty for conviction. The victim is eligible for compensation after the trial but is not even required to attend the court proceedings. The accused must be required to be present when he is sentenced. The main goal of plea bargaining is to hasten court trials and organize the court system so that the prisoners can be released, as stated in both the 142nd and 154th Law Commission Reports. For their good intentions, those who are sorry for what they did should receive sentence reductions. The Reports had expected that this framework would be appropriate and applicable to all legal

15 Committee on Reforms of Criminal Justice System. Report. Vol. 1. 2003. URL: https://www.mha.gov.in/sites/default/files/criminal_justice_system.pdf (date accessed: 08.12.2022).

16 The Code of Criminal Procedure (India, 1973). Section 265 A. URL: https://legislative.gov.in/sites/default/files/A1974-02.pdf (date accessed: 08.12.2022).

17 Ibidem. Section 265 B. URL: https://legislative.gov.in/sites/default/files/A1974-02.pdf (date accessed: 08.12.2022).

18 Ibidem. At 16. URL: https://legislative.gov.in/sites/default/files/A1974-02.pdf (date accessed: 08.12.2022).

19 Ibidem. Section 265 E. URL: https://legislative.gov.in/sites/default/files/A1974-02.pdf (date accessed: 08.12.2022).

violations in the future, but at the moment it doesn't appear that there are any plans to broaden the parameters or breadth of plea bargaining. The true intent of the legislature in passing the Amendment Act of 2005 could not be fully understood, but the overcrowding of jails, high acquittal rates, and inhumane treatment of prisoners were cited as justifications [20].

Stance of the Judiciary

The Apex Court in India, in particular, had a staunch opposition to the idea of plea bargaining and any method connected with it at the outset. These accords' immorality and the consequent implications for the idea of natural justice were the main sources of criticism [21]. *Murlidhar Meghraj Loya v. State of Maharashtra,* a seminal decision on the subject determined in 1976, was decided prior to the adoption of plea bargaining into the Criminal Procedure Code [22]. In order to get a favorable penalty from the local magistrate, the accused in this instance, who was found to be selling contaminated food, approached him informally. He pled guilty in a way that was similar to the plea-bargaining system. According to Justice Krishna Iyer, our system allowed the "business perpetrator" to escape punishment by selling his agony in jail for the appearance of sorrow, persuading everyone but the victim and the community. In *State of Uttar Pradesh v. Chandrika* [23], the Supreme Court overturned a High Court decision that approved plea bargaining, upholding its censure. According to the Supreme Court, it is unlawful to pressure an accused individual into entering a guilty plea through the use of any assurances or promises since it violates Article 21 of the Indian Constitution. It further stated that in certain situations, the court must vacate the conviction and remand the matter to the trial court so that the accused person can have a chance to defend himself and receive the proper sentence if proven guilty [24]. This condemnation, however, was not universal; in the case of *State of Gujarat v. Natwar Harchandji Thakor* [25], the Gujarat High Court found it to be a quick and affordable way to settle disputes. In this case, the court determined that the primary goal of the law is to deliver quick, inexpensive, and straightforward justice through the settlement of disputes, including the criminal justice system. As a result, it can be claimed that the idea of plea bargaining is actually a kind of redress and will give judicial reforms a new dimension.

The fact that all of these cases occurred before plea bargaining was included in the Criminal Procedure Code is pertinent, though. The first time plea bargaining was permitted was in the case of *Vijay Moses Das And Another v. Central Bureau Of Investigation* [26]. The Indian court system then largely accepts and recognizes it in *Ranbir Singh v. State* [27].·In this case, the petitioner contested the sentences of paying a fine of ₹5,000 under Section 279 of the IPC and receiving an additional month of simple imprisonment in the event that the fine was not paid, along with a sentence of

20 Aggarwal T., Rewari S. Wanna Make a Deal? The Introduction of Plea Bargaining in India. (2006) 2 SCC (Cri) J-12. URL: https://www.ebc-india.com/lawyer/articles/2006_2cri_12.htm (date accessed: 08.12.2022).

21 AIR 1968 SC 1267 ; AIR 2000 SC 164.

22 AIR 1976 SC 1929.

23 AIR 2000 SC 164.

24 AIR 1983 SC 747.

25 (2005) Cr.L.J. 2957.

26 Crim. Misc. Appln. 1037/2006.

27 Crl. M. C. 1705/2011.

imprisonment for six months in addition to the penalty of ₹5000 under Section 304 A of the IPC. A ¼th of the sentence for imprisonment may be imposed by the Trial Court. Even then, the knowledgeable Trial Court is required to consider any mitigating factors. The full penalty was imposed without taking any of the mitigating circumstances into consideration. The petitioner is the only source of income, with the help of his elderly parents and two young children. The petitioner provided financial compensation to the victims. In order to prove that the parties reached an agreement and there is no longer a disagreement between them, he has also reported the affidavit of the deceased person's legal heirs. On the other hand, the prosecution argued that strong action was necessary to reduce the impact of the rising number of murders by careless and reckless driving offences under Section 304 A IPC. According to Section 265 E of the Criminal Procedure Code, the Court could impose a sentence equal to ¼ of the fine, including in the case of a deposition that both parties could agree upon. In accordance with Section 265 G of the Code, the trial court's decision is also final and cannot be challenged. Even if it cannot be said that the petitioner should not be imprisoned given these mitigating circumstances and should be released, the Delhi High Court ruled that he should not have been given the whole sentence as the learned Trial Court had done. The court changed the punishment to a fine of ₹1,000 and four months in jail under Section 304 A of the IPC.

In *Pardeep Gupta v. State* [28], According to Justice Shiv Narayan Dingra, the trial court's rejection of the accused's plea agreement demonstrates that the court did not take into account the provisions of chapter XXIA of the law that were intended for this usage. Since the applicant is participating in an offence under Section 120 B of the IPC and her involvement is equal to that of her co-accused, the court rejected the accused's plea agreement. However, none of the offences for which the petitioner was charged carried a sentence of more than seven years. The role of the accused, the nature of the offense, and other factors should be taken into consideration when considering the plea negotiation request. Due to his involvement with section 120 B of the Indian Penal Code, the trial court should not have denied his request for a plea agreement on the grounds that he was ineligible to request a lesser sentence. The trial court's frame of thought suggests that it did not read the provisions of chapter XXIA before considering the application. The High Court instructed the trial court to reconsider the accused's plea bargain request in light of the Code of Criminal Procedure's provisions and not just on a whim.

In the case of *Rahul Kumpawat v. Union of India* [29], the trial court's decision to reject the petitioner's motion for a plea deal in the current case was challenged by the petitioner in a miscellaneous criminal appeal before the high court of Rajasthan. The attorney claimed that there was no basis for the ruling rejecting the application in question. It was dismissed without explanation because it violated the letter and spirit of Section 265A of the Code of Criminal Procedure. The attorney vehemently argued that the purpose of implementing Section 265A was to shorten the duration of a criminal trial. By disregarding the spirit of the aforementioned Section in the instant case, the learned trial court abused it. The High Court of Rajasthan found these arguments to be meritorious. It was noted that the said trial court order needed to be overturned

28 Bail Appln. 1298/2007.
29 CRIMINAL MISC. (PET.) (CRLMP) No. 2257 of 2015.

in order for justice to be served. The High Court accordingly took the necessary action.

United States of America

Historical Background

As Justice Charles Clark famously stated, "Plea deals have accompanied the whole history of our nation's criminal justice system" many Americans have long believed that plea bargaining is an inherent and integral part of their legal system [30]. This idea is not entirely supported by empirical truth, though. In actuality, the plea-bargaining system has been strongly condemned by the American judiciary for many generations. They didn't begin welcoming the mechanism with open arms until the late 19th century. The 20th century saw an increase in the power and influence of politicians, the media, and the general public, requiring the need for an immediate judicial system and enabling plea bargaining to flourish in legal proceedings. The country's substantial increases in criminal law and alcohol bans also helped to further this development [31].

Plea bargaining received enormous praise and support after the 1920s, to the point where it started to dominate the handling of criminal cases. The United States Constitution's Sixth Amendment does not specifically reference plea bargaining, but judicial bodies have upheld the practice's legality. Thus, the scope of its operation was broadened, leading to the current plea-bargaining framework in the USA, where plea bargains are now permitted to be made for reductions in conviction sentences for all types of criminal offences committed. The extensive evaluation and popularity of the plea-bargaining mechanism in criminal law continue to be largely attributed to the United States.

James Earl Ray admitted to killing Martin Luther King Jr. in 1969 in order to avoid being put to death. Finally, he was sentenced to 99 years in jail. The US Supreme Court ruled in the seminal case of *Bordenkircher v. Hayes* that the constitutional justification for plea negotiations are that there is no element of punishment or retribution as long as the accused is free to accept or reject the prosecution's offer. The accused, however, refused the plea deal of five years in jail, therefore the Apex Court maintained his life sentence [32]. The Supreme Court noted that it is always in the best interest of the party under duress to select the lesser of the two evils in the same case, but in a different context. Similar justification has also been used by the courts in private party tort issues. In a different case, the US Supreme Court publicly agreed that plea bargaining was necessary for the fair administration of justice and should be promoted when done well.

Current Scenario

When a defendant is arrested in America, he must first appear in court to be assessed for his rights and any offences that may have been done against him. The defendant is then brought back before the court and given the opportunity to enter a plea when the prosecutor files accusations against him. *Nolo contendere* indicates that the defendant is not going to challenge his conviction. No matter how serious the crime, the accused is allowed to enter a plea deal and may even do so after the case has already begun. He has the right to rescind his appeal for

30 524 U.S. 184 (1998).

31 Alschuler A. W. Plea Bargaining and its History. *Law & Society Review*. 1979. Vol. 13. No. 2. Special Issue on Plea Bargaining. Pp. 211—245. DOI: 10.2307/3053250 (date accessed: 08.12.2022).

32 Randhwa G. S. Victimology and Compensatory Jurisprudence. Central Law Publications, 2015. 296 p.

legitimate reasons [33]. However, the accused is not legally entitled to receive a plea bargain, and the decision to accept or reject such offers rests with the prosecution [34]. Even the judge has the option to accept the plea of bargain; he or she is not required to do so even if the parties have come to an agreement [35]. Whether the accused entered a plea voluntarily and fully understanding its implications is primarily decided by the judge. In addition, the Federal Procedure Code requires the courts to pose a number of inquiries in order to establish justice and equity [36]. However, in terms of procedure, it is fairly simple, requiring only a statement of the desired agreement to be entered into the court's records for a successful application of the provision of plea bargaining.

Plea bargaining is noticeably more common and has a much wider range of applications in the United States than in the majority of other nations. 97 % of Federal cases and 94 % of Civil cases are resolved through plea negotiations [37]. While obtaining lenient sentences is the primary goal of plea bargains, they are also used to coerce defendants into disclosing case-related information and obtaining testimony against others. Plea bargaining has become essential to the American legal system as it currently stands.

Stance of the Judiciary

In America, plea bargaining is used to determine a sizable number of cases. In the famous case of *Brady v. United States* [38], the question of plea bargaining and its legality are covered. The judges in this case agreed that plea bargaining was a legal and constitutional mechanism, but they expressed some concerns about the possibility of abuse of this clause by citing the case where even innocent defendants would plead guilty with the hope of receiving concessions through plea deals. It was held in *Santobello v. New York* [39] that in situations where attempts at plea bargaining are unsuccessful, the public has a number of other options.

In essence, the plea-bargaining mechanism determines the outcome of almost every criminal case in American law. Plea bargaining is widely believed to be a crucial and necessary component of the criminal justice system in the United States.

In the instant case of *State v. Adams* [40], The Nolo Contendere concept was articulated by the court. According to the Court, the plea of "Nolo Contendere" often referred to as "Plea of Nolvut" indicates that the accused does not desire to contest. In *United States v. Risfield* [41], the Court noted that the adjudication by the Court in connection to the guilty plea is not required in a criminal case in which a plea-bargaining application has been lodged. However, the accused person's sentence may be given immediately by the court.

In the case of *Bordenkircher v. Haynes* [42], The US Supreme Court upheld the constitutionality of plea bargaining while impos-

33 LaFave W. R. et al. 5 Criminal Procedure § 21.3(f) at 769 (West 3d ed. 2007).
34 Weatherford v. Bursey, 429 U.S. 545 (1977).
35 LaFave W. R. et al. 5 Criminal Procedure § 21.3(e) at 769 (West 3d ed. 2007).
36 Fed. R. Crim. P. 11(b)(1).
37 Goode E. Stronger Hand for Judges in the 'Bazaar' of Plea Deals / The New York Times. URL: https://www.nytimes.com/2012/03/23/us/stronger-hand-for-judges-after-rulings-on-plea-deals.html (date accessed: 08.12.2022).
38 397 U. S. 742 (1970).
39 404 U. S. 257 (1971).
40 111 S. E. 2d 336 (1959).
41 340 U.S. 914
42 434 U. S. 357 (1978).

ing a life sentence on the accused who refused to accept a guilty plea in exchange for a five-year prison sentence. The Supreme Court noted a slim chance that the accused person would be forced to select the less severe of the two penalties. The Supreme Court further noted that if the accused person is free to accept or reject the offer made by the prosecutor during the plea-bargaining negotiation process, there is no likelihood of coercion or duress.

Italy

Historical Background

Italy's criminal law framework differs greatly from those of India and the United States because of the way the country's civil law system is structured. With far less importance attached to precedents, the majority of its laws are codified into codes that may be easily examined or referred to. The inquisitorial system of justice was first practiced in Italy, where the courts and its agents' primary goal was to elicit information and intelligence from the accused in order to empower the judge to make his own decisions. The Adversarial System, which allows for plea bargaining, provides more options than this system does [43].

The Adversarial System of Justice, where two sides present their cases and counter each other's arguments, was adopted as the new code of criminal procedure in Italy after 1988. It also included plea bargaining and shortened trials. The foundation of plea bargaining, consensual justice, was also made legal in Italy by the legislative branch [44].

Present Form & Purpose

Plea bargaining, or *patteggiamento* as it is more widely called in Italy, differs significantly from the practices used in the other two nations. The accused enters a plea of guilty in the Italian legal system based on the judgement rendered against him, not the allegations brought against him. Along with the forgiveness of all legal expenses, a good plea agreement can lower his sentence by one-third. The accused consequently admitted guilt on all counts brought against him. Plea bargaining is only permitted, though, when the penalty for the offence is a fine or a term of imprisonment of five years or less. Additionally, appeals of court rulings are only allowed in cases where there was a procedural error; they cannot be made on the basis of the case's merits [45].

An idea is agreed upon by both the prosecution and the defence, and is then submitted to the judge for his approval. The judge determines whether the defendant is innocent, guilty and deserving of a harsh sentence, or guilty and deserving of a merciful sentence based on the facts and evidence at hand. This primarily aims to speed up court proceedings because the judge has already been given the verdict [46].

Stance of the Judiciary

Because Italy adheres to Civil Law rather than Common Law, court precedents have relatively little weight there. They do, however, have some corroboratory significance, so they cannot be totally disregarded.

43 Iovene F. Plea Bargaining and Abbreviated Trial in Italy. Warwick School of Law Research Paper. No. 2013/11. DOI: 10.2139/ssrn.2286705 (date accessed: 08.12.2022).

44 Ibidem.

45 Pizzi W., Marafioti L. The New Italian Code of Criminal Procedure: The Difficulties of Building an Adversarial Trial System on a Civil Law Foundation. *Yale Journal of International Law*. 1992. Is. 1. Art. 2. Vol. 17. Pp. 1—40. URL: https://openyls.law.yale.edu/handle/20.500.13051/6264 (date accessed: 08.12.2022).

46 Ibidem.

The case that raised the issue of plea bargaining in Italy for the first time unambiguously stated that, despite the fact that it was legal, the Italian legal system would not change into a fully adversarial one because it would be in conflict with the principles of Civil Law [47]. Since then, the plea-bargaining process has been unequivocally approved and is being used with little to no criticism or condemnation.

The criminal jurisprudence now attempts to plea bargain in every case possible with the aim of fostering quick dispensation of justice due to the introduction of plea bargaining into Italian law and its general favorability in their justice system.

Role of Law Commission of India as to Plea Bargaining

The idea of plea bargaining was not initially attempted to be implemented in India. Later, in its 142nd and 154th reports, the Law Commission of India introduced the provisions relating to plea bargaining.

142nd Report [48]. In its 142nd report, the Law Commission interviewed numerous states and jurists about the issue of plea deals and made the following observations:

It specifies that only the offender or accused may implement this plan.

There will be no plea negotiating discussions with the prosecution office or its attorney.

The competent authority, known as the "plea judge" is chosen by the Chief Justice of the respective High Courts of each State from among the sitting judges qualified to hear cases carrying sentences of up to seven years in prison. The Chief Justice of the state also appoints two retired judges of the High Court to serve on the bench.

The competent authority will only consider a plea-bargaining request if he is confident that the defendant is entering the plea voluntarily and free from coercion or undue influence.

The application must be heard by the competent authority in front of the party who was wronged and the public prosecutor.

For compounding the offense, the authority has the right to impose a jail sentence, a fine, or demand that the accused pay restitution to the party who was wronged. With regard to certain offenses, the authority qualified to hear this application may impose a jail sentence of six months or one year.

When the competent authority is not required to use the release on probation powers under the Probation of Offenders Act, 1958, or under section 360 of the Code of Criminal Procedure, 1973, in accordance with the rules, the competent authority may impose a jail term that does not exceed one-half the maximum allowed by the relevant provision.

The scheme may initially only be applied to offences that are punishable by a fine or a sentence of less than seven years in prison.

After thoroughly evaluating and assessing the outcomes of the application of the scheme to offences punishable by imprisonment for less than seven years, the scheme may be made applicable to offences punishable by imprisonment for seven years or more.

47 La Corte Costituzionale. Sentenza 313/1990 (ECLI:IT:COST:1990:313). URL: https://www.cortecostituzionale.it/actionRicercaSemantica.do (date accessed: 08.12.2022).

48 Vishwanath A. Why hasn't Plea Bargaining taken off in India? / Mint. URL: https://www.livemint.com/Politics/otm5XvV7DTZJ9KaKScbJ4H/Why-hasnt-plea-bargaining-taken-off-in-India.html (date accessed: 08.12.2022).

154th Report [49]. The following recommendations have been made in the 154th report's paragraph 9:

When the accused appears, this process can be started by a written request or by the court acting on its own initiative to make sure the accused is willing. The court may require the accused to submit an application after determining his willingness.

The court must decide whether the accused filed the application voluntarily, knowingly, and free from coercion or improper influence by any police or public defenders before the hearing date. The police and the prosecutor are not required to be present during the preliminary examination.

The court will set the hearing date and issue a final order once it is certain that the application was submitted voluntarily. The court has the authority to reject an application if it determines that it was made under improper influence.

Such a decision might be taken at the beginning of the process or after the public prosecutor and the harmed party have testified. If the court determines that the case is not appropriate for a plea agreement, it may reject the claim and explain why.

The court's decision regarding the application of the accused-applicant is confidential and will only be disclosed to the accused if he requests it. No prejudice will be brought against the accused at the ensuring trial as a result of the accused making such an application.

No appeal may be filed against a judgement rendered by the court accepting such a plea; it shall be considered final.

When the Probation of Offenders Act, 1958 or Section 360 of the Criminal Procedure Code apply to the accused applicant, he is allowed to submit an application stating his desire to enter a plea of guilty and asking to be granted the benefit under the aforementioned legislative provisions. In such situations, the court may issue the proper order granting the benefit of those legislative provisions after hearing from the public prosecutor and the party who was wronged. In the right circumstances, the court may have the authority to waive the requirement of receiving a report from the probation officer.

In the event that an accused pleads guilty to an offence for which a minimum sentence is set, the court may, rather than rejecting the application, accept the plea of guilty, issue an order of conviction, and sentence the accused to one-half of the minimum sentence set.

After receiving a plea of guilty, the court must inform the accused that it may record a conviction for the offense, and that it may then hear from the public prosecutor or the aggrieved party, depending on the circumstances —

- Sentence him to a suspended term and place him on probation;
- Direct him to provide the harmed party with compensation; or
- Impose a sentence that is appropriate for the plea agreement; or
- If it is possible given the facts and circumstances of the case, convict him of a crime with less serious consequences than the one for which he has been charged.

Comparative Analysis

Substantive Differences

In India, the US, and Italy, plea negotiations are significantly different in terms of both content and method. On one end of the scale is Italy. In Italy, the use of plea

49 Bhattacharjee A. Indian Laws on Plea-bargaining Anwesha Bhattacharjee / Lawyers Club India. URL: https://www.lawyersclubindia.com/articles/Indian-Laws-on-Plea-bargaining-4213.asp (date accessed: 08.12.2022).

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deals is very restricted, only being used in cases of infractions that carry sentences of five years or less in prison. Additionally, the Italian judicial system requires pleading guilty to all charges, which is very different from the systems in the other two countries. Italy currently employs an adversarial system, but this is a by-product of the civil law system in place.

The United States, on the other hand, represents the opposite extreme of the spectrum. In the USA, plea bargaining is available for any type of crime that might be committed. The accused is free to engage in both charge and sentence negotiations with the hope of obtaining sentence concessions, which he typically does. Few cases in the USA are decided without a plea agreement because most defendants are prepared to admit guilt from the beginning of a case. The outrageous amount of time a convict would have to spend in jail if the case went against him far outweighs any negative attention, he may receive for accepting a plea deal. Therefore, the chance of accepting plea deals appeals to the majority of defendants. The prosecuting attorney only needs to inform the Court of the desired settlement agreement in order to follow the procedure. There are no hassles associated with submitting any documents or filing any paperwork with the court throughout the entire process.

In terms of its approach, India sort of veers in the middle and reiterates the fact that its legal system is a synthesis of those of many different countries. India does allow plea negotiations, but there are many conditions and limitations attached although not as many as in Italy. In India, compared to America, far fewer "cases are resolved through the use of plea bargaining. The application must abide by all the special requirements outlined in section 265A-L of the Cr.P.C., which makes the process in India far more onerous than it is in the USA.

It might be difficult to decide which of the three systems is best. However, it can be dealt with more effectively after taking into account all the benefits and drawbacks of plea bargaining in these nations.

Advantages

Plea bargaining's main goal is to make the judicial administrative system more efficient. Those who favor plea negotiating favor a speedy resolution of the cases rather than a drawn-out trial. The parties strike an agreement outside the boundaries of the Court by using plea bargaining. In that situation, the judge only looks at the evidence at face value and avoids giving it a meaningful judicial review. Additionally, there is no opportunity for the sides to advance their points. Another significant benefit of this legal rule is that none of the parties to the case may challenge the judgement rendered in plea bargaining instances.

Plea bargaining enables the courts and judges to shorten the length of pending cases, so enabling more people to benefit from the opportunity to get justice. In India, pending litigation provide a significant barrier to receiving justice from the courts. In India, obtaining justice is not always so simple. The situation is reversed in the American court system, since it is simpler to get justice there than it is in India.

Fundamentally, if the plea deal is only available to criminals who really regret their crimes, the whole legal system will be able to benefit the most from this legislative provision. The only people who truly deserve forgiveness under this rule are those who seek to change for the better. Hardcore offenders who don't want to change their ways and merely want to take advantage of this provision should not be given the benefit of the doubt.

The judicial systems in the United States and India are diametrically opposed. While in the United States people believe in forgiving and moving on with life while letting offenders make changes to become more likeable and responsible citizens, in India this plea agreement provision only has a limited application to offences of a specific nature. Offenders who are facing serious charges are not permitted to use this clause. In addition to the aforementioned, in the United States, the option of plea bargaining is used to seek conviction of the offenders accused of serious crimes by giving a lenient punishment to their accomplices accused of crimes of lower seriousness. For example, thieves are permitted to receive a lighter sentence if they testify against mobsters or rioters in order to apprehend them [50].

With a few minor procedural and substantive exceptions, Italy's legal system for plea bargaining is essentially identical to that of India.

Disadvantages

The main victim of the plea-bargaining system is justice. Sometimes those who are actually guilty get away with less severe punishment than they should, and other times those who are falsely accused in a criminal case receive the harshest sentences, which they could have avoided had they waited patiently until the delivery of the final verdict in their case. In the case of a plea agreement, the judicial evaluation of the arguments and the polish of the evidence is diminished, and it is not given the importance it deserves. Plea bargaining undermines the fundamental tenet of a trial, which is to discover the truth and dispense justice [51]. In cases of plea bargaining, the punishment is determined solely by a rough estimation or evaluation of the evidence in the case. Additionally, the likelihood that innocent people will receive a relatively harsher punishment rises, and it is also possible that the real offender may only receive a token punishment [52].

Either society or the victim of the crime doesn't receive justice in the true sense of the word when one knocks on the door of the legal system. The victim and society often have a very negative impression of the judicial administrative system because the penalty is not given in its absolute and strict sense. While plea bargaining is freely used in the US, there are some restrictions in India. As a result, in Indian law, the victim plays a significant role in the Plea-Bargaining process. In the event that a mutually agreeable resolution cannot be reached, the victim has the right to reject or veto. The victim, however, does not actively participate in the Plea-Bargaining process in the USA.

In the USA, a plea-bargaining application is only submitted following the conclusion of negotiations between the prosecutor and the accused. To ensure that the application for plea bargaining is made voluntarily by the accused, the negotiation process with the accused does not even begin in India before the application is submitted. As a result, there is a lower likelihood that the

50 Messitte P. J. Plea Bargaining in Various Criminal Justice Systems. Conf. Montevideo, Uruguay (May, 2010). URL: https://www.law.ufl.edu/_pdf/academics/centers/cgr/11th_conference/Peter_Messitte_Plea_Bargaining.pdf (date accessed: 08.12.2022).

51 Cheesman S. J. A Comparative Analysis of Plea Bargaining and the Subsequent Tensions with an Effective and Fair Legal Defence. Faculty of Law and Political Science, University of Szeged. URL: http://doktori.bibl.u-szeged.hu/2488/1/Samantha_Joy_Cheesman_ertekezes.pdf (date accessed: 08.12.2022).

52 Kathuria S. The Bargain has been Struck: A Case For Plea Bargaining in India. *Special Issue on Alternative Dispute Resolution in Association with the Singhania Chair on ADR Laws.* 2007. Vol. 19. No. 2. Pp. 55—68.

accused will be forced into making a plea bargain application or that there will be covert negotiations.

The second problem with plea bargaining is that it lacks the level of spontaneity that, by law, it should have. According to the law, the suspect or defendant shall choose a plea deal on his or her own, independent of the prosecution or the judge. However, the situation is different on the ground. To assure a win for both the prosecution and the accused, the accused is persuaded into entering into a plea bargain. The prosecution would nearly intimidate the defendant, forcing them to accept a plea deal. Particularly those who become entangled in the web of the police and the prosecution choose to negotiate a plea out of fear of further harm from the court's final verdict. Another factor that forces the accused to enter a plea agreement rather than have the case decided on the merits is the burdensome legal procedures.

Plea bargaining ultimately serves the interests of the guilty while unintentionally undermining the cause of justice. Even though many nations have adopted plea bargaining in accordance with American laws, India is still far from it [53]. Only minor and non-heinous offences in India are eligible for the plea-bargaining offer. The major drawback of plea negotiations is that a co-accused is sometimes persuaded to testify against the other accused on the promise of receiving a considerably less sentence than his partner. Those in charge of the justice system frequently lose sight of the real offender in front of them in the process. As a result, a cunning criminal gets away with less punishment than the other, and does so without feeling guilty. Due to this situation, most nations, including India, are reluctant to permit the free application of plea bargaining in serious and heinous crimes.

Recommended Reforms

It is obvious that multiple improvements may be implemented in India when weighing the benefits and drawbacks of the plea-bargaining procedure. The first one may have to do with the power and supervision of the judges. Although it is up to the judges' discretion whether to accept or reject the suggested punishment, the law tacitly urges them to do so. With regard to trial and punishment, the judges' scope of authority has to be broadened. Additionally, there has to be a check on the judges' performance to prevent them from becoming complacent. The judge simply accepts the sentence that is offered; however, this practice is against justice and frequently results in the conviction of the innocent while the guilty are allowed to walk free with unfairly lenient sentences.

Although it is not advisable to adopt the American system of plea bargaining, which favors only the wealthy, given its narrow and constrained scope, it is also not expected to be successful in India. The core of plea bargaining has been lost as a result of the revisions and the strictly controlled rules. Trials are more appealing to defendants than plea bargains because they do not always result in conviction in India and because they offer more protections against rights violations. In order for the process to actually succeed in its goal of accelerating the resolution of cases, the scope should be expanded rather than only allowing it to be used against offences for which the punishment does not exceed 7 years. Additionally, there are lessons to be learned from the American model, which permits a lesser charge if the accused enters a timely plea agreement. Furthermore, the concessions made in a plea agreement must be more desirable than the punishment and options an accused person would have in a trial. It should also be noted that even though one

53 Kathuria S. Op. cit.

of the main goals of introducing plea bargaining in India was to embrace the victim's wishes and move toward a restorative form of justice, the same thing may have contributed to the process' failure. The victims are frequently motivated by the punitive form of justice, making it challenging for the prosecutor and the accused to come to a resolution that placates the victim. Therefore, eliminating the tri-partite system could benefit plea negotiations in India.

Furthermore, the case's adjudication needs to be given a lot more importance. If a judge is unable to preside over the case, the prosecution and defence may choose an impartial mediator to decide on a reasonable sentencing based on the facts and available evidence. Although it involves making the trials a little more difficult, it is still a quicker method of deciding cases and does not put as much pressure on the Court. Currently, the defendant frequently has no choice but to agree to the prosecution's demands. Every case needs to be examined more thoroughly in order to get around this. Given the scope of his authority and responsibilities in the court of law, the defence attorney cannot do this work alone.

These suggestions might be helpful up to a point, but it's debatable whether plea bargaining is ever beneficial rather than harmful. There is no question that India needs a framework for instantaneous justice administration, and there is no doubt that plea bargaining in its current form and structure is insufficient to accomplish that goal.

Conclusions

Even though it was a revolutionary idea in India, plea bargaining has evolved through time. The Indian judiciary has completed a significant amount of necessary work. The criticisms raise an important question: Isn't it possible that in the pursuit of swift justice, justice itself is denied, engulfing the accused in an ocean of evils? The idea of plea bargaining was developed to lighten the load on the courts, but it accomplishes this in an unconstitutional way because the victim is placed in a disadvantageous position and his rights are violated by giving the accused a lesser sentence in exchange for using plea bargaining. Even this idea does not help to lower crime rates because it gives the accused the idea that he can commit an offence and still negotiate a lesser sentence. Only time will be able to determine whether or not the introduction of this novel idea was warranted. In the USA, plea bargaining can result in convictions in as many as 90 % of cases, whereas in India, it only accounts for about 10 % of criminal cases. This discrepancy exists as a result of the variations between the American and Indian approaches to plea bargaining. Although India's conviction rate is far lower than the United States, it is nonetheless successful in ensuring that the application for plea bargaining was submitted freely. Even if justice is delayed, it must still be upheld. In India, choosing the lower of the possible punishments is a voluntary activity rather than a part of the plea-bargaining process. As a result, there is a good chance that an innocent individual will not receive punishment in India through plea bargaining. Plea negotiations clearly differ amongst nations, especially when common law and civil law nations are contrasted. The underlying idea that underlies this, however, is unaffected. Criminals who admit their guilt, feel regret, or are willing to work with the administration of justice in other capacities ought to get some leniency in the form of a sentence reduction. Additionally, the criminal justice systems of many countries around the world are ineffective and cumbersome, a situation that needs to be resolved for an effective administration of justice.

When examining the numerous disadvantages, some of which are more serious than others when compared, it becomes clear that they are not small in nature and cannot be disregarded. In order to accept the idea of plea bargaining and incorporate it into the criminal justice system, a solution must be found to each of the consequential questions about the legitimacy of plea bargaining that each issue raises.

The current state of plea bargaining in India has several barriers that prevent it from being as effective as it would want to be. The way plea bargaining petitions are handled should change significantly. There is a pressing need to examine the calibre of decisions and orders made in the matter. However, in the current situation, plea bargaining has been crucial in addressing the outrageous application processing rate at the Court, a problem India has experienced more than any other nation. As a result, judges do not currently hold this concept of plea bargaining in high regard because it has only been used in a very small number of cases, and higher courts have not given it the proper consideration in those cases. However, it is urgent that cases be resolved quickly. In order to decrease the number of prisoners awaiting trial, the legislature must implement reforms and give the judiciary the necessary infrastructure.

In India, as opposed to the United States of America, the idea of plea bargaining has, in my opinion, been introduced with restrictions and regulations, which benefits the system. There are still some oddities, but they have mostly been rectified by our competent legal system. My opinion is that all we need to do is have faith in our judicial system, and that will eventually take care of the remaining problems as well.

Угода про визнання провини — порівняльне дослідження Індії з іноземними країнами

Бойвоб Манджемда

Угода про визнання провини відома як засіб урегулювання судових спорів у всьому світі. Застосування, сфера охоплення та функціювання угоди про визнання провини істотно змінюється залежно від режимів загального й цивільного права. Для того щоб проаналізувати ці відмінності щодо різних юрисдикцій, у цьому дослідженні проведено порівняння таких угод в Індії та США. Питання відносних переваг і недоліків угоди про визнання провини досі залишається дискусійним. Це зумовлено тим, що, як відомо, угоди про визнання провини ставлять під сумнів основні цілі судового розгляду, які полягають у з'ясуванні істини й обстоюванні справедливості. Беззаперечно, Індія потребує запровадження певної структури, яка б забезпечувала оперативне відправлення правосуддя. В індійських судах спостерігається збільшення кількості кримінальних справ. Наразі в'язниці переповнені ув'язненими, яких утримують без судового рогляду через постійні зволікання із розв'язанням справ. Індія розробила угоду про визнання провини (як відповідь на сумний стан судової системи), яку визнано надійною стратегією для завершення відкритих справ і прискорення роботи системи кримінального судочинства. За словами Головного Судді Індії Й. К. Сабхарвала (2005—2007), запровадження угод про визнання провини в Індії не лише прискорить роботу системи кримінального судочинства, а й слугуватиме відновною формою правосуддя, де жертви є однаково зацікавленими сторонами й отримують достатню компенсацію. Однак, незважаючи на роки концептуалізації, індійська система кримінального правосуддя ще не запровадила угоди про визнання провини. У цій праці досліджено, чи є угода про *визнання провини в Індії в її нинішніх формі та структурі достатньою для досягнення цієї мети, зважаючи на її переваги й недоліки в контексті індійської судової системи. У зв'язку з наведеним вище запропоновано внести зміни до цього сучасного механізму розв'язання спорів.*

Ключові слова: *поступки в процесі досудового розгляду; ведення переговорів; угода про визнання провини; покарання; правова комісія; судова система.*

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Legal Status of Forensic Veterinarian as a Subject of Forensic Science Activity in Context of the Latest Legislation of Ukraine

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Legal status of a forensic expert as a subject of forensic science activity in the context of the latest legislation of Ukraine is studied. It has been proven that elements of legal status of forensic expert, provided for by civil, economic, administrative and criminal legislation of Ukraine, as well as by departmental regulatory legal acts, do not fully correlate with each other: they have different rights, obligations, prohibitions, restrictions and the legal responsibility of forensic expert, that can negatively affect implementation of the principles of forensic expert activity, in particular during forensic veterinary examination, as well as the provision of a substantiated, objective, reliable, correct and truthful expert conclusion. Amendments and additions to mentioned normative legal acts of Ukraine are proposed with the aim of unifying the legal status of forensic expert (regardless of type of legal proceedings and grounds for conducting a forensic examination) for more effective implementation of principles of forensic science activity. The research purpose: reveal the legal status of forensic veterinarian in the system of forensic expertise and to systematize his duties, rights, prohibitions and grounds for liability in the newest legal field of Ukraine. General and special scientific methods of research (analysis, synthesis, analogy; modeling; formal-logical; logical-grammatical; statistical; comparative-legal; legal analysis) were used to achieve the goal.

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***Keywords**: forensic veterinary examination; forensic veterinarian; forensic expert; legal status, rights, duties, prohibitions, restrictions, responsibility of forensic veterinarian; forensic science activity.*

Research Problem Formulation

The main form of specific expertise application in any type of legal proceedings is forensic examination [1]. One of the new types of forensic examination is forensic veterinary examination, an independent type of forensic examination, a special type of research; the field of practical activity in which special veterinary knowledge is used; means of proof; the field of knowledge and the latest scientific direction, which is actively developing both in Ukraine [2] and abroad [3]. Currently, forensic veterinary examination is one of the important means of proving circumstances or facts concerning live animals under expert examination[4] and animal corpses[5] in criminal proceedings and civil, administrative and economic cases affecting effectiveness of legal proceedings and largely depends on the latest achievements of forensic examination. One of the subjects of forensic science activity in the modern system of expert provision of justice is a forensic expert who has a set of rights, duties are assigned to him, a system of prohibitions and restrictions is defined, and legal responsibility for violations

1 Шепітько В., Шепітько М. Доктрина криміналістики та судової експертизи: формування, сучасний стан і розвиток в Україні. *Право України.* 2021. № 8. С. 12—27. DOI: 10.33498/louu-2021-08-012 (date accessed: 01.12.2022).

2 Кравчук В. В., Кравчук О. В., Туровець Ю. М. Застосування судово-ветеринарної експертизи під час розкриття та розслідування кримінальних правопорушень. *Криміналістичний вісник.* 2015. № 2 (24). С. 109—114. URL: https://visnyk.dndekc.mvs.gov.ua/index.php/visnuk/issue/view/27/ISSN%201992-4437%20%D0%9A%D1%80%D0%B8%D0%BC%D1%96%D0%BD%D0%B0%D0%BB%D1%96%D1%81%D1%82%D0%B8%D1%87%D0%BD%D0%B8%D0%B9%20%D0%B2%D1%96%D1%81%D0%BD%D0%B8%D0%BA%202%20%2824%29%202015 (date accessed: 01.12.2022).

3 Stern A. W., Ewen B. Mc., McDonough S. P., Viner T., Brooks J. W., Kagan R., Brower A. Veterinary forensic pathology standards. *Journal of Forensic Sciences.* 2021. Vol. 66. Is. 3. P. 1176. DOI: 10.1111/1556-4029.14683 (date accessed: 01.12.2022) ; Mazzante N. M. G., de Camargo B. W. D. F., de Sanctis P., Fogaca J. L., de Campos Vettorato M., Tremori T. M., Babboni S. D., de Vasconcelos Machado V. M., Rocha N. S. Post-mortem analysis of injuries by incomplete hanging in dog (Canis familiaris) through radiographs and forensic necropsy. *Forensic Imaging.* 2020. Vol. 20. DOI: 10.1016/j.FRI.2019.100350 (date accessed: 01.12.2022) ; Cooper J. E., Cooper M. Veterinary involvement in forensic medicine. *Veterinary Record.* 2021. Vol. 189. Is. 6. Pp. 249—250. DOI: 10.1002/vetr.1004 (date accessed: 01.12.2022).

4 Watson E., Baucom K. J. Two case studies in veterinary forensic imaging and a brief literature review. *Forensic Imaging.* 2020. Vol. 21. DOI: 10.1016/j.fri.2020.200382 (date accessed: 01.12.2022).

5 Hill M. A., Pokines J. T. Comparative analysis of fetal pig decomposition processes in burials of variable depths and wrapping. *Journal of Forensic Sciences.* 2022. Vol. 67. Is. 6. Pp. 2192—2202. DOI: 10.1111/1556-4029.15120 (date accessed: 01.12.2022).

of the law is provided [6]. Elaboration of the latest research papers on this issue indicates that researchers do not pay enough attention to.

The subject of forensic veterinary in Ukraine is a forensic veterinarian certified in forensic expert specialization: 18.1 *Veterinary researches*. Forensic science activity of such a professional is of great importance, since it is he who establishes and clarifies circumstances and facts during investigation of animal abuse offenses. Unfortunately, the issues of the legal and procedural status of a forensic veterinary expert (in particular, systematization of his duties, rights, prohibitions, restrictions and liability for violation of legislation) are not sufficiently covered in the regulatory legal acts of Ukraine and the scientific literature, therefore they require comprehensive research and classification.

Article Purpose

Disclosing legal status of forensic veterinarian in the system of forensic science activity and to systematize his duties, rights, prohibitions and grounds for liability in the newest legal field of Ukraine.

Research Methods

Methodological basis of this research is a systematic approach caused by the specifics of the topic and associated with the use of general and special scientific methods, in particular:

- *analysis, synthesis, analogy* made possible to determine essence of the categorical apparatus of a forensic veterinarian;
- *formal-logical method,* thanks to which the logic of duties, rights, prohibitions and responsibilities of a forensic veterinarian is organized;
- *comparative legal method* contributed to the research on the level of legal regulation of forensic science activity and compliance of regulatory legal acts with the current state of regulation of forensic science activity in Ukraine and abroad;
- *logical and grammatical method* made possible to compare certain categories and legal norms, to find out the etymological content of the legal status of a forensic veterinarian, identify gaps in the current legislation of Ukraine to provide proposals for its improvement;
- *method of legal analysis* was used to analyze relevant provisions of criminal, civil, economic and administrative legislation and departmental regulations of Ukraine on forensic science support to justice regarding the duties, rights, prohibitions and responsibilities of a forensic veterinarian in the newest legal field of Ukraine;
- *system-structural method* contributed to the systematization and structuring of the duties, rights, prohibitions and responsibilities

6 Biedermann A., Kotsoglou K. N. Decisional Dimensions in Expert Witness Testimony — A Structural Analysis. *Frontiers in Psychology*. 2018. Vol. 31. Is. 9. DOI: 10.3389/fpsyg.2018.02073 (date accessed: 01.12.2022) ; Gramond V. Quelle responsabilité pour l’expert? *Annales Medico-Psychologiques*. 2020. Vol. 178. Is. 2. Pp. 153—160. DOI: 10.1016/j.amp.2020.01.001 (date accessed: 01.12.2022) ; Satiani B. Expert witness testimony: rules of engagement. *Vascular and Endovascular Surgery*. 2006. Vol. 40. Is. 3. Pp. 223—227. DOI: 10.1177/153857440604000307 (date accessed: 01.12.2022).

of forensic veterinarian in the newest legal field of Ukraine;

- *sociological method* made possible to expose the issues existing in the research area by interviewing judges, investigators, inquirers, animal defenders and lawyers based on developed questionnaires;
- *statistical method is* used to process survey results of respondents;
- *modeling method* contributed to the forecasting, development and determination of the legal status of forensic veterinarian regarding duties, rights, prohibitions and responsibilities while forensic science activity;
- *comparative legal method* was used to analyze and compare the norms of procedural and basic legislation of Ukraine, as well as by-laws that regulate the duties, rights, prohibitions and responsibilities of forensic expert.

Analysis of Essential Researches and Publications

Legal status of forensic expert in general and a forensic veterinarian in particular is almost a crucial issue in forensic science and forensic science activity both in Ukraine[7] and in foreign countries [8], especially under current rapid new reforms of national and international legislation [9].

Some legal status aspects of forensic experts of various expert specialization were studied by domestic scientists: Ye. Ye. Demydova, O. M. Domashenko, I. A. Kolesnikova and K. V. Latysh [10] revealed the legal status of forensic expert as a subject of forensic science activity;

7 Михайлов В. О. Реформування судово-експертного забезпечення правосуддя в Україні. *Право і суспільство.* 2017. № 6. Ч. 2. С. 196—202. URL: http://pravoisuspilstvo.org.ua/archive/2017/6_2017/part_2/34.pdf (date accessed: 01.12.2022).

8 Lesting W. Das Delegationsverbot des gerichtlichen Sachverständigen. *Recht & Psychiatrie.* 2021. Vol. 39. Is. 1. Pp. 4—11. DOI: 10.1486/RP-2021-01_4 (date accessed: 01.12.2022) ; Eastwood J., Caldwell J. Educating Jurors about Forensic Evidence: Using an Expert Witness and Judicial Instructions to Mitigate the Impact of Invalid Forensic Science Testimony. *Journal of Forensic Sciences.* 2015. Vol. 60. Is. 6. Pp. 1523—1528. DOI: 10.1111/1556-4029.12832 (date accessed: 01.12.2022) ; Satiani B. Op. cit. DOI: 10.1177/153857440604000307 (date accessed: 01.12.2022).

9 Клюєв О. М. Реформування базового законодавства України з питань експертного забезпечення правосуддя — нагальна потреба часу. *Проблеми реформування базового законодавства України з питань експертного забезпечення правосуддя* : мат-ли кругл. столу. (Харків, 06—07.02.2020). Харків, 2020. С. 6—11. URL: https://www.hniise.gov.ua/user_files/File/other/13%20%D0%BF%D0%BE%D1%81%D0%BB%D0%B5%D0%B4%D0%BD%D1%8F%D1%8F%20%D0%BD%D0%B0%20%D0%BF%D0%B5%D1%87%D0%B0%D1%82%D1%8C.pdf (date accessed: 01.12.2022) ; Сімакова-Єфремян Е. Б. Щодо необхідності реформування базового законодавства України про експертне забезпечення правосуддя. *Ibidem.* С. 12—15. URL: https://www.hniise.gov.ua/user_files/File/other/13%20%D0%BF%D0%BE%D1%81%D0%BB%D0%B5%D0%B4%D0%BD%D1%8F%D1%8F%20%D0%BD%D0%B0%20%D0%BF%D0%B5%D1%87%D0%B0%D1%82%D1%8C.pdf (date accessed: 01.12.2022).

10 Демидова Є. Є., Домашенко О. М., Колеснікова І. А., Латиш К. В. Судовий експерт як суб'єкт судово-експертної діяльності: правовий статус. *Юридичний науковий електронний журнал.* 2022. № 5. С. 549—553. DOI: 10.32782/2524-0374/2022-5/132 (date accessed: 01.12.2022).

O. M. Kliuiev [11] and O. P. Uhrovetskyi [12] investigated the legal status of forensic expert in administrative proceedings; L. V. Maksymiv [13] and A. V. Halushko [14] provided a theoretical and legal characterization of forensic expert as a participant in criminal proceedings and formulated recommendations for improving the criminal procedural legislation of Ukraine and practice of its application in the field of forensic expert participation in criminal proceedings; O. Grabovska and M. Vilinskyi [15], V. Shapiro [16] summarized issue of peculiarities of the legal status of forensic expert in the system of subjects of civil procedural legal relations; O. Zaiats and R. Skrynkovskyi [17] singled out problematic aspects of expert participation in civil proceedings of Ukraine and O. B. Verba-Sydor and V. I. Krupko [18] substantiated proposals for improving the legal status of forensic experts in civil proceedings; I. A. Butyrska [19] argued the legal status of an expert on legal issues in economic process; A. V. Shulzhenko [20] investigated the peculiarities of the procedural activity of forensic expert and a professional;

11 Клюєв О. М. Процесуальні питання судової експертизи в адміністративному судочинстві. *Вісник Одеського науково-дослідного інституту судових експертиз*. 2018. Вип. 3. С. 109—113. URL: http://ondise.od.ua/DOC/vipusk3/pitannyasudovoiexpertizivadminsudo4instvi.pdf (date accessed: 01.12.2022).

12 Угровецький О. П. Регламентація правового статусу судового експерта в адміністративному судочинстві. *Науковий вісник Ужгородського національного університету. Серія «Право»*. 2017. Вип. 43. Т. 3. С. 229—234. URL: https://journals.indexcopernicus.com/api/file/viewByFileId/496424.pdf (date accessed: 01.12.2022).

13 Максимів Л. В. Процесуальний статус експерта у кримінальному провадженні: окремі аспекти. *Порівняльно-аналітичне право*. 2020. № 2. С. 205—207. URL: https://dspace.uzhnu.edu.ua/jspui/handle/lib/35561 (date accessed: 01.12.2022).

14 Галушко А. В. Експерт як учасник кримінального провадження: теоретичний аспект. *Право і суспільство*. 2017. № 5. С. 237—243. URL: http://pravoisuspilstvo.org.ua/archive/2017/5_2017/part_1/42.pdf (date accessed: 01.12.2022).

15 Грабовська О., Вілінський М. Експерт у цивільному судочинстві. *Підприємництво, господарство і право*. 2021. № 1. С. 5—10. DOI: 10.32849/2663-5313/2021.1.01 (date accessed: 01.12.2022).

16 Шапіро В. С. Проблемні аспекти участі експерта в цивільному процесі. *Правові горизонти*. 2018. Вип. 13 (26). С. 24—28. URL: http://repository.sspu.edu.ua/handle/123456789/8356 (date accessed: 01.12.2022).

17 Заяць О., Скриньковський Р. Проблемні аспекти участі експерта у цивільному судочинстві України. *Traektoriâ Nauki = Path of Science*. 2019. Vol. 5. No 9. Pp. 3001—3011. DOI: 10.22178/pos.50-3 (date accessed: 01.12.2022).

18 Верба-Сидор О. Б., Крупко В. І. Пропозиції щодо вдосконалення правового статусу експерта у цивільному судочинстві. *Науковий вісник Львівського державного університету внутрішніх справ. Серія юридична*. 2014. Вип. 3. С. 69—84. URL: http://nbuv.gov.ua/UJRN/Nvldu-vs_2014_3_10 (date accessed: 01.12.2022).

19 Бутирська І. А. Правовий статус експерта з питань права у господарському процесі. *Науковий вісник Ужгородського університету. Серія «Право»*. 2018. Вип. 48. Т. 1. С. 108—111. URL: https://lexadvance.com.ua/wp-content/uploads/2020/12/7-Butyrska_Legal_expert.pdf (date accessed: 01.12.2022).

20 Шульженко А. В. Процесуальний статус і особливості процесуальної діяльності експерта й спеціаліста. *Науковий вісник міжнародного гуманітарного університету. Серія: Юриспруденція*. 2016. Вип. 19. С. 132—134. URL: http://nbuv.gov.ua/UJRN/Nvmgu_jur_2016_19_36 (date accessed: 01.12.2022).

Ye. V. Kovalevska [21] outlined procedural requirements for the legal personality of a medical specialist and a forensic expert participating in criminal proceedings; L. O. Sydorenko [22] clarified the issue regarding forensic expert right to edit the questions put to him.

Separate issues of forensic science activity and the legal status of forensic expert in various types of legal proceedings were devoted to dissertation and monographic research: A. V. Ivanov [23], M. G. Shcherbakovskyi [24] , E. B. Simakova-Yefremian [25], S. V. Yevdokimenko [26], N. M. Tkachenko [27], A. V. Dudych [28], O. M. Dufeniuk [29], D. V. Shcherbaniuk [30], O. Yu. Grosheva [31] et al.

Main Content Presentation

Currently, the issue of forensic expert status is especially relevant in the context of reforming forensic expert activity in Ukraine in view of the proposed draft laws (on forensic science activity in Ukraine [32] and on forensic examination and self-government of forensic experts, [33] etc.). In scientific community, there is a discussion about legal and procedural status of forensic expert. Thus, in research papers

21 Ковалевська Є. В. Використання спеціальних медичних знань під час розслідування злочинів : дис. ... канд. юрид. наук. Київ, 2018. 298 с.

22 Сидоренко Л. О. Щодо права експерта на редагування поставлених йому запитань. *Криміналістичний вісник*. 2015. № 2 (24). С. 83—91. URL: http://elar.naiau.kiev.ua/bitstream/123456789/1900/1/%D0%A1%D0%B8%D0%B4%D0%BE%D1%80%D0%B5%D0%BD%D0%BA%D0%BE%20%D0%9B.%D0%9E..pdf (date accessed: 01.12.2022).

23 Іванов А. В. Експерт у провадженні у справах про адміністративні правопорушення : автореф. дис. ... канд. юрид. наук. Харків, 2009. С. 10—11.

24 Щербаковський М. Г. Проведення та використання судових експертиз у кримінальному провадженні : монографія. Харків, 2015. 560 с.

25 Сімакова-Єфремян Е. Б. Комплексні судово-експертні дослідження: теорія та практика : монографія. Харків, 2016. 456 с.

26 Євдокіменко С. В. Судово-економічна експертиза: теоретико-методологічні засади і практика реалізації : автореф. дис. ... д-ра юрид. наук. Харків, 2016. 44 с.

27 Ткаченко Н. М. Суб'єкти судово-експертної діяльності в сучасній системі експертного забезпечення кримінального провадження : автореф. дис. ... канд. юрид. наук. Харків, 2017. 20 с.

28 Дудич А. В. Експерт як учасник кримінального провадження : автореф. дис. ... канд. юрид. наук. Одеса, 2017. 20 с.

29 Дуфенюк О. М. Експертиза у кримінальному провадженні за законодавством України та Польщі: порівняльне дослідження : монографія. Львів, 2018. 272 с. URL: http://dspace.lvduvs.edu.ua/bitstream/1234567890/3601/1/%D0%9C%D0%BE%D0%BD%D0%BE%D0%B3%D1%80%D0%B0%D1%84%D1%96%D1%8F%20%D0%94%D1%83%D1%84%D0%B5%D0%BD%D1%8E%D0%BA%20%D0%BC%D0%B0%D0%BA%D0%B5%D1%82%20%D0%925-28.10.pdf (date accessed: 01.12.2022).

30 Щербанюк Д. В. Теорія та практика реалізації експертної ініціативи у кримінальному провадженні : автореф. дис. ... канд. юрид. наук. Харків, 2019. 20 с.

31 Грошева О. Ю. Організаційно-правові, загально-методичні засади комплексної судової біолого-трасологічної експертизи та її оцінка судом : дис. ... д-ра філос. Харків, 2021. 341 с.

32 Проєкт закону про судово-експертну діяльність в Україні від 30.03.2017 р. № 6264. URL: https://ips.ligazakon.net/document/JH4U000I (date accessed: 01.12.2022).

33 Проєкт закону про судову експертизу та самоврядування судових експертів від 03.04.2018 р. № 8223. URL: https://ips.ligazakon.net/document/JH6CF00A (date accessed: 01.12.2022).

of A. V. Panchyshyn [34], N. M. Tkachenko [35], S. D. Nesterenko and O. O. Stulov [36] and other authors, common and distinctive features of these concepts are investigated and proposals for regulating the legal status of forensic expert (therefore, forensic veterinarian) are presented.

Applying the systematic method of research, it is possible to define the broad concept of *legal status* as a complex legal phenomenon that determines the status (position) of the subject, in particular forensic expert, in the relevant system, which is reflected in his relations with society. The procedural status of forensic expert, according to S. D. Nesterenko and O. O. Stulov, consists in determining the position of a court expert from among other participants in a criminal procedure or trial case in another type of legal proceedings and substantiating his independence and independence, delineating rights and obligations responsibilities during a forensic examination in a specific type of legal proceedings. The authors came to the conclusion that described in Sect. II of the Law of Ukraine: *On Judicial Examination* [37] (hereinafter referred to as *Specialized Law*), general legal status of forensic expert, supplemented by elements, the list of which is given in the relevant articles of procedural legislation, "at the end" should ensure the legal status of a forensic expert in a certain type of legal proceedings [38].

The author of this publication believes that separation of the legal and procedural statuses of forensic expert is of theoretical importance.

Secondly, separate provisions of the status of forensic expert, regulated by Specialized Law (legal status) and procedural codes of Ukraine (procedural status), as well as the Instruction on the appointment and conduct of forensic examinations and forensic research (hereinafter referred to as *Instruction №1*) [39] and the Instruction on the peculiarities of carrying out of forensic science activity by certified forensic experts who do not work in state specialized expert institutions (hereinafter referred to as *Instruction № 2*) [40] are somewhat duplicated, for example: *"get acquainted with the materials of criminal proceedings related to the subject*

34 Панчишин А. В. Поняття, ознаки та структура категорії «правовий статус». *Часопис Київського університету права.* 2010. № 2. С. 95—98. URL: http://dspace.nbuv.gov.ua/handle/123456789/23529 (date accessed: 01.12.2022).

35 Ткаченко Н. Н. Правовой статус субъектов судебно-экспертной деятельности в уголовном производстве. *Верховенство права* : міжнар. наук.-практ. журн. 2016. № 3. С. 123—127. URL: http://sd-vp.info/wp-content/uploads/2020/11/vp_2016_3-2.pdf (date accessed: 01.12.2022).

36 Нестеренко С. Д., Стулов О. О. Правовий статус судового експерта: актуальні проблеми регламентації. *Криміналістика і судова експертиза.* 2020. Вип. 65. С. 82—89. DOI: 10.33994/kndise.2020.65.08 (date accessed: 01.12.2022).

37 Про судову експертизу : Закон України від 25.02.1994 р. № 4038-XII (зі змін. та допов.). URL: https://zakon.rada.gov.ua/laws/show/4038-12#Text (date accessed: 01.12.2022).

38 Нестеренко С. Д., Стулов О. О. Op. cit. DOI: 10.33994/kndise.2020.65.08 (date accessed: 01.12.2022).

39 Інструкція про призначення та проведення судових експертиз та експертних досліджень : затв. наказом Мін'юсту України від 08.10.1998 р. № 53/5 (зі змін. та допов.). URL: https://zakon.rada.gov.ua/laws/show/z0705-98#Text (date accessed: 01.12.2022).

40 Інструкція про особливості здійснення судово-експертної діяльності атестованими судовими експертами, що не працюють у державних спеціалізованих експертних установах : затв. наказом Мін'юсту України від 12.12.2011 р. № 3505/5 (зі змін. та допов.). URL: https://zakon.rada.gov.ua/laws/show/z1431-11#Text (date accessed: 01.12.2022).

of research" (clause 1, part 3, art. 69 of the Criminal Procedural Code of Ukraine [41]), *"get acquainted with the materials of the case"* (clause 1 part 6 of Article 72 of the Civil Procedural Code of Ukraine [42]), *"get acquainted with the materials of the case relating to the subject of the examination"* (par. 2 clause 2.1 of *Instruction №1*) or *"submit a request to provide additional materials and samples and take other actions related to conducting an examination"* (Para. 2 p. 3 Art 69 of the Code of Civil Procedure), *"submit a request for the provision of additional materials and samples, if the examination is ordered by the court"* (clause 2, part 6 of Article 72 of Civil Procedural Code of Ukraine) and "in accordance with the procedural legislation, submit a request for the provision of additional materials and samples and take other actions, related to the examination" (par. 3, clause 2.1 of *Instruction № 1*).

Thirdly, in the theory of law as a holistic science of law, substantive and procedural law are distinguished, therefore, concept of *procedural status* is a component of the concept of *legal status* of forensic expert.

Fourthly, there are no clear criteria for distinguishing between the concepts of *legal status* and *procedural status* of forensic expert that follows from analysis of the list of rights, obligations and prohibitions determined by the legislation of Ukraine on forensic expert and forensic science activity.

Therefore, in theory and practice of forensic science, it is expedient and legally justified to use the term: *forensic expert legal status*. Therefore, in our opinion, Section. II of Specialized Law *Forensic Expert* should be renamed to *Legal Status of Forensic Expert*.

Specialized Law defines the legal, organizational and financial foundations of forensic science activity in order to ensure justice of Ukraine with an independent, qualified and objective expertise focused on the maximum use of the achievements of science and technology. Section II of which regulates the provisions regarding persons who may (Article 10) or cannot (Article 11) be forensic experts, stipulates obligations (Article 12), rights (Article 13) and prohibition (Part 4 of Article 10), as well as indicates the liability (Article 14) of forensic expert on the grounds and in the manner prescribed by law (regardless of the type of proceedings and the grounds for conducting forensic examination) [43].

Legal structure of Section II of Specialized Law is based on the use of blanket norms: for example, in Part 2 of Art. 11 states that other circumstances prohibiting the participation of a person as an expert in court proceedings are provided for by procedural legislation [44]. In part 2 of Art. 12 it is regulated that (in addition to the list of duties of forensic expert, grouped in three clauses of part 1 of this article) other duties of forensic expert are provided for by procedural legislation [45]. After all, in part 2 of Art. 13 it is stated that (in addition to the list of rights of a court expert set out in six points of part 1 of this article) other rights of forensic expert are provided for

41 Кримінальний процесуальний кодекс України від 13.04.2012 р. № 4651-VI (зі змін. та доп.). URL: https://zakon.rada.gov.ua/laws/show/4651-17#Text (date accessed: 01.12.2022).

42 Цивільний процесуальний кодекс України від 18.03.2004 р. № 1618-IV (зі змін. та доп.). URL: https://zakon.rada.gov.ua/laws/show/1618-15#Text (date accessed: 01.12.2020).

43 Про судову експертизу ... . URL: https://zakon.rada.gov.ua/laws/show/4038-12#Text (date accessed: 01.12.2022).

44 Ibidem.

45 Ibidem.

by procedural legislation [46]. Thus, in our opinion, applied in Section II. the legal construction of profile Law (when some lists of rights, obligations and prohibitions are concentrated in this Law and other lists of rights, obligations and prohibitions are contained in the corresponding procedural legislation, which, moreover, often duplicate each other in various regulatory and legal acts) creates inconveniences associated with the need to simultaneously use various laws related to substantive and branch procedural law, as well as subordinate regulatory legal acts (for example, instructions № 1 and 2).

In addition, we should note that the lists of rights, obligations, prohibitions and restrictions of forensic expert are much wider in Instructions № 1 and 2 compared to Specialized Law, for example: clause 2.1 of Instruction № 1 contains 11 points on rights, and Article 13 of Specialized Law — 6 points; in clause 2.2 of Instruction № 1 — 8 points of duties, and in Article 12 of the profile Law — 3 similar points [47].

Instead, paragraph 10 of paragraph 2.1 of Instruction № 1 regulates the right of forensic expert *"ensure security if there are relevant grounds"* [48], and Article 13 *Forensic Expert Rights* does not contain such a provision. Thus, we are unanimous with the opinion of S. D. Nesterenko and O. O. Stulov that list of rights, obligations, prohibitions and restrictions of the forensic expert in instructions № 1 and 2 is stated editorially differently than in the profile Law, which may have caused their ambiguous interpretation, at the same time we deny their assertion that this list is expanded groundlessly [49]. On the contrary: the more detailed the legal status of a forensic expert on paper, the more accurate it is to be able to implement it in practice.

It should be noted that most of the regulatory legal acts of foreign countries contain a list of the duties and rights of forensic expert, but the content and scope are somewhat different. In our opinion, the most complete legal status of a forensic expert is regulated in the laws of the Kyrgyz Republic: *On Forensic Expert Activity* [50] and the Republic of Tajikistan: *On State Forensic Science* [51]. In the list of rights of a forensic expert of the Kyrgyz Republic and the Republic of Tajikistan, it is worth paying attention to the following: request to the head of the corresponding forensic expert organization to involve other forensic experts in conducting the forensic examination; express a personal opinion in the conclusion of the forensic examination; refuse to conduct a forensic examination, if there is a threat to the life and health of

46 Про судову експертизу ... . URL: https://zakon.rada.gov.ua/laws/show/4038-12#Text (date accessed: 01.12.2022).

47 Ibidem ; Інструкція про призначення та проведення ... . URL: https://zakon.rada.gov.ua/laws/show/z0705-98#Text (date accessed: 01.12.2022).

48 Інструкція про призначення та проведення ... . URL: https://zakon.rada.gov.ua/laws/show/z0705-98#Text (date accessed: 01.12.2022).

49 Нестеренко С. Д., Стулов О. О. Op. cit. DOI: 10.33994/kndise.2020.65.08 (date accessed: 01.12.2022).

50 О судебно-экспертной деятельности : Закон Кыргызской Республики от 24.06.2013 г. № 100. URL: http://cbd.minjust.gov.kg/act/view/ru-ru/203908 (date accessed: 01.12.2022).

51 О государственной судебной экспертизе : Закон Республики Таджикистан от 25.06.2005 г. № 102 (с изм. и доп.). URL: https://base.spinform.ru/show_doc.fwx?rgn=9038 (date accessed: 01.12.2022).

forensic expert due to the lack of necessary conditions for conducting research, and the issue of forensic expert independence is raised.

Among forensic expert rights of the Republic of Tajikistan*, the following should be noted: "Refuse to conduct a state forensic examination if the procedural procedure for appointing a state forensic examination is violated and this significantly complicates or makes it impossible to conduct it; objects of examination and case materials are unsuitable or insufficient to provide an opinion and the forensic expert is refused to supplement them; there are no conditions, methodological means and equipment necessary to conduct an examination and provide an opinion; there is a real threat to the life and health of forensic expert"* [52].

Among prohibitions for forensic expert provided for by the Law of the Kyrgyz Republic: *On Forensic Expert Activity* [53], it is advisable to single out a special prohibition to independently involve other forensic experts or persons in the conduct of the commissioned forensic examination.

We conclude that rights and obligations of forensic experts in Turkmenistan [54] and Uzbekistan are [55] not very different from the rights and obligations of forensic experts in Ukraine. However, prohibition provided for forensic experts in the Republic of Uzbekistan (in comparison with the prohibitions regulated by legislation of Ukraine and other countries) can be considered special: *"Conduct forensic examination as an employee of another organization or other individual"* [56].

Instead, there is no law on forensic science in the Republic of Armenia: the legal status of forensic expert is set out in the Criminal Procedural Code of the Republic [57]. Thus, among the duties of forensic expert of Armenia there is a refusal to conduct forensic examination (if the issues raised go beyond his special knowledge) and a prohibition to leave the place of the said action without permission of the person who performs it, and the courtrooms; without permission of the chairman. In Georgia, forensic expert has the right to refuse to conduct a forensic examination if the questions put to him are beyond his competence (Article 52 of the Criminal Procedural Code of Georgia, where the term: *specific expertise* is missing and the list of rights and obligations of a forensic expert is quite limited) [58].

52 О государственной судебной экспертизе : Закон Республики Таджикистан … . URL: https://base.spinform.ru/show_doc.fwx?rgn=9038 (date accessed: 01.12.2022).

53 О судебно-экспертной деятельности : Закон Кыргызской Республики … . URL: http://cbd.minjust.gov.kg/act/view/ru-ru/203908 (date accessed: 01.12.2022).

54 О судебно-экспертной деятельности : Закон Туркменистана от 08.11.2014 г. № 137-V (с изм.). URL: http://www.turkmenbusiness.org/content/zakon-turkmenistana-o-sudebnoekspertnoi-deyatelnosti (date accessed: 01.12.2022).

55 О судебной экспертизе : Закон Республики Узбекистан от 01.06.2010 г. № ЗРУ-249 (с изм. и доп.). URL: https://lex.uz/ru/docs/1633100 (date accessed: 01.12.2022).

56 О судебной экспертизе : Закон Республики Узбекистан … . URL: https://lex.uz/ru/docs/1633100 (date accessed: 01.12.2022).

57 Уголовно-процессуальный кодекс Республики Армения от 27.07.2021 г. № ЗР-306 (с изм. и доп.). URL: https://base.spinform.ru/show_doc.fwx?rgn=143021 (date accessed: 01.12.2022).

58 Уголовно-процессуальный кодекс Грузии от 09.10.2009 г. № 1772. URL: https://matsne.gov.ge/ru/document/view/90034?publication=144 (date accessed: 01.12.2022).

Legal status of forensic expert of Moldova [59] is similar to the Ukrainian one, except for the right of forensic expert to petition for appointment of a commission or multidisciplinary forensic examination.

The Law of the Republic of Kazakhstan: *On Forensic Expert Activity in the Republic of Kazakhstan* [60] contains a list of restrictions provided for forensic expert, but does not have a list of his rights, obligations and prohibitions.

It should be noted that legal status of forensic veterinarian (as well as a forensic expert of any other expert specialization) is a set of rights, obligations, prohibitions, restrictions, scope of liability that distinguish it from procedural functions of other participants in legal proceedings, in particular a witness, investigator, inquirer. These elements of legal status of forensic veterinarian are a guarantee of its independence and independence, as well as the completeness and objectivity of conclusion as a source of evidence in criminal proceedings or a case in another type of proceedings.

We state that forensic expert legal status (therefore, forensic veterinarian) is regulated by Specialized Law, instructions № 1 and 2 and legislation of Ukraine, in particular:

- *in Criminal Procedural Code* concepts of *forensic expert* (Article 69), *responsibility of forensic expert* (Article 70), the grounds for conducting an examination (Article 242), the procedure for attracting an expert (Article 243), consideration by an investigating judge of a petition for an examination (Article 244), examination by a court decision (Article 332)[61];
- *in Civil Procedural Code* the concept *of forensic expert* (Art. 72), *requirements for forensic expert conclusion* (Art. 102), appointment of forensic examination by court (Art. 103), decision on the appointment of expert examination (Art. 104), examination commissioned by participants of the case (Art. 106), collection of materials for forensic *examination (Art. 107), forensic examination* (Art. 108), consequences of evasion from participation in forensic examination (Art. 109), assessment of forensic expert conclusion by court (Art. 110), commission examination (Art. 111), multidisciplinary forensic examination (Art. 112), additional and repeated examination (Art. 113) [62];
- *in Commercial and Procedural Code,* concept *of forensic expert* (Article 69), requirements for forensic expert conclusion (Article 98), appointment of expert examination by the court (Article 99), decision on appointment of forensic examination (Article 100),

59 О судебной экспертизе : Закон Республики Молдова от 23.06.2000 г. № 1086 (с изм. и доп.). URL: https://www.legis.md/cautare/getResults?doc_id=65630&lang=ru (date accessed: 01.12.2022).

60 О судебно-экспертной деятельности : Закон Республики Казахстан от 10.02.2017 г. № 44-VI (с изм. и доп.). URL: https://adilet.zan.kz/rus/docs/Z1700000044 (date accessed: 01.08.2022).

61 Кримінальний процесуальний кодекс … . URL: https://zakon.rada.gov.ua/laws/show/4651-17#Text (date accessed: 01.12.2022).

62 Цивільний процесуальний кодекс … . URL: https://zakon.rada.gov.ua/laws/show/1618-15#Text (date accessed: 01.12.2020).

examination commissioned by participants of the case (Article 101), collection of materials for forensic examination (Article 102), conducting forensic examination (Article 103), assessment of forensic expert conclusion by court (Article 104), commission examination (Article 105), the comprehensive examination (Article 106), additional or repeated examination (Article 107) [63];

- *in Code of Administrative Proceedings of Ukraine* the concept of *forensic expert* (Article 68), requirements for forensic expert conclusion (Article 101), appointment of forensic examination by court (Article 102), decision on appointment of forensic examination (Article 103), examination commissioned by the participants in the case (Article 104), collection of materials for forensic research (Article 105), conducting forensic examination (Article 106), assessment of forensic expert conclusion (Article 108), commissioned examination (Article 109), multidisciplinary forensic examination (Article 110), additional and repeated examination (Article 111) [64].

Forensic expert legal status, in particular forensic veterinarian, is an independent legal category and has the following specifics:

1) universal, since it applies to forensic experts regardless of forensic expert specialization;
2) reflects peculiarities of forensic expert as a participant in forensic science activity, as well as the degree and nature of his interaction with other participants in forensic science activity, law enforcement agencies, the court, public authorities;
3) elements of structure of forensic expert legal status of a (list of rights, duties, prohibitions, restrictions and responsibilities) are dependent on each other and mutually affect each other;
4) relative stability and dynamism.

Important element of the legal status of forensic veterinarian (as well as a forensic expert of any other forensic expert specialization) is his rights: a set of freedoms and opportunities due to his professional activity characterized by normativity, formal certainty in official sources and the provision of legal opportunities by state coercion.

Basic rights of forensic expert in any forensic expert specialization, in particular forensic veterinarian, are enshrined in the relevant articles of the Criminal Procedural Code of Ukraine, Civil Procedural Code of Ukraine, Commercial and Procedural Code of Ukraine, Code of Administrative Proceedings of Ukraine, Specialized Law and instructions № 1 and 2. Therefore (regardless of type of proceedings and grounds for conducting forensic examination), forensic expert of any forensic expert specialization (in particular, forensic veterinary medicine) has the *rights*, the list of which is given in Table 1.

63 Господарський процесуальний кодекс України від 06.11.1991 р. № 1798-XII (зі змін. та доп.). URL: https://zakon.rada.gov.ua/laws/show/1798-12#Text (date accessed: 01.12.2022).

64 Кодекс адміністративного судочинства України від 06.07.2005 р. № 2747-IV (зі змін. та доп.). URL: https://zakon.rada.gov.ua/laws/show/2747-15#Text (date accessed: 01.12.2022).

Table 1

Forensic Expert Rights in Accordance with the Legislation of Ukraine

Forensic expert rights	Criminal Procedural Code of Ukraine	Civil Procedural Code of Ukraine	Commercial and Procedural Code of Ukraine	Code of Administrative Proceedings of Ukraine	Specialized Law	Instruction	
						№ 1	№ 2
Familiarize withe case files related to the topic of forensic examination	Clause 1 Part 3 of Art. 69	Clause 1 Part 6 of Art. 72	Clause 1 Part 6 of Art. 69	Clause 1 Part 6 of Art. 68	Clause 1 Part 1 of Art. 13	Paragraph 2, clause 2.1, section II	Sub-item 1, item 1, section II
Apply for the provision of additional materials and samples and perform other actions related to the forensic examination	Clause 2 Part 3 of Art. 69	Clause 2 Part 6 of Art. 72	Clause 2 Part 6 of Art. 69	Clause 2 Part 6 of Art. 68	Clause 1 Part 1 of Art. 13	Paragraph 3, clause 2.1, section II	Sub-item 2, item 1, section II
Submit a request to the body (person) that appointed a forensic examination or engaged a forensic expert to clarify the issues raised	— *	—	—	—	—	Paragraph 4, clause 2.1, section II	Sub-item 4, item 1, section II
Be present while execution of procedural actions relating to the subjects and objects of research **	Clause 3 Part 3 of Art. 69	Clause 4 Part 6 of Art. 72	Clause 4 Part 6 of Art. 69	Clause 4 Part 6 of Art. 68	Clause 3 Part 1 of Art. 13	Paragraph 5, clause 2.1, section II	Sub-item 3, item 1, section II
Submit a request to interview participants in the legal process and witnesses (ask questions to persons participating in criminal proceedings) related to the subject or object of the forensic examination, and conduct separate research in their presence	Clause 5 Part 3 of Art. 69	Clause 5 Part 6 of Art. 72	Clause 5 Part 6 of Art. 69	Clause 5 Part 6 of Art. 68	—	Paragraph 5, clause 2.1, section II	Sub-item 3, item 1, section II
Present in the conclusion information found during the forensic examination that is relevant to the case and for which no questions were raised, and the circumstances that contributed or could contribute to the commission of the offense	Clause 4 Part 3 of Art. 69	Clause 3 Part 6 of Art. 72	Clause 3 Part 6 of Art. 69	Clause 3 Part 6 of Art. 68	Clause 2 Part 1 of Art. 13	Paragraph 6, clause 2.1, section II	Sub-item 5, item 1, section II
Draw up a separate conclusion in case of disagreement with the position of other members of forensic expert commission	—	—	—	—	—	Paragraph 7, clause 2.1, section II	—

Forensic expert rights	Criminal Procedural Code of Ukraine	Civil Procedural Code of Ukraine	Commercial and Procedural Code of Ukraine	Code of Administrative Proceedings of Ukraine	Specialized Law	Instruction	
						№ 1	№ 2
Request the involvement of other experts	—	—	—	—	—	—	
Ensure unhindered access to the research object and proper working conditions	—	—	—	—	Art. 6	Clause. 3.9 section III	—
Provide answers to questions, in particular in writing, that are asked to the forensic expert during explanations or testimony regarding the conclusion drawn up by him	Art. 356	Part 4 of Art. 239	Art. 215	Part 3 of Art. 221	—	Paragraph 8, clause 2.1, section II	Sub-item 6, item 1, section II
Indicate in the conclusion about the information found during the examination, which is important for the proceedings and for which he was not asked questions	Part 3 of Art. 102	Part 8 of Art. 102	Part 8 of Art. 98	Part 8 of Art. 101	—	Paragraph 6, clause 2.1, section II	Sub-item 5, item 1, section II
In cases determined by law, to use the free help of an interpreter, to object to him	—	—	—	—	—	—	—
Challenge actions and decisions of forensic examination customer and other participants in the trial, violating rights of the forensic expert or the procedure for conducting forensic examination	—	—	—	—	—	Paragraph 9, clause 2.1, section II	Sub-item 7, item 1, section II
Apply for security in cases provided for by law	Clause 7 Part 3 of Art. 69	—	—	—	—	Paragraph 10, clause 2.1, section II	Sub-item 8, item 1, section II
Receive remuneration for performed work and reimbursement of expenses related to conducting forensic examination, if its conducting is not the official duty of the person involved as forensic expert	Clause 6 Part 3 of Art. 69	Part 7 of Art. 72	Part 7 of Art. 69	Part 7 of Art. 68	Clause 5 Part 1 of Art. 13	Paragraph 11, clause 2.1, section II	Sub-item 9, item 1, section II
Participate in court session in the mode of video conference, if there are no objections of participants in the case	Art. 336	Part 4 of Art. 72	Part 4 of Art. 69	Part 4 of Art. 68	—	—	

Forensic expert rights	Criminal Procedural Code of Ukraine	Civil Procedural Code of Ukraine	Commercial and Procedural Code of Ukraine	Code of Administrative Proceedings of Ukraine	Specialized Law	Instruction	
						№ 1	№ 2
Refuse to conduct forensic examination ***	—	Part 8 of Art. 72	Part 8 of Art. 69	Part 8 of Art. 68	—	—	Clause 2 section II
Use other rights provided by legislation of Ukraine	Clause 8 Part 3 of Art. 69	Clause 6 Part 6 of Art. 72	Clause 6 Part 6 of Art. 69	Clause 6 Part 6 of Art. 68	Part 2 of Art. 13	—	—

Notes.

* Here and further, there is no sign;

** With permission of the body (person) who appointed forensic examination or engaged forensic expert.

*** If there is a threat to the life and health of the forensic expert; there are no necessary conditions for conducting research; principle of forensic expert independence is violated; objects of forensic examination and case files are unsuitable or insufficient to provide a conclusion and forensic expert was refused to supplement them; there are no conditions, methodological tools and equipment necessary for conducting a forensic examination and providing a conclusion; current level of scientific development does not allow us to answer the questions. Application for refusal should be motivated.

Certified forensic veterinarian carrying out forensic science activity, but does not work in a state specialized forensic institution, while control of organization of his activity by checking compliance with requirements of normative legal acts on forensic science activity and methods of conducting forensic examinations, shall (in accordance with Clause 15 of Chapter IV of Instruction № 2), in particular, the following rights:

"• demand that commission members present official certificate;

- be present while inspection;
- demand from commission members not to disclose information that became known to them during inspection;
- apply to commission with a substantiated statement regarding the analysis of conclusions in another FSI;
- receive a copy of the act based on inspection results;
- sign the act with comments or refuse to sign;
- provide in writing their explanations, comments or objections to the act and the documents attached to" [65].

One of important elements of procedural status of forensic veterinarian (as well as a forensic expert of any other forensic expert specialization) are his duties set forth in the Criminal Procedural Code, Civil Procedural Code, Commercial and Procedural Code, Code of Administrative Proceedings of Ukraine, Specialized Law and instructions № 1 and 2.

Duties of forensic veterinarian outline his obligations (both to the state and to other participants in forensic science activity), which should be fulfilled without fail in accordance with legislation requirements, as well as according to his own conscience. Regardless of the type of legal proceedings and the basis of forensic examination, the forensic expert of any forensic expert specialization is assigned duties which list is given in the table. 2.

65 Інструкція про особливості здійснення … . URL: https://zakon.rada.gov.ua/laws/show/z1431-11#Text (date accessed: 01.12.2022).

Table 2

Forensic Expert Rights in Accordance with the Legislation of Ukraine

Forensic Expert Duties	Criminal Procedural Code of Ukraine	Civil Procedural Code of Ukraine	Commercial and Procedural Code of Ukraine	Code of Administrative Proceedings of Ukraine	Specialized Law	Instruction	
						№ 1	№ 2
Adhere to the oath and rules of professional ethics of a forensic expert	Part 1 of Art. 356	Part 1—3, 5 of Art. 225	—	Art. 207	—	—	—
Declare self-recusal if there are grounds provided for by legislation	Clause 5 Part 5 of Art. 69	—	—	—	Clause 3 Part 1 of Art. 12	Paragraph 2, clause 2.1, section II	Sub-item 1, item 3, section II
Accept commissioned forensic examination	—	—	—	—	—	Paragraph 3, clause 2.1, section II	—
Adhere to forensic examination deadlines	—	—	—	—	—	Clause 1.13 section II	—
Personally conduct full research on material and materialized objects	Clause 1 Part 5 of Art. 69	—	—	—	Clause 1 Part 1 of Art. 12	Paragraph 4, clause 2.1, section II	Sub-item 3, item 3, section II
Provide a substantiated and objective written forensic expert conclusion and if necessary, clarify it	Clause 1 Part 5 of Art. 69	Part 3, 4 of Art. 72	Part 3 of Art. 69	Part 3 of Art. 68	Clause 1 Part 2 of Art. 12	Paragraph 4, clause 2.1, section II	Sub-item 3, item 3, section II
Submit a request to the person or court that appointed forensic examination to clarify the content and scope of the assignment or to inform about impossibility of conducting it according to the question posed or without involvement of other persons	Part 7 of Art. 69	Part 6 of Art. 104	—	—	—	—	—
Arrive at the summons of the body or person who ordered forensic examination or engaged forensic expert to provide explanations, testimony or additions regarding conducted forensic examination or the reasons for its impossibility	Clause 2 Part 5 of Art. 69	Part 4 of Art. 72	Part 4 of Art. 69	Part 4 of Art. 68	—	Paragraph 6, clause 2.1, section II	Sub-item 2, item 2, section II
Ensure preservation of objects and materials provided for research	Clause 3 Part 5 of Art. 69	Part 3 of Art. 108	Part 3 of Art. 103	—	—	Paragraph 7, clause 2.1, section II	—

Forensic Expert Duties	Criminal Procedural Code of Ukraine	Civil Procedural Code of Ukraine	Commercial and Procedural Code of Ukraine	Code of Administrative Proceedings of Ukraine	Specialized Law	Instruction	
						№ 1	№ 2
Obtain permission from forensic examination customer for complete or partial destruction of the forensic examination object of or change of its properties, if it is impossible to apply other research methods	Clause 3 Part 5 of Art. 69	Part 4 of Art. 108	Part 4 of Art. 103	Part 3 of Art. 104	—	Paragraph 7, clause 2.1, section II	—
Not to inform anyone, except forensic examination customer, about the course and results of its conduct (except for cases provided for by law)	Clause 4 Part 5 of Art. 69	Clause 1 Part 2 of Art. 107	Part 2 of Art. 102	Part 2 of Art. 105	—	Paragraph 8, clause 2.1, section II	Sub-item 7, item 3, section II
Indicate in forensic expert conclusion that forensic expert is aware of responsibility for a knowingly false conclusion and refusal without valid reasons to fulfill the duties assigned to him	Part 2 of Art. 102	Part 7 of Art. 102	Part 7 of Art. 98	Part 7 of Art. 101	—	Paragraph 14, clause 2.1, section IV	—
It should be noted in forensic expert conclusion that conclusion has been prepared for submission to the court and forensic expert is aware of the criminal responsibility for a knowingly false conclusion, if forensic examination is carried out at the request of the parties to the case	—	Part 5 of Art. 106	Part 5 of Art. 101	Part 6 of Art. 104	—	Paragraph 15, clause 2.1, section IV	—
Notify relevant case participant about consequences of forensic expert research and obtain written permission for its conducting *	—	Clause 2 Part 4 of Art. 108	Clause 2 Part 4 of Art. 103	Clause 2 Part 4 of Art. 106	—	—	—
Notify the body or person who ordered forensic examination or engaged forensic expert about impossibility of conducting it and return case files and other documents **	Clause 5 Part 5 of Art. 69	Part 8 of Art. 72	Part 8 of Art. 69	Part 8 of Art. 68	—	Paragraph 5, clause 2.1, section II	Sub-item 4, item 3, section II
Immediately return case files and other documents provided for forensic examination in case of:							
• its completion;	—	—	—	—	—	—	—

Forensic Expert Duties	Criminal Procedural Code of Ukraine	Civil Procedural Code of Ukraine	Commercial and Procedural Code of Ukraine	Code of Administrative Proceedings of Ukraine	Specialized Law	Instruction № 1	Instruction № 2
• receipt of a procedural document or a request from forensic examination customer (if forensic expert is engaged on a contractual basis) to terminate its conducting;	—	—	—	—	—	—	—
• disapproval by forensic examination customer of the extension of its conducting terms;	—	—	—	—	—	Paragraph 4, clause 1.13, section I	—
• refusals of forensic examination customer to give consent to the complete or partial destruction or damage of the object of forensic examination, if it is impossible to conduct research using other non-destructive methods;	—	—	—	—	—	—	—
• cancellation by court of decision on forensic examination appointment	—	Part 4 of Art. 107	Part 5 of Art. 102	Part 4 of Art. 105	—	Paragraph 9, clause 2.1, section II	—

Notes.

* If forensic research is related to complete or partial destruction of forensic examination object or change of its properties.

** Due to the lack of necessary knowledge, or insufficient materials for forensic examination, or their failure to submit within the time stipulated by legislation, or failure to submit additional materials, or due to impossibility of conducting forensic examination without involvement of other experts. The application for refusal should be motivated.

Legislation provides for control over organization of activities of certified forensic veterinarians who do not work in State specialized expert institutions, carried out by checking their compliance requirements of normative legal acts on forensic science activity and methods of conducting forensic examinations. According to Clause 16 of Chap. IV of Instruction No. 2, additional duties are assigned to the forensic expert during such an inspection, in particular:

"• *allow the commission to his workplace;*
- *provide copies of other specimens of conclusions for their analysis, as well as other materials and explanations on issues arising during inspection;*
- *comply with elimination requirements for identified deficiencies*" [66].

In addition to duties and rights, the legal status of a forensic veterinarian includes a system of prohibitions during the performance of his professional activities,

66 Інструкція про особливості здійснення … . URL: https://zakon.rada.gov.ua/laws/show/z1431-11#Text (date accessed: 01.12.2022).

provided for in Part 4 of Art. 69 Criminal Procedural Code of Ukraine, Part 5 of Art. 69 of Commercial and Procedural Code of Ukraine, Part 4 of Art. 10 of Specialized Law, clause 2.3, Ch. II Instructions №. 1, Clause 4, Chap. II Instructions №. 2. We systematized the list of prohibitions in the table. 3.

Table 3

Forensic Expert Rights in Accordance with the Legislation of Ukraine

Prohibitions for Forensic Expert	Criminal Procedural Code of Ukraine	Civil Procedural Code of Ukraine	Commercial and Procedural Code of Ukraine	Code of Administrative Proceedings of Ukraine	Specialized Law	Instruction № 1	Instruction № 2
Conduct a forensic examination without a written authorization from superior, *	—	—	—	—	Clause 2 of Part 3 of Art. 14**	Paragraph 2, clause 2.1, section II	—
Reassign forensic examination to another person	—	Part 5 of Art. 72	Part 5 of Art. 69	Part 5 of Art. 68	Clause 3 of Part 3 of Art. 14**	Paragraph 3, clause 2.1, section II	—
Independently collect materials that are subject to forensic research, as well as select initial data for conducting forensic examination, if they are ambiguously reflected in provided materials	Part 4 of Art. 69	Clause 1 Part 2 of Art. 107	Part 2 of Art. 102	Clause 1 Part 2 of Art. 105	Clause 1 of Part 3 of Art. 14**	Paragraph 4, clause 2.1, section II	Subitem 2, item 4, section II
Solve issues that go beyond the scope of forensic examination, specific expertise or qualification of forensic expert in the relevant forensic expert specialization	—	—	—	—	Clause 5 of Part 3 of Art. 14**	Paragraph 5, clause 2.1, section II	Subitem 3, item 4, section II
Find out legal issues and provide assessments of legality of procedures regulated by legal regulations	Part 1 of Art. 242	Part 2 of Art. 102	Clause 2 Part 2 of Art. 98	Clause 2 Part 2 of Art. 101	Clause 5 of Part 3 of Art. 14**	Paragraph 5, clause 2.1, section II	Subitem 3, item 4, section II
Independently involve other forensic experts or persons in carrying out forensic examination entrusted to him	—	—	—	—	—	—	—

Prohibitions for Forensic Expert	Criminal Procedural Code of Ukraine	Civil Procedural Code of Ukraine	Commercial and Procedural Code of Ukraine	Code of Administrative Proceedings of Ukraine	Specialized Law	Instruction № 1	Instruction № 2
Without consent of the body (person) who appointed forensic examination to communicate with hearing participants outside the court session ***	—	Clause 2 Part 2 of Art. 107	Part 2 of Art. 102	Clause 2 Part 2 of Art. 105	—	Paragraph 6, clause 2.1, section II	Subitem 4, item 4, section II
Store case (proceedings)files and objects of forensic examination outside the workplace or outside a specially designated storage place	—	—	—	—	—	Paragraph 7, clause 2.3, section II	Subitem 5, item 4, section II
Disclose information that has become known to forensic expert in connection with forensic examination, or notify anyone, except court and the party to the case, on whose order the forensic examination was conducted, about its performing and obtained results	Clause 4 Part 5 of Art. 69	Clause 1 Part 2 of Art. 107	Part 2 of Art. 102	Part 2 of Art. 105	—	Paragraph 8, clause 2.1, section II	Subitem 7, item 3, section II
Apply destructive research methods or significantly change the properties of research objects without permission of the body (person) who appointed forensic examination or engaged forensic expert	Clause 3 Part 5 of Art. 69	Part 3, 4 of Art. 108	Part 3, 4 of Art. 103	Part 3, 4 of Art. 106	Clause 9 of Part 3 of Art. 14**	Paragraph 7, clause 2.1, section II	Subitem 6, item 3, section II
Conduct forensic examination, if the right of forensic expert to conduct a forensic examination is temporarily suspended in the relevant forensic expert specialization or the certificate of qualification of a forensic expert is canceled	=	=	=	=	=	=	=
Interrogate forensic expert before he issues a conclusion	=	=	=	=	=	=	=
Comply with other restrictions provided by legislation	—	—	—	—	Clause 6 Part 1 of Art. 13	—	—

Notes.

* In particular, in the case of its appointment (order) to forensic expert institution which employee is a forensic expert, or to accept the execution of forensic examination by a certified forensic

expert who does not work in a State specialized expert institution, if it is not personally entrusted to him.

** Is a disciplinary offense.

*** If this calls into question the disinterestedness of forensic expert in the result or if such persons are directly or indirectly interested in the results of forensic examination.

Let us sum up intermediate results. The lists of rights, duties, and prohibitions of forensic expert (in particular, a forensic veterinarian), given in procedural legislation of Ukraine, Specialized Law and instructions № 1 and 2, differ somewhat in scope and content, that can negatively affect effectiveness of their application in the legal field and forensic expert practice (in particular, forensic veterinary), as well as the validity, objectivity, reliability and veracity of forensic expert conclusion. In addition, analyzed rights, duties, and prohibitions of the forensic expert are included in various articles of the above-mentioned documents which to some extent complicates their practical application for the purpose of implementing the tasks of legal proceedings and forensic science activity.

Our generalization (E.g., Tables 1–3) indicates: system of rights, obligations and prohibitions of forensic expert determined by the mentioned normative legal acts needs unification with the aim of the same scope of their application regardless of the type of legal proceedings, grounds for conducting a forensic examination, and for effective implementation of forensic expert activity principles.

According to the tab. 1–3, we come to the conclusion that procedural legislation, Specialized Law, instructions № 1 and 2 do not contain clearly formulated and grouped norms regarding the rights, duties and prohibitions of the forensic expert. In our opinion, the status of a judicial expert in the legislation of Ukraine (regardless of the type of legal proceedings) needs to be improved: systematize and concentrate the list of his rights, duties and prohibitions in the relevant Law with reference to this Law as a blanket norm in the Criminal Procedural Code of Ukraine, Civil Procedural Code of Ukraine, Commercial and Procedural Code of Ukraine and Code of Administrative Proceedings of Ukraine which will contribute to clarity of interpretation, ease of perception and effective application of these rights, obligations and prohibitions. In this regard, regulate in the legislation of Ukraine the rights, obligations and prohibitions provided for a court expert, we suggest using their complex, grouped in the table. 1–3 of research paper (regardless of species of legal proceedings).

Forensic veterinarian is one of the substitute participants in a proceeding or legal procedure (regardless of type of legal proceedings), so he can be removed from participation in the case by granting a motion for recusal or as a result of self-recusal. Comprehensive, complete and objective investigation of circumstances of the case assumes the lack of direct or indirect interest of the forensic veterinary expert in its results. In this regard, procedural legislation provides for the removal of forensic expert in existence of such interest or other circumstances that raise doubts about the impartiality of the expert. We systematized the conditions under which a person cannot be forensic expert in the table. 4.

Table 4

Restrictions Provided by Legislation of Ukraine for forensic expert

Conditions Under which Professional Cannot be Forensic Expert?	Criminal Procedural Code of Ukraine	Civil Procedural Code of Ukraine	Commercial and Procedural Code of Ukraine	Code of Administrative Proceedings of Ukraine	Specialized Law	Provisions on CEQC
Is an applicant, victim, civil plaintiff or defendant, a family member or close relative of a party, applicant, victim, civil plaintiff or defendant or was (is) in an official or other dependence on participants in the case	Art. 79 & 80	Art. 38 & 39	Art. 37 & 38	Art. 38 & 39	—	—
Participated in the case as an examining magistrate, judge, defense attorney or representative, witness, forensic expert, professional, translator, secretary of court session, representative of the staff of probation authority	Art. 79 & 80	Art. 38 & 39	Art. 37 & 38	Art. 38 & 39	—	—
Directly or indirectly personally (or his close relatives or family members) interested in the outcome of the case	Art. 79 & 80	Art. 38 & 39	Art. 37 & 38	Art. 38 & 39	—	—
Was (is) in an official, family or other dependence on the parties to proceedings; or there are other circumstances that raise reasonable doubts about impartiality of forensic expert	Part 2 of Art. 69	Clause 1 Part 2 of Art. 38	Part 2 of Art. 37	Clause 1 Part 2 of Art. 38	—	—
Took part in the departmental investigation and acts in it as a witness, representative, lawyer	—	—	—	Part 1 of Art. 38	—	—
Participated in audits, inspections, etc., materials that were used in the case	Part 2 of Art. 79	—	—	Clause 2 Part 2 of Art. 38	—	—
Finding out circumstances relevant to the case is beyond his specific expertise	Part 6 of Art. 69	Clause 2 Part 2 of Art. 38	Part 6 of Art. 99	Clause 3 Part 2 of Art. 38	—	—
Person with limited legal capacity or an incapacitated person	—	—	—	—	Part 1 of Art. 11	—
Has an unexpunged or unexpired criminal record	—	—	—	—	Part 1 of Art. 11	—

Conditions Under which Professional Cannot be Forensic Expert?	Criminal Procedural Code of Ukraine	Civil Procedural Code of Ukraine	Commercial and Procedural Code of Ukraine	Code of Administrative Proceedings of Ukraine	Specialized Law	Provisions on CEQC
During the last year, had (had) an administrative penalty for committing offense related to corruption, or disciplinary penalty in the form of deprivation forensic expert qualification	—	—	—	—	Part 1 of Art. 11	Clause 12, 16 section VI
In conducting forensic re-examination, if he provided expert conclusion based on the results of the initial examination for the same case or criminal proceedings	—	—	—	—	—	—
Other circumstances that raise doubts about impartiality or objectivity of the forensic expert and exclude possibility of instructing him to conduct a forensic examination	Clause 3 Part 1 of Art. 77	Art. 38	Clause 5 Part 1 of Art. 35	Part 1 of Art. 39	—	—
Other circumstances prohibiting participation in legal proceedings	—	—	—	—	Part 2 of Art. 11	—

Notes.

* Regulations on the Central Expert Qualification Commission under the Ministry of Justice of Ukraine and the certification of forensic experts [67] (hereinafter referred to as *Regulations on CEQC*).

According to the table 4, we come to the conclusion that procedural legislation does not contain clearly formulated and grouped norms-limitations and grounds for disqualification of a court expert. Thus, the norm of Part 1 of Art. 79 of Criminal Procedural Code of Ukraine: *Grounds for impeachment of a specialist, representative of the staff of the probation authority, translator, expert, secretary of the court session* is strong; it states that the named persons *do not have the right to participate in criminal proceedings and are impeached on the grounds provided for in the first part of Article 77 of this Code*, entitled *Grounds for disqualification of the prosecutor, investigator* (therefore, Article 77 of Criminal Procedural Code of Ukraine does not refer to forensic expert). In our opinion, such legal substantiation of the grounds for disqualification of a forensic expert causes inconvenience in the use of these norms in the practice of criminal justice.

We are convinced that posting a list of grounds for disqualification of forensic expert (regardless of the type legal proceeding) in Specialized Law (with reference to this Law in Article 79 of Criminal Procedural Code of Ukraine, Article 38 of Civil Procedural Code of Ukraine, Article 37 of Commercial and Procedural Code of

67 Положення про Центральну експертно-кваліфікаційну комісію при Міністерстві юстиції України та атестацію судових експертів : затв. наказом Мін'юсту України від 03.03.2015 р. № 301/5 (зі змін. та допов.). URL: https://zakon.rada.gov.ua/laws/show/z0249-15#Text (date accessed: 01.12.2022).

Ukraine and Article 38 of Code of Administrative Proceedings of Ukraine as a blanket norm) will contribute to clarity and ease of their use in any type of legal proceedings. Therefore, for filing a recusal and self-recusal of forensic expert (regardless of species of legal proceedings), we suggest using a set of grounds grouped in the table. 4.

We reasonably assert that participation of forensic expert as a specialist in a case at a previous stage cannot be grounds for his disqualification as an expert in the same case (Part 1 of Article 79 of Criminal Procedural Code of Ukraine, Part 3 of Article 38 Civil Procedural Code of Ukraine, Part 3 of Article 37 of Commercial and Procedural Code of Ukraine, Part 3 of Article 38 of the Code of Administrative Proceedings of Ukraine). Based on the experience of our own forensic veterinary expert practice during 2010—2022, we should state that such a transfer of powers (from specialist to forensic expert) is more effective and promising than when in the pre-expert period a single specialist works with research objects and after appointing a forensic examination is another. In particular, forensic veterinarian, together with police officers, visits the scene of the incident, inspects the animal corpse and makes a corresponding description directly at the place of discovery, and then conducts a detailed external and internal examination of the animal corpse in the morgue of a specialized expert institution according to the necessary methods, according to needs, applies additional laboratory and instrumental research methods, which together will make it possible to establish a justified forensic veterinary diagnosis (argue the cause and age of the animal's death, find out the localization, nature and degree of severity of individual injuries, etc.), integrating the information obtained during the examination of this corpse at the place of discovery and its detailed examination in morgue.

Issue of forensic veterinarian disqualification is decided by composition of court considering the case (Part 10 of Article 40 of Civil Procedural Code of Ukraine, Part 10 of Article 39 of Commercial and Procedural Code of Ukraine, Part 9 of Article 40 of Code of Administrative Proceedings of Ukraine). If forensic expert challenge to criminal proceedings is satisfied, another forensic expert should be involved within the time limits determined by examining magistrate or the court (Part 2, Article 83 of the Criminal Procedure Code). At the same time, Code of Civil Procedure, the Code of Civil Procedure and the Civil Code of Civil Procedure do not contain such a norm. To the deep conviction of the author of this research, in forensic veterinary examination, this approach is ineffective or ineffective in general with respect to individual objects of forensic veterinary examination and under certain conditions of these objects (for example, if an animal carcass is subjected to the initial examination, then during its forensic veterinary autopsy, which is a mandatory stage of forensic veterinary examination, destructive research methods are used). As a result of application of a full set of forensic veterinary manipulations to a sub-expert corpse of an animal, wound openings and wound passages are destroyed, as well as (partially or completely) the primary structure of organs. Therefore, if at the stage of the judicial review of the case in criminal proceedings, forensic expert who provided the opinion, based on the results of the forensic veterinary examination, is challenged and the investigating judge or the court involves another forensic veterinary expert (Part 2, Article 83 of Criminal Procedural Code of Ukraine), effectiveness research and the informativeness of obtained results will be significantly reduced due to the complete or partial destruction of the corpse during initial examination. Similarly, efficiency, informativeness and effectiveness will decrease or even make it impossible to carry out a repeated forensic veterinary examination of such a research object or cause expert errors. However, in each specific case, the expert capabilities and informativeness of the research results should be evaluated individually, taking into account many factors: for example, fractures, cracks and other pathologies of the bones of the skeleton retain informativeness for a long time after the death of animal (including the exhumation of the corpse) to establish factual data, in the case of researching decayed remains or skeletonization of a corpse (this helps to determine the place of application of force to cause injuries, their localization, nature and even the mechanism of injury).

Therefore, the list of grounds for which a person cannot be a forensic expert, in particular a forensic veterinary expert, given in the Code of Criminal Procedure, Code of Criminal Procedure, Code of Criminal Procedure, Civil Code of Ukraine, instructions № 1 and 2 is different, which can negatively affect the process of appointing a forensic expert in general and judicially veterinary examination, in particular, for its impartial conduct, as well as the provision of a substantiated, objective, reliable opinion by a forensic expert (see Table 5), therefore mentioned documents need unification (regardless of the type of legal proceedings and/or grounds for conducting forensic examination) with the aim of implementation of the principles of forensic science activity, necessarily taking into account peculiarities of legal proceedings.

Results of the survey of respondents (judges, investigators, inquirers, lawyers, forensic veterinarians) regarding the rights, duties, prohibitions and restrictions provided by law for forensic expert are set out in table. 5.

Table 5

Results of statistical processing of respondent questionnaires *

Questions	Answers									
	Judges		**Investigators**		**Investigating officers**		**Lawyers**		**Forensic veterinarians**	
	Quantity	**%**	**Quantity**	**%**	**Quantity**	**%**	**Quantity**	**%**	**Quantity**	**%**
1. Is it necessary to develop a doctrine on legal status of a forensic expert in Ukraine, taking into account specifics of national legislation?										
Yes	58	96.7	82	89.1	45	90	43	86	2	100
No	—	—	—	—	—	—	—	—	—	—
No answer	2	3.3	10	10.9	5	10	7	14	—	—
2. In your practice, have you come across information about influencing forensic expert with the purpose of providing false conclusion (refusal without valid reasons to perform assigned duties)?										
Yes	—	—	—	—	—	—	—	—	—	—
No	—	—	80	87.0	44	88.0	50	100	2	100
No answer	2	3.3	2	2.0	1	2.0	—	—	—	—

Questions	Answers									
	Judges		Investigators		Investigating officers		Lawyers		Forensic veterinarians	
	Quantity	%	Quantity	%	Quantity	%	Quantity	%	Quantity	%
3. Does the separation of his legal and procedural status affect forensic expert practical activity?										
Yes	10	16.7	12	13.0	8	16.0	12	24.0	—	—
No	45	75.0	75	81.5	39	78.0	32	64.0	2	100
No answer	5	8.3	5	5.5	3	6.0	6	12.0	—	—
4. Are there any inconveniences associated with the need to simultaneously refer to various legislative and regulatory acts related to substantive and branch procedural law when using them in practice, when one list of rights, obligations, and prohibitions of forensic expert is concentrated in the Specialized Law and the other list in relevant procedural legislation?										
Yes	38	63.3	55	59.8	32	64.0	29	58.0	2	100
No	16	26.7	28	30.4	11	22.0	10	20.0	—	—
No answer	6	10.0	9	9.8	7	14.0	11	22.0	—	—
5. What is your attitude to the fact that list of rights, obligations, prohibitions and restrictions provided for by Specialized Law is partially inconsistent with the list of rights, obligations, prohibitions and restrictions of forensic expert provided for by instructions that are hierarchically subordinate to this Law?										
Negative	27	45.0	45	48.9	26	52.0	26	52.0	2	100
This does not affect appointment and conducting forensic examinations	30	50.0	39	42.4	22	44.0	21	42.0	—	—
No answer	3	5.0	8	8.7	2	4.0	3	6.0	—	—
6. Do you consider it expedient to improve the legislation of Ukraine regarding the status of a judicial expert during his professional activity, regardless of the type of judicial proceedings, by placing a systematized list of norms in the relevant Law with reference to this Law as a blanket norm in Art. 69 of Civil Procedural Code of Ukraine, Art. 69 of Commercial and Procedural Code of Ukraine, Art. 68 of Code of Administrative Proceedings of Ukraine, what will make it possible to ensure clarity and convenience of their perception, as well as effective application?										
Yes	50	83.3	82	89.1	37	74.0	41	82.0	2	100
No	7	11.7	—	—	7	14.0	7	14.0	—	—
No answer	3	5.0	10	10.9	6	12.0	2	4.0	—	—

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Questions	Answers									
	Judges		Investigators		Investigating officers		Lawyers		Forensic veterinarians	
	Quantity	%	Quantity	%	Quantity	%	Quantity	%	Quantity	%
7. Submit a request to the body (person) that appointed a forensic examination or engaged forensic expert to clarify raised issues?										
Appropriate	52	86.7	81	88.0	46	92.0	45	90.0	2	100
Impractical	—	—	—	—	—	—	—	—	—	—
No answer	8	13.3	11	12.0	4	8.0	5	10.0	—	—
8. What is your attitude to the right of a forensic expert to draw up a separate conclusion while commissioned forensic examination in case of disagreement with position of other forensic experts?										
Appropriate	52	86.7	81	88.0	46	92.0	45	90.0	2	100
Impractical	—	—	—	—	—	—	—	—	—	—
No answer	8	13.3	11	12.0	4	8.0	5	10.0	—	—
9. Challenge actions and decisions of the customer of forensic examination and other participants in the trial, violating rights of forensic expert or the procedure for conducting forensic examination?										
Appropriate	52	86.7	81	88.0	46	92.0	45	90.0	2	100
Impractical	—	—	—	—	—	—	—	—	—	—
No answer	8	13.3	11	12.0	4	8.0	5	10.0	—	—
10. Should the list of duties of forensic expert be supplemented with the following item: *Observe the deadlines for conducting a forensic examination*?										
Yes	58	96.7	85	93.4	48	96.0	45	90.0	2	100
No	—	—	—	—	—	—	—	—	—	—
No answer	2	3.3	7	7.6	8	16.0	5	10.0	—	—
11. Is it expedient to oblige the forensic expert to immediately return case files and other documents used for the forensic examination in case of: • receipt of a procedural document or a request from forensic examination customer (if forensic expert is engaged on a contractual basis) to terminate its conducting; • disapproval by forensic examination customer of extension of its conducting terms; • refusal of forensic examination customer to give consent to the complete or partial destruction or damage of the object of forensic examination, if it is impossible to conduct research using other non-destructive methods; • cancellation by court of decision on appointment of forensic examination?										
Appropriate	58	96.7	85	93.4	48	96.0	45	90.0	2	100
Impractical	—	—	—	—	—	—	—	—	—	—
No answer	2	3.3	7	7.6	8	16.0	5	10.0	—	—

Questions	Answers									
	Judges		Investigators		Investigating officers		Lawyers		Forensic veterinarians	
	Quantity	%	Quantity	%	Quantity	%	Quantity	%	Quantity	%
12. Should the list of prohibitions for forensic expert be supplemented with prohibition to conduct a forensic examination without a written authorization from the head of the forensic institution which employs this forensic expert?										
Yes	59	98.3	89	96.7	43	86.0	45	90.0	2	100
No	—	—	—	—	—	—	—	—	—	—
No answer	1	1.7	3	3.3	7	14.0	5	10.0	—	—
13. Should the list of prohibitions for forensic expert be supplemented with a prohibition to contact persons directly or indirectly interested in the results of forensic examination?										
Yes	59	98.3	89	96.7	43	86.0	45	90.0	2	100
No	—	—	—	—	—	—	—	—	—	—
No answer	1	1.7	3	3.3	7	14.0	5	10.0	—	—
14. Should the list of prohibitions for a court expert be supplemented with a prohibition to interrogate forensic expert in court before he provides a conclusion?										
Yes	57	95.0	85	92.4	49	98.0	48	96.0	2	100
No	—	—	—	—	—	—	—	—	—	—
No answer	3	5.0	7	7.6	1	2.0	2	4.0	—	—
15. Can the participation of forensic expert in proceedings as a specialist preclude his participation as a forensic expert in the same proceedings?										
Yes	—	—	—	—	—	—	—	—	—	—
No	59	98.3	87	94.6	49	9.8	48	96.0	2	100
No answer	1	1.7	5	5.4	1	2.0	2	4.0	—	—

Notes.

* Total respondents: judges: 60, investigators: 92, Investigating officers: 50, lawyers: 50, forensic veterinarians: 2.

Thus, analysis of questionnaires of interviewees confirmed our statement about the existence in Ukraine of the need to develop a doctrine on the legal status of a forensic expert in view of specifics of national legislation in the context of the latest reforms, in particular regarding forensic science activity.

Note that legal responsibility of forensic veterinarian is a component of his legal status. In legal responsibility, one of the methods of State management of society is reproduced, which consists in coercive, State-authority influence on behavior of persons committed offenses.

Legal responsibility of forensic veterinarian is a type of state coercion and a specific type of legal relationship. The basis of legal responsibility of a forensic veterinary expert is his commission of an offense in forensic science activity. The purpose of the expert's legal responsibility is the formation of his lawful behavior. The responsibility of the forensic expert is based on the principles of legality, inevitability, reasonableness, justice, and appropriateness of punishment [68]. Art. 14 of Specialized Law states that this responsibility is carried out on the grounds and in the manner prescribed by law. We believe that this article of the relevant Law does not at all specify the responsibility of the forensic expert and has rather generalized features, which is why it cannot satisfy the requirements of forensic expertise, because legal responsibility is a central category in forensic expertise and forensic expertise and one of the principles of forensic expertise, to which such scientists as: E. B. Simakova-Yefremian [69], V. M. Sherstiuk [70], A. V. Ostropilets [71], B. P. Surzhan [72], O. A. Kravchenko [73] and others pay attention.

For violation of legislation, forensic veterinarian bears criminal, administrative, disciplinary and material responsibility which we systematized and illustrated in the table. 6.

68 Білозьоров Є. В., Власенко В. П., Горова О. Б., Завальний А. М., Заяць Н. В. та ін. Теорія держави та права : навч. посіб. / за заг. ред. С. Д. Гусарєва, О. Д. Тихомирова. Київ, 2017. 320 с.

69 Сімакова-Єфремян Е. Б. До питання про нормативно-правове регулювання судово-експертної діяльності в умовах судової реформи в Україні. *Актуальні питання судової експертизи і криміналістики* : мат-ли кругл. столу з нагоди 100-річ. від дня народж. проф. М. В. Салтевського (Харків, 30.10.2017). Харків, 2017. С. 68—70.

70 Шерстюк В. М. Принципи судово-експертної діяльності. *Теорія та практика судової експертизи і криміналістики*. 2008. Вип. 8. С. 18—23. URL: https://www.hniise.gov.ua/user_files/File/files/2008.pdf (date accessed: 12.12.2022).

71 Остропілець А. В. Принципи адміністративно-правового регулювання судово-експертної діяльності в Україні. *Прикарпатський юридичний вісник*. 2018. Вип. 1 (22). Т. 3. С. 197—202. URL: http://www.pjv.nuoua.od.ua/v1-3_2018.pdf (date accessed: 12.12.2022).

72 Суржан Б. П. Юридична відповідальність судового експерта у світлі судової реформи. *Криміналістичний вісник*. 2018. № 2 (30). С. 46—54. DOI: 10.37025/1992-4437/2018-30-2-46 (date accessed: 12.12.2022).

73 Кравченко О. А. Види юридичної відповідальності судового експерта в Україні. *Право та державне управління*. 2015. № 2 (19). С. 69—72. URL: http://pdu-journal.kpu.zp.ua/archive/2_2015/16.pdf (date accessed: 12.12.2022).

Table 6

Forensic Expert Responsibility for Legislation Violation

Type of Responsibility and Offense	Legislative Norm
I. Criminal Responsibility	
1. Misleading a court or other authorized body; providing a knowingly false conclusion of a forensic expert drawn up for a body conducting a pre-trial investigation, a court, etc.	Criminal Code of Ukraine[74]
2. Refusal of forensic expert without valid reasons from performing assigned duties in court or during the pre-trial investigation	Art. 385 of Criminal Code of Ukraine
3. Obstructing appearance of forensic expert in court, pre-trial investigation bodies, forcing him to refuse to provide a conclusion, as well as to give a knowingly false conclusion by means of threats of murder, violence, destruction of the property of a forensic expert or his relatives, or disclosure of shameful information, or bribing forensic expert with the same purpose, as well as a threat to carry out these actions in retaliation for a previously given testimony or conclusion	Art. 386 of Criminal Code of Ukraine
4. Data disclosure of crime detection and investigation of pre-trial investigation	Art. 387 of Criminal Code of Ukraine
5. Abuse of authority by persons who provide public services, in particular forensic expert services	Art. 365^2 of Criminal Code of Ukraine
II. Administrative responsibility	
1. Showing disrespect to the court or the Constitutional Court of Ukraine, malicious evasion of forensic expert from appearing in court	Art. 185^3 Code on Administrative Offenses [75] (hereinafter referred to as *Code on Administrative Offenses*)
2. Malicious evasion of forensic expert from appearing before pre-trial investigation bodies or prosecutor during pre-trial investigation	Art. 185^4 of Code on Administrative Offenses
3. Violation of legal restrictions on receiving gifts	Art. 172^5 of Code on Administrative Offenses
4. Violation of requirements prevention and settlement of conflicts of interest	Art. 172^7 of Code on Administrative Offenses

74 Кримінальний кодекс України від 05.04.2001 р. № 2341-III (зі змін. та допов.). URL: https://zakon.rada.gov.ua/laws/show/2341-14#Text (date accessed: 01.12.2022).

75 Кодекс України про адміністративні правопорушення від 07.12.1984 р. № 8073-X (зі змін. та допов.). URL: https://zakon.rada.gov.ua/laws/show/80731-10#Text (date accessed: 01.12.2022).

Type of Responsibility and Offense		Legislative Norm
Reasons	Unscrupulous attitude towards one's official duties, which do not entail criminal or administrative responsibility, and/or violation of methodological requirements during the conduct of forensic investigations	Art. 147–152 Labor Code of Ukraine [76]
Species	Violation of general labor discipline	
	Offense[77]	Section. VI Provisions on CEQC[78], Art. 14 of Specialized Law [79]
Penalty	Warning, suspension of the validity period of the Certificate for relevant forensic expert specialization, deprivation of forensic expert qualification	
IV. Material responsibility		
Reasons	Assignment of property damage	Art. 1166–1177of Civil Code of Ukraine[80]
Species	Damage caused to the enterprise, institution, organization	Chapter IX of Labor Code of Ukraine [81]
	Damage caused to an individual or legal entity	Art. 1166 **, 1172 ***, 1192 **** of Civil Code of Ukraine [82]

Notes.

* In accordance with clause 13 of section VI of Provisions on the CEQC, when choosing the type of disciplinary penalty, disciplinary chamber of the CEQC takes into account: severity of consequences of the committed disciplinary offense; circumstances of its commission; fact that disciplinary sanctions have been applied to the forensic expert in the past; other information characterizing him as a forensic expert.

** General grounds for liability for property damage.

*** Compensation by a legal entity or an individual for damage caused by their employee or another person.

**** Methods of compensation for damage caused to victim's property.

76 Кодекс законів про працю України від 10.12.1971 р. № 322-VIII (зі змін. та допов.). URL: https://zakon.rada.gov.ua/laws/show/322-08#Text (date accessed: 01.12.2022).

77 Алєксеєва Н. Ю. Кримінальна відповідальність за злочини проти правосуддя, що вчиняються свідками, експертами, перекладачами або щодо них : дис. ... канд. юрид. наук. Київ, 2017. 223 с. URL: https://dspace.lvduvs.edu.ua/bitstream/1234567890/3501/1/alekseeva_d.pdf (date accessed: 01.12.2022).

78 Положення про Центральну експертно-кваліфікаційну комісію ... . URL: https://zakon.rada.gov.ua/laws/show/z0249-15#Text (date accessed: 01.12.2022).

79 Про судову експертизу ... . URL: https://zakon.rada.gov.ua/laws/show/4038-12#Text (date accessed: 01.12.2022).

80 Цивільний кодекс України від 16.01.2003 р. № 435-IV (зі змін. та допов.). URL: https://zakon.rada.gov.ua/laws/show/435-15#Text (date accessed: 01.12.2022).

81 Кодекс законів про працю ... . URL: https://zakon.rada.gov.ua/laws/show/322-08#Text (date accessed: 01.12.2022).

82 Цивільний кодекс ... . URL: https://zakon.rada.gov.ua/laws/show/435-15#Text (date accessed: 01.12.2022).

We will give an example of possible compensation for damage caused by a forensic veterinarian. During initial forensic veterinary examination in civil procedure, the forensic veterinary expert determined the cause of animal death in the veterinary clinic, which occurred during surgery. Forensic expert inadvertently made a mistake during the analysis of the clinical situation, which led to a false conclusion. During repeated forensic veterinary examination, this error was discovered by another forensic expert. In such a case, the person who paid for the initial forensic examination may apply to the court for compensation for material damage in the amount paid for initial examination, as well as moral damage.

At the same time, we note that neither criminal nor administrative liability has been established for obstructing the examination of the object of expert research by forensic expert. There is no provision for liability for insulting a forensic expert during performance of his professional duties. In this regard, we share the opinion of O. P. Uhrovetskyi [83] about the need for detailed research of this issue and introduction of additions to legislation.

According to the results of scientific investigations, own experience of forensic expert activity during 2010–2022, taking into account research results by authoritative scientists in the field of criminalistics and forensic expertology, with the aim of unifying the procedural rights, duties, prohibitions and restrictions of the forensic expert (in particular, forensic veterinarian), regulated by procedural legislation (taking into account the peculiarities of judicial proceedings, the norms of Specialized Law, instructions № 1 and 2), we offer a blanket method of applying the procedural status of a forensic expert by setting out his procedural rights, duties, prohibitions and restrictions in the relevant Law and in the relevant articles of procedural legislation only refer to the mentioned Law.

Therefore, we propose the following changes.

1. In the theory and practice of forensic science, it is legally justified to use the term: *legal status of a forensic expert*. The title of Section II: *Forensic Expert* of Law of Ukraine: *On Judicial Examination* shall be rewritten as follows: Section II. *Forensic Expert Legal Status*.
2. Article 11 of Law of Ukraine: *On Judicial Examination* shall be amended as follows:

"Article 11. Persons who cannot be court experts

Regardless of species of legal proceedings, a person may not be involved in conducting forensic examination and performing forensic expert duties during professional activity, if:

1) he (she) is an applicant, victim, civil plaintiff, civil defendant, family member or close relative of a party, applicant, victim, civil plaintiff or civil defendant;

2) he (she) participated in the same proceedings as an examining magistrate, judge, defense attorney or representative, witness, expert, specialist, representative of the staff of probation authority, translator;

3) he (she) or her close relatives or family members are directly or indirectly interested in the case outcome;

4) he (she) was or is in an official, family or other relationship with the parties to the proceedings of the accused, suspect, victim, plaintiff or defendant in civil cases or there are other circumstances that cause reasonable doubts about her impartiality;

5) he (she) participated in the departmental investigation and is a witness, representative, lawyer in;

83 Угровецький О. П. Op. cit. URL: https://journals.indexcopernicus.com/api/file/viewByFileId/496424.pdf (date accessed: 12.12.2022).

6) he (she) participated in audits, inspections, etc., materials that were used in the case;

7) finding out circumstances relevant to the case is beyond his specific expertise;

8) he (she) is limited in civil capacity or incapacitated;

9) he (she) has an unexpunged or unexpired criminal record for committing criminal offenses;

10) within the last year, he (she) has been subject to administrative penalty for committing a corruption offense or a violation related to corruption, or to disciplinary penalty in the form of termination of the right to conduct forensic examination in the relevant forensic expert specializations;

11) he (she) participated in the re-examination; provided forensic expert conclusion based on the results of primary forensic examination of the same case or criminal proceedings;

12) other circumstances that raise doubts about impartiality or objectivity of the forensic expert and exclude possibility of instructing him to conduct a forensic examination".

3. Article 12 of Law of Ukraine: *On Judicial Examination* shall be amended as follows:

*"**Article 12. Forensic Expert Duties***

Regardless of the type of legal proceedings and the basis for conducting a forensic examination, during professional activity, forensic expert is obliged to:

1) adhere to the oath and rules of professional ethics of forensic expert;

2) declare self-recusal in availability of circumstances provided for by law that make impossible for forensic expert to conduct forensic examination;

3) accept commissioned forensic examination;

4) adhere to forensic examination deadlines;

5) personally conduct full research on material and materialized objects;

6) provide a substantiated and objective written conclusion on raised issues and if necessary, clarify it;

7) submit a request to the person who appointed forensic examination, or the court that commissioned it, clarify the content and scope of the assigned task, or to inform about impossibility of conducting a forensic examination on the issue or without the involvement of other persons;

8) arrive at the summons of the body or person who appointed a forensic examination or engaged a forensic expert to provide explanations, testimony or additions regarding the conducted forensic examination or the reasons for notification of its impossibility carrying out;

9) ensure the maximum possible preservation of objects and materials of the proceedings or case provided for research;

10) obtain permission from forensic examination customer for research related to complete or partial destruction of the object of examination or a change in its properties, if there are reasonable grounds for asserting impossibility of applying other methods;

11) not to inform anyone, except the forensic examination customer, about its conducting and results, except for cases provided for by legislation;

12) state in forensic expert conclusion that forensic expert has been warned (aware) of responsibility for a knowingly false conclusion, and in the case of the appointment of a forensic examination by the court, of responsibility for refusing without valid reasons to perform the duties assigned to;

13) indicate in the conclusion that it has been prepared for submission to the court and the forensic expert is aware of criminal responsibility for a knowingly false conclusion *(if forensic examination is conducted at request of the parties to the case);*

14) notify the relevant party to the case about consequences of forensic research and obtain written permission for its conducting (if forensic expert is involved as a party to the case);

15) notify in writing the body or person who appointed forensic examination or involved forensic expert about impossibility of conducting it and return the provided case materials and other documents, if the question is beyond the scope of competence and specific expertise of forensic expert, if forensic examination requires involvement of other forensic experts, and/or if the provided materials are not sufficient to solve the expert task, and the requested additional materials are not provided within the time limit stipulated by the law;

16) immediately return the case files and other documents used to conduct forensic examination, in the event of its completion, receipt of a procedural document or the request of the forensic examination customer (if forensic expert was engaged on the contract basis) to terminate its conduct, if the customer of the forensic examination does not agree extension of the terms of its conduct, refusal of forensic examination customer to give consent to the complete or partial destruction or damage of the object of forensic examination (if it is impossible to conduct research using other non-destructive methods), cancellation by the court of the decision on the appointment of forensic examination;

17) perform other duties provided for by law."

4. Article 13 of Law of Ukraine: *On Judicial Examination* put in the new edition:

"Article 13. Forensic expert rights

Regardless of the type of legal proceedings and the basis for conducting forensic examination, during professional activity, forensic expert is obliged to:

1) get acquainted with the materials of the case (proceedings) that relate to forensic examination topic;

2) submit a request for provision of additional materials and samples and take other actions related to conducting forensic examination;

3) submit a request to the body (person) that appointed forensic examination or engaged forensic expert to clarify the content and scope of the task and the issues raised;

4) be present during procedural, executive actions related to the subject and objects of research with the permission of the body (person) who appointed forensic examination or engaged a forensic expert;

5) submit a request to interview the participants in legal procedure and witnesses regarding the topic or object of the forensic examination, and conduct separate investigations in their presence;

6) indicate in conclusion the facts discovered during forensic examination that are important for the case, but about which the question was not raised and circumstances that contributed or could contribute to the offense commission;

7) provide separate conclusion during forensic examination as part of commission in case of disagreement with the position of other commission members;

8) request involvement of other forensic experts in forensic examination, if it is necessary to conduct research and provide an expert conclusion;

9) ensure unhindered access to the research object and proper working conditions;

10) provide answers to questions, in particular in writing, that are asked to the forensic expert during explanations or testimony regarding the conclusion drawn up by him;

11) add to conclusion his considerations about circumstances that he found out during preparation of the conclusion and which are important for criminal proceedings or a case in another type of legal proceedings, about which he was not asked any questions;

12) in cases determined by law, to use the free help of an interpreter, to object to him;

13) challenge actions and decisions of the customer of forensic examination and other participants in the trial, violating rights of the forensic expert or the procedure for conducting forensic examination;

14) submit petitions for providing for oneself and one's loved ones in cases provided for by law;

15) receive compensation (reimbursement) for the expenses incurred during examination and remuneration for work performed related to forensic examination, if it is not an official duty of forensic expert;

16) participate in court session in the mode of video conference, if there are no objections of the participants in the case;

17) refuse to conduct forensic examination (if: there is a threat to the life and health of forensic expert; there are no necessary conditions for conducting an investigation; principle of independence of a forensic expert is violated; the objects of forensic examination and case files are unsuitable or they are insufficient to provide a conclusion, and forensic expert was refused their provision and/or addition; there are no conditions, methodological tools and equipment necessary for conducting an examination and providing a conclusion; current level of scientific development does not allow answering the questions;

18) use other rights provided by the legislation of Ukraine".

5. Supplement Law of Ukraine: *On Judicial Examination* with Article 13[1] of the following content:

"Article 13[1]. Prohibitions for forensic expert

Regardless of the type of legal proceedings and the basis for conducting forensic examination, during professional activity, forensic expert is obliged to:

1) conduct forensic examination without a written authorization from the head in the case of its appointment (order) to forensic institution, whose employee is a forensic expert (to accept the execution of a forensic examination by a certified forensic expert who does not work in a state specialized forensic science institution, if its conducting is not entrusted to him personally);

2) reassign forensic examination to another person;

3) independently collect materials that are subject to forensic research, as well as select initial data for conducting forensic examination, if they are ambiguously reflected in provided materials;

4) solve issues that go beyond the scope of forensic examination, specific expertise or qualification of forensic expert in relevant forensic expert specialization;

5) find out legal issues and provide assessments of legality of procedures regulated by legal regulations;

6) independently involve other forensic experts or persons in carrying out forensic examination entrusted to him;

7) have any personal contacts with procedure participants that are not provided for by regulatory legal acts and without the consent of the body (person) that appointed the forensic examination, if this calls into question disinterest of forensic expert as a result of the study or if such persons are directly or indirectly interested in forensic examination results;

8) store case (proceedings) files and objects of forensic examination outside the workplace or outside a specially designated storage place;

9) disclose information that has become known to forensic expert in connection with forensic examination, or notify anyone, except court and the party to the case, on whose order the forensic examination was conducted, about its performing and obtained results;

10) communicate with hearing participants outside the court session, except in cases of committing actions directly related to f forensic examination conducting;

11) apply destructive research methods or significantly change the properties of research objects without permission of the body (person) who appointed forensic examination or engaged forensic expert;

12) conduct forensic examination, if the right of forensic expert to conduct a forensic examination is temporarily suspended in relevant forensic expert specialization or the qualification certificate of forensic expert is canceled;

13) interrogate forensic expert before he issues a conclusion;

14) comply with other restrictions provided by legislation".

6. Article 14 of Law of Ukraine: *On Judicial Examination* put in the new edition:

"Article 14. Forensic expert responsibility

Regardless of species of legal proceedings, forensic expert can be held liable in the course of professional activity on the grounds and in the manner prescribed by law, namely:

1) criminal one: for misleading the court or other authorized body; providing a deliberately false conclusion of a forensic expert drawn up for the body conducting the pre-trial investigation; refusal of forensic expert to perform assigned duties in court or during the pre-trial investigation; disclosure of data of operational and investigative activities, pre-trial investigation; abuse of authority;

2) administrative one: for showing disrespect to the court or the Constitutional Court of Ukraine, malicious evasion from appearing in court; malicious evasion from appearing to the pre-trial investigation bodies or the prosecutor while pre-trial investigation; violation of restrictions on receiving gifts provided for by law; violation of requirements for the prevention and settlement of conflicts of interest;

3) disciplinary one: for violation of general labor discipline; for violation of labor discipline;

4) material one: for property and/ or moral damage caused to an institution, enterprise, organization, individual or legal entity.

7. Replace parts 2—7 of Article 69 of Criminal Procedural Code of Ukraine and parts 3-8 (Articles 72 of the Civil Procedure Code of Ukraine, Article 69 of the Commercial and Procedural Code of Ukraine and Article 68 of the Code of Code of Administrative Proceedings of Ukraine) with parts 2 and 3, respectively, as follows:

"While professional activity, forensic expert has procedural rights, performs duties, observes prohibitions and restrictions and bears legal responsibility provided for by Law of Ukraine Law of Ukraine on Judicial Examination".

Conclusions

In theory and practice of forensic science, it is legally justified to use the term: *legal status of a forensic expert*. The title of Chapter II: *Forensic Expert* of Law of Ukraine: *On Judicial Examination* shall be rewritten as follows: Chapter II. *Forensic Expert Legal Status*.

The separation of the concepts of *legal one* and *procedural one* in the status of a forensic expert, *firstly*, has an exclusively theoretical significance and does not affect the practical activities of the expert in any way, *secondly*, certain provisions of the status of a forensic expert (which are regulated by the profile Law (legal status), procedural codes of Ukraine (procedural status), instructions No. 1 and 2) are to a certain extent duplicated, *thirdly*, the concept of *procedural status of a forensic expert* is a component of the concept of *forensic expert legal status*, *fourthly*, there are no clear criteria for distinguishing these concepts, as proved by our study of the list of rights, obligations and prohibitions (which are stipulated in the material and procedural legislation

Forensic expert legal status, in particular a forensic veterinarian, is an independent legal category, therefore, characterized by the following features: it is universal (since it applies to forensic experts regardless of forensic expert specialization); reflects specifics of forensic expert as a participant in forensic science activity, as well as the degree and nature of his interaction with other participants in forensic science activity, law enforcement agencies, the court, state authorities; elements of the structure of the legal status of forensic expert (a list of rights, obligations, prohibitions, restrictions and responsibilities) are interdependent and affect each other; has relative stability and dynamism.

Legal status of forensic veterinarian, as well as forensic expert of any other expert specialization is a set of procedural rights, obligations, prohibitions, restrictions, liability that distinguish it from legal status of other participants in criminal proceedings or judicial proceedings in another species of legal proceedings, in particular a witness, investigator, inquirer and other subjects. These elements of the legal status of a forensic veterinary expert are a guarantee of his independence and independence, as well as the completeness and objectivity of the conclusion provided by him as a source of evidence.

Elements of legal status of forensic expert, provided for by the procedural legislation of Ukraine, the profile Law, the Regulation on the CEQC, as well as instructions № 1 and 2, are a tool for implementing the system of principles of forensic science activity.

Based on the of theoretical research results, on our own experience in conducting forensic veterinary examinations during 2010–2022, taking into account the achievements of authoritative scientists in the field of criminalistics and forensic expertology, we propose amendments and additions to the legislative framework and regulatory legal acts that regulate the implementation of forensic examination in Ukraine, in order to unify the legal status of forensic expert regarding his rights, duties, prohibitions, restrictions and legal liability.

Правовий статус судово-ветеринарного експерта як суб’єкта судово-експертної діяльності у контексті новітнього законодавства України

Іван Яценко

Досліджено правовий статус судового експерта як суб’єкта судово-експертної діяльності в контексті новітнього законодавства України. Доведено, що елементи правового статусу судового експерта, передбачені цивільним, господарським, адміністративним і кримінальним законодавством України, а також відомчими нормативно-правовими актами, не цілком корелюють між собою: у них по-різному визначено права, обов’язки, заборони, обмеження та юридичну відповідальність судового експерта, що *може негативно позначатися на реалізації принципів судово-експертної діяльності, зокрема під час проведення судово-ветеринарної експертизи, а також на наданні обґрунтованого, об'єктивного, достовірного, правильного і правдивого висновку експерта. Запропоновано зміни й доповнення до згаданих нормативно-правових актів України із метою уніфікувати правовий статус судового експерта (незалежно від виду судочинства і підстав проведення судової експертизи) для більш ефективної реалізації принципів судово-експертної діяльності. Мета дослідження: розкрити правовий статус судово-ветеринарного експерта в системі судово-експертної діяльності та систематизувати його обов'язки, права, заборони й підстави для відповідальності в новітньому правовому полі України. Для досягнення поставленої мети використано загальні та спеціальні наукові методи дослідження (аналіз, синтез, аналогію; моделювання; формально-логічний; логіко-граматичний; статистичний; порівняльно-правовий; юридичного аналізу).*

Ключові слова: *судово-ветеринарна експертиза; судово-ветеринарний експерт; судовий експерт; правовий статус, права, обов'язки, заборони, обмеження, відповідальність судово-ветеринарного експерта; судово-експертна діяльність.*

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Author declare no conflict of interest.

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General System of Forensic Engineering Tasks

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Active development of forensic sciences in recent years (in accordance with the laws and principles of the genesis of forensic expertise) growing demand for their conduct and the urgent need for the emergence of new types of research make it necessary to systematize general tasks of forensic science in general and engineering in particular. This article purpose: to conduct an analysis of tasks solved by performing engineering and technical types of forensic science; determine the general principles of their formation; organize (unify) these tasks into a general (generic) system; to form a theoretical basis for improving the list of issues to be resolved while forensic engineering and technical researches (with the aim of modernizing Chapter II "Research guidelines concerning preparation and appointment of forensic examinations and researches", that should be made the basic for new species(subspecies) of forensic engineering. In order to achieve the goal, methods of scientific knowledge were used: observation, comparison, abstraction, analysis, synthesis, modeling, etc. It is proposed to differentiate the tasks of engineering and technical research according to four groups that define the system as general (generic): 1) research of the state of objects; 2) establishment of conformity / non-conformity of the state of the object with certain requirements; 3) mechanism determination of investigated situation occurrence ; 4) clarification of cause-and-effect relationships in the situation under research.

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Keywords: *forensic science, research topic and object, tasks of forensic examination; expertology; species, subspecies of forensic science; forensic engineering; engineering and technological examination.*

Research Problem Formulation

Research guidelines on preparation and appointment of forensic examinations and forensic researches [1] (hereinafter referred to as *RG*) contain the main lists of tasks and indicative lists of issues to be resolved in forensic researches according to relevant forensic specializations. The analysis of solved tasks in specific forensic researches of engineering and technical types of forensic examinations, their relative and cross-comparison make it possible to assert that the general features characteristic of forensic engineering and technical examination in general and reflected in the relevant sections of these RGs are somewhat unclear due to the fact that these tasks relate exclusively to the applied plane of a specific type of forensic engineering. In case that court or pretrial investigation bodies appoint multidisciplinary forensic engineering and technical expert researches, there is a need to holistically imagine the task to be solved in while research, otherwise this task is difficult to implement during preparation of questions for a court decision on of a forensic examination appointment or in the case of drawing up a corresponding resolution of the investigator. In addition to such cases, the general list of tasks of engineering and technical forensic examinations will also be useful for starting new types of engineering and technical and engineering and technological examinations.

Article Purpose

In order to analyze the tasks solved by performing engineering and examinations; determine the general principles of their formation; organize (unify) these tasks into a general (generic) system; form a theoretical basis for improving the list of issues solved during the execution of forensic engineering and technical studies (in order to modernize sections II *Forensic Engineering examinations* of RG) which should be made the basis for new types (subspecies) of forensic engineering.

Research methods

In order to achieve this goal, methods of scientific cognition were used: observation, comparison, abstraction, analysis, synthesis, modeling, etc.

Analysis of Essential Researches and Publications

Emergence and development of legal sciences and practical developments in

1 E.g. розд. II «Інженерно-технічні експертизи» Науково-методичних рекомендацій з питань підготовки та призначення судових експертиз та експертних досліджень : затв. наказом Мін’юсту України від 08.10.1998 р. № 53/5 (зі змін. та допов.). URL: https://zakon.rada.gov.ua/laws/show/z0705-98#Text (date accessed: 09.11.2022).

forensic engineering contributed to the initiation of forensic expertise — the science of the general theory of forensic expertise. Currently, a lot of special literature is devoted to issues of forensic expertise. Scientists and researchers, including V. K. Lysychenko, A. V. Ishchenko, I. M. Aliiev, M. Ya. Sehai, N. I. Klymenko, V. H. Honcharenko, and F. M. Dzhavadov, made significant efforts for its formation and development. Historical aspects of emergence and development of forensic science and its issues are elaborated in detail in research papers and textbooks on forensic sciences by N. I. Klymenko and M. Ya. Sehai [2] which many researchers call fundamental. Development of separate directions by species (subspecies) of forensic science led to development of legal, organizational and methodological principles in appointment and execution of forensic examinations by generic and species division. Subsequently, scientists and jurists identified common features for certain types of forensic research. Currently, a significant number of theoretical and applied research papers (at the level of monographs, articles, educational and methodical literature) are devoted to the general problems of forensic expertise, as well as the genesis of certain areas of forensic science. Today (in accordance with laws and principles of forensic expertology genesis) there is an active demand for the emergence of new types of forensic engineering. Rapid development of this area of forensic examination contributed to initiation of new forensic expert specializations that requires development of a special methodological base for conducting research and specifying the tasks of new types of forensic engineering . At the same time, generic tasks of forensic engineering (as opposed to specific lists of tasks by separate species) have not been generalized yet. General tasks of forensic engineering, as stated above, are somewhat unclear due to their specification exclusively in the applied plane, i.e., for a separate species of forensic engineering.

Given the classification division of forensic examinations in domestic regulations, their practical application may be limited. In the aspect of the subject and purpose of this study, the works of A. A. Krupka, L. Ye. Duz, M. O. Kraliuk and Ye. O. Yakovleva [3], as well as H. M. Honcharuk [4], which can be considered fundamental on the way to introducing new forensic specializations, namely, forensic engineering and forensic examination of unmanned aerial vehicle (hereinafter referred to as UAV*s*). Taking into account the narrowly specialized direction of these studies, their general use is impossible. Thus, the systematization of the tasks of forensic engineering and technical types of examinations, synthesizing generalization is relevant.

2 Сегай М. Я. Судебная экспертология: объект, предмет, природа и система науки. *Теорія та практика судової експертизи і криміналістики*. 2003. Вип. 3. С. 25—32. URL: http://revo-pravo.kiev.ua/s1.html (date accessed: 09.11.2022).

3 Крупка А. А., Дузь Л. Є., Кралюк М. О., Яковлєва Є. О. Судова інженерно-механічна експертиза: праксеологічний підхід. *Вісник НТУУ «КПІ». Політологія. Соціологія. Право*. 2020. Вип. 3 (47). С. 80—85. DOI: 10.20535/2308-5053.2020.3(47).229484 (date accessed: 09.11.2022).

4 Гончарук Г. М. Запровадження та становлення судової експертизи безпілотних літальних апаратів. *Вчені записки ТНУ імені В. І. Вернадського. Серія: юридичні науки.* 2021. Т. 32 (71). № 2. С. 70—75. DOI: 10.32838/TNU-2707-0581/2021.2/012 (date accessed: 09.11.2022).

Main Content Presentation

Domestic forensic scientists, in particular from the Kyiv and Kharkiv schools (M. Ya. Sehai [5], P. D. Bilenchuk [6], A. V. Ishchenko, N. I. Klymenko [7], H. V. Prokhorov-Lukin [8], M. G. Shcherbakovskyi [9] etc.) consider forensic expertise to be an independent branch of legal science. At the end of the 20th century, practical forensic activity accumulated a significant number of empirical materials within specific genera (types) of forensic examinations, making them the basis of a number of separate theories (concepts) in certain areas of forensic examinations. In the opinion of the author, one of the many interpretations reflecting the essence of the subject of forensic expertise can be considered the definition given by M. G. Shcherbakovskyi: *"The subject of forensic expertology as a science of one of the sides of forensic expertise, the methodological basis of forensic research includes patterns of genesis and development of genera, types of forensic examinations; scientific apparatus, including the concept of objects, methods, problems of expert research, separate teachings; the regularities of the formation of the qualities of the objects of examination and the selection of relevant evidentiary and indicative information from them, which are used to solve the problems of the judiciary"* [10]. Emergence and development of engineering and technical expertise in the general structure of forensic science can be considered quite indicative.

Topic and object specification of forensic engineering is an urgent issue at the current stage of this area development while implementation of such research is conditioned by the need to their conducting that affects increase in the number of forensic expert specializations of engineering and technical types forensic examinations at request of investigative and judicial practice. In general, forensic examination as a science is developing and requires solution of many debatable issues that arise in practical forensic science. Further development of existing trends in certain species(subspecies) of forensic examinations contributed to the development of legal, organizational and methodological bases for the appointment and direct execution of forensic examinations by generic and species division. Subsequently, scientists and jurists identified common features characteristic of these forensic studies for certain genera. It is worth noting that

5 Сегай М. Я. Судова експертологія — наука про судово-експертну діяльність. *Вісник Академії правових наук України*. 2003. № 2—3 (33—34). С. 740—742.

6 Біленчук П. Д. Засоби пізнання у сфері кримінального судочинства: наукові засади систематизації та особливості використання. Кн. 1 : Загальнотеоретична характеристика засобів пізнання у сфері кримінального судочинства: проблеми методології, системології, праксеології : монографія. Хмельницький, 2012. 372 с.

7 Клименко Н. І. Поняття та завдання загальної теорії судової експертології в системі юридичних наук. *Криміналістика і судова експертиза.* 2019. Вип. 64. С. 48—57. DOI: 10.33994/kndise.2019.64.02 (date accessed: 09.11.2022).

8 Прохоров-Лукин Г. В. Теоретические и методические основы судебно-экспертной ситуалогии : дис. … канд. юрид. наук. Киев, 1993. 217 с.

9 Щербаковский М. Г. О предмете судебной экспертологии. *Актуальні питання судової експертизи і криміналістики* : мат-ли Міжнар. наук.-практ. конф., присвяч. 150-річ. з дня народж. Засл. проф. М. С. Бокаріуса (Харків, 18—19.04.2019). Харків, 2019. С. 38—40. URL: http://dspace.univd.edu.ua/xmlui/handle/123456789/9008 (date accessed: 09.11.2022).

10 Ibidem.

the development of all types and types of forensic examinations (in particular, engineering and technical) takes place on the basis of praxeology, i.e., a path that can be considered as classical and is overcome by genesis of new types of forensic science:

a) first, investigator / court draws up a decision/ resolution on appointment of forensic examinations / involvement of forensic experts;
b) in the decision / resolution, investigator / court forms a range of issues that need to be resolved within framework of forensic examinations;
c) forensic experts of various specializations conduct a number of examinations, often multidisciplinary ones;
d) scientists generalize expert practice which results in a proposal to initiate new species of forensic examination at regulatory level.

By analyzing and summarizing the by-laws, we have identified engineering and technological forensic expert specializations (code 10):

- *10.1 Forensic research on circumstances and mechanism of traffic collisions;*
- *10.2 Forensic technical condition research on vehicles;*
- *10.3 Forensic research on vehicle components;*
- *10.4 Forensic transport and trace evidence analysis;*
- *10.5 Forensic research on causes and consequences of violation of life safety and labor protection requirements;*
- *10.6 Forensic research on real estate objects, building materials, structures and relevant documents;*
- *10.7 Forensic land distribution of and determination of the use order of land plots;*
- *10.8 Forensic research on circumstances of occurrence and spread of fires and compliance with fire safety requirements;*
- *10.9 Forensic research on hardware and software;*
- *10.10 Forensic determination of estimated value of construction objects and structures;*
- *10.11 Research on circumstances and mechanism of train accident;*
- *10.12 Forensic research on technical condition of rolling stock of rail transport;*
- *10.13.1 Forensic research on engineering equipment of permanent way;*
- *10.13.2 Forensic research on engineering equipment of ballastless track;*
- *10.14 Forensic valuation of land plots;*
- *10.15 Forensic research on causes and consequences of emergency events in mining industry and in underground conditions;*
- *10.16 Forensic road engineering research;*
- *10.17 Forensic research on telecommunication systems (equipment) and means;*
- *10.18 Forensic research on technical operation of electrical equipment;*
- *10.19 Forensic research on circumstances, organizational and technical causes and consequences of influence of technogenic sources on environmental objects;*
- *10.20 Forensic research on land management;*
- *10.21 Forensic research on urban electric vehicle;*
- *10.22 Forensic research on technical condition of elevators and conditions for their safe operation;*
- *10.23 Forensic research on technical condition and operating conditions of machines and mechanisms;*

- *10.24 Forensic research on events on waterborne transport;*
- *10.25 Forensic research on aviation events and incidents;*
- 10.26 *Forensic research on unmanned aerial vehicles (UAVs) intended for radio control and interception of mobile communication systems, photo and video control of objects on the ground;*
- *10.27 Forensic research on radio-electronic equipment for receiving, processing and transmitting information;*
- *10.28 Forensic research on special purpose robotic systems;*
- *10.29 Forensic engineering and technological examination of critical infrastructure objects;*
- *10.29.1 Forensic research on critical infrastructure objects of power engineering;*
- *10.29.2 Forensic research on critical infrastructure objects of petroleum industry;*
- *10.29.3 Forensic research on critical infrastructure objects of gas industry;*
- *10.29.4 Forensic research on critical infrastructure objects of nuclear power;*
- *10.29.5 Forensic research on critical infrastructure objects of urban engineering;*
- *10.29.6 Forensic research on critical infrastructure objects of industrial agriculture and food industry;*
- *10.29.7 Forensic research on critical infrastructure objects of aviation;*
- *10.29.8 Forensic research on critical infrastructure of road transport;*
- *10.29.9 Forensic research on critical infrastructure of rail transport;*
- *10.29.10 Forensic research on critical infrastructure of waterborne transport;*
- *10.29.11 Forensic research on critical infrastructure of postal communication;*
- *10.29.12 Forensic research on critical infrastructure of chemical industry;*
- *10.29.13 Forensic research on critical infrastructure of metallurgy;*
- *10.29.14 Forensic research on critical infrastructure of defense industry;*
- *10.29.15 Forensic research on critical infrastructure of space industry;*
- *10.29.16 Forensic research on critical infrastructure of aviation;*
- *10.29.17 Forensic research on critical infrastructure of the shipbuilding;*
- *10.30 Thermal engineering researches* [11].

Retrospective appearance analysis of new species of forensic examinations indicates rapid development of class of forensic engineering and technological examinations. In the last 2 years alone, 24 new forensic specializations have been launched, initiated by the FSI of Ministry of Justice of Ukraine (in particular, *Forensic research on technical condition and operating conditions of machines and mechanisms, Forensic research on events on waterborne transport, Forensic research on events and incidents* and *Thermal engineering*

11 Див.: дод. 5 до Положення про Центральну експертно-кваліфікаційну комісію при Міністерстві юстиції України та атестацію судових експертів : затв. наказом Мін'юсту України від 03.03.2015 р. № 301/5 (зі змін. та допов.). URL: https://zakon.rada.gov.ua/laws/show/z0249-15#Text (date accessed: 09.11.2022) ; дод. 4 до Положення про експертно-кваліфікаційну комісію Служби безпеки України та атестацію судових експертів : затв. наказом Центр. упр. СБУ від 15.09.2021 р. № 321 (зі змін. та допов.). URL: https://zakon.rada.gov.ua/laws/show/z0044-15#Text (date accessed: 09.11.2022).

research) [12] and Ukrainian Research Institute of Special Equipment and Forensic Science of the Security Service of Ukraine (*Forensic research on unmanned aerial vehicles* (UAVs) intended for radio control and interception of mobile communication systems, photo, video control for objects in the area, *Forensic research on radio-electronic equipment for reception, processing and transmission of information, Special purpose forensic research on robotic system*s and *Forensic Engineering and technological examination of critical infrastructure objects*) [13].

Establishment of modern species of forensic examinations and new forensic expert specializations is due to the emergence of new research objects. Proliferation of UAVs (in particular, their interest in representatives of criminal world) required the regulatory and legal regulation of their use, therefore conducting an engineering assessment of their safety / danger, etc., and this contributed to the formation of a new type of engineering examination: 10.26 *Forensic research on unmanned aerial vehicles (UAVs) intended for radio control and interception of mobile communication systems, photo and video control of objects on the ground*. Such spread of innovative objects is due to the emergence of another new type of forensic expert specialization: 10.28 *Forensic research on special purpose robotic systems*.

In domestic development of forensic engineering, it is worth noting emergence of a new direction, due to interpretation expansion of research topic , 10.29 *Forensic engineering and technological examination of critical infrastructure objects,* initiated by Ukrainian Research Institute of Special Equipment and Forensic Science of the Security Service of Ukraine. Until recently, there were no engineering and technological types of forensic examinations in domestic classification at all. Appearance of forensic engineering and technological examinations, according to the author of this research paper does not exclude possibility of separating this area of research into an independent kind of engineering and technological forensic examinations and in the future (together with forensic engineering ones); form a separate class of forensic engineering examinations.

The following example of emergence of new forensic engineering examination illustrates another reason for the genesis of forensic science activity. Increase in the number of violations of regulatory requirements and crimes committed in relation to objects of heat engineering purpose has led to the need for special knowledge (in the field of research of thermal networks, thermal energy metering devices, thermal energy sources, verification of calculations and substantiation of thermal load and consumption standards, etc.) and formation of a new direction: *Thermal engineering researches* (code 10.30). The rise in demand for conducting new research

12 Див.: Зміни до Положення про Центральну експертно-кваліфікаційну комісію при Міністерстві юстиції України та атестацію судових експертів : затв. наказом Мін'юсту України від 28.04.2020 р. № 1540/5 (зі змін. та допов.). URL: https://zakon.rada.gov.ua/laws/show/z0389-20#Text (date accessed: 09.11.2022) ; Зміни до деяких нормативно-правових актів з питань судово-експертної діяльності : наказ Мін'юсту України від 15.08.2022 р. № 3430/5. URL: https://zakon.rada.gov.ua/laws/show/z0922-22#n73 (date accessed: 09.11.2022).

13 Зміни до Положення про експертно-кваліфікаційну комісію Служби безпеки України та атестацію судових експертів : затв. наказом Центр. упр. СБУ від 15.09.2021 р. № 321. URL: https://zakon.rada.gov.ua/laws/show/z1258-21#n61 (date accessed: 09.11.2022).

types on machines and mechanisms, events and incidents on water and air transport is due to the emergence of new forensic specializations: 10.23 *Forensic research on technical condition and operating conditions of machines and mechanisms*, 10.24 *Forensic research on events on waterborne transport* and 10.25 *Forensic research on aviation events and incidents*.

At the same time, general tasks of forensic engineering are somewhat unclear due to the fact that these tasks relate exclusively to the applied plane of a specific type of forensic engineering and technical expertise. A detailed outline of the tasks for individual forensic specializations will contribute to the analysis of these tasks, the determination of their common features and (on this basis) their synthesizing generalization. Such a generalization will make it possible to systematize tasks, organize (unify) existing types and algorithmize the introduction of new types (subspecies) of forensic engineering that means solve this issue in the reverse way, namely: from the tasks already established in the RG to the development of a general system tasks of forensic engineering examinations and forensic expert researches. However, in order to achieve this goal, definitions of the concepts: *topic of forensic engineering examination* and *task of forensic engineering examination* should first be specified.

While considering the topic of forensic examination in general and engineering examinations in particular, this concept should be correlated with the field of scientific knowledge and practical activity. In scientific aspect, the topic of forensic examination is a group of objective laws that are studied in this field of scientific knowledge. In this case, we should talk about the field topic of knowledge, that is the scientific basis of the examination of a particular kind and type, and not about the procedural and applied value of the subject of examination. Regarding this, M. G. Shcherbakovskyi cites the following topic division of forensic examination as a field of knowledge and distinguishes two species of regularities:

“1. Regularities determining emergence of properties of objects of forensic expert research:

- *formation of properties of objects as elements of a crime event;*
- *Functioning and interaction of objects in the circumstances of investigated event;*
- *displaying the properties of objects in the surrounding material environment;*
- *spatial-temporal and causal relationships and relationships of objects arising before, at the moment and after crime.*

2. Research regularities of forensic examination objects:

- *search, detection and recording objects, their properties and signs;*
- *obtaining from the objects of potential criminal-relevant information, factual data on the crime under investigation*“ [14].

The authors of the textbook: *Fundamentals of Forensic Science...* (2016) claim that the intensification of the process of differentiation (distribution) of fields of knowledge led to the need to

14 Щербаковский М. Г. Судебные экспертизы: назначение, производство, использование : учеб.-практ. пособ. Харьков, 2005. 544 с. URL: https://library.nlu.edu.ua/POLN_TEXT/UP/SHERBAKOVSKIY_2005.pdf (date accessed: 09.11.2022).

grant expertise the status of a means of proof [15]. In this area, the statement of the famous lawyer V. D. Spasovych is still relevant: "*There is a limitless sea of human knowledge and the correct division of labor is necessary. A separate head, a separate mind is not able to contain even a thousandth part of the experience accumulated over centuries. Each specialty was refined to special laws. If... the court or an individual needs... to turn to another specialty, then instead of starting to study this specialty and, so to speak, go to discover America, it possible to turn directly to a specialist in a certain specialization and take a ready-made formula* [16]. The above directly applies also to engineering and technical examinations. Engineering and technical expertise is singled out as an independent class or genus of forensic expertise in the works of M. G. Shcherbakovskyi and other researchers. At the same time, the subject, tasks, and typical issues of forensic engineering and technical expertise are only generally indicated in the scientific literature. In addition, specialists understand the task of forensic engineering and technical expertise in different ways. Some of forensic engineering and technological examinations distinguish technological and materials science, designed to determine the state of technology, product quality and their compliance with state standards and technical conditions and commodity science, which is conducted on industrial and food products. Currently, forensic commodity examinations are an independent genus including determination of compliance of product quality with standards and regulations [17].

Other researchers call the subject of forensic engineering and technological examination to determine the causes of accidents while operating machines and equipment, as well as violations of production technology and safety rules in industrial and agricultural production. Forensic labor safety examination is rightly considered one of the types of forensic engineering and technological examination. Modern generic division of forensic examinations in Ukraine corresponds to another name: *forensic engineering*.

According to numerous studies of many scientists who developed the theoretical foundations of forensic expertology, the *subject* is the most significant, main aspects, properties of the object (phenomenon) under research which the process of cognition is aimed at. The concept of the topic and tasks of forensic examination (if the task is understood not in a broad sense — as specific questions posed to forensic expert by the person or body that appointed the forensic examination, and in a narrow sense — as the achievement of what the cognitive activity of the expert is aimed at) are identical. In view of this, it can be argued that the subject of examination is conditioned by its tasks, objects and methods of cognition. In this case, the methodology of forensic examination becomes important, because a correct understanding methodology essence

15 Головченко Л. М., Лозовий А. І., Сімакова-Єфремян Е. Б. та ін. Основи судової експертизи: навчальний посібник для фахівців, які мають намір отримати або підтвердити кваліфікацію судового експерта. Харків, 2016. 928 с. URL: https://expertize-journal.org.ua/attachments/article/924/ose.pdf (date accessed: 09.11.2022).

16 Спасович В. Д. Сочинения : в 10 т. Санкт-Петербург, 1889—1902. Т. 5. 1895. С. 286.

17 Науково-методичні рекомендації ... . URL: https://zakon.rada.gov.ua/laws/show/z0705-98#Text (date accessed: 09.11.2022).

requires consideration of general scientific methodology is theoretic knowledge system in another words the concept system and not only research means. There is a trend to designate the methodology as integral concept uniting several components: conception of the world and fundamental theoretical concepts, dialectical categories and laws, general, specific scientific methods. In another words the methods of knowledge of objects of forensic examination should be understood as a set of general scientific research methods, general and special forensic methods. Therefore, the methods of knowledge in forensic engineering examinations should be understood primarily as special forensic methods.

Regarding generic division of forensic examination objects (taking into account the defining relationship between the subject, object and special research methods), the opinion of the authors of the manual *Fundamentals of forensic examination*... (2016) is appropriate: *"Object of forensic examination is material (materialized) sources of information (objects, formations, etc.) that are investigated (known) by forensic expert on the basis of the application of specific expertise, within the topic of forensic research by certain methods and means in order to solve the tasks (issues) posed by authorized person (body)"*[18].

Thus, the topic of forensic engineering examination is determined by the tasks solved by forensic engineering examinations, special forensic expert methods aimed at solving these issues and objects of forensic engineering examinations. The above proves the existence of a close connection of the topic with the objects and methods of forensic engineering and examination determining its essence.

Based on the results of the analysis of the tasks solved in specific forensic expert studies of engineering and technical forensic examinations and indicated in the *RG*, general characteristic features are identified and on this basis a synthesizing generalization of the tasks of engineering and technical examinations is performed, as well as the tasks of engineering and technical expert researches are classified in directions of the tasks of forensic science, namely: identification, diagnostic (first and second group) and situational. The last (situational) tasks in forensic engineering research are additionally combined into two separate groups (third and fourth): while research, one of them determines occurrence mechanism of the situation under research and the other: causal relationships.

Thus, we propose to differentiate the tasks of forensic engineering researches into four groups defining the system as general (generic):

- *first group*: research on the state of objects;
- *second group* is establishment of compliance / non-compliance of the state of the object with certain requirements;
- *third group*: determination of occurrence mechanism of investigated situation;
- *fourth group*: clarification of causal relationships in the situation under research.

The general system of tasks of forensic engineering covers all the signs that

18 Головченко Л. М., Лозовий А. І., Сімакова-Єфремян Е. Б. та ін. Op. cit. С. 27. URL: https://expertize-journal.org.ua/attachments/article/924/ose.pdf (date accessed: 09.11.2022).

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cause these tasks. In the future, the list of tasks of a new species (subspecies) of engineering and technical forensic examinations can be formed on the basis of the general system of tasks given by us.

According to the author, it is advisable to state the tasks of forensic engineering and in the following wording:

1. Investigation of the state of objects with the definition of:
   - 1.1. Purpose of the object with the identification of functions performed, identification of the object (type, brand, model, design, modification, etc.);
   - 1.2. Characteristic parameters:
     - a) physical quantities (length, mass, time, electric current, etc.);
     - b) technical and operational indicators (pressure, concentration, voltage, temperature, tension, density, speed, acceleration, current, flow, etc.);
     - c) technical indicators (level, group, complexity, configuration, boundaries, etc.);
   - 1.3. Actual condition:
     - a) integrity (complete, partial, set of fragments, fragment);
     - b) functionality (functional / inoperative, critical / limiting condition, etc.);
     - c) list of actual defects with their identification and establishment of the type of malfunction of the object (partial, complete, critical, etc.) by the defects recorded in the research;
     - d) type of malfunction by method of detection (obvious / hidden one);
   - 1.4. Operating mode / process mode (change of mode in time);
   - 1.5. Identification of operating mode (normal / abnormal / emergency);
   - 1.6. State identification with determination of the type of the studied state (primary / changed);
   - 1.7. Type (nature) of malfunctions (loss of integrity; wear; destruction; thermal, mechanical damage, etc.) of the object as a whole or its individual parts, elements, fragments;
   - 1.8. Estimated scope of works on restoration, repair, elimination of consequences.
2. Establishment of conformity or non-compliance with the object state:
   - 2.1. Requirements of technical and regulatory documents (technical requirements; technical specifications; technical conditions; terms of the contract of sale / provision of services / supply / storage / property management/ lease / accession; easements, etc.);
   - 2.2. Requirements of regulatory and technical documents (rules, instructions, guidelines) regarding the actions of certain persons;
   - 2.3. Scope of work performed (manufacturing, construction, installation, other work, including modernization, repair, restoration) to requirements of regulatory and technical and regulatory documents, contracts, project documentation, estimates.
3. Investigation of objects with establishment of the occurrence mechanism of studied:
   - 3.1. Events, incidents, situations, accidents, etc.;
   - 3.2. Actual mode of operation, actual technological process;
   - 3.3. Actual condition, existing defects, malfunctions with determination

of mechanism occurrence of type malfunction due to:
a) inept object handling;
b) improper and improper operation (maintenance), installation, storage;
c) overload;
d) fragility;
e) deterioration
f) aging, degradation;
g) coincidence of operational resource;
h) constructive failure;
i) production or technological malfunction.

4. Establishment of causal and conditionality relations:
   4.1. Actual state acquisition;
   4.2. Events, incidents, situations, accidents;
   4.3. Improper operation, improper use;
   4.4. Accident.

Conclusions

This research identified general (generic) specifics and characteristic features of forensic examinations on the basis of the tasks enshrined in the relevant sections of *RG*, in accordance with the principles and laws of forensic examination; analyzed the main lists of tasks and indicative lists of issues solved by forensic expert researches of engineering and technological direction; generalized and developed a general (generic) system of tasks of forensic engineering, differentiated into four groups, namely:

- *first group*: research on the state of objects;
- *second group* is establishment of compliance / non-compliance of the state of the object with certain requirements;
- *third group*: determination of occurrence mechanism of investigated situation;
- *fourth group*: clarification of causal relationships in the situation under research.

The proposed general (generic) system of tasks of forensic engineering and technical expertise and the general list of tasks of forensic engineering created on this basis will further contribute to:

- unification and modernization of the adjustment of the relevant sections of the RG from the main lists of tasks and indicative lists of issues solved while forensic expert researches in all specializations of forensic engineering and technical types of forensic examinations;
- introduction of new types (subspecies) of forensic engineering and technical expertise. The system of proposed tasks of forensic engineering formalizes and algorithmizes the indicative list of issues solved in accordance with Section II *Forensic engineering examinations RG*, for any new type of forensic engineering.

Загальна система завдань інженерно-технічних судових експертиз

Ігор Богданюк

Активний розвиток судових експертиз останніми роками (відповідно до закономірностей і принципів генезису судової експертології), зростання попиту на їх проведення й нагальна потреба в появі нових видів досліджень зумовлюють необхідність систематизувати загальні завдання судової експертизи загалом й інженерно-технічної зокрема. Мета статті: провести аналіз завдань, розв’язуваних шляхом виконання інженерно-технічних

видів судових експертиз; визначити загальні засади їх формування; упорядкувати (уніфікувати) ці завдання в загальну (родову) систему; сформувати теоретичне підґрунтя для вдосконалення переліку питань, вирішуваних під час виконання судових інженерно-технічних досліджень (із метою осучаснення розд. II «Інженерно-технічні експертизи» Науково-методичних рекомендацій з питань підготовки та призначення судових експертиз та експертних досліджень), який доцільно зробити базовим для нових видів (підвидів) судових інженерно-технічних та інженерно-технологічних експертиз. Для досягнення поставленої мети використано методи наукового пізнання: спостереження, порівняння, абстрагування, аналіз, синтез, моделювання тощо. Запропоновано диференціювати завдання інженерно-технічних досліджень за чотирма групами, що визначають систему як загальну (родову): 1) дослідження стану об'єктів; 2) установлення відповідності / невідповідності стану об'єкта певним вимогам; 3) визначення механізму виникнення досліджуваної ситуації; 4) з'ясування причиново-наслідкових зв'язків у досліджуваній ситуації.

Ключові слова: *судова експертиза; предмет та об'єкт дослідження; завдання судової експертизи; експертологія; рід, вид, підвид судової експертизи; інженерно-технічна експертиза; інженерно-технологічна експертиза.*

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Declaration of Competing Interest

The author declares no conflict of interest related to this topic, although he is Advisory Board member of research paper collection; he was not involved in publishing decision and this article has undergone a full peer review and editing procedure.

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Case Notes

Significance of Open Educational Resources for Forensic Expert Training

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The issue of ensuring forensic expert training in conditions of online education with the help of open educational resources has been analyzed. Research and developement of National Scientific Center «Hon. Prof. M. S. Bokarius Forensic Science Institute» concerning the project implementation "Open Educational Resource: Forensic Science" which research results are educational materials on forensic science, developed in order to freely use them during forensic expert training in Ukraine and abroad, have been presented. The main created video content has been analyzed in relation to the essence of outlined issues and importance of educational product for future experts. The practical value of the educational resource has been emphasized thanks to the high level of technical equipment use at the research institution. European experience of using available educational resources while training experts in the field of law at Rīga Stradiņš University has been considered. Expediency of applying such experience to the practice of such

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training in Ukraine has been determined. The research paper studies into demand for free educational resource which was confirmed by the range of approbation events both in Ukraine and in Latvia. The research suggests continuing to expand capabilities of free access under conditions of forensic expert distance learning, introducing international educational resources into mandatory educational and methodological support of educational programs. The Article purpose is to develop theoretical provisions and practical recommendations concerning implementation of open educational resources in the course of forensic expert training. To fulfil this goal, general scientific methods of theoretical generalization, comparison, systems analysis and formalization have been applied.

Keywords: *open educational resource; distance learning; accessibility; education; forensic expert.*

Research Problem Formulation

Transition to digital technologies is one of current global stages of society development, resulting in becoming a determining factor in growth of any sector that has joined digitalization. Tendencies to strengthen information flows, formation of new consumer requests gave rise to transformation of digital technologies for ensuring processes of their optimization, automation, improvement of communication between partners and increase in efficiency of decision-making in the world. Ukraine also has joined these processes since the beginning of European integration cooperation with the European Union. Today, developement of digital industry in Ukraine is a component of the strategic areas of its development and is fully supported by the state, as evidenced by activities of the Ministry of Digital Transformation [1]. Thus, the main focus indicated by the Ministry until 2024 is implementation of dozens of projects aimed at one hundred percent provision of available online public services. The issue of accessibility is a significant component of modern life, and a constantly changing environment stresses the need for introduction of digital technologies in all sectors.

The development issue of digitization in Ukraine has gained particular relevance due to the need to adapt economy, science and other areas to changes related to the coronavirus pandemic and the war in Ukraine, which started in February 2022. As a result of infrastructure destruction, many sectors of national economy have been affected; and the need to tackle the issue of maintaining proper life support has become the basis for strengthening digitalization as a mandatory component of renewable processes in Ukraine. Education has suffered heavy losses along with other sectors. Since the beginning of the Russian Federation full-scale invasion, more than

1 Міністерство цифрової трансформації України. URL: https://thedigital.gov.ua/ (date accessed: 15.11.2022).

2,400 educational institutions have been damaged or entirely destroyed [2], requiring an urgent need to ensure (in addition to restoration) a continuous educational process, which is possible within the distance learning.

The list of modern digital tools helping to fulfill this task is diverse, while the degree of access to these tools and their free use is not out of focus. During the martial law [3], the Ministry of Education and Science of Ukraine implemented a project on its official website enabling general secondary educational institutions to use electronic textbooks [4], and thus help students acquire certain competencies in distance learning conditions. The Ukrainian European integration portal has placed materials available to every user for mastering issues of European Union legislation implementation [5]. Other institutions are gradually being drawn into this: this process is ongoing.

Consequently, the amount of available educational resources in Ukraine is constantly growing. The bulk of state support is provided to secondary education. In return, higher education remains autonomous in implementing free access to educational projects. Postgraduate education has a similar problem, which is actually forced to independently train top-qualified specialists under conditions of online education.

Forensic science sector does not stand aside from these problems, and even more: foresnic experts training within the framework of advancing their qualifications necessitates the introduction of individual training programs taking into account specificity of acquired knowledge and peculiaritues of the mission of expert institutions in ensuring justice in Ukraine. Training of forensic experts and advancing their qualifications within a specific specialization under critical learning conditions requires widening access to educational Internet resources.

Analysis of Essential Researches and Publications

The majority of domestic researchers attempted to resolve the issues of forensic experts' training. For example, S. O. Strilets and R. V. Kuznetsov [6] in their research focused on shortcomings of the current system of personnel training for the Expert Service of the Ministry of Internal Affairs, emphasizing the need to improve it by considering corresponding European

2 2400 закладів освіти постраждали від бомбардувань та обстрілів, 269 з них зруйновані повністю, – Сергій Шкарлет / Міністерство освіти і науки України. URL: https://mon.gov.ua/ua/news/2400-zakladiv-osviti-postrazhdali-vid-bombarduvan-ta-obstriliv-269-z-nih-zrujnovani-povnistyu-sergij-shkarlet (date accessed: 15.11.2022).

3 Про введення воєнного стану в Україні : Указ Президента України від 24.02.2022 р. № 64/2022 (зі змін. та доп.). URL: https://zakon.rada.gov.ua/laws/show/64/2022#Text (date accessed: 15.11.2022).

4 Електронні підручники для навчання в умовах воєнного стану розміщено у вільному доступі / Міністерство освіти і науки України. URL: https://mon.gov.ua/ua/news/elektronni-pidruchniki-dlya-navchannya-v-umovah-voyennogo-stanu-rozmisheno-u-vilnomu-dostupi (date accessed: 15.11.2022).

5 Інфографіка та освітні матеріали / Євроінтеграційний портал. URL: https://eu-ua.kmu.gov.ua/infografika (date accessed: 15.11.2022).

6 Стрілець С. О., Кузнєцов Р. В. Шляхи вдосконалення підготовки та підвищення кваліфікації судових експертів Експертної служби МВС. *Молодий вчений*. 2020. № 9 (85). С. 236—241. DOI: 10.32839/2304-5809/2020-9-85-51 (date accessed: 15.11.2022).

experience. S. H. Hasparian [7] dedicated her dissertation research to the study of individual aspects of forensic science institutions staffing, seeing improvement in the process of qualified specialists' training through amendments in administrative legislation. The practice of training forensic experts in higher education instiutions was studied by V. M. Baraniak [8], paying attention to the need to reform of organizational and educational support for forensic experts' training. I. A. Petrova and O. P. Sniherov [9] considered options for advancing the system of forensic experts training at research institutions of the Ministry of Justice of Ukraine by motivating them. In his research paper, V. V. Khosha [10] emphasizes the need to eliminate legislative flaws while scientific staff training in the field of law, presenting ways to overcome shortcomings by expanding activities of forensic escience institutions with the help of educational tasks.

An extensive list of publications by modern authors on this topic strengthens its relevance, but the issue of introducing free educational resources for forensic expert training is not viewed by modern researchers and specialists, and the subject of research in most research papers is legal component of the process. Therefore, informational or educational component of the process of forensic expert training necessitates further research.

Article Purpose

To develop of theoretical provisions and practical recommendations regarding introduction of open educational resources while forensic experts' training.

Research Methods

General scientific methods of theoretical generalization, comparison, systems analysis and formalization.

Main Content Presentation

In conformity with the Regulations on the Central Expert Qualification Commission under the Ministry of Justice of Ukraine and certification of forensic experts [11], specialists who seek to obtain or confirm forensic expert qualification must have an appropriate higher education (educational qualification level not lower than a specialist), know legislation of Ukraine on judicial examination and undergo training/internship in the relevant specialization at state forensic science institution, according

7 Гаспарян С. Г. Адміністративно-правові засади кадрового забезпечення судово-експертних установ України : автор. дис. … канд. юрид. наук. Харків, 2019.

8 Бараняк В. М. Проблеми підготовки судових експертів у вищих навчальних закладах України. *Вісник Національного університету «Львівська політехніка»*. 2014. № 801. С. 229—233. URL: http://nbuv.gov.ua/UJRN/vnulpurn_2014_801_41 (date accessed: 15.11.2022).

9 Петрова І. А., Снігерьов О. П. Шляхи вдосконалення системи підготовки судових експертів в Україні. *Актуальні питання судової експертизи та криміналістики*: мат-ли міжнар. наук.-практ. конф., присвяч. 95-річчю створення Харків. НДІ суд. експертиз ім. Засл. проф. М. С. Бокаріуса (Харків, 10—11.10.2018). Харків, 2018. С. 17—20.

10 Хоша В. В. Питання підготовки наукових кадрів в галузі права за профілем судово-експертної діяльності. *Судова експертиза: сучасність та майбутнє*: мат-ли круглого столу (Львів, 25—26.02.2019). Львів, 2019. С. 136—137.

11 Про затвердження Положення про Центральну експертно-кваліфікаційну комісію при Міністерстві юстиції України та атестацію судових експертів : наказ Мін'юсту України від 04.03.2015 р. № 249/26694 (зі змін. та допов.). URL: https://zakon.rada.gov.ua/laws/show/z0249-15#Text (date accessed: 15.11.2022).

to the results of which pass the exam at the Central Expert Qualification Commission in Kyiv. Most of requirements for the forensic expert are of formal nature, but the above-mentioned problems arise precisely at the stage of learning or internship, which under modern circumstances have been transformed into distance learning. The online interaction of a lecturer and a specialist who plans to obtain qualification in one of the expert specializations requires research institutions to make responsible decisions regarding refocusing of training programs and changes in teaching approaches.

In search of efficient means for solving educational problems in conditions of global digitization, it is interesting to study international experience. European countries are more progressive in matters of access to education, which is evidenced by high level of use of electronic libraries and repositories, free use of scientometric databases, professional journals and other educational and methodological support. In fact, every European who aims to obtain specific education has an opportunity to freely use materials of the educational institution where they study. Borrowing such experience is logical and expedient within European integration processes in Ukraine; moreover, the exchange of educational resources will contribute to strengthening of international partnership and increase the quality of specialists training in any field (in particular, forensic science). Future prospects of such cooperation encourage higher education institutions and research institutions to take active actions in order to expand learning opportunities by providing free access to educational resources.

Thus, in 2021, National Scientific Center «Hon. Prof. M. S. Bokarius Forensic Science Institute» [12] (hereinafter reffered to as *NSC «Hon. Prof. M. S. Bokarius FSI»*) was one of the first in Ukraine, along with Rīga Stradiņš University, to implement the large-scale project *Open Educational Resource: Forensic Science*, which provided an opportunity to create basic (essential) educational materials for forensic expert training both in Ukraine and abroad.

Let's note that at the project planning stage, its authors conducted survey among 132 forensic experts as to acceptability of free educational resources for specialists training and the necessity to implement such an approach in practice. Statistically processed results of the questionnaires demonstrate a positive perception of available tools in conditions of education global transformation [13], and therefore the expediency of research conducted within the project is scientifically proven and determines interest of both foreign educators and Ukrainian forensic science institutions.

What is more, the choice of a Latvian partner is not accidental. The process of forensic experts' training in Latvia is identical to the Ukrainian system of training corresponding specialists, and therefore exchange of knowledge at the

12 Відбувся українсько–латвійський семінар «Відкритий освітній ресурс: судова експертиза. Крок до модернізації методів підготовки судових експертів» / Національний науковий центр «Інститут судових експертиз ім. Засл. проф. М. С. Бокаріуса». URL: https://www.hniise.gov.ua/14642-vdbuvsya-ukranskolatviskii-semnar-vdkritii-osvtni-resurs-sudova-ekspertiza-krok-do-modernzats-metodv-pdgotovki-sudovix-ekspertv.html (date accessed: 15.11.2022).

13 Palkova K., Agapova O., Zīle A., Polianskyi A., Vadym K., Hasparian S., Mykhailo M. (2022). Sustainability of Open Educational Resources in Forensic Sciences: International Experience. *European Journal of Sustainable Development*. No 11 (3). DOI: 10.14207/ejsd.2022.v11n3p71 (date accessed: 15.11.2022).

international level will contribute to the improvement of distance education and facilitate formation of practical skills in specialists, taking into account a leading Latvian-Ukrainian experience of carrying out expert research [14].

Within the scope of the presented project, open educational resource was introduced with scientific, educational and other materials dedicated to topical issues of forensic science and criminalistics, as well as video presentations of forensic expert work with the possibility of their remote use by end users (higher education applicants of various education levels, researchers, forensic experts of other countries). The created video content contains a video to familiarize listeners with the purpose of the *Open Educational Resource: Forensic Science* project and 9 videos as well as video presentations dedicated to individual types of forensic examinations and that relate to forensic gemological, ballistic and psychological, art, forensic veterinary, biological, engineering and transport examination, as well as questioned document examination and examination of materials, substances and products.

A specialist in specialization 17.1.1 *Research on precious stones*, 17.1.2 *Research on diamonds*, 17.1.3 *Research on precious stones of organic nature*, 17.1.4 *Research on semi-precious stones*, 17.1.5 *Research on decorative stones* introduces types of precious and semi-precious stones (which are forensic examination objects), and the main methods of conducting research on them (organoleptic, instrumental and comparative) using technical equipment of forensic science institution.

The video *Forensic Ballistics Examination* encompasses educational materials related to forensic examination of weapons and traces as well as circumstances of their use. An expert in weapon research and explosive research demonstrates the main stages of conducting forensic examination, taking into account the specifics of addressed tasks (classification, diagnostic and identification), and also shows the process of empirical experiment with weapons in the shooting range of NSC «Hon. Prof. M. S. Bokarius FSI».

The content of forensic psychological examination (in addition to the outline of its tasks) teaches users how to work with computer polygraph, indicating features of psychophysiological research with application of techniques having passed state certification. Moreover, the video contains educational experiment on the use of modern equipment at NSC «Hon. Prof. M. S. Bokarius FSI» in the course of researching a person's verbal statement about a specific event.

Questioned document examination is presented in video presentations with information on types of research objects and equipment for its implementation. The demonstration of the *Spectrum Expert MF-3* video set and the process of photographing documents with the help of optical filters is quite interesting.

In turn, the *Art Examination* video presentation acquaints the listener with peculiarities of researching antiques and pieces of art. The art connoisseur talks in detail about the task of art examination and provides examples of assessing cultural value of objects, attributing a piece of art, etc.

The next video is dedicated to forensic veterinary examination, research methods of its objects and principle tasks.

14 Відбувся українсько–латвійський семінар … . URL: https://www.hniise.gov.ua/14642-vdbuvsya-ukranskolatviskii-semnar-vdkritii-osvtni-resurs-sudova-ekspertiza-krok-do-modernzats-metodv-pdgotovki-sudovix-ekspertv.html (date accessed: 15.11.2022).

What is more, the presentation shows modern equipment of NSC «Hon. Prof. M. S. Bokarius FSI» for carrying out this type of forensic examination, namely: GCMS-QP2020 gas chromatography-mass spectrometry, with the help of which it is possible to establish availability of unknown substances and/or poisons that could have resulted in the death of animals, and a spectrometer with inductively coupled plasma of the ICPE-9800 series, using which helps to conduct a study in order to establish the presence of heavy metals in submitted objects.

In educational materials forensic biological examination is represented by theoretical aspects of research and demonstration of measuring equipment for its implementation (microscopes and drying cabinet).

Concerning forensic examination of materials, substances and products, the educational video includes information on chemical laboratory of NSC «Hon. Prof. M. S. Bokarius FSI» and its technical equipment.

The last presentation is dedicated to forensic engineering and transport examination. It informs users about tasks of automotive engineering, transport and trace evidence examinations as well as railway transport examination. Demonstration of computer programs enabling to simulate movement and collision of vehicles are of particular note. Using the PC Crash program, a forensic expert can visualize the mechanism of traffic collision. In the video, users can thorougly study the impact models that the program calculates in dynamics. Also, the educational material contains information about 6 modern pieces of equipment helping the forensic expert in road technical research (decelerometer, steering angle converter, automatic press, etc.). In addition, NSC «Hon. Prof. M. S. Bokarius FSI» has a laboratory for researching asphalt concrete mixtures, technical equipment of which is presented in the video content.

Thus, while using created educational resources, you can not only get acquainted with theoretical foundations of a particular type of forensic examination, but also get practical research skills by testing modern equipment of NSC «Hon. Prof. M. S. Bokarius FSI».

Undoubtedly, application of the developed content solves organizational problem of forensic expert training in the online mode in Ukraine, but the *Open Educational Resource: Forensic Science* project can also benefit outside the country. In order to test this hypothesis, developers have carried out a number of approbation measures, which purpose is to determine acceptability of carried out research work, to assess quality of obtained educational product and ensure its distribution among European scientific community.

To familirize yourself with the essence of the *Open Educational Resource: Forensic Science* project and acquired results, many research papers have been published, in particular in editions cited in the abstract and citation databases Scopus, Web of Science [15].

In order to discuss challenging aspects of creating a free educational space for forensic experts training, the panel discussion *The Impact of the Ukrainian-Latvian Research Project "Open Educational Resource: Forensic Science" on the Mechanisms of Implementing Educational Activities in the Field of Expert Support of Justice* was held within the framework of the international scientific and practical

15 Palkova K., Agapova O., Zīle A. OER as a Tool for Sustainable Development: The Ukrainian — Latvian Experience of Forensic Science Experts. *European Journal of Sustainable Development*. 2021. Vol. 10. No. 3. P. 15—26. DOI: 10.14207/ejsd.2021.v10n3p15 (date accessed: 12.11.2022).

polylogue conference *Relevant Issues of Forensic Science and Criminalistcs* [16].

To maintain continuous communication between project participants, a joint Ukrainian-Latvian page was created on Facebook (META) [17].

To exchange practical experience on issues of experts training, the educational resource developing countries have also organized seminars, one of which was held online at NSC «Hon. Prof. M. S. Bokarius FSI», and the second: during authors' business trip to Latvia.

Testing of the project proves the demand for the developed educational content, its relevance, and also strengthens international partnership.

Available advantages of the introduction of open educational resources encourage further broaden possibilities of application of the *Open Educational Resource: Forensic Science* project. With the purpose of deepening this process, it is suggested to thoroughly compare educational materials for conducting expert research at European forensic science institutions with practice in Ukraine and to encourage partners to continue exchanging experience, and at the same time it is necessary to add video presentations to the training program / internship of forensic experts at advanced training courses of NSC «Hon. Prof. M. S. Bokarius FSI», by placing content for free access on the official website of this institution; disseminate information about available educational materials among colleagues from other forensic science institutions, inviting them to join the process of bilateral exchange of experience for educational purposes.

Thus, results dissemination of the *Open Educational Resource: Forensic Science* project contributes to advancement of educational direction at NSC «Hon. Prof. M. S. Bokarius FSI» and improves effectiveness of forensic experts' training in conditions of distance learning. Creation of open educational resource enables to supplement existing educational (instructional) materials, thus facilitating easy familiarization with a certain type of forensic examination and contributing to more effective acquisition of knowledge, skills and abilities by future forensic experts. Futhermore, international exchange of knowledge between forensic science institutions in the field of specific expertise has a positive effect on the formation of practical skills in specialists.

Conclusions

The experience of the Ukrainian-Latvian partnership is an example of accessibility and availability of educational resources that demonstrate a voluminous information array, enabling the user to self-educate in the chosen area and receive corresponding training necessary for development of professional competences. Implementation of projects aimed at providing free access to teaching materials helps not only adapt to conditions of online learning, but also expand educational opportunities of students. Thus, forensic experts' training within the framework

16 Агапова О. В. «Відкритий освітній ресурс: судова експертиза». Крок до модернізації методів підготовки судових експертів. *Актуальні питання судової експертизи і криміналістики* : мат-ли міжн. конф.-полілогу (Харків, 15—16.04.2021). Харків, 2021. С. 301—302 ; Zīle A. Development of forensic institute in the republic of Latvia. *Ibidem*. С. 302—304 ; Grasis J., Palkova K. Open educational resource and forensic science: challenges and future perspectives for the higher education. Ibidem. С. 306—308. URL: https://www.hniise.gov.ua/uploads/files/public-folder/2021_tezy_konference%20in%20print5.pdf (date accessed: 15.11.2022).

17 Open Educational Resource: Forensic Science / Facebook. URL: https://www.facebook.com/OERForensicScience (date accessed: 15.11.2022).

of the *Open Educational Resource: Forensic Science* project enables Ukrainian and Latvian experts to exchange experience, positively influencing their expertise, and remotely get required theoretical and practical basis for further professional activities.

Значення відкритих освітніх ресурсів для підготовки судового експерта

Дар'я Давиденко, Карина Палкова, Юлія Шпак

Розглянуто питання щодо забезпечення підготовки судового експерта в умовах онлайн-навчання за допомогою відкритих освітніх ресурсів. Представлено наукові доробки Національного наукового центру «Інститут судових експертиз ім. Засл. проф. М. С. Бокаріуса» щодо реалізованого проєкту «Відкритий освітній ресурс: судова експертиза», наукові результати якого — навчальні матеріали з питань судової експертизи, зібрані з метою їх вільного застосування під час підготовки судового експерта в Україні та за її межами. Проаналізовано основний створений відеоконтент щодо сутності висвітлених питань і користі навчального продукту для майбутніх фахівців. Відзначено практичну цінність освітнього ресурсу завдяки високому рівню застосування в ньому технічного обладнання наукової установи. Вивчено європейський досвід застосування доступних освітніх ресурсів під час підготовки фахівців у галузі права Ризького університету імені Страдіня. Визначено доцільність перенесення досвіду на практику здійснення такої підготовки в Україні. Досліджено затребуваність відкритого освітнього ресурсу, що підтверджена низкою апробаційних заходів як в Україні, так і в Латвії. Запропоновано продовжувати розширення можливості вільного доступу в умовах дистанційного навчання судового експерта, запроваджуючи міжнародні освітні ресурси в обов'язкове навчально-методичне забезпечення освітніх програм. Метою статті є розроблення теоретичних положень та практичних рекомендацій щодо запровадження відкритих освітніх ресурсів під час підготовки судового експерта. Для досягнення мети використано загальнонаукові методи теоретичного узагальнення, порівняння, системного аналізу та формалізації.

Ключові слова: *відкритий освітній ресурс; дистанційне навчання; доступність; освіта; судовий експерт.*

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Research Papers

The Model of Adjudication by Administrative Courts in Poland

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This research concerns the model of judicial proceedings by Polish administrative courts. Article purpose is to analyze the administrative court in Poland, to compare it with the Ukrainian one, to investigate the effectiveness and possibilities of intervention of the administrative court in the sphere of powers of other authorities. Administrative justice in Poland consists of voivodship administrative courts, which hear cases in the first instance, and the Supreme Administrative Court as a court of second instance. The author assumed that the introduction of a mixed model of judicial practice of administrative courts effectively fulfills the main goal of administrative proceedings, which is to protect individual rights from the arbitrariness of public administration bodies. The intrusion of the administrative court into the sphere of powers of the authorities is justified by the effectiveness and efficiency of the judiciary. This allows the complainant to get a decision on the merits much faster. The mixed model of judicial practice of Polish administrative courts allows more effective implementation of the protection of individual rights. The analysis of the issue was carried out using theoretical-legal and historical-legal methods.

Keywords: *control over the activities of public administration; administrative courts in Poland; jurisdiction of administrative courts of Ukraine; functions of administrative proceedings; a drawback of the cassation model.*

Research Problem Formulation

Nowadays, judicial control of the activities of public administration is an element of the democratic state system and at the same time is a form of protection of individual rights [1].

Administrative courts in Poland constitute a separate part of the judiciary authority, and not bodies of external control over public administration. The objectives of public administration control are different. This control is exercised only from the point of view of the public interest, consisting in ensuring the legal and purposeful operation of this administration in the name of the common good. When it comes to judicial control, its primary purpose is the administration of justice [2]. The administrative judiciary in Poland consists of provincial administrative courts adjudicating in the first instance and the Supreme Administrative Court as the second instance court.

Administrative courts are an authority independent and separate from other authorities (Article 173 of the Polish Constitution [3]), issue judgments on behalf of the Republic of Poland (Article 174 of the Constitution of the Republic of Poland) and constitute a separate division of the judiciary from the Supreme Court, common courts and military courts (Article 175 of the Constitution of the Republic of Poland). The constitutional separation of administrative courts next to the common judiciary division results from the specificity of administrative judiciary, which comes down to exercising control over the activities of public administration [4].

The Supreme Administrative Court and other administrative courts, to the extent specified in the act, control the activities of public administration. This control also includes adjudicating on the compliance with statutes of resolutions of local self-government bodies and normative acts of local government administration bodies (Article 184 of the Constitution of the Republic of Poland). The constitutional regulation of the judiciary indicates that the administrative courts constitute a completely separate division of the judiciary, independent of the common, military and Supreme Court courts, which imposes on the legislator the obligation to shape the system, tasks and properties of administrative courts in such a way as to separate the administrative judiciary division from common and military courts as well as the Supreme Court [5].

The exercise by administrative courts of control of the activities of public administration comes down to entrusting them with the powers that amount to eliminating illegal acts or activities from legal circulation. On the other hand, administrative courts do not provide for the performance of functions of public administration bodies consisting in

1 Babiarz S., Dauter B., Marciniak S., Mudrecki A. Doradca podatkowy przed sądem administracyjnym. Warszawa, 2009. 504 p.

2 Wyrok TK z 14 czerwca 1999 r., K 11/98, OTK ZU 1999, nr 5, poz. 97.

3 Konstytucja Rzeczypospolitej Polskiej z dnia 2 kwietnia 1997 r. , Dz. U. Nr 78, poz. 483 ze zm. URL: https://www.sejm.gov.pl/prawo/konst/polski/kon1.htm (date accessed: 22.11.2022).

4 Hauser R. Założenia reformy sądownictwa administracyjnego. *Państwo i Prawo*. 1999. Z. 12. S. 22.

5 Ibid.

substantive settlement of cases [6]. Regulating the competence of administrative courts in Art. 184 of the Constitution of the Republic of Poland introduces the presumption of limiting the powers of common courts by indicating the subject matter of the competence of the administrative court and by referring to the regulation of the specific scope of the competence of the administrative court specified in the act [7].

From the constitutional regulation used in Art. 184 of the Constitution of the Republic of Poland, the control exercised by the administrative judiciary is directed towards the protection of the objectively binding legal order. The above statement corresponds to the principle of legality expressed in Art. 1 of the Law on the System of Administrative Courts [8], which is the only criterion for controlling the activities of public administration [9]. The content of Art. 1 § 2 of the Act on Law on the System of Administrative Courts sets out the scope, content and nature of the control powers of administrative courts by stating that administrative courts exercise control over the contested acts and activities, taking into account their compliance with the law [10].

Analysis of Essential Researches and Publications

At different times, many domestic and foreign scientists turned to the study of the problem of the scope, content and nature of the control powers of the administrative courts of the state — S. Babiarz, B. Dauter, S. Marciniak, A. Mudrecki; R. Hauser; J. Drachal, R. Hauser, E. Mzyk; W. Piątek; B. Adamiak, J. Borkowski; D. Dąbek; R. Król; J. P. Tarno, E. Frankiewicz, M. Sieniuć, M. Szewczyk, J. Wyporska; B. Banaszak, K. Wygoda; M. Szubiakowski; A. Gomułowicz; M. Masternak-Kubiak; О. М. Клюєв, О. П. Угровецький, Е. Б. Сімакова-Єфремян, І. А. Петрова; В. С. Князєв; А. О. Неугодников; Т. О. Кравчук [11] etc.

Article Purpose

To analyze the administrative court in Poland, to compare it with the Ukrainian one,

6 Hauser R., Drachal J., Mzyk E. Dwuinstancyjne sądownictwo administracyjne : Omówienie podstawowych zasad i instytucji procesowych : Teksty aktów prawnych : Stan prawny na dzień 17 lutego 2003 r. Warszawa ; Zielona Góra, 2003. S. 52 ; Piątek W. Zakres kognicji polskiego sądu administracyjnego. *Ruch prawniczy, ekonomiczny i socjologiczny*. 2009. R. LXXI. Z. 4. S. 86. URL: https://repozytorium.amu.edu.pl/bitstream/10593/4554/1/06_Wojciech_Piatek_Zakres%20kognicji%20polskiego%20s%C4%85du%20administracyjnego_67-76.pdf (date accessed: 22.11.2022).

7 Adamiak B., Borkowski J. Metodyka pracy sędziego w sprawach administracyjnych. Warszawa, 2015.

8 Ustawa z dnia 25 lipca 2002 r. – Prawo o ustroju sądów administracyjnych, Dz. U. z 2022, poz. 2492 ze zm., zwana dalej u.s.a.

9 Dąbek D. Prawo miejscowe. Warszawa, 2015. S. 300.

10 Król R. Legitymacja skargowa w postępowaniu sądowoadministracyjnym jako element wpływający na efektywność podejmowania decyzji w administracji publicznej. *Rocznik Administracji Publicznej*. 2017. No 3. S. 10. DOI 10.4467/24497800RAP.17.002.7053 (date accessed: 22.11.2022).

11 Князєв В. С. Сутність та ознаки експертизи в адміністративному судочинстві. Гуманітарний вісник НУК. 2013. Вип. 6. С. 57–61. URL: http://eir.nuos.edu.ua/xmlui/bitstream/handle/123456789/1490/Knyazev.pdf?sequence=1&isAllowed=y (date accessed: 22.11.2022) ; Неугодников А. О. Правовий статус адміністративного суду в Україні: адміністративно-правовий аспект : дис. ... канд. юрид. наук. Одеса, 2006 ; Кравчук Т. О. Використання спеціальних знань у формі судової експертизи в адміністративному судочинстві України : дис. ... канд. юрид. наук. Луцьк, 2016.

to investigate the effectiveness and possibilities of intervention of the administrative court in the sphere of powers of other authorities.

Main Content Presentation

The essence of administrative judiciary

The administrative judiciary in the model functioning in Poland can be characterized by indicating the following features:

1) administrative courts administer justice by controlling the activities of public administration, taking into account the legality criterion;
2) the jurisdiction of administrative courts covers the overwhelming majority of actions of public administration bodies in individual cases, regardless of their legal form and selected actions in general cases, complaints about inactivity and lengthy proceedings;
3) court proceedings are initiated only at the request of the entity which has a complaint card;
4) adopting models taken from civil proceedings, while maintaining the autonomy of administrative court proceedings;
5) separateness of the administrative and common judiciary division, expressed in the supervision exercised by the Supreme Court;
6) the principle of two-instance administrative court proceedings;
7) a cassation model (in principle) of administrative judiciary;
8) the possibility of conducting mediation and simplified proceedings;
9) introduction of procedural guarantees of access to court, expressed through the formalization of the complaint, the institution of the law of assistance, statutory exemption from court costs [12].

By the way, in Ukraine, in accordance with Article 19 of the Code of Administrative Procedure of Ukraine, the jurisdiction of administrative courts (subject matter jurisdiction) extends to cases in public legal disputes, in particular:

1) disputes of individuals or legal entities with the subject of authority regarding the appeal of his decisions (normative legal acts or individual acts), actions or inaction, except for cases when a different procedure for court proceedings is determined by law for consideration of such disputes;
2) disputes regarding the acceptance of citizens for public service, its completion, dismissal from public service;
3) disputes between subjects of power regarding the implementation of their competence in the field of management, in particular, delegated powers;
4) disputes that arise in connection with the conclusion, execution, termination, cancellation or invalidation of administrative agreements;
5) at the request of a subject of authority in the event that the right to appeal to a court to resolve a public-law dispute is granted to such a subject by law;
6) disputes regarding legal relations related to the election process or the referendum process; disputes between subjects of power regarding the implementation of their competence in the field of management, in particular, delegated powers;
7) disputes between individuals or legal entities with the administrator of public information regarding the appeal of his decisions, actions or inaction regarding access to public information;

12 Piątek W., Skoczylas A. Sądowa kontrola administracji / System Prawa Administracyjnego / red. R. Hauser, Z. Niewiadomski, A. Wróbel. Warszawa, 2014. S. 52—53 ; Tarno J. P., Frankiewicz E., Sieniuć M., Szewczyk M., Wyporska J. Sądowa kontrola administracji. Warszawa, 2006. S. 20—21.

8) disputes regarding the seizure or forced alienation of property for public needs or for reasons of public necessity;
9) disputes regarding the appeal of decisions of attestation, competition, medical and social expert commissions and other similar bodies, the decisions of which are binding on state authorities, local self-government bodies, and other persons;
10) disputes regarding the formation of the composition of state bodies, local self-government bodies, the election, appointment, dismissal of their officials;
11) disputes of individuals or legal entities regarding the appeal of decisions, actions or inaction of the customer in legal relations that arose on the basis of Law of Ukraine *"On the Peculiarities of Procurement of Goods, Works and Services for the Guaranteed Provision of Defense Needs*" (with the exception of disputes related to the conclusion of a contract with the winner of the procurement negotiation procedure, as well as the change, termination and execution of procurement contracts);
12) disputes regarding the appeal of decisions, actions or inaction of state border protection bodies in cases of offenses provided for by Law of Ukraine *On the Liability of Carriers during International Passenger Transportation*;
13) disputes regarding the appeal of the decisions of the National Commission for Rehabilitation in legal relations arising on the basis of Law of Ukraine *On the Rehabilitation of Victims of the Repressions of the Communist Totalitarian Regime 1917-1991* [13].

Let us immediately note that legal examinations in Ukraine are carried out by the Scientific and Expert Council of Law Specialists, which has more than ten collective members (prominent scientific institutions of Ukraine) and more than 70 individual members (legal scholars recognized in Ukraine and abroad, most of whom are members of the Scientific Advisory Council at the Supreme Court, are professors, academicians and doctors of legal science). Experts prepare opinions in all categories of court cases.

The task of the Scientific and Expert Council of Legal Specialists is to carry out scientific expertise on the application of national legislation, international law, the legislation of other countries, the study of legal practice problems, and the examination of contracts. Expertise in the field of law will be carried out in any field of knowledge and in all types of judicial proceedings (including cases considered in international courts, and especially in ICAC).

The scientific expert opinion of an expert in the field of law is provided on the grounds determined by the procedural legislation (Article 242 of the Code of Criminal Procedure of Ukraine, Article 108 of the Code of Civil Procedure of Ukraine, Article 112 of the Civil Code of Ukraine, Article 114 of the Code of Criminal Procedure of Ukraine). In all other cases, a scientific and legal opinion of a specialist in the field of law is provided [14].

The administrative judiciary in Poland operates on the basis of a cassation model with elements of the power to adjudicate on the merits. The administrative court was not equipped with cassation and reform powers, which results in the extension of the period necessary to complete

13 Клюєв О. М., Угровецький О. П., Сімакова-Єфремян Е. Б. та ін. Судові експертизи в адміністративному провадженні : навч. посіб. Харків, 2021. С. 15—16.

14 Експертиза у галузі права / Офіс незалежних експертиз. URL: https://oie.com.ua/ua/expertises/ekspertiza-u-galuzi-prava (date accessed: 22.11.2022).

the case [15]. The complaint initiating the administrative court proceedings ensures the fulfillment of the direct aim of the appeal, which is to overturn the action in question and its effects or to combat inaction, but the fundamental aim of the complainant will be achieved only as a result of the case being resolved by the administrative authority. Even if the administrative court exceptionally adjudicates on certain rights or obligations of the complainant, it only decides on the law, on the interpretation of the law in a specific case, and does not make decisions in the case that would be determined by the purposefulness criterion [16].

As for certain examinations in the field of public law, they can be performed, for example, by Centrum Eksperckie Unawersitetu w Bialymstoku [17].

Administrative courts are courts of public law whose task is to exercise control over the activities of public administration. They do not settle the dispute between the parties and do not guarantee the procedural penalty. The function of a court of public law is perceived in the control of administration, through professional interpretation of the law, and therefore the challenged act or action is revoked, which is treated as the main result of judicial review [18].

Functions of administrative judiciary

The issues of the functions of administrative judiciary focus on entrusting administrative courts with tasks consisting in the administration of justice and the protection of individual rights and freedoms in relations with public administration [19]. The activity of an administrative court is to protect constitutional standards that define the rights of an individual [20].

The basic purpose of the functioning of administrative judiciary is to protect individual rights [21]. Control of the activities of

15 Banaszak B., Wygoda K. Funkcjonowanie sądownictwa administracyjnego w Polsce w zderzeniu z problemami współczesności – wybrane zagadnienia. *Studia Iuridica Lublinensia*. 2014. No 22. S. 169—171. URL: https://bazhum.muzhp.pl/media/files/Studia_Iuridica_Lublinensia/Studia_Iuridica_Lublinensia-r2014-t22/Studia_Iuridica_Lublinensia-r2014-t22-s165-178/Studia_Iuridica_Lublinensia-r2014-t22-s165-178.pdf (date accessed: 22.11.2022).

16 Adamiak B., Borkowski J. Postępowanie administracyjne i sądowoadministracyjne. Warszawa, 2009. S. 348.

17 Centrum Eksperckie Unawersitetu w Bialymstoku. URL: https://centrumeksperckie.uwb.edu.pl (date accessed: 22.11.2022).

18 Szubiakowski M. Administracyjnoprawna regulacja praw i wolności obywatelskich. Warszawa, 2017. S. 275.

19 Wiącek M. Komentarz do art. 184 Konstytucji RP / Konstytucja RP. Komentarz. Art. 87—243. T. II / red. M. Safjan, L. Bosek. Warszawa, 2016. S. 1091 ; Trzciński J. Kształtowanie się kognicji sądów administracyjnych od 1980 do 2013 r. / Droga ku zmianom. Księga Jubileuszowa w sześćdziesiątą rocznicę urodzin Prezydenta Aleksandra Kwaśniewskiego / red. D. Waniek, K. Janik. Warszawa ; Kraków, 2014. S. 102. In the historical process of shaping the administrative judiciary, two goals of the administrative judiciary system can be distinguished. The Austrian judicial system assumed that administrative courts ensure the protection of individual public rights. On the other hand, the Prussian model focused on the protection of the binding provisions of the applicable law (subject law), and the protection of individual public rights while protecting the subject law (e.g. Izdebski H. Historia administracji. Warszawa, 2015. S. 79).

20 Gomułowicz A. Aspekt prawotwórczy sądownictwa administracyjnego. Warszawa, 2008. S. 35.

21 Hauser R. Sądownictwo administracyjne w przyszłej konstytucji. *Ruch prawniczy, ekonomiczny i socjologiczny*. 1995. R. LVII. No 2. S. 57. URL: https://repozytorium.amu.edu.pl/bitstream/10593/16212/1/006%20ROMAN%20HAUSER.pdf (date accessed: 22.11.2022).

public administration bodies comes down to the protection of the rights and freedoms of legal entities in relations with public administration bodies. Its aim is also to strengthen the principle of the democratic rule of law [22].

The administration of justice and the performance of tasks in the field of legal protection constitute the core activities of courts, including administrative courts [23]. The content and scope of activity of administrative courts was indicated by the legislator in Art. 175 of the Polish Constitution by entrusting them with the administration of justice [24].

The provision of Art. 184 of the Polish Constitution sets out the limits of jurisdiction and the essence of the administration of justice exercised by administrative courts [25] through the control of the activities of public administration bodies [26], which comes down to examining whether an act or activity of a public administration body complies with formal and substantive law and whether it was undertaken by a competent public administration body [27].

The solution adopted in Art. 184 and 175 of the Constitution of the Republic of Poland also constitute the constitutional basis for the exclusive competence of administrative courts to administer justice through the control of the activities of public administration bodies. It also specifies the manner of administering justice by administrative courts in such a way that they control — and not replace — the authority in the exercise of its statutory competences [28].

The role of the administrative court is to control the operation of an administrative body from the point of view of its compliance with the law. This process includes: control of the reconstruction and application by public administration bodies of procedural standards specifying the legal requirements for establishing facts, control of the legal qualification of these facts, which refers to the substantive legal grounds for administrative decisions, including control of their interpretation and application, through the prism of statutory provisions procedural defining legal requirements for the justification of an administrative decision, control of a specific method of determining the actual and legal grounds for a decision in a specific

22 Trzciński J. Sądownictwo administracyjne jako gwarant ochrony wolności i praw jednostki. Trzecia władzy sądy i trybunały w Polsce : 50 Jubileuszowym Zjeździe Katedr i Zakładów Prawa Konstytucyjnego (Gdynia, 24—26.04.2008) ; Adamiak B. Model sądownictwa administracyjnego a funkcje sądownictwa administracyjnego / Polski model sądownictwa administracyjnego / red. J. Stelmasiak, J. Niczyporuk, S. Fundowicz. Lublin, 2003. S. 21—22.

23 Wyrok TK z 8 maja 2014, U 9/13, OTK ZU 5A/2014, poz. 51.

24 Masternak-Kubiak M. Komentarz do art. 1 ustawy o ustroju sądów administracyjnych / Kuczyński T., Masternak-Kubiak M. Prawo o ustroju sądów administracyjnych. Komentarz. Warszawa, 2009. S. 12.

25 Hauser R., Kabat A. Właściwość sądów administracyjnych. *Ruch prawniczy, ekonomiczny i socjologiczny*. 2004. R. LXVI. Z. 2. S. 25. URL: http://repozytorium.amu.edu.pl:8080/bitstream/10593/6710/1/02_R_Hauser_A_Kabat_W_a_ciwo__%20s_d%C3%B3w%20administracyjnych_25-34.pdf (date accessed: 22.11.2022).

26 Ibid ; Hauser R. Przekształcenia modelu polskiego sądownictwa administracyjnego. *Forum Iuridicum*. 2002. Z. 1. S. 96—98.

27 Hauser R. Założenia reformy ... .

28 Woś T. Reforma sądownictwa administracyjnego – projekty dalekie od ideału. *Państwo i Prawo*. 2001. Z. 7. S. 31—32.

case [29]. Control actions of administrative courts must be undertaken in an individual case, directed to a designated entity and refer to the rights and obligations of this entity. The right or obligation to which a given act (activity) relates is defined in the provisions of generally applicable law [30]. The control exercised by administrative courts is performed on three levels: assessment of the compliance of an act or activities of a public administration body with substantive law; compliance with the legally required procedure; respect of the competence rules [31].

The administrative court controls the activities of the public administration body by eliminating from legal transactions their decisions that are inconsistent with the law, as well as arbitrary decisions that are lawful [32].

Exercising control within the meaning of Art. 1 of the Law on the System of Administrative Courts means some kind of secondary actions of the court towards the actions of administrative bodies [33]. The administrative court controls the ways and methods of applying the law by the public administration body during the proceedings aimed at ending the administrative case. The administrative court does not evaluate the effectiveness or purposefulness of actions taken by public administration [34].

Polish model of administrative judiciary

The doctrine points to the presence in Europe of two administrative judiciary systems — the cassation model and the so-called full adjudication [35]. It should be emphasized that nowadays in Europe there are no models of adjudication by administrative courts only on the merits and only on cassation. The substantive judicial powers are combined with the powers of a cassation appeal, leaving the administrative courts with a wider catalog of cassation powers [36].

Assuming the variety of judicial models of administrative courts, it should be emphasized that they are all oriented towards the implementation of the right of access to a court, which will provide individuals with the opportunity to present their arguments and defend their interests in a dispute with a public administration body. Therefore, the proceedings before the administrative court are aimed at guaranteeing the individual's rights and ensuring protection against illegal actions of public administration bodies [37].

The discussion on the model of adjudication by Polish administrative courts was swept for the first time during the work on the reform of the administrative judiciary, which resulted in the Acts of 2002 on the system of administrative courts the

29 Wyrok NSA z 22 czerwca 2018 r., I OSK 629/17, CBOSA.

30 Zięty J. J. Glosa do uchwały siedmiu sędziów Naczelnego Sądu Administracyjnego z 25 listopada 2013 r., (I OPS 12/13). *Samorząd Terytorialny*. 2014. Nr 12. S. 86 ; Uchwała NSA z 8 listopada 1999 r., OPS 12/99, ONSA 2000/2, poz. 47.

31 Wyrok NSA z 26 stycznia 2006 r., I GSK 1421/05, CBOSA.

32 Gomułowicz A. Op. cit.

33 Wyrok WSA w Gliwicach z 4 lipca 2018 r., II SA/Gl 331/18.

34 Gomułowicz A. Op. cit. S. 40.

35 Kmieciak Z. Postępowanie administracyjne i sądowoadministracyjne a prawo europejskie. Warszawa, 2009. S. 103.

36 Piątek W. Nowe kompetencje do merytorycznego orzekania przez sądy administracyjne. *Państwo i Prawo*. 2017. Z. 1. S. 21.

37 Piątek W., Skoczylas A. Op. cit. S. 56—57.

Law on Proceedings Before Administrative Courts [38], and the act, which included provisions introducing the act on the organization of administrative courts and the Law on Proceedings Before Administrative Courts [39]. Another discussion on the competences of the administrative judiciary was related to the amendment to the Law on Proceedings Before Administrative Courts by the Act of 9 April 2015 amending the act - the Law on Proceedings Before Administrative Courts [40].

After the entry into force of the Act of 9 April 2015, Poland has a mixed model of judicial competences of administrative courts, with a predominance of cassation powers [41]. By the Act of 9 April 2015, administrative courts were allowed to make substantive decisions in cases in exceptional circumstances [42]. However, until the amendment to the Act on Proceedings before Administrative Courts by the Act of 9 April 2015, the cassation model of adjudication was in force.

Due to the cassation model of adjudication in the Polish administrative judiciary, until the date of entry into force of the Act of 9 April 2015, the views of the doctrine relating to the cassation model of adjudication should be presented first. The most intensive exchange of arguments on the essence of the cassation model of adjudication took place in the period preceding the adoption of the package of laws reforming the administrative judiciary.

The judicial powers of administrative courts, exclusively of a cassation nature, faced criticism due to the juggling of the case between the authority and the administrative court without its substantive and final conclusion [43].

An important element of *administrative judiciary* is the indication of the type of activity undertaken by courts of an *administrative* nature, being a response to the specificity and needs of administrative law. The concept of the judiciary includes activities consisting in resolving disputes and, consequently, making substantive decisions, based on a statutorily specified model of proceedings. Thus, the concept of *administrative judiciary* focuses on a special court that influences the substantively correct functioning of public administration bodies [44].

R. Hauser noticed that enabling administrative courts to deal with administrative matters in terms of the content would be incompatible with their control function

38 Ustawa z dnia 30 sierpnia 2002 r. – Prawo o postępowaniu przed sądami administracyjnymi, Dz. U. Nr 153, poz. 1270.

39 Ustawa z dnia 30 sierpnia 2002 r. Przepisy wprowadzające ustawę – ustawę – Prawo o ustroju sądów administracyjnych oraz ustawę - Prawo o postępowaniu przed sądami administracyjnymi, Dz. U. Nr 153, poz. 1271 ze zm.

40 Dz. U. z 2015 r., poz. 658, zwaną ustawą z 9 kwietnia 2015 r.

41 Piątek W. Nowe kompetencje ... . S. 22.

42 Miemiec M. Dylematy sądowej kontroli administracji. Antywartości w prawie administracyjnym : VI Krakowsko-Wrocławskie Spotkanie Naukowe Administratywistów / red. A. Błaś. Warszawa, 2016. S. 414—427.

43 Pietrasz P. Reformacyjne orzekanie przez wojewódzkie sądy administracyjne w przypadku sądowej kontroli decyzji i postanowień — uwagi de lege ferenda / Z zagadnień prawa rolnego, cywilnego i samorządu terytorialnego. Księga jubileuszowa Profesora Stanisława Prutisa / red. J. Bieluk, A. Doliwa, A. Malarewicz-Jakubów, T. Mróz. Białystok, 2012. S. 814.

44 Zimmermann J. Z podstawowych zagadnień sądownictwa administracyjnego / Sądownictwo administracyjne gwarantem wolności i praw obywatelskich 1980-2005. Warszawa, 2005. S. 492.

indicated in Art. 184 of the Polish Constitution [45]. T. Woś pointed to the provision of Art. 184 of the Polish Constitution as the basis for the administration of justice by administrative courts by controlling the activities of public administration. The administration of justice by administrative courts comes down to controlling, not replacing public administration in the exercise of its statutory powers. Therefore, it seems impossible to equip the administrative court with the powers to deal with substantive matters [46].

Administrative courts control the activity of public administration bodies, examining acts or actions taken by a public administration body for compliance with the law. Enabling administrative courts to hear a case substantively would lead to replacing public administration bodies in the performance of entrusted tasks. Taking into account the principle of the separation of powers, it is not possible to replace public administration in exercising its competences provided for by law, and thus enter the sphere of executive power [47].

Until the entry into force of the Act of 9 April 2015, administrative courts resolved substantively a court-administrative case in the instances specified in Art. 15 § 2, Art. 146 § 2, Art. 154 § 2 and Art. 297 of the Law on Proceedings Before Administrative Courts. In other cases, when the complaint was granted by the administrative court, the case was re-examined by the public administration body, which was bound by the legal assessment and indications as to further proceedings, formulated in the justification of the judgment. Thus, the legal dispute between the parties did not end with the issuance of a court decision [48].

The Supreme Administrative Court could adjudicate on the merits of the case by applying the solution provided for in Art. 188 of the Law on Proceedings before Administrative Courts, according to the content of which, if there are no violations of the provisions of the procedure that could have a significant impact on the outcome of the case, and there is only a violation of substantive law, the Supreme Administrative Court may revoke the appealed judgment and examine the complaint. In this case, the Supreme Administrative Court adjudicates on the basis of the facts adopted in the judgment under appeal.

Conferring competence on the court of second instance (in principle acting as a cassation court) to adjudicate on reformation was justified by the implementation of the principle of procedural economy. The court-administrative case with only the charge of infringement of substantive law will be re-examined by the court of second instance [49].

A significant disadvantage of the cassation model of adjudication by administrative courts is, above all, the extension of the time necessary for the final, substantive settlement of the case [50].

The defectiveness of the cassation model of adjudication by administrative courts may be limited by transferring to administrative courts the competences of a public

45 Hauser R. Założenia reformy … . S. 23 ; Powyższe stanowisko zostało również zaakceptowane w orzecznictwie sądów administracyjnych. Zob. wyrok WSA w Gliwicach z 4 lipca 2018 r., II SA/Gl 331/18.

46 Woś T. Op. cit.

47 Masternak-Kubiak M. Komentarz do art. 184 Konstytucji RP / Konstytucja Rzeczypospolitej Polskiej. Komentarz / red. M. Haczkowska. 2014.

48 Piątek W. Powaga rzeczy osądzonej wyroku sądu administracyjnego. Warszawa, 2015. S. 4.

49 Prawo o postępowaniu przed sądami administracyjnymi / red. R. Hauser, M. Wierzbowski. Warszawa, 2011. S. 620.

50 Kmieciak Z. Op. cit. S. 105.

administration body for substantive handling of cases [51].

The next stage of the discussion on the model of adjudication by administrative courts is closely related to the work on the Act of April 9, 2015, which significantly amended the provisions constituting the basis for adjudication by administrative courts.

Equipping administrative courts with the power to adjudicate on reform is closely related to the principle of separation of powers. While enabling the administrative court to resolve a case on the merits, the judge should be equipped with instruments for determining the facts of the case [52]. Therefore, the administrative court has a double obligation — to examine the case, taking into account the criterion of legality, and in the event of a violation of formal law, to conduct evidence proceedings to the necessary extent (at the same time as provided for in the legal norm) and to issue an appropriate substantive judgment.

By the Act of 9 April 2015, the provision of Art. 145 of the Law on Proceedings Before Administrative Courts was amended by adding § 3 [53] and adding a new provision of Art. 145a of the Law on Proceedings Before Administrative Courts [54]. New procedural solutions give administrative courts the right to discontinue administrative proceedings (Article 145 § 3 of the Law on Proceedings Before Administrative Courts) and substantive adjudication in an administrative court case (Article 145a Law on proceedings before administrative courts). In the case of application of Art. 145 § 3 of the Law on Proceedings Before Administrative Courts, a court judgment replaces a decision in a case of a public administration body only in a situation where the court finds that the contested decision or order is illegal and at the same time there are grounds for discontinuing the administrative procedure [55]. The solution provided for in Art. 145 § 3 is a form of implementation of the principle of providing

51 Bogusz M. Charakter kompetencji sądu administracyjnego a zasada podziału władzy. *Gdańskie Studia Prawnicze*. 2014. T. XXXI. S. 30. URL: https://prawo.ug.edu.pl/sites/default/files/_nodes/strona-pia/33461/files/3_charakter_kompetencji_sadu_administracyjnego.pdf (date accessed: 22.11.2022).

52 Piątek W., Skoczylas A. Op. cit. S. 57.

53 Art. 145 § 3 of the Law on Proceedings Before Administrative Courts. received the following wording: "In the case referred to in § 1 items 1 and 2, the court, stating the grounds for discontinuation of the administrative proceedings, at the same time discontinues the proceedings".

54 The content of the provision of art. 145a is as follows: § 1 In the case referred to in Art. 145 § 1 point 1a or point 2, if it is justified by the circumstances of the case, the court obliges the authority to issue a decision or order within a specified period, indicating the manner of settling the case or its resolution, unless the decision is left to the discretion of the authority. § 2 The competent authority shall notify the court of issuing the decision or order referred to in § 1 within 7 days from the date of issue. If the court is not notified, it may decide to impose a fine on the authority in the amount specified in Art. 154 § 6. The order may be issued in closed session. § 3 in the event of failure to issue the decision or order referred to in § 1, within the time limit specified by the court, a party may file a complaint, requesting a denial stating the existence or non-existence of a right or obligation. The court will issue a ruling on this subject, if the circumstances of the case allow it. As a result of examining the complaint, the court determines whether the failure to issue the decision or order was in gross violation of the law, and may also, ex officio or at the request of a party, impose a fine on the authority in the amount specified in Art. 154 § 6 or order the authority to pay the complainant a sum of up to half of the amount specified in Art. 154 § 6.

55 Kabat A. Komentarz do art. 145 / Prawo o postępowaniu przed sądami administracyjnymi. Komentarz / red. B. Dauter, A. Kabat, M. Niezgódka-Medek. Warszawa, 2016. S. 632.

administrative courts with limited power to issue decisions replacing administrative acts or ordering the authority to issue a decision with a specific content. The judgment of the administrative court, using the option provided for in Art. 145 § 3 of the Law on Proceedings Before Administrative Courts, will settle the administrative case without the need to re-engage the public administration body in the proceedings, the effect of which is the decision to discontinue the administrative proceedings [56].

The solution provided for in Art. 145a of the Law on Proceedings before Administrative Courts gives administrative courts the right to substantively settle a case in which the subject of the appeal is a decision or order, which is an exception to the cassation model of administrative judiciary [57]. It also aims to grant the court the power to oblige the authority to issue a decision or order on the indicated resolution, within the time limit specified by the court. If the circumstances of the case justify issuing the above ruling, the court is obliged not only to repeal the challenged act, but also to indicate a binding way of settling the case or its decision. The court may not exercise its right to resolve the matter on the merits in a situation where the provisions leave the decision to the discretion of the authority [58].

The solutions introduced in Art. 145 § 3 and in Art. 145a of the Law on proceedings before administrative courts correspond to the principles of procedural economy and are in line with the European tendency to provide an administrative court with the possibility of substantive adjudication [59], thus departing from the cassation model of administrative judiciary. The provisions of Art. 145 and 145a of the Law on Proceedings before Administrative Courts Law on Proceedings before Administrative Courts emerges a quasi-substantive model of adjudication by an administrative court introduced to the Polish system of administrative courts, with a predominance of cassation decisions. It should also be noted that adjudication on the merits is excluded in the event that discretionary acts are subject to judicial review [60].

The introduction of substantive adjudication powers into the Polish model of administrative judiciary entails certain consequences in terms of the enforcement of a court decision. Judgment discontinuing administrative proceedings pursuant to Art. 145 § 3 of the Law on Proceedings Before Administrative Courts, causes that the public administration body is not obliged to take any procedural steps. Z. Kmieciak rightly notices that the phrase *the court obliges the authority to issue a decision or order within a specified period, indicating the manner of settling the matter or its resolution* included in Art. 145a § 1 of the Law on Proceedings before Administrative Courts does not lead to a risk of abuse of substantive powers to adjudicate. The solution provided for in Art. 145a § 1 of the Law on proceedings before administrative courts affects the judicial independence of the body to a lesser extent than Art. 138 § 4 of the CCP, imposing an obligation to issue a decision with specific content [61].

56 Druk sejmowy 1633.

57 Kabat A. Op. cit. S. 633 ; Szustakiewicz P. Komentarz do art. 145a / Prawo o postępowaniu przed sądami administracyjnymi. Komentarz / red. A. Skoczylas, P. Szustakiewicz. Warszawa, 2016. S. 261.

58 Druk sejmowy 1633.

59 Ibid.

60 Miemiec M. Op. cit.

61 Kmieciak Z. O merytorycznym orzekaniu przez sądy administracyjne raz jeszcze. Gdańskich Studiów Prawniczych – Przeglądu Orzecznictwa. 2015. Z. 4. S. 23.

Conclusions

When analyzing the essence of adjudication models by administrative courts, a conclusion emerges that the models of cassation, reform and mixed adjudication are aimed at achieving the goal set before an administrative court by protecting an individual against illegal or arbitrary actions of public administration bodies. Regardless of the model of adjudication adopted by administrative courts, each of them meets the standards provided for in Recommendation Rec 20/2004 on judicial review of administrative acts [62]. The breach by the administrative court into the domain of the authority's powers is justified by the effectiveness and efficiency of the proceedings. It allows the complainant to obtain a substantive decision on the case much faster. The mixed model of jurisprudence of Polish administrative courts allows for a more effective implementation of the protection of individual rights.

Модель судового розгляду адміністративними судами в Польщі

Анна Шишка

Це дослідження стосується моделі судового розгляду польськими адміністративними судами. Мета роботи: проаналізувати адміністративне судочинство у Польщі, порівняти його з українським, дослідити ефективність і можливості втручання адміністративного суду у сферу повноважень інших органів влади. Адміністративне судочинство в Польщі здійснюють воєводські адміністративні суди, які розглядають справи в першій інстанції, і Верховний адміністративний суд як суд другої інстанції. Авторка виходила з того, що запровадження змішаної моделі судової практики адміністративних судів збільшує ефективність виконання основної мети адміністративного судочинства, яка полягає у захисті прав особи від свавілля органів публічної адміністрації. Вторгнення адміністративного суду в сферу повноважень владних органів виправдовується дієвістю та ефективністю судочинства, адже надає можливість скаржнику значно швидше отримати рішення по суті. Змішана модель судової практики польських адміністративних судів дає змогу ефективніше реалізовувати захист прав особи. Аналіз питання здійснено з використанням теоретико-правового та історико-правового методів.

***Ключові слова**: контроль за діяльністю публічної адміністрації; адміністративні суди в Польщі; юрисдикція адміністративних судів України; функції адміністративного судочинства; недоліком касаційної моделі.*

Фінансування
Це дослідження не отримало жодного спеціального гранту від фінансових установ у державному, комерційному чи некомерційному секторах.

Відмова від відповідальності
Засновники не грали жодної ролі у розробленні дослідження, добиранні й аналізуванні даних, рішенні про публікацію чи підготовку рукопису.

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Декларація щодо конфлікту інтересів
Автор заявляє, що у нього відсутній конфлікт інтересів.

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Internal Conviction and Forms of Expert Conclusions

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The Article Purpose is to determine grounds, essence, conditions and reflection of the forensic expert's internal conviction in conclusions of performed research, the concept and significance of possible conclusions for criminal proceedings. Fulfilling the set goal was made possible due to the use of: the system-structural method (to determine peculiarities of formation and external manifestation of the forensic expert's internal conviction); the comparative-legal analysis (to compare approaches of researchers with probative value of probable conclusions); the formal-legal (to reveal procedural independence of the forensic expert and formulate the concept of "probable expert conclusion"). Objective basis of the forensic expert's internal conviction is objects of forensic examination, expert methods, scientific positions of forensic examination, research results; subjective: the forensic expert's specific expertise and personal experience. The essence of internal conviction is psychological state of a forensic expert, his/her confidence in obtained findings and readiness to word conclusions. The procedural condition of objectivity, impartiality of internal conviction are guaranteed by the forensic expert's independence. External manifestation of the forensic expert's inner conviction is answers to addressed questions (in the form of categorical judgments). The lack of internal conviction may be embodied by the forensic expert while formulating a conclusion as to possibility of existence (availability)

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of circumstances and facts. A possible conclusion should be distinguished from a probable one. A possible conclusion is a form of the forensic expert's version, which probability or credibility is determined stemming from results of evaluation of all pieces of evidence as a whole.

Keywords: *criminal proceedings; forensic examination; forensic expert's internal conviction; expert conclusion; forensic expert's probable conclusion.*

Research Problem Formulation

The majority of daunting issues associated with forensic expert activity have not been resolved by science, legislation and practice to this day. One of the most complex is the issue of the forensic expert's inner conviction. In the procedural literature, inner conviction, its content and grounds are oftentimes viewed in relation to subjects of evidence: the inner conviction of a judge, prosecutor, investigator. As to the forensic expert's inner conviction, it can be argued that aspects of this issue have been understudied. The peculiarity of the forensic expert's internal conviction is that the cognitive component of personality while its development prevails, as the forensic expert possesses specific expertise. The forensic expert's internal conviction is the result of a comprehensive evaluation of the course and results of research carried out by her/him, and not of pieces of evidence, which is characteristic of subjects of proof. The lack of a proper analysis of the issue of the forensic expert's internal conviction is to some extent due to the fact that this issue is not separately regulated in the current procedural legislation. In addition, legal experts do not specifically consider link between the forensic expert's internal conviction and form of conclusions on the basis of expert research results, in particular, formulation of categorical and probable conclusions.

Analysis of Essential Researches and Publications

Individual aspects of the forensic expert's internal conviction were studied at different times by: T. V. Averianova, L. Yu. Arotsker, V. D. Arseniev, A. O. Aubakirova, R. S. Bielkin, L. M. Holovchenko, N. L. Hranat, N. I. Klymenko, V. P. Kolmakov, V. O. Konovalova, Yu. H. Korukhov, A. V. Kudriavtseva, V. K. Lysychenko, A. R. Ratinov, H. M. Reznyk, O. R. Rossynska, M. V. Saltevskyi, M. Ya. Sehai, E. B. Simakova-Yefremian, Z. M. Sokolovskyi, O. R. Shliakhov, V. D. Yurchyshyn, Ya. M. Yakovliev and others. Analysis of research papers of indicated authors demonstrates that there is no consensus among scientists concerning such important issues as the essence of inner conviction, elements of its structure and grounds. Insufficient attention is also drawn to connection of internal conviction with forms of the forensic expert's final conclusions based on findings of carried out research.

The inner conviction of a forensic expert has a complex nature, therefore it requires a complex approach to research from the standpoint of psychology, logic, epistemology and given the specifics of forensic expert activity. This indicates that the issue of internal conviction necessitates further research. There is a need to differentiate the approach to the process of formation of the forensic expert's internal conviction, taking into account his/her function in court proceedings and peculiarities of obtaining evidentiary information based on specific expertise.

Research methods

Considering specifics of the set goal, the following methods were selected for research: *the system-structural method* (for the systematic review and identification of the grounds for the formation of the forensic expert's internal conviction, arsing at all stages of forensic examination, its essence and external manifestation); *the comparative-legal* (to compare approaches of scientists to the probative value of probable conclusions); *the formal-legal* (as grounds for revealing the procedural independence of the forensic expert and wording the definition for the concept of *probable expert conclusion*. The indicated methods were applied as interconnected and complementary, which contributed to the completeness of research and credibility of formulated research conclusions and proposals.

Article Purpose

To determine grounds, essence, conditions and manifestation of the forensic expert's internal conviction in conclusions of performed research, the concept and significance of probable conclusions for criminal proceedings. To analyze the content and determine the objective and subjective grounds for formation of the forensic expert's internal conviction, external forms of its manifestation; find out reasons for wording a forensic expert's probable conclusions and their probative value in criminal proceedings; clarify the essence of the *probable conclusion* term.

Main Content Presentation

In the criminal justice literature, internal conviction relates to evidence evaluation [1]. The internal conviction concept is viewed as a means (method) of evaluating evidence and as a result of its evaluation. Internal conviction as a method outlines the principle of free evaluation and means that *"no evidence shall have any predetermined probative value"* (Part 2 of Article 94 of the Criminal Procedure Code of Ukraine [2]). With regard to a forensic expert, free expert evaluation means that the forensic expert, given her/his specific expertise, independently determines the significance of individual features and characteristics of objects under study. Internal conviction as a result means that the forensic expert draws a conclusion on significance of established features (combination of features) of objects only after being convinced of this. This aspect of inner conviction is the outcome of the forensic expert's creative thinking. It is absolutely clear that both aspects

1 Вапнярчук В. В. Теорія і практика кримінального процесуального доказування : монографія. Харків, 2017. С. 118. URL: https://dspace.nlu.edu.ua/handle/123456789/13425 (date accessed: 04.12.2022).

2 Кримінальний процесуальний кодекс України від 13.04.2012 р. № 4651-VI (зі змін. та доп.). URL: https://zakon.rada.gov.ua/laws/show/4651-17#Text (date accessed: 04.12.2022).

of the inner conviction concept are inextricably linked.

For the first time about the forensic expert's inner conviction spoke V. P. Kolmakov, a distinguished Ukrainian criminalist, who believes that the forensic expert's inner conviction is *"an instinct, not a subconscious intuition; it is a consciously and freely formed conviction (belief) that has objective grounds enabling to draw only one veracious conclusion"* [3]. In forensic expertology, the forensic expert's inner conviction is described as a complex, multifaceted concept. Internal conviction is considered as a mental, emotional and intellectual state of a forensic expert, which characterizes his/her confidence in accuracy of judgments and conclusions, in their representation of real facts [4].

The structure of the forensic expert's inner conviction constitutes a set of closely interrelated components: epistemological, logical, psychological [5]. The epistemological component means the forensic expert's sense of confidence in validity of her/his specific expertise and the entire research process, application of science-based research methods, established properties and features of objects of forensic examination. The logical component consists in the fact that internal conviction is reasonable, categorical and (according to the forensic expert's opinion) veracious and the only possible conclusion concerning addressed question, which is made on the basis of observing laws and rules of logic. The psychological conviction component is the result of interaction of a person's mind, feelings and will, a state of consciousness characterized by confidence in the objectivity of obtained data and determines readiness to take further actions [6].

The forensic expert's internal conviction is formed while research in accordance with evaluation results of established data. At all stages of forensic examination (starting from external inspection of provided objects, subsequent identification of their features and properties, and up to the formulation of final conclusion), the expert evaluates meaning of identified data, using specific expertise and logic methods applied to evaluate any evidence. Therefore, the expert conclusion is based not only on objective data identified as a result of performed research but also on their individual evaluation. The forensic expert must understand factual data obtained as a result of conducted forensic examination (for example, common and individual handwriting features, quantitative and qualitative glass composition, etching traces on a document, etc.), evaluate their reliability and significance for resolving addressed question. He must be sure that applied research methodology (on the basis of specific expertise) has established objectively available facts, conclusions are a rationale of these facts, and a conclusion drawn on their basis is the only possible one.

The forensic expert's inner conviction is conditioned and associated with

3 Колмаков В. П. О внутреннем убеждении советского судебного эксперта / Вопросы советской криминалистики. Москва, 1951. С. 28.

4 Белкин Р. С. Курс криминалистики : учеб. пособ. Москва, 2001. С. 468.

5 Головченко Л. М. Оцінка висновків криміналістичної експертизи : автореф. … дис. канд. юрид. наук. Київ, 1999. С. 10.

6 Серкевич І. Р., Лісіцина Ю. О. Психологічні особливості внутрішнього переконання судді. *Вісник Львівського торговельно-економічного університету. Юридичні науки.* 2022. Вип. 11. С. 53. DOI: 110.36477/2616-7611-2022-11-08 (date accessed: 04.12.2022).

the principle of his/her procedural independence and self-sufficiency. Despite the lack of the rule that the forensic expert provides a conclusion founded on her/his inner conviction in procedural codes, this provision is a logical result of his/her position in criminal, civil, and administrative proceedings. Thus, in compliance with Art. 3 and 4 of the Law of Ukraine *On Judicial Examination* [7], one of the principles of forensic expert activity is independence of the forensic expert (procedural independence during conduct of research and conclusion provision) and prohibition of anyperson to interfere in forensic examination conduct, as well as to persuade a forensic expert to refuse to provide conclusions and testimony (under the threat of criminal liability stipulated by law: Articles 364, 365, 373, 386 of the Criminal Code of Ukraine [8]).

The forensic expert makes a conclusion on the basis of an objective and comprehensive evaluation of carried out research and in accordance with her/his specific expertise. In addition, he/she shall have the right to make a motion for additional materials necessary for providing a conclusion (opinion), and in the event of their insufficiency, he/she is obliged to inform about the impossibility of compiling a conclusion (Article 69 of the Criminal Procedural Code of Ukraine [9]). Consequently, the question of whether it is possible to draw a conclusion based on submitted objects and materials, and what exactly this conclusion will consist of, is resolved by the forensic expert relying on her/his inner conviction. The forensic expert's conviction has nothing to do with the body (person) who ordered forensic examination. At the same time, the customer of forensic examination has no right to force the forensic expert to provide a conclusion of a certain content. Neither the forensic science institution head nor anyone else has such a right.

The indicated above means that expert conclusions are grounded on her/his conviction stemming not only from objective results of his/her research performed with the use of specific expertise but also on subjective evaluation of obtained findings. The forensic expert's internal conviction reflects the expert's confidence in the accuracy of conclusions drawn by him/her. However, the significance of the expert's inner conviction is not limited by this principle. Forensic examination as a means of proof establishes new evidentiary facts and circumstances of a case, but at the same time it is linked to the forensic expert's personality. Forensic examination cannot be considered a source of evidence unless the forensic expert has reached a conclusion (conviction) as a result of evaluating his/her research concerning the fact that circumstances established by him/her correspond to reality.

The psychological category of internal conviction implies a certain form of external manifestation, which depends on procedural situation of the subject in whom conviction arises. The forensic expert's inner conviction manifests itself externally through the answers provided by him/her in

7 Про судову експертизу : Закон України від 25.02.1994 р. № 4038-XII (зі змін. та допов.). URL: https://zakon.rada.gov.ua/laws/show/4038-12#Text (date accessed: 04.12.2022).

8 Кримінальний кодекс України від 05.04.2001 р. № 2341-III (зі змін. та допов.). URL: https://zakon.rada.gov.ua/laws/show/2341-14#Text (date accessed: 04.12.2022).

9 Кримінальний процесуальний кодекс … . URL: https://zakon.rada.gov.ua/laws/show/4651-17#Text (date accessed: 04.12.2022).

response to questions posed. Therefore, as a mandatory summary of evaluation by the forensic expert of results of research carried out by her/him, the internal conviction should in all cases acquire the character of judgments, which are traditionally divided into the following types: conclusions are categorical (ambiguous, unconditional) and conclusions about the impossibility of resolving addressed question. Each of the two mentioned judgment types about the investigated fact is the result of the forensic expert's inner conviction [10].

If the forensic expert has not reached the state of internal conviction, he/she is not absolutely sure in research results, therefore he/she makes a conclusion that is called probable (acceptable, problematic) in forensic expertology. Probable conclusions have been the subject of a long-standing debate in forensic and procedural literature: scholars have different opinions regarding their admissibility and probative value.

The majority of scientists, on the basis of the lack of prohibitory rule as to this matter in the criminal procedural legislation, allow for the possibility of presenting probable conclusions. At the same time, individual legal scholars [11] believe that probable conclusions cannot be viewed as source of evidence, since they are assumptions about facts (in this way equating probable conclusions with assumptions that are not accepted as prosecution evidence as stated in Article 62 of the Constitution of Ukraine [12] . Some believe that intermediate facts, signs and circumstances set forth in research part of forensic examination, and which are the basis for probable conclusions, possess the meaning of indirect evidence [13]. It is important to note that the issue of the truth and significance of the forensic expert's probable conclusions should be addressed only after their verification and evaluation in conjunction with all other pieces of evidence collected in a case [14]. By admitting the existence of probable conclusions, attention is focused on their positive role in the investigation process for gaining approximate, searching information [15] (in particular, concerning

10 Юрчишин В. Д. Аналіз та класифікація висновків експерта у кримінальному провадженні: теоретичний та практичний аспекти. *Прикарпатський юридичний вісник.* 2013. Вип. 1 (3). С. 442. URL: http://www.pjv.nuoua.od.ua/v1_2013/42.pdf (date accessed: 04.12.2022).

11 Панько Н. А. Доказове значення висновку експерта. *Форум права.* 2009. № 1. С. 411.

12 Конституція України : Закон України від 28.06.1996 р. № 254к/96-ВР (зі змін. та допов.) URL: https://zakon.rada.gov.ua/laws/show/254к/96-вр#Text (date accessed: 04.12.2022).

13 Скачкова Т. Ю. Про можливість використання висновків криміналістичних експертиз із вірогідною формою висновку під час розслідування кримінальних проваджень. *Науковий вісник Херсонського державного університету. Серія Юридичні науки.* 2014. Вип. 4. Т. 2. С. 248.

14 Воробчак А. Р. Висновок експерта як джерело доказів у кримінальному провадженні : дис. … канд. юрид. наук. Одеса, 2019. С. 58. URL: http://dspace.onua.edu.ua/bitstream/handle/11300/12104/%D0%94%D0%B8%D1%81%D0%B5%D1%80%D1%82%D0%B0%D1%86%D1%96%D1%8F%20%D0%92%D0%BE%D1%80%D0%BE%D0%B1%D1%87%D0%B0%D0%BA%203.pdf?sequence=6&isAllowed=y (date accessed: 04.12.2022).

15 Клименко Н. І. Судова експертологія. Курс лекцій : посібник. Київ, 2007. С. 158—159 ; Клименко Н. І., Колонюк В. П. Структура і доказове значення висновкуексперта як документа, що відображує його дослідження. *Теорія та практика судової експертизи і криміналістики.* 2009. Вип. 9. С. 217 ; Експертизи у судовій практиці : наук.-практ. посіб. / за заг. ред. В. Г. Гончаренка. Київ, 2005. С. 263.

versions to be verified [16]). Lastly, it is proposed to view the forensic expert's probable conclusions as evidence since the probable form does not automatically deprive the expert conclusion of probative value [17]. Indeed, any expert conclusion as a document must fully meet requirements of Art. 102 of the Criminal Procedure Code of Ukraine [18]; however, conclusions worded in a probable form require a more reasoned argumentation, stating grounds for drawing up and explaining reasons for impossibility of obtaining a conclusion in a categorical form. From our perspective, the expert conclusion as a procedural document (regardless of the form of final conclusions) is subject to evaluation as source of evidence. Individual researchers believe that, based on evaluation results and verification, the forensic expert's probable conclusion acquires probative value if it is later consistent with other pieces of evidence collected in proceedings [19]. We view the last position as the most appropriate.

As we see, terminology regarding probable conclusions and their essence should be clarified. First, it is necessary to clearly distinguish between the concepts of *categorical* and *probable* as they have different etymological origins. *Categorical* is based on certainty, which implies an unconditional, non-alternative judgment. The concept of *possibility* is the opposite of categorical. The possibility concept is the opposite of categorical. A conclusion in the form of possibility assumes the presence or absence of any fact, event. The forensic expert's lack of confidence in resolving posed question should be expressed precisely by the *possibility* term. Another paired category is *probability* and *veracity*. They characterize knowledge from the point of view of its provenance, reasonableness, persuasiveness, correspondence to reality. Veracious is knowledge which truth is confirmed by certain data, probable is problematic knowledge which truth has not been proven: so the probable is opposed to the veracious. According to Art. 94 of the Criminal Procedure Code of Ukraine [20], veracity of the expert conclusion is determined during evaluation by the investigator, prosecutor, investigating judge, court: along with other evidence identified in the course of proceedings. Therefore, the concepts of *probable* and *veracious* characterize the degree of proof of facts, knowledge form. In this case, we are talking about the expert's subjective attitude to the degree of proof. Thus, categorical conclusions should be distinguished from veracious ones, and possible ones from probable ones.

The expert research procedure includes certain stages. Based on the review of submitted objects, her/his own specific expertise and acquired experience, the forensic expert proposes expert versions depending on a question addressed to him/her. The expert version is an expert's

16 Лисиченко В. К., Циркаль В. В. Использование специальных знаний в следственной и судебной практике : учеб. пособ. Киев, 1987. С. 90.

17 Юрчишин В. Д. Висновок експерта як джерело доказів у кримінальному процесі України : дис. ... канд. юрид. наук. Івано-Франківськ, 2007. С. 153.

18 Кримінальний процесуальний кодекс ... . URL: https://zakon.rada.gov.ua/laws/show/4651-17#Text (date accessed: 04.12.2022).

19 Афонін Д. С. Деякі особливості використання некатегоричних висновків експерта в якості доказів. *Порівняльно-аналітичне право.* 2014. № 3. С. 193.

20 Кримінальний процесуальний кодекс ... . URL: https://zakon.rada.gov.ua/laws/show/4651-17#Text (date accessed: 04.12.2022).

reasonable assumption about properties and condition of submitted objects, final and intermediate circumstances to be determined during research. Expert versions are put forward regarding various characteristics of objects submitted for forensic examination: nature and origin of their features, the mechanism by which features of one object appear in others, the role of objects in the mechanism of investigated events, information structure of objects, etc. [21]. Versions are the basis for choosing the methodology for subsequent expert research, in the course of which they are verified and clarified, and obtained results are the basis for moving from a hypothesis to certain knowledge. The set of data obtained as a result of forensic expert analysis forms the expert's internal conviction of confidence in the veracity, falsity, and probability of a suggested version. If source data provided to the forensic expert are insufficiently informative in terms of its quantity or quality, the methodology is flawed or there are no certain research and development results associated with a question posed, then the forensic expert may develop an incomplete inner conviction about veracity of obtained research results [22]. The impossibility of attaining veracious knowledge allows for the probability of the existence of a fact, but does not exclude another, opposite conclusion about the one. According to our terminology, such a psychological state is embodied in formulation of a conclusion in the form of possibility [23].

Thus, a possible conclusion of the forensic expert is a version that is not sufficiently substantiated by results of conducted expert research, therefore it is a form of resolution of addressed question by a forensic expert. If the forensic expert, within the limits of her/his specific expertise and based on materials submitted to him/her, is unable to resolve the question (for example, about fingerprinting), in individual cases it can be resolved by the investigator and the court, based on the entire body of evidence, considering the forensic expert's intermediate conclusions. For this reason, it is increasingly important to present mentioned intermediate conclusions in a clear, understandable way, so that they can be used to prove actual circumstances of a case in the future. Expert versions (in the form of possible conclusions) can confirm other evidence of criminal proceedings. Analysis of judicial practice for 2020 demonstrates that 86% of expert conclusions in criminal proceedings and 78 % in civil cases are accepted as a source of evidence in such a form [24].

21 Щербаковський М. Г. Судова експертологія : посібник. Харків, 2008. С. 117.

22 Georgiou N., Morgan R. M., French J. C. The Shifting Narrative of Uncertainty: a Case for the Coherent and Consistent Consideration of Uncertainty in Forensic Science. *Australian Journal of Forensic Sciences.* 2022-07-31. Pp. 6—9. DOI: 10.1080/00450618.2022.2104370 (date accessed: 04.12.2022) ; Іванович А., Науменко С., Брюхань С. Оцінювання ідентифікаційних ознак почерку за різних форм висновку експерта. *Теорія та практика судової експертизи і криміналістики.* 2021. Вип. 3 (25). С. 106. DOI: 10.32353/khrife.3.2021.07 (date accessed: 04.12.2022).

23 Сімакова-Єфремян Е. Б. Теоретико-правові та методологічні засади комплексних судово-експертних досліджень : дис. … д-ра юрид. наук. Харків. 2017. С. 225.

24 Щербаковський М. Г. Судебная практика оценки вероятных выводов эксперта. *Актуальні питання судової експертології, криміналістики та кримінального процесу* : мат-ли II Міжнар. наук.-практ. конф. (Київ, 19.11.2020). Київ, 2020. С. 649. URL: *https://m3rkxutm8pk3eqapl5ynjvb3gjps8uao.cdn-freehost.com.ua/wp-content/uploads/2021/06/5fd09ad02772c.pdf* (date accessed: 04.12.2022).

Reasoned possible conclusions of the forensic expert are quite admissible in forensic expert practice, and probability or veracity of facts and circumstances of offense are established by the subjects of proof themselves, evaluating totality of all pieces of evidence collected in criminal proceedings.

Conclusions

In compliance with performed analysis, it is possible to single out certain components of the forensic expert's internal conviction. The *objective* cognitive basis of the forensic expert's internal conviction is objects submitted for forensic examination, availability of developed expert methods, scientific provisions of a certain type of forensic examination, clarified actual circumstances of the offense, obtained research results in the form of signs and characteristics of objects. The *subjective* basis of internal conviction is the forensic expert's specific expertise and personal experience. The essence of internal conviction is the forensic expert's psychological state, his/her confidence in objectivity and reliability of obtained results, validity of their interpretation and evaluation, and his/her readiness to formulate conclusions. The forensic expert's inner conviction is a feeling of confidence in accuracy of his/her conclusion (opinion) and the decision made on its basis. Internal conviction is such a psychological state when a forensic expert (relying on specific expertise, scientific and methodological principles of forensic examination) is confident in the accuracy of a chosen scheme and methodology of research of submitted materials, results obtained, their interpretation and evaluation, and is ready to formulate answers to questions addressed to him. The procedural condition of objectivity, impartiality of internal conviction is guaranteed by the forensic expert's independence.

The external manifestation of the forensic expert's inner conviction is logical, reasoned answers provided by him/her to posed questions in the form of categorical judgments. As a result of the insufficiency or poor quality of the materials submitted for forensic examination and/or the lack of scientific and methodological principles corresponding to addressed questions, the forensic expert may still be uncertain in research results; and the lack of internal conviction can be embodied by the forensic expert while formulating a conclusion on the possibility of availability of facts and circumstances. A possible conclusion should be distinguished from a probable one: it is a form of expert version, which probability or veracity is determined by the investigator, prosecutor, investigating judge and the court according to evaluation of results of all pieces of evidence as a whole.

Внутрішнє переконання
та форми висновків експерта
Микола Дементьєв

Метою статті є визначити підстави, сутність, умови й відображення внутрішнього переконання експерта у висновках проведеного дослідження, поняття та значення ймовірних висновків для кримінального провадження. Досягнення поставленої мети стало можливим завдяки використанню: системно-структурного методу — для визначення особливостей формування й зовнішнього відображення внутрішнього переконання експерта; порівняльно-правового аналізу — для зіставлення підходів науковців до доказового значення ймовірних висновків; формально-юридичного — для розкриття процесуальної незалежності судового *експерта та формулювання поняття «можливий висновок експерта». Об'єктивним підґрунтям внутрішнього переконання експерта є об'єкти експертизи, експертні методики, наукові положення експертизи, результати дослідження; суб'єктивним — спеціальні знання й особистий досвід експерта. Сутністю внутрішнього переконання є психологічний стан експерта, його впевненість у здобутих результатах й готовність формулювати умовиводи. Процесуальну умову об'єктивності, неупередженість внутрішнього переконання гарантовано незалежністю судового експерта. Зовнішнім виявленням внутрішнього переконання експерта є відповіді на поставлені питання (у формі категоричних суджень). Відсутність внутрішнього переконання експерт може втілити у формулюванні висновку про можливість існування обставин і фактів. Можливий висновок слід відрізняти від імовірного. Можливий висновок є формою експертної версії, імовірність чи достовірність якої визначають за результатами оцінювання сукупно всіх доказів.*

Ключові слова: *кримінальне провадження; судова експертиза; внутрішнє переконання експерта; висновок експерта; імовірний висновок експерта.*

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Yurchyshyn, V. D. (2013). Analiz ta klasyfikatsiia vysnovkiv eksperta u kryminalnomu provadzhenni: teoretychnyi ta praktychnyi aspekty [Analysis and classification conclusions of expert in criminal proceedings: theoretical and practical aspects]. *Prykarpatskyi yurydychnyi visnyk*. Vyp. 1 (3). URL: http://www.pjv.nuoua.od.ua/v1_2013/42.pdf [in Ukrainian].

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Case Notes

On Improvement of Scientific and Methodological Basis for Conducting Forensic Economic Examinations Considering Other Types of Forensic Examinations (review article)

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[a] Conceptualization, supervision.
[b] Writing — original draft.
[c] Methodology.

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Multidisciplinary forensic examinations reflect current tendency to integrate knowledge from various fields in order to objectively and impartially solve tasks of court proceedings, as integration of knowledge of specialists with different competences opens up new prospects for development of forensic examinations. Forensic economists who currently participate in multidisciplinary forensic examinations involving various kinds of interaction, sequence and degree of participation of each specialist in solving a common task have not been left behind. Article Purpose: to study into the need to develop scientific and methodological guidelines on the issues of carrying out forensic economic examinations while considering other types of forensic examinations. Leading methods of analysis and synthesis have been applied. The research paper substantiates the relevance of issues associated with conduct of forensic economic examinations taking account other types of forensic examinations. It is stressed that forensic economic examinations, during conduct

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of which results of other types of forensic examinations are used, do not fall under the concept of multidisciplinary forensic examination, since conclusions of other types of forensic examinations are not the research object of forensic economic examination. The paper emphasizes the need to develop an algorithm for conducting forensic economic examinations taking into account other types of forensic examinations. This will help forensic economists to use conclusions of other types of forensic examinations in multidisciplinary research without their evaluation, which in turn will enable to reduce the time for conducting forensic examinations and contribute to obtaining objective and unbiased expert conclusions.

Keywords: *classification; forensic economic examination; set of forensic examinations; multidisciplinary forensic examination; research objects.*

Research Problem Formulation

The key component for enhancing the quality of expert support for justice is improvement of the scientific and methodological basis of forensic expert activity, particularly forensic economic examination.

According to the content of the indicative list of questions that can be posed for resolution in the course of forensic economic examination (they are determined by the requirements of the Scientific and Methodological Recommendations on the Preparation and Appointment of Forensic Examinations and Expert Research [1]), forensic economists address the issue of the documentary evidence of reasonableness in relation to the presentation of various types of economic operations in accounting by the economic entity, particularly taking into account conclusions of other types of forensic examinations. As of today, there is no certified expert methodology for conducting forensic economic examinations considering other types of forensic examinations.

Analysis of Essential Researches and Publications

The issue of scientific and methodological support for activities of Ukrainian forensic science institutions is especially important for researchers. It has been widely covered in research papers by leading Ukrainian and foreign specialists in the field of forensic expertology, including T. V. Averianova, L. Yu. Arotsker, V. D. Arseniev, V. D. Basai, V. V. Biriukov, A. I. Vinberh, O. O. Eisman, O. M. Zinin, A. V. Ishchenko, N. I. Klymenko, M. V. Kostytskyi, V. K. Lysychenko, O. M. Lytvynov, H. M. Nadhornyi, I. V. Pyrih, M. Ya. Sehai, E. B. Simakova-Yefremian, I. Ya. Fridman, M. H. Shcherbakovskyi, and others.

An important role of forensic economic examination during investigation of

1 Про затвердження Інструкції про призначення та проведення судових експертиз та експертних досліджень та Науково-методичних рекомендацій з питань підготовки та призначення судових експертиз та експертних досліджень : наказ Мін’юсту України від 08.10.1998 р. № 53/5 (зі змін. та допов.). URL: https://zakon.rada.gov.ua/laws/show/z0705-98#Text (date accessed: 29.11.2022).

crimes in the field of construction and peculiarities of its appointment have been stressed in research papers by A. Zapototskyi [2] and A. Lysenko [3].

R. V. Rudzevych believes that discovery of the truth in investigation of economic crimes while appointment of multidisciplinary forensic construction-technical and economic examination is only possible with a systematic approach by the investigator to the process of formulating questions that are posed for resolution by forensic experts in both areas of expertise, and in the availability of all research objects required for performing forensic examination [4]. I. L. Shebalkov and co-authors note that questions being solved by forensic experts after appointment of multidisciplinary expert research require the investigator to provide a detailed and complete presentation of all circumstances of investigated event during collection and preparation of materials. This will further contribute to a complete and high-quality expert research [5].

Therefore, we assume that the issue of carrying out forensic economic examinations taking into account other types of forensic examinations is not sufficiently disclosed in modern scientific and methodological developments.

Article Purpose

To study into the need of developing scientific and methodological guidelines for the issues of conducting forensic economic examinations considering other types of forensic examinations.

Research methods

The methods of analysis and synthesis have been applied while research. The analysis method consists in the mental dissection of holistic research subject into components for their in-depth study on the basis of certain signs, characteristics and relations. The synthesis method lies in combining previously identified elements into a single whole, which takes place according to certain signs, properties, and nature of relations.

Main Content Presentation

Forensic examination is focused on the use of achievements from various fields of scientific knowledge in court proceedings, therefore its nature is integrative. In this regard, taking into account conclusions of other research types while conducting forensic economic examinations is a form of specific expertise integration.

2 Запотоцький А. Особливості призначення судових експертиз під час установлення обставин, які мають значення в процесі розслідування злочинів у сфері будівництва. *Підприємство, господарство і право*. 2017. Вип. 6. С. 173—177. URL: http://nbuv.gov.ua/UJRN/Pgip_2017_6_40 (date accessed: 29.11.2022).

3 Лисенко А. М. Економічні дослідження операцій, пов’язаних з виконанням будівельних робіт із залученням бюджетних коштів. *Теорія та практика судової експертизи і криміналістики*. Харків, 2008. Вип. 8. С. 515—519. URL: https://www.hniise.gov.ua/user_files/File/files/2008.pdf (date accessed: 29.11.2022).

4 Рудзевич Р. В. Особливості призначення комплексних будівельно-технічних та економічних експертиз. *Теорія та практика судової експертизи і криміналістики*. Харків, 2020. Вип. 22. С. 393—405. DOI: 10.32353/khrife.2.2020.32 (date accessed: 29.11.2022).

5 Шебалков І. Л., Панчук Ю. В., Гусейнов Р. Н., Супрун В. С. Актуальні проблеми комплексних судово-експертних досліджень під час визначення порядку дій пожежних підрозділів ДСНС України. *Теорія та практика судової експертизи і криміналістики*. Харків, 2020. Вип. 22. С. 416—425. DOI: 10.32353/khrife.2.2020.34 (date accessed: 29.11.2022).

Multidisciplinary forensic examination reflects current tendency of science and practice: integration of knowledge to solve urgent tasks of court proceedings. The development of multidisciplinary research is one of the results of the influence of scientific and technical progress in the field of forensic science and acceleration of the processes of integration and differentiation of knowledge in forensic expert activity. Integration of knowledge of specialists in different fields opens up new prospects for the development of forensic examination; the needs of judicial and investigative practice increasingly require resolution of issues that are at the intersection of different sciences. An integrated approach helps to build up a more complete and adequate picture of the research object in contrast to separate subject-specific approaches. This is a key indicator of scientific research efficiency. Furthermore, practice shows that application of a set of methods and technical means can be fruitful in solving tasks, leading to the development of new fields of scientific knowledge. This, in turn, introduces interdisciplinary scientific disciplines determining patterns of their practical application. Researchers and practitioners have come to a conclusion that only through multidisciplinary research can a comprehensive study of the same object be achieved [6]. The development of forms of interaction between forensic experts is closely linked to procedures for solving integration tasks, and their reasonable construction is impossible without the development of the basic principles of such cooperation. It is difficult to imagine an adequate level of cooperation between forensic experts without organized professional communication of forensic examination subjects [7].

According to Clause 1.2.14 of *the Scientific and Methodological Recommendations on the Preparation and Appointment of Forensic Examinations and Expert Research* [8], "multidisciplinary is forensic examination carried out with application of specific expertise from various fields of science, technology or other specific expertise (of different branches within the same field of expertise) to solve one joint (integration) task (issue). Forensic experts from forensic science institutions along with forensic experts from institutions and services (subdivisions) of other central executive bodies or other specialists who do not work in state specialized forensic science institutions may be involved in forensic examinations if necessary.

Forensic economic examinations, in the course of which results from other types of forensic examinations are used do not fall under the above concept. This is because specific expertise in the field of economics is applied during their conduct; and conclusions of forensic experts in other areas of expertise are used as source data without their analysis and evaluation.

Forensic expert practice demonstrates that it is hard (and sometimes even impossible) for forensic experts specialized in different types of researches to solve posed task within the framework of multidisciplinary forensic examination. It can be due to various circumstances (for

6 Майлис Н. П. Об актуальности использования комплекса знаний в различных направлениях судебной экспертизы. *Эксперт-криминалист*. 2008. № 4. С. 5—7.

7 Сімакова-Єфремян Е. Б. Сутність суб'єкта інтеграції знань при проведенні комплексних судово-експертних досліджень. *Теорія та практика судової експертизи і криміналістики*. Харків, 2006. Вип. 6. С. 108—117.

8 Про затвердження Інструкції … . URL: https://zakon.rada.gov.ua/laws/show/z0705-98#Text (date accessed: 29.11.2022).

example, complexity and short time frame for conducting each type of research, the influence of conclusions of already carried out forensic examinations on expediency of carrying out others or, on the contrary, involving forensic experts in other areas of expertise in order to fully ascertain case circumstances, which are the subject of court proceedings or pre-trial investigation).

That is why an alternate conduct of various types of forensic examinations while solving multidisciplinary tasks sometimes optimizes the process of expert support of justice. As an example, to calculate deviation of the purchase price of products from its market price in non-compliance with the tender procedure, merchandising research was conducted. It helped to determine that the purchase price is equal to or less than the average market price. In such a case, it would not make sense to appoint forensic economic examination after receiving a conclusion from a forensic merchandising expert (who was hired to determine the total paid deviation for the entire delivery batch), as this would save time for the investigator when making a procedural decision.

The concepts of *multidisciplinary forensic examination* and *set of forensic examinations* [9] are distinguished in the scientific literature. A distinctive feature of multidisciplinary forensic examination is solution of related issues of different types and classes of forensic examinations, which cannot be solved by applying expertise from one field. The procedure for conducting research, along with sequence and terms of performing individual researches, are determined by a meeting of all co-executive forensic experts that must be organized by the Expert Committee Head, taking into account functions of each forensic expert participating in forensic examination. Obtained results are also evaluated collectively.

If solution of questions belonging to different types of forensic examinations is implemented by forensic experts in different specializations in relation to the same objects without a joint research and without a collaborative evaluation of obtained results, then this is viewed as a set of forensic examinations [10]. In such cases, it is required to keep in mind possible options for conducting joint research and priorities of actions of forensic experts from diverse fields in research on a common object. It is also important to consider types and sequence of application of research methods while observing the rules of storage and handling of objects. Investigators or courts may use results of such a research while dealing with particular cases, although the current criminal procedure legislation does not explicitly indicate conduct of multidisciplinary forensic examination. In spite of this, multidisciplinary forensic examinations are used more and more frequently, which is evidenced by a high efficiency of such forensic examinations, ample possibilities of a combined, synthesized application of knowledge from various fields of science and technology.

Although forensic experts from various areas of expertise are not required to make a joint decision during conduct of a set of

9 Веретун Г. С. Особливості та відмінності понять «комплексна експертиза» та «комплекс експертиз». *Вісник ОНДІСЕ*. 2018. Вип. 3. С. 14-17. URL: http://ondise.od.ua/DOC/vipusk3/osoblivostitavidminostiponyatkomplecexpertiza.pdf (date accessed: 29.11.2022).

10 Корухов Ю. Г. Теоретический, методический и процессуальный аспекты комплексных экспертиз и комплексных исследований. *Проблемы организации и проведения комплексных экспертиз и экспертных исследований* : мат-лы Всесоюз. науч.-практ. конф. Москва, 1985. С. 31.

forensic examinations (which does not make it possible to qualify their actions in procedural terms as multidisciplinary forensic examination), forensic economists might consider conclusions of other forensic examinations, synthesizing different areas of knowledge while using a conclusion of the forensic expert from another area of expertise. Therefore, in case of performing a set of forensic examinations, the moment of synthesizing various fields of expertise is deferred in time until completion of the last forensic examination.

For this reason, epistemologically, we believe that concepts of *multidisciplinary forensic examination* and *set of forensic examinations* are equivalent and permissible for all forms of integration while implementing forensic examinations. On the other hand, in court proceedings the concept of multidisciplinary forensic examination is exclusively procedural, i.e., the one that presupposes integrating different competencies in one expert research, although it does not specify in advance the option for their integration (it may not be known at the initial stage of forensic examination appointment). This does not imply that appointment of multidisciplinary forensic examination is reducible to combination of an arbitrary set of specialists in one research, which will potentially enable the integration of their specific expertise. Such a possibility is predetermined by the unity of research object, which is determined firstly by intersection of related knowledge, and secondly by specifics of the expert task.

In the general sense, the research subject is contained within an object. The object and subject of research relate to each other as general and separate. With application of specific expertise, a part of the research object is distinguished as the research subject, therefore the forensic expert directs his/her main attention towards it.

When studying conclusions of other types of forensic examinations, the forensic economist does not apply her/his specific expertise, which is one of the key features of the research object of forensic economic examination. For this reason, conclusions of forensic economic examination and conclusions of remaining forensic examinations taken into account during its compilation are components necessary for the court (investigation) to adopt an objective decision on the merits of a case. One component determines certain factual data for clarification of which there is a need to apply specific expertise (not in the field of economics). The second component, based on economic expertise, uses the data from the first component to establish factual circumstances.

From our perspective, taking into account conclusions of other types of forensic examinations by forensic experts is a way of expanding basic information concerning research objects or case circumstances, data about are partially or completely lacking in objects submitted for research; or the use of such information in the course of forensic economic examination is possible only after it has been processed by forensic experts specialized in other research types based on their areas of competence, which is determined by tasks for this type of forensic examination.

In order to develop an approximate range of questions that can be addressed for solution by forensic economists, you must first determine which forensic examination conclusions can be useful during conduct of forensic economic examinations. This involves creation of a classification of sets of forensic examinations with application of a set of classification features, groups and their interconnections.

Vagueness and incompleteness of the current classification of forensic examinations sometimes may lead to limitation of the range of issues addressed by forensic experts, or to their inaccurate interpretation.

New classes, kinds and types of forensic examinations are developed differently: they can arise within existing ones; in the event of emergence of new research objects and new tasks; the development of a type of forensic examination can lead to formation of a new class. The emergence of new kinds and types of forensic examinations is also related to emergence of new forms and manifestations of crime. In such cases, the need for efficient and quick adaptation of judicial and investigative practice to new criminal-legal realities determines the emergence of new ways and methods of applying specific expertise in the process of proof. All of this results in transformation of classifications of forensic examinations, which, in turn, prompts a theoretical rethinking of the grounds and principles of their development.

Classification of forensic examinations has theoretical, applied and procedural significance. As it is known, classification is a system of dividing any homogeneous objects or concepts into classes relying on certain common features or criteria (in our case: forensic economic examinations). A result of forensic economic examination classification is a systematic unit: class, type, kind and subkind, enabling to study and understand the classification object in a greater depth.

Traditionally, the issue of selecting criteria for classification of forensic economic examinations is a complicated one since various factors can be taken as their basis. Thus, it is possible to combine forensic examinations by complexity, scope of the original document, execution period, research subject and by other common external and internal features.

Within the scope of our research, the only possible classification feature of the sets of forensic economic examinations is types of forensic examinations conducted in combination with forensic economic examinations. A distinctive feature of such sets of forensic examinations is that forensic economic examination is carried out last and it takes into account conclusions of those already performed.

When carrying out forensic economic examinations, conclusions of the following types of forensic examinations are most often considered: merchandising research; auto-merchandising experts; construction and technical; environmental.

However, in our view, classification should not be limited only to the most common cases or even exclusively to sets of forensic examinations that took place in forensic expert practice. Considering that forensic economic examination may take into account conclusions of other kinds of forensic examinations, cases of sets of forensic examinations taking place in forensic expert practice can only be described based on it, while the rest of cases can be predicted since there is currently no information about the impossibility of the existence of certain types of sets.

Sets of forensic economic examinations can be classified according to the following kinds (subkinds):

- *economic-forensic* set (subkinds are a combination of forensic economic examination with forensic handwriting one; forensic linguistic examination of speech; forensic document examination; examination of weapons and traces and circumstances of their use; trace evidence analysis (except for studies of traces of damage to clothing associated with simultaneous infliction of physical injuries, which are carried out in the bureau of forensic medicine);

phototechnical, forensic portrait examination; forensic hologram examination; forensic audio and video examination; blast; anthropogenic explosions; materials, substances and products (paint and varnish materials and coatings; polymeric materials; fibrous materials; petroleum products and fuels and lubricants; glass, ceramic; narcotic drugs, psychotropic substances, their analogues or precursors; alcohol-containing mixtures; soils; metals and alloys and products from them; availability of harmful substances (pesticides) in the environment; substances of chemical industry and specialty chemicals; foods; highly toxic substances); forensic biological examinations);

- *economic-engineering-technical* set (subkinds are a combination of economic with engineering-transport (automotive, transport trace evidence, railway-transport); road-technical; construction-technical; appraisal-construction; land-technical; appraisal-land; forensic examination on land management; fire-technical; life safety; mining-technical; engineering-environmental; electrical engineering; computer; telecommunications; electric transport; forensic examination of elevators' technical condition; engineering-mechanical; water-technical; forensic aviation-technical examinations);
- *economic* set (subkinds are a combination of economic with forensic accounting and tax accounting examinations, financial-economic activities and financial and credit operations. In forensic expert practice, there have been cases regarding appointment of forensic economic examinations taking into account conclusions of other forensic economic examinations. The need for such sets is due to the necessity to expand already conducted research in the absence of objects that have already been studied, or in the impossibility of spending additional time on their re-processing without analysis, that is, as initial data);
- *economic-merchandising* set (subkinds are a combination of economic with forensic examinations of machines, equipment, raw materials and consumer goods; military property, military equipment and weapons; forensic transport and merchandising examination);
- a set of *forensic economic examinations and forensic examination in the intellectual property field* (subkinds are a combination of forensic economic examination with forensic examinations of literary and artistic works; phonograms, video grams, programs (broadcasts) of broadcasting organizations; inventions and utility models; industrial samples; plant varities and animal breeds; commercial (brand) names, trademarks (marks for goods and services), geographical indications; integrated circuit topographies; trade secrets (know-how) and rationalization proposals; forensic economic examination in the intellectual property field);
- *economic and psychological*;
- *economic and art*;
- *economic and environmental*;
- *economic and military*;
- *economic and veterinary*;
- *economic and gemmological*;
- *economic-historical-archaeological*.

It is obvious that provided classification of sets of forensic economic examinations is inexhaustible. Its update is due primarily to the need to solve new tasks as to objects that were not previously forensic examination subjects. In view of the above, the suggested basic scheme for classification of economic sets of forensic examinations may be transformed in the future, considering new expert tasks and expertise.

Conclusions

The lack of a separate methodology for conducting expert research of accounting, tax accounting, and reporting documents, documents about economic activity, as well as documents of financial and credit operations, which would take into account conclusions of forensic experts specialized in other areas (for example, construction and technical, merchandising, environmental, handwriting examination, questioned document examination, etc.), necessitates its development. In this regard, it is vital to adopt a unified approach to conducting sets of forensic economic examinations related to the confirmation of the validity of documentation by enterprises, institutions, and organizations engaged in various types of economic activities. This should include examining their quantitative and value indicators while taking into account remaining factual circumstances of a case that support conclusions drawn from other types of forensic examinations.

Such a methodology will practically help forensic economists to use conclusions of other types of forensic examinations without evaluating them, thereby optimizing the terms of conducting forensic examinations and contributing to obtaining objective and unbiased conclusions. It will ensure transparency in the course of expert research, making it impossible to raise questions about completeness and validity of research, as well as compliance with the limits of its competence.

Щодо вдосконалення науково-методичної бази проведення судово-економічних експертиз із урахуванням інших видів експертиз (оглядова стаття)

Костянтин Капустник, Олексій Хомутенко, Павлос Кіпоурас

Комплексні експертизи відображають сучасну тенденцію до інтеграції знань у різних сферах із метою об’єктивного та неупередженого розв’язання завдань судочинства, адже інтеграція знань фахівців різного профілю відкриває нові перспективи розвитку судових експертиз. Не залишилися осторонь експерти-економісти, які наразі беруть участь у комплексних експертизах, що передбачають різні форми взаємодії, послідовності та ступені участі кожного фахівця в розв’язанні спільного завдання. Мета статті: дослідити необхідність розроблення науково-методичних рекомендацій із питань проведення судово-економічних експертиз з урахуванням інших видів експертиз. Як провідні застосовано методи аналізу та синтезу. Обґрунтовано актуальність питань, пов’язаних із проведенням судово-економічних експертиз, які враховують інші види експертиз. Зазначено, що судові економічні експертизи, під час виконання яких використовують результати інших видів експертиз, не підпадають під поняття комплексної експертизи, оскільки висновки судових експертиз інших видів не є об’єктом дослідження судової економічної експертизи. Указано на необхідність розроблення алгоритму проведення судово-економічних експертиз із урахуванням інших видів експертиз. Це допоможе фахівцям судової економічної експертизи використовувати висновки інших видів експертиз у комплексному дослідженні без їх оцінювання, що дасть змогу скоротити строки проведення експертиз і сприятиме отриманню об’єктивних і неупереджених експертних висновків.

Ключові слова: *класифікація; економічна експертиза; комплекс експертиз; комплексна експертиза; об'єкти дослідження.*

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Declaration of Competing Interest
Authors declare no conflict of interest.

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Problematic Aspects of the Classification of Forensic Economic Examination

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The theoretical-methodological foundations of the development of forensic economic examination regarding the determination of classification features of its species composition have not only theoretical-methodological, but also direct practical significance in the activities of expert economists, as well as judicial investigative bodies in the event that the latter appoint this type of examinations. This research paper's purpose is to study the criteria for the classification of forensic economic examinations, established by soviet scientific thought, aimed at improving the systematization of their species composition. Using the techniques of analysis, synthesis, induction, deduction and generalization, it was determined that the emergence of new types and sorts of forensic economic examinations depends on factors that can be combined into two groups: 1) socio-economic relations — a change of their format; 2) judicial and investigative practice —emergence of new objects of research and tasks; 3) economic offenses — new ways, techniques of committing economic crimes. It has been established that the structural differentiation of this type of forensic examinations is due to the procedural needs of the judicial and investigative practice. It has been found that the criterion for systematization of the species composition of forensic examinations belongs to the economic plane, namely to the distribution of social production into the spheres of material and immaterial production. The next stage of the distribution of economic examinations is to

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the relevant industries according to certain types of activity with the definition of the main criterion of classification — according to the type of production activity. Thanks to this, compliance with the set of requirements for the scientifically based selection of classification criteria with the distinction of sorts and types of economic examinations is ensured.

Keywords: *forensic economic examination; judicial system; classification features; classification criterion; economic relations; types of activities.*

Research Problem Formulation

Science as a way of learning the surrounding reality has an appropriate methodological base which includes principles, basic categories, methods, techniques, etc. Among them, such a necessary and effective methodological tool of knowledge as a classification which is used to group system elements (objects, phenomena, processes) according to stable features which greatly facilitates epistemological processes in the study of system functioning, is singled out.

Currently, forensic economic examination, as one of the most important tools of judicial system, has particular issues in its development. First of all, this refers to the lack of criteria for the classification of forensic economic examination established by law. Given forensic examination is one of the most widespread and essential, and its importance as an effective and preventive tool, which is used by forensic investigative bodies aimed at investigating and preventing economic crimes, has no doubt. Domestic scientific research on the development of a single classification feature that would meet scientifically based requirements continues until now, causing certain discussions points, which will be mentioned later. This is a factor that restrains the methodological and methodical development of various types of economic examinations and at the same time highlights the potential of further scientific research.

The above-mentioned methodological issue, on the one hand, is due to insufficient scientific development of classification as a research method. On the other hand, its cause is the turbulence of economic process which is characteristic not only for the domestic economic environment, but also for the economic systems of other countries of the world, in particular with the developed market economy. Considering the economic system as a set of deterministic relationships, it can be noted that the stabilization of economic processes will lead to similar positive transformations in the theoretical and methodological base of economic sciences, which collectively form the basis for the development of forensic economic examination. Such dependence can be traced extremely clearly.

Taking into account the work of theorists and practitioners of forensic economic examination, it is possible to state with high probability that the criterion for a scientifically based classification of the species composition of forensic economic examination (during a thorough analysis of economic processes and their impact on other spheres of human activity) should be sought in the economic plane, about which will be indicated later.

Undeniably, solving of this issue will add clarity and systematicity to the transformational development of forensic economic examination in modern conditions, in turn, this requires fruitful scientific research by scientists and specialists in the economic profile.

Analysis of Essential Researches and Publications

To study this essential methodological issues, domestic and foreign scientists devoted their research, in particular O. V. Anishchenko and O. V. Khomutenko [1]; N. L. Hres and K. K. Nedostup [2]; L. V. Dikan, V. D. Ponikarov and O. V. Kozhushko [3]; N. I. Klymenko and V. V. Fedchyshyna [4]; H. A. Matusovskyi [5]; I. V. Pyrih [6]; E. B. Simakova–Yefremian, V. L. Fedorenko and L. V. Svyrydova with co-authors [7]; A. V. Svintsytskyi and A. M. Padalka [8]; Yu. B. Foris and V. P. Koloniuk [9]; P. P. Cheberiak [10], O. O. Shushko [11], etc. Without diminishing the methodological and practical significance of their scientific

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4 Клименко Н. І., Федчишина В. В. Судово-економічна експертиза : сучасний стан і актуальні питання. *Криміналістичний вісник.* 2016. № 1 (25). С. 56–61. URL: https://visnyk.dndekc.mvs.gov.ua/index.php/visnuk/issue/view/28/ISSN%201992-4437%20%D0%9A%D1%80%D0%B8%D0%BC%D1%96%D0%BD%D0%B0%D0%BB%D1%96%D1%81%D1%82%D0%B8%D1%87%D0%BD%D0%B8%D0%B9%20%D0%B2%D1%96%D1%81%D0%BD%D0%B8%D0%BA%201%20%2825%29%202016 (date accessed: 10.11.2022).

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6 Пиріг І. В. Теоретико-прикладні проблеми експертного забезпечення досудового розслідування : монографія. Дніпропетровськ, 2015. 432 с. URL: https://er.dduvs.in.ua/bitstream/123456789/2363/1/%D0%BC%D0%BE%D0%BD%D0%BE%D0%B3%D1%80%D0%B0%D1%84%D1%96%D1%8F_2_%D0%9F%D0%B8%D1%80%D1%96%D0%B3_%D0%BC%D0%B0%D0%BA%D0%B5%D1%82.pdf (date accessed: 10.11.2022).

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investigations, we believe that the features of forensic economic examination as one of the most important definitions of classification methodological issues in the development of forensic economic expertise require further scientific research.

Article Purpose

Carrying out a systematic analysis of the classification criteria of forensic economic examinations to improve the systematization of their species composition in modern conditions.

Research methods

The following methods of scientific reasoning were used during the research analysis, synthesis, induction, deduction, generalization.

Main Content Presentation

The concept of *classification* (from Latin *classis* — rank, class and *facio* — do) means dividing a set of any objects (elements) into groups (subsets) based on common features. To classify correctly, the following requirements should be met: 1) subsets should not overlap (contain common elements); 2) sums of subsets give the initial set of classified objects; 3) each element belongs to a specific class; 4) sets are divided into groups based on one feature [12]. In addition, it should be noted, the classification is a necessary condition of the cognitive process, and in scientific practice, the classification systems are taken into account, which make it possible to demonstrate the fundamental patterns of movements and development of objective reality. That is, classification as an integral component of scientific research and one of the most important methodological procedures is characterized by the distribution of subjects according to common features with the formation of a certain system of classes of this set of subjects. At the same time, the tasks that are solved as a result of classification are as follows:

- development of general principles of division objects, phenomena and processes into certain group;
- identification of common features of a certain group;
- direct grouping of objects, phenomena and processes.

From an epistemological point of view, the above makes it possible to learn the regularities of the emergence and development of objects, phenomena and processes. Attempts to clasify forensic examinations were carried out during the time of command-administrative economy, to which many scientific works are assigned of domestic scientists that contribute to the controversy regarding the definition of this criterion.

The classification of forensic economic examinations is an objective, necessary process and an important methodological issue that expert science investigates. For a more in-depth and comprehensive coverage of the mentioned issue, it is worth paying attention to the key moments in the evolution of forensic economic examination, which at the beginning of its emergence and formation was called forensic accounting.

Forensic accounting examination as a special institute of expert accountants began to develop in 13^{th}—17^{th} C. [13]. And

12 Українська радянська енциклопедія : у 12 т. Т. 5. Київ, 1980 / за ред. М. П. Бажана. 542 с. URL: https://leksika.com.ua/19120918/ure/klasifikatsiya (date accessed: 10.11.2022).

13 Панченко І. А. Етапи розвитку судово-бухгалтерської експертизи. URL: http://www.rusnauka.com/19_NNM_2007/Economics/23348.doc.htm (date accessed: 10.11.2022).

it was in the 17th century in Western European countries, the formation of an industrial type of production took place (the emergence of new types of production based on the achievements of science and technology, an unprecedented increase in the volume of trade and the circulation of large capital), and therefore market relations. Accordingly, this examination was in demand due to the rapid development of socio-economic relations based on the intensification of commodity and monetary exchange.

The end of the 19th and the beginning of the 20th centuries became the next key stage in the transformation of this examination. Against the background of historical changes in economic relations with the transition of the domestic economy to market principles of management (the format of economic relations between economic entities changed radically, which was reflected in other spheres of activity), forensic accounting examination at the structural level was downgraded to a species, and the class was called forensic economic examinations.

The need for the classification of forensic economic examinations against the background of dynamic economic development arose as a response to the increase in the number of economic studies in various areas of economic activity. It can be confidently asserted that the creation of a national economic complex with many spheres of production and the corresponding industry structure led to the emergence of economic sciences that studied them, and therefore to the further development of forensic accounting expertise (the basis of which is economic sciences) with the subsequent appearance of new types of examinations. That is, the search for classification features and the emergence of new types of production and specialized sciences from their study are closely related processes. Even more, an interrelated triad is explored: the *economy* with its multi-sector structure, which tends to become more complex; *economic sciences*, which study and justify economic phenomena and processes, and *economic crimes*, the methods of which are also complicated as similar processes in the economy become more complicated. And therefore, in determining a scientifically based classification criterion, the specified key processes should be taken into account, giving priority to economic ones among them.

The formation of forensic accounting examination required its structural arrangement which is fair in the conditions of various economic systems of management in which the domestic economy functioned:

- in the conditions of a command-administrative economy during the investigation of economic crimes, the most common types of forensic accounting examination (at that time such examination occupied the highest structural level) were planning and economic, pricing examination, etc. Forensic accounting examinations were conducted where the need for specific expertise in the field of accounting arose in the process of inquiry, preliminary investigation, and court proceedings. Their appointment in criminal cases was explained by the spread of only two main forms of ownership: state (dominant) and collective. For instance, the accounting examination was appointed during the investigation by law enforcement agencies of theft of state or public property or official and economic crimes;

- in the conditions of market relations with their multi-system type of economy (a significant number of economic subjects of various organizational forms and forms of ownership) during the investigation of economic crimes, much more types of economic examinations are used (forensic accounting, financial-credit, in the field of taxation, insurance, etc.).

Today, there is almost no need to conduct certain types of forensic economic examinations: for instance, in the planning-economic one, which was in demand in the command-administrative economy, since all parameters of social production during the times of the USSR, starting from the actual production and ending with the stage of consumption, were determined by planning bodies. Instead, there was a need to conduct expert studies, demonstrating a new format for the development of economic relations — violation regarding the formation and distribution of the company's share capital, property and share contributions, corruption crimes, and many others.

Just as numerous theoretical studies carried out during the time of the planned economy failed to develop unified classification features for organizing the species compositions that arose and spread as a result of the transformation of the economic conditions of business (the end of the 1980s), they have also not successeded until now and modern theoretical developments for a new type of economic relations. The turbulence of the socio-economic environment, the inconsistency of the regulatory and legal framework, issues of a scientific and applied nature in the development of sciences related to forensic economic examination, which have been observed in recent years, are destabilizing factors in the development of forensic examination in both a theoretical and practical sense.

For this reason, the question arises: to what extent will the resolution of this epistemological question affect the effectiveness of the functioning of forensic expert activity in the economic sphere, and does it generally have (apart from theoretical) particular value as well?

First of all, we note that the clear differentiation of forensic economic examinations by their types (at the same time by subtypes) has important procedural and forensic, theoretical and practical significance[14]. This greatly facilitates the work of judicial and investigative bodies in the case of appointment of economic examination, in which tasks are clearly formed in accordance with the competence of experts.

The need for the classification of this type of examinations, as was mentioned earlier, is an objective necessity. The appearance of new species is a continuous process and a reflection of dialectical development characterized by its own laws. The emergence of new types (genera) of forensic economic examinations may be caused by the following objective factors:

- emergence of new ways and methods of committing economic crimes. First of all, they concern the organization of accounting, the implementation of financial and credit operations, which are of a hidden nature;
- emergence of new objects of research as a result of a technological breakthrough in social production, as well as new tasks due to the need for them by judicial and investigative bodies.

14 Форис Ю. Б., Колонюк В. П. Op. cit. С. 81. URL: https://digest.kndise.gov.ua/wp-content/uploads/2021/06/2018_1.pdf (date accessed: 10.11.2022).

For instance, the distribution of electronic document circulation and related documents in electronic forms which under certain requirements are the objects of researches, or the clarification of the circumstances leading to the bankruptcy of an enterprise, which are investigated by the forensic economic examination by the resolution of investigative bodies using economic methods and techniques;

- a change in the format of socio-economic relations as a result of a change in the type of economic system of management, which is reproduced in the dominance of a certain form of ownership of the means of production (market, planned economy, public-private partnership, mixed type of economy, etc.). An example is planning and economic examination as a result of a planned approach to management.

The action of the mentioned factors makes it necessary to improve the classification features of forensic economic examinations, which (respectively) is the prerogative of ministries and other central bodies of executive power, to the sphere of management of which belong state specialized institutions that carry out forensic expert activities [15].

In the scientific literature on this topic, you can find objective requirements that the criteria for the classification of forensic examinations must meet: have permanent and fundamental, not temporary and random factors as their core; be to a certain extent determined by criteria-characteristics; have a stable objective character; distinguish the main, dominant criterion in the case when the basis of the classification is not one, but several signs-criteria [16].

In our opinion, the classification of forensic economic examination as a complex epistemological process should meet the following scientifically based requirements;

- a simple, logical algorithm for substantiating criteria;
- the universality of the criterion, that is, it must *"work"* and can be applied in certain economic relations, as well as in their transformation;
- have a scientifically based nature.

Undoubtedly, the issue of classification is currently controversial and debatable which is also related to the problems of scientific methodology. That is, classification as one of the methods of cognition is not supported by a general scientific theory of classification, scientific theoretical developments that would reflect the algorithm of this scientific procedure in general.

It is undeniable that the emergence and development of forensic examinations, their types and kinds (on the example of the economic examination) are due to the procedural needs of the judicial system in the investigation of economic crimes which outlines the tasks for expert economic research which requires the development of a theoretical and methodological base of this kind examination. This should also include the practical activities of forensic experts, who, thanks to the systematization of practical activities, can form new structural levels of forensic

15 Про судову експертизу : Закон України від 25.02.1994 р. № 4038-XII (зі змін. та допов.). URL: https://zakon.rada.gov.ua/laws/show/4038-12#Text (date accessed: 15.11.2022).

16 Аніщенко О. В., Хомутенко О. В. Op. cit. С. 479. DOI: 10.32353/khrife.2018.54 (date accessed: 15.11.2022).

economic examinations; direct theoretical and methodological development of economic sciences based on the process of differentiation and integration, which are two aspects of the epistemological process.

The difficulty in carrying out classification as a scientific epistemological approach is explained by the difficulty in abstraction, in determining general, systematic features that unite.

The specified methodological issue belongs to the circle of theoretical research of forensic examination — the general theory of forensic examination which studies the connection of basic sciences with subject forensic and relevant types of forensic examination.

The task of forensic examination as a science is to develop a scientifically based classification of the entire variety of forensic economic examination. With the use of methods of abstraction, system analysis and synthesis, tasks, research methods, expert specialties are organized, which makes it possible to create a general picture of interrelated system elements and, on the basis of this, to develop a scientifically based architecture of the classification of forensic economic examinations according to a single criterion, which in the conditions of a certain economic system and for a certain period would be characterized by constancy and immutability.

Scientifically based classification must be ensured by observing the principles of development, structure and interconnection of the main stages: selection of a plurality of objects; exact definition of the features by which they will be compared; method of division into classes (class selection algorithm) [17].

One of the most common classifications of forensic economic examinations is the classification by H. A. Matusovskyi, taking into account the characteristics of various branches of the economy, types of economic activity, as well as the subject of research [18]:

1. By sectors of the economy and types of economic activity:
   1) by economic sectors: industrial, agricultural, construction, transport and communication, service;
   2) by types of economic activity: tax, privatization, insurance, investment, foreign economic, etc.
2. By the subject of research:
   1) class of examinations: forensic economic examination;
   2) types of examinations: forensic accounting, planning-economic, financial-economic, production-economic, pricing, economic-statistical, labor economics examination, etc.;
   3) types of examinations: financial and credit and economic examination of banking operations which belongs to the type of financial and economic examination; economic examination of production resources, economic technological examination, economic-technical examination, etc., which belong to the type of economic examination of production resources.

By the way, the following subtypes of forensic economic examination are highlighted in the Instructions on the Appointment and Conduct of Forensic

17 Юнацький О. В. Конспект лекцій з дисципліни «Експертологія». Дніпро, 2016. 150 с. URL: https://dduvs.in.ua/wp-content/uploads/files/Structure/library/student/lectures/1130/3.1.pdf (date accessed: 15.11.2022).

18 Матусовский Г. А. Op. cit. С. 468—469. URL: https://library.nlu.edu.ua/POLN_TEXT/KNIGI/MATUSOVSKIY_1999.pdf (date accessed: 10.11.2022).

Examinations and Expert Research [19] forensic examination of accounting and tax accounting; examination of financial and economic activity; examination of financial and credit operations.

As a result of numerous studies by scientists and practitioners of forensic expert activity, forensic examinations are divided into the following structural levels by nature and fields of knowledge:

1) *forensic examination class*. This is the highest level formed on the basis of a unifying condition or feature. Such a grouping feature is the commonality of knowledge, which plays the role of a source of formation of the theoretical and methodological foundations of the development of forensic examinations, as well as objects that are investigated on the basis of this knowledge [20]. The class of examination as a rather variable category may undergo certain transformations as a result of the emergence of new types, and kinds of forensic examination and changes in their status. Thus, with the beginning of the structuring of the forensic accounting examination, which was a consequence of the fundamental transformation of economic relations in our country, the classification status of the traditional forensic accounting examination decreased, as a result of which it became one of the types of the class of economic examinations [21]. Undoubtedly, the emergence of new types of forensic examinations and the formation of new classes by them is a natural phenomenon, as it reflects the complication of economic relations and the increase in the structuring of the economy. In addition, in practical terms, the structuring of levels of forensic examinations (in particular, the identification of the class of examinations as their highest structural level) makes it possible to determine the organizational structure of forensic institutions;
2) *type of examination*. The basis for its definition is the subject and object, as well as the applied methods of expert research[22]. From a practical point of view, the type of examination is the main category of this classification;
3) *types of examinations*. This structural level is a component of a kind of examination. The feature that unites them is the specificity of the subject which distinguishes them from objects and methods of research common to the genus [23]. In turn, the type of examination is divided into subtypes, i.e. varieties of the species composition which are characterized by specific tasks and methods of research.

The above-mentioned classification of forensic examinations (by fields of

19 Про затвердження Інструкції про призначення та проведення судових експертиз та експертних досліджень та Науково-методичних рекомендацій з питань підготовки та призначення судових експертиз та експертних досліджень : наказ Мін'юсту України від 08.10.1998 р. № 53/5 (зі змін. та допов.). URL: https://zakon.rada.gov.ua/laws/show/z0705-98#Text (date accessed: 12.11.2022).

20 Експертизи у судочинстві України : наук.-практ. посіб. / за заг. ред. В. Г. Гончаренка. Київ, 2017. 504 с. URL: https://pidru4niki.com/74883/pravo/klasifikatsiya_ekspertiz_harakterom_galuzi_spetsialnih_znan (date accessed: 02.09.2022).

21 Аніщенко О. В., Хомутенко О. В. Op. cit. С. 478. DOI: 10.32353/khrife.2018.54 (date accessed: 02.09.2022).

22 Експертизи у судочинстві ... URL: https://pidru4niki.com/74883/pravo/klasifikatsiya_ekspertiz_harakterom_galuzi_spetsialnih_znan (date accessed: 02.09.2022).

23 Ibidem.

knowledge) facilitates the correct choice of the addressee of expert research, provides for the training and retraining of expert personnel, determines their competence and specialization, assists to determine types and kinds of examinations.

The importance of this issue can be concluded from the following. Employees of NSC «Hon. Prof. M. S. Bokarius FSI», scientific research institutions of forensic examinations of the Ministry of Justice of Ukraine and the Scientific Center of Forensic Examination of the Republic of Moldova carried out the research work *"Improving the classification of forensic examinations"* which made it possible to improve the classification of forensic examinations at the level of an integrated approach, to propose ways solving problems that arise during the development of such a classification [24]. On the other hand, this issue has risen from the state (regional) level to the level of international cooperation [25].

Law of the Republic of Moldova no. 68 of 14 April 2016 *On Forensic Examination and Status of a Forensic Expert* classifies forensic examinations according to the following criteria: sequence of examinations; scope of research; the number of experts participating in research; scientific disciplines, information from which was used during examinations [26]. Thus, the classification concerns only the organizational part, leaving out its most important part — the economic part.

Currently, there is no doubt that the study of classification features of the species composition of forensic economic examinations is reaching a qualitatively new level of development.

The complexity of choosing a criterion for the classification of economic profile examination involves conducting scientifically based research, which, in turn, requires:

- abstraction from secondary, non-essential features with the selection of the general, most essential feature for the objects being classified;
- fundamental analytical research of economic processes, socio-economic relations as the organic connection of all types of human activity with material production. The forensic economic examination is no exception because its basis is specialized sciences that explain economic processes, economic relations and transactions between business entities of various forms of ownership and organizational forms.

Any classification is built using the comparative method. The basis of the construction of all classifications is the relationship between the general and the special. In the bowels of this category, categories of quality and quantity are formed and developed. Recognition of an object begins with a single one. For the first time, a visible object is perceived as the only one of its kind. The researcher tries to get to know the subject from a qualitative point of view. Making the transition from a single object to a set, using the method of comparison, the researcher in

24 Сімакова-Єфремян Е. Б., Федоренко В. Л., Свиридова Л. В. та ін. Op. cit.

25 Гурэу Н., Лопатенко И. О совершенствовании классификации судебных экспертиз. *Актуальні питання судової експертизи та криміналістики:* зб. мат-лів міжнар. наук.-практ. конф. до 95-річчя створення Харків. НДІСЕ ім. Засл. проф. М. С. Бокаріуса (Харків, 10—11.10.2018). Харків, 2018. С. 34—36.

26 Гурэу Н., Лопатенко И. Op. cit. С. 34.

the process of comparing them reveals signs of coincidence, similarity (general comparison objects) and differences (single, special).

Some modern scientific studies related to the classification of forensic economic examinations on a certain basis.

Thus, O. V. Anishchenko and O. V. Khomutenko, choosing a classification criterion from among the list of main features of the classification object of forensic economic examination, give an important place to the essence of the feature. It is certainly hard to disagree with this. Accordingly, scientists consider the essence of a sign as a triad of elements [27]:

1) research by the classification features of which can be considered objects, methods and the subject of research and tasks caused by it;
2) a procedural document, the classification features of which may include judicial proceedings, according to which an examination is appointed;
3) information whose classification features is completeness, reliability, etc.

Priority among the mentioned elements, in these authors' opinion, should be given to the criteria that characterize the research itself, and the main feature of the latter should be the subject of the research and the tasks determined by it.

O. V. Anishchenko and O. V. Khomutenko consider the next stage of the research algorithm based on the existing expert practice to be the need to group expert tasks, which makes it possible to form types of forensic economic examinations, which can be: accounting examination; pricing examination; taxation examination; examination of the financial state of the enterprise; examination of banking transactions, transactions with securities and other financial transactions; examination of wages, pensions and other payments to citizens; examination of the targeted use of budget funds; examination of documentary validity and calculation of the amount of damages; examination of another kind [28].

As a result of the grouping of expert tasks and the determination of the types of forensic economic examinations based on them, these scientists propose to determine the types of examinations by the names of certified expert methods and certain types of examinations for the conduct of which there are no certified expert methods [29].

A. V. Svintsytskyi and A. M. Padalka draw attention to the fact that the classification of forensic economic examination is a relevant issue, because it is important for the development and improvement of the theory of forensic examination and is the basis for the formulation of the expert's opinion and its assessment by judicial and investigative bodies as sources of evidence. In the opinion of scientists, as a classification criterion of forensic economic examinations, the branch of economic knowledge should be chosen, according to which such types of examinations can be distinguished [30]:

- forensic accounting examination, the subject of which is the financial and economic transactions

27 Аніщенко О. В., Хомутенко О. В. Op. cit. С. 480. DOI: 10.32353/khrife.2018.54 (date accessed: 10.11.2022).

28 Аніщенко О. В., Хомутенко О. В. Op. cit. С. 481–482. DOI: 10.32353/khrife.2018.54 (date accessed: 10.11.2022).

29 Ibidem.

30 Свінцицький А. В., Падалка А. М. Op. cit. С. 98–100. DOI: 10.37750/2616-6798.2020.3(34).220999 (date accessed: 10.11.2022).

reflected in the accounting and reporting documents;
- financial and economic examination, which includes the study of signs and methods of distortion of data on financial indicators that affect the financial result and calculations of the obligations of the business entity; calculation of the equity participation of the founders (shareholders) in the property and distributed profit of the business entity;
- financial and credit examination, the subject of which research is the signs and methods of distortion of data on financial indicators that characterize the solvency and creditworthiness of the business entity, the use and repayment of loans.

In the above-mentioned systematization of the typical composition of economic examinations, three blocks can be distinguished:
- *first one* — display of economic transactions in accounting;
- *second one* — production activity of business entities (fields of production);
- *third one* — non-production spheres, namely capital circulation.

Based on a systematic analysis, Yu. B. Foris and V. P. Koloniuk claim that the comfort of using forensic examinations in the judiciary directly depends on the differentiation of the type and subtype of the prescribed forensic examination and on whether this examination is comprehensive. The comfort of forensic expert activity also benefits from how clearly the boundaries of the competence of forensic experts of each specialty are clearly defined, the definition of which is directly related to the definition of the tasks of each class, genus, type and subtype of forensic examination. In addition, the classification does not have the ultimate goal of differentiation (analysis) of tasks with the subsequent impossibility of their synthesis. In accordance with this, they offer a model of their own approach to the classification of forensic examinations, which combines two sets with a sphere of intersection: the set (type) of examination "A"; set (type) of examination "B"; the sphere of intersection as a set of complex examinations "AB"[31]. Researchers note that the classification of forensic examinations should look like a collection of sets, in which the set "A" contains the set "B", and the set "B", in turn, contains the set "B" as a subtask of problems. This model is similar to the division of forensic examinations into classes, genera and types. However, solving tasks of different classes of forensic examinations are not related to each other, unless it is a complex examination [32].

Therefore, it should be emphasized that the practices of economic research, the peculiarity of the tasks and methods of performed economic examinations are characterized by the instability of legislation in the field of accounting and taxation, as well as general economic conditions of the functioning of business entities [33].

Based on the systematization of scientific research on the issue of classification of forensic examinations, I. V. Pyrih believes that the subject (factual

31 Форис Ю. Б., Колонюк В. П. Op. cit. С. 81–82. URL: https://digest.kndise.gov.ua/wp-content/uploads/2021/06/2018_1.pdf (date accessed: 10.11.2022).

32 Ibidem. С. 82.

33 Економічна експертиза / Київський науково-дослідний інститут судових експертиз. https://kndise.gov.ua/ekonomichna/#%D0%A2%D1%80%D0%B0%D0%BD%D1%81%D1%84%D0%B5%D1%80%D1%82%D0%BD%D0%B5_%D1%86%D1%96%D0%BD%D0%BE%D1%83%D

data established by the examination) as well as the objects of the examination determine the field of specific expertise. Based on it, the subject of the examination solves the expert task, and the use of specific expertise makes it possible to choose research methods and techniques. The author comes to the conclusion that it is more correct to choose a field of specific expertise rather than a subject, object and methods of research as a classification feature [34].

P. P. Cheberiak suggests that all types of forensic economic examinations (since they examine one object, namely accounting and economic operations) can be classified as an examination of the accounting process and an examination of economic operations[35]. Undoubtedly, these processes and operations are present in the production and financial activities of all economic entities, and therefore they should be taken into account in the process of scientific research.

In their scientific work, N. L. Hres and K. K. Nedostup in the class of economic examinations distinguish three types (accounting and tax accounting, financial and economic activity, as well as financial and credit operations), which correspond to the following specialties: research of accounting documents, tax accounting and reporting; study of documents on the economic activity of enterprises and organizations; study of documents of financial and credit transactions [36].

O. O. Shushko classifies economic examination by type of economic activity: industrial, agricultural, construction, etc. At the same time, the author notes that along with this feature (by types of economic activity), the economic examination can be classified by the customer, purpose, users of the results of the examination, which characterizes a subjective approach to classification [37]. Certainly, the classification according to the last signs (by the customer, purpose, etc.) has an organizational nature and does not concern the choice of a scientifically based criterion during the systematization of the type composition of forensic economic examinations.

On the basis of the analysis of the previously cited scientific studies related to the selection of criteria for the classification of forensic economic examinations, it is possible to single out the main classification features that are widespread today in the scientific literature:

- forensic examinations as a set of sets based on a systematic approach (Yu. B. Foris, V. P. Koloniuk);
- by the field of economic knowledge (A. V. Svintsytskyi, A. M. Padalka, I. V. Pyrih);
- by types of economic activity (H. A. Matusovskyi, O. O. Shushko);
- by subject of research (H. A. Matusovskyi, O. V. Anishchenko, O. V. Khomutenko);
- by accounting and economic operations (P. P. Cheberiak).

1%82%D0%B2%D0%BE%D1%80%D0%B5%D0%BD%D0%BD%D1%8F (date accessed: 15.11.2022).

34 Пиріг І. В. Op. cit. С. 237. URL: https://er.dduvs.in.ua/bitstream/123456789/2363/1/%D0%BC%D0%BE%D0%BD%D0%BE%D0%B3%D1%80%D0%B0%D1%84%D1%96%D1%8F_2_%D0%9F%D0%B8%D1%80%D1%96%D0%B3_%D0%BC%D0%B0%D0%BA%D0%B5%D1%82.pdf (date accessed: 10.11.2022).

35 Чеберяк П. П. Op. cit. С. 85. URL: http://nbuv.gov.ua/UJRN/Nzlubp_2013_10_22 (date accessed: 10.11.2022).

36 Гресь Н. Л., Недоступ К. К. Op. cit. С. 22. URL: http://ir.nmu.org.ua/handle/123456789/158744 (date accessed: 10.11.2022).

37 Шушко О. О. Op. cit. С. 34—35.

The various characteristics by which the above-mentioned authors propose to classify the species composition of forensic economic examinations have one common characteristic — economic nature which is of undeniable interest for our research. Let's dwell on this aspect in more detail.

The concept *"economy"* (from Ancient Greek *οἰκονομία* — an art of managing a household) modern dictionaries interpret it as follows: 1) national economy of a certain country; 2) sphere of human economic activity in which the goods of life are created; 3) economic science that studies various economic phenomena and processes occurring in society; 4) a set of economic relations between people in the sphere of production, distribution, exchange and consumption of products that form a certain economic system [38].

We believe that the solution to the issue of scientifically based systematization of forensic economic examinations is contained in the plane of economic relations that are manifested at all stages of social production, which are production itself, as well as distribution, exchange and consumption.

Economic relations are a set of relations between people in the process of production of material and spiritual goods and their appropriation in all spheres of social reproduction (direct production, distribution, exchange and consumption) [39].

The entire set of economic relations can be combined into three independent subsystems, which embody a certain type of relations of social reproduction of production [40]: 1) *technical and economic,* which arise during specialization, cooperation, combining production, etc.; 2) *organizational and economic,* which relate to the organization of production; 3) *socio-economic,* which arise between people regarding the production, distribution, exchange and consumption of material and spiritual goods and relate to such categories as money, price, wages, profit, etc.

Socio-economic or property relations, are basic for any type of economy and occupy a prominent place in the investigation by law enforcement agencies of economic crimes in the field of property relations (using material damage, non-payment of wages, non-return of received loan funds, etc.).

The essence of the category *"economic relations"* is the economic environment is embodied in the activities of economic entities related to the production of products, or the provision of various services (for example, transport, housing and communal services, etc.), or the performance of a certain type of work (housing construction, etc.), or in the activities of financial and credit institutions (banks, insurance companies, credit unions, pension funds, leasing companies, etc.), and so on. Thanks to economic relations, all other social relations (social, cultural, national, spiritual, and many others) develop, because they are their base.

In Economic Code of Ukraine (Art. 261 *Fields of the Sphere of Material Production)*, all types of activity are represented by two spheres of production: *"1. The sphere of material production includes the sectors incorporating the types of activities on creating, restoring or finding material values (products, energy, natural resources), and continuing production in the area of turnover*

38 Економічна теорія: Політекономія : підруч. / за ред. В. Д. Базилевича. 6-те вид., переробляє. і доп. Київ, 2007. 719 с.

39 Економічна енциклопедія : у 3 т. Т. 1 / редкол.: С. В. Мочерний (відп. ред.) та ін. Київ, 2000. С. 471—472.

40 Ibidem.

(sale) by transporting, storing, sorting or packing products or other types of activities.

2. All other types of activities in their aggregate shall comprise the sphere of non-material production (non-productive sphere)" [41].

Taking into account the distribution of social production by spheres, as well as the structural division of these spheres, forensic economic examinations can be divided into two types: 1) in the sphere of material production; 2) in the sphere of non-material production.

In these spheres, using the classification of types of economic activity according to the National Classifier of Ukraine [42], the following types of activity can be distinguished:

- in the field of material production: agriculture, forestry and fisheries; extractive industry and development of quarries; processing industry; supply of electricity, gas, steam and air conditioning; construction; wholesale and retail trade; temporary accommodation and catering; transport, warehousing;
- in the field of non-material production: housing and communal economy; repair of motor vehicles and motorcycles; postal and courier activities; information and telecommunications; financial and insurance activities; transactions with real estate; professional, scientific and technical activities; activities in the field of administrative and auxiliary services; public administration and defense; mandatory social insurance; education; health care and provision of social assistance; art, sports; provision of other types of services; activities of extraterritorial organizations and bodies.

Classification of forensic economic examinations according to their types of economic activities was created by H. A. Matusovskyi [43]. Under this systematization of the species composition of economic examinations, important requirements regarding their selection are observed, which are as follows: the criterion must be a fundamental, not a temporary, random factor; it should have a simple substantiation algorithm and scientifically based systematization; the criterion must be universal in application.

Let's dwell on the universality of this classification feature in more detail. The emergence of new types of forensic economic examinations is connected with the emergence of new types of activities, branches of the economy, in which economic violations are committed. That is, the principle of synchronicity is traced, which consists in the reflection by economic sciences of the continuity of the processes of specialization and division of labor, which causes the emergence of new industries and branches of the economy. All the main types of activities that currently exist, with the aim of ensuring optimal,

41 Господарський кодекс України від 16.01.2003 р. № 436-IX (зі змін. та допов.). URL: https://zakon.rada.gov.ua/laws/show/436-15#Text (date accessed: 15.11.2022).

42 Класифікація видів економічної діяльності ДК 009:2010: Наказ Державного комітету України з питань технічного регулювання та споживчої політики від 11.10.2010 р. № 457. URL: https://zakon.rada.gov.ua/rada/show/vb457609-10#top (date accessed: 17.11.2022).

43 Матусовский Г. А. Op. cit. С. 468—469 URL: https://library.nlu.edu.ua/POLN_TEXT/KNIGI/MATUSOVSKIY_1999.pdf (date accessed: 10.11.2022).

sustainable economic development of the country, will continue to function. In addition, the development of productive forces, the emergence of new needs of society will always require the creation of new industries to satisfy them. The fact remains indisputable that along with the expansion of the industry structure, the opposite processes will occur, which are also characteristic conditions of the economic environment: the collapse of individual industries that satisfy the needs for material and immaterial goods, for which there is no demand in society.

Conclusions

The classification of forensic economic examinations as one of the most essential and effective methodological tools of knowledge makes it possible to systematize the species composition of economic examinations according to their structural levels. However, this can be implemented only if a set of scientifically based requirements are followed during classification, as well as certain regularities are taken into account. A clear structure of the division of forensic examinations by types of economic activity, in the development of which processes of differentiation and collapse of types of activity are present at the same time, makes it possible to determine this criterion for the classification of forensic economic examinations as one of the most important.

Проблемні аспекти класифікації судових економічних експертиз

Олексій Горлачук

Теоретико-методологічні засади розвитку судової економічної експертизи щодо визначення класифікаційних ознак її видового складу мають не лише теоретико-методологічне, а й безпосереднє практичне значення в діяльності експертів-економістів, а також судово-слідчих органів у випадку призначення останніми такого виду експертиз. Мета статті — дослідити критерії класифікації судових економічних експертиз, розроблені вітчизняною науковою думкою, із метою вдосконалення систематизації їх видового складу. За допомогою методів аналізу, синтезу, індукції, дедукції та узагальнення визначено, що виникнення нових видів і родів судових економічних експертиз залежить від чинників, що можна об'єднати у три групи: 1) соціально-економічні відносини — зміна їх формату; 2) судово-слідча практика — поява нових об'єктів дослідження та завдань; 3) економічні правопорушення — нові способи, методи здійснення економічних злочинів. Установлено, що структурна диференціація такого виду судових експертиз обумовлена процесуальними потребами судово-слідчої практики. З'ясовано, що критерій систематизації видового складу судових економічних експертиз знаходиться в економічній площині, а саме в розподілі суспільного виробництва на сфери матеріального та нематеріального виробництва. Наступний етап розподілу економічних експертиз — на відповідні галузі за певними видами діяльності із визначенням основного критерію класифікації — за видом виробничої діяльності. Завдяки цьому забезпечено дотримання сукупності вимог науково-обґрунтованого вибору критерію класифікації з виокремленням родів і видів економічних експертиз.

Ключові слова: *судова економічна експертиза; судово-правова система; класифікаційні ознаки; критерій класифікації; економічні відносини; види діяльності.*

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Case Notes

Peculiarities of Conducting Forensic Merchandising Examination Related to Illegal Logging in Ukraine

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The research paper is dedicated to peculiarities of conducting forensic merchandising examination during investigation of crimes related to illegal logging in Ukraine. The negative impact of illegal logging on the environment is substantiated, and changes taking place in the territories of logging are stressed. On the contrary, logging related to forestry management is aimed at ensuring protection, rehabilitation, strengthening of protective properties and raising productivity of forests and other forestry lands. The Article Purpose is to theoretically substantiate peculiarities of perfomring forensic merchandising examination to determine the market value of round timber while investigation of crimes related to illegal logging, and to emphasize key aspects of conducting such research using the suggested algorithm of actions. The performed research is built on application of comparative approach involving the analysis of prices of sale and offers of this type of timber. The definition of the terms "timber", "round timber", their classification and characteristics are also provided. Merchandising research of round timber presupposes obtaining raw data on measurement of wood parameters and applying a certain algorithm of actions in order to assess their market value. The new national wood quality

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standards were analyzed and the need to attract a forest industry specialist in the course of forensic merchandising examination is justified.

Keywords: *round timber; environmental crimes; illegal logging; merchandising examination; firewood of industrial use; firewood of non-industrial use; timber quality class.*

Research Problem Formulation

The forest fund of Ukraine is state property and one of the essential factors of production (along with labor and capital), therefore the nature of its use depends on the level of socio-economic, cultural and spiritual development of society overall and environment state in particular.

Improper exploitation of forests results not only in their destruction, but also seriously affects the environment, disrupting functioning of ecological system and increasing level of morbidity within population. Therefore, forests are the national wealth of people and the state, which, according to their direct purpose, regulate the circulation of water and air, the level of precipitation, the release of oxygen into the air, the air temperature, prevent soil erosion, that is, they perform water protection, protective, sanitary and hygienic, health, recreational, aesthetic and other functions to ensure and meet the needs of society and environmental safety of human life. After all, protection and rational use of natural resources is an integral and required condition for economic growth and development of society as a whole.

Statistics indicate that relative density of environmental crimes in the territory of our state is growing every year. Such a negative trend is due to the spread of such a phenomenon as illegal logging. In this connection, problems associated with this phenomenon are relevant, indisputable and global and require further research in order to compile practical guidelines to prevent destructive consequences for the environment in the future.

During investigation and trial of civil and criminal cases related to environmental crimes investigation, it is necessary to apply specific expertise to establish the market value of round timber; therefore, it is merchandising examination gives an opportunity to obtain a competent conclusion regarding crimes associated with illegal logging in Ukraine.

Analysis of Essential Researches and Publications

Scientific foundation for the research of issues related to investigation of environmental crimes (in particular, illegal logging) is studied in research papers of such researchers as V. M. Poprevych [1],

1 Попревич В. М. Сучасний стан та перспективи розвитку кримінально-правової охорони лісів України. *Вісник Маріупольського державного університету*. 2014. Вип. 8. С. 180—186. URL: http://nbuv.gov.ua/UJRN/Vmdu_pr_2014_8_25 (date accessed: 11.11.2022).

O. M. Pylypenko [2], O. V. Zaichko [3], R. P. Oliinychuk [4], A. M. Krotyuk [5], O. M. Trokhanenko with co-authors [6] and others.

Article Purpose

Theoretical substantiation of peculiarities of conducting forensic merchandising examination to assess market value of round timber while investigation of crimes related to illegal logging and emphasizing key aspects of carrying out such research using the suggested algorithm of actions.

Research methods

This research paper suggests applying general methods of theoretical research (analysis, synthesis, generalization, deduction) and empirical research methods (description and comparison), which combination helped to establish mechanisms for calculating market value of round timber.

Main Content Presentation

The problem of logging forest plantations is one of the most severe environmental problems worldwide. Regrettably, this negative trend has not passed Ukraine either, where recently there has been a massive destruction of windbreaks and illegal logging of forest plantations. By the way, Ukraine is the largest exporter of illegal raw materials to the EU countries. The public report of the Head of State Forest Resources Agency stresses that *"the total area of forest areas belonging to the Forest Fund of Ukraine is 10.4 million hectares, including 9.6 million hectares covered with forest vegetation. The forest cover of Ukraine is 15.9%. But despite a fairly small forest cover of the territory, Ukraine ranks 9th in Europe in terms of forested area and 7th in terms of timber reserves"* [7].

Loggings associated with forestry management are intended for ensuring protection, rehabilitation, strengthening of protective properties and increasing the

2 Пилипенко О. М. Використання сучасних можливостей судових експертиз на початковому етапі розслідування незаконної порубки лісу. *Вісник Луганського державного університету внутрішніх справ ім. Е. О. Дідоренка.* 2016. № 4 (76). С. 232—241. URL: https://journal.lduvs.lg.ua/index.php/journal/article/view/619 (date accessed: 11.11.2022) ; Її ж. Особливості організації й тактики огляду місця події при розслідуванні незаконної порубки лісу. *Ibidem.* 2018. Вип. 2 (82). С. 280—289. URL: https://journal.lduvs.lg.ua/index.php/journal/article/view/139 (date accessed: 11.11.2022).

3 Заічко О. В. Кримінологічна характеристика та запобігання незаконній порубці лісу : дис. ... канд. юрид. наук. Харків, 2019. 210 с. URL: http://criminology.nlu.edu.ua/wp-content/uploads/2019/09/Disertatsiya-Zaichko-O.V.pdf (date accessed: 11.11.2022).

4 Олійничук Р. П. Особливості розслідування незаконної порубки лісу. *Актуальні проблеми правознавства.* 2020. № 3 (23). С. 166—170. DOI: 10.35774/app2020.03.166 (date accessed: 11.11.2022).

5 Кротюк А. М. Іноземний досвід запобігання незаконним порубці, перевезенню, зберіганню, збуту лісу. *Науковий вісник Національної академії внутрішніх справ.* 2021. Том 26. № 1. С. 24—30. DOI: 10.33270/01211181.24 (date accessed: 11.11.2022).

6 Троханенко О. М., Комісарова А. Д., Верба В. В. Сучасні можливості судових експертиз і напрями використання спеціальних знань у розслідуванні злочинів, пов'язаних із лісом. *Нове українське право.* 2021. Вип. 4. С. 276—282. DOI: 10.51989/NUL.2021.4.41 (date accessed: 11.11.2022).

7 Публічний звіт голови Державного агентства лісових ресурсів України за 2021 р. URL: https://forest.gov.ua/storage/app/sites/8/публічні%20звіти/publichniy-zvit-za-2021.pdf (date accessed: 11.11.2022).

productivity of forests and other forest areas, oftentimes carried out according to plan (periodic planned logging). They are an element of the forest care system, that's why their further storage as plantations is inappropriate. In Ukraine, such loginngs are one of the essential factors for improving quality and enhancng forest productivity. Unfortunately, also illegal logging takes place, which is the evidence of environmental crimes.

Damage inflicted to forests by excessive logging may even lead to ecological disaster (in extreme cases). Climate changes and changes in the ecosystem take place in the territories of logged forests, resulting in destruction of a substantial number of plants and animals, worsening of circulation of water and substances in nature, destruction (erosion) of the soil, etc., negatively affecting not only forestry but also climate.

In order to research into the problem of illegal logging, the concept of *forest* should first be defined. In particular, Art. 1 of Section I of the Forest Code of Ukraine defines the *forest* term as *"a type of natural complex (ecosystem), which combines mainly woody and shrub vegetation with appropriate soils, herbal vegetation, animal world, micro-organisms and other natural components that are interconnected in their development, affecting each other and the environment"* [8]. Art. 2 of the Forest Code of Ukraine specifies that *"the object of forest relations is the forest fund of Ukraine and some forest areas. The subjects of forest relations are public authorities, local governments, legal entities and citizens who act in accordance with the Constitution and laws of Ukraine* [9].

State Forest Resources Agency of Ukraine defines the *illegal logging* term as *"timber harvesting without a special permit for the use of forest resources (logging permit, or a wood ticket)"* [10].

At the same time, O. V. Zaichko interprets this definition as follows: *"this is predominantely organized criminal activity aimed at illegal harvesting of timber in forests and other protected areas and sites for commercial purposes or to meet personal (household) needs of population for firewood and timber"* [11].

O. Storchous proposes to define as illegal logging which *"is viewed as a completed crime from the moment of total separation of the tree or shrub from the root, in case this act inflicted significant damage (given materially defined crime)"* [12]. He emphasizes that "*illegal logging could be divided into two groups depending on offense (crime) subjective composition. A. Loggings carried out without a special permit, i.e. without wood ticket (unauthorized logging). B. Loggings carried out under appropriate permit, in the course of which significant violations were committed"* [13].

8 Лісовий кодекс України від 21.01.1994 р. № 3852-XII (зі змін. та допов.). URL: https://zakon.rada.gov.ua/laws/show/3852-12#Text (date accessed: 11.11.2022).

9 Ibidem.

10 Охорона лісів від незаконних рубок / Державне агентство лісових ресурсів України. URL: https://forest.gov.ua/napryamki-diyalnosti/lisove-gospodarstvo/ohorona-i-zahist-lisiv/ohorona-lisiv-vid-nezakonnih-rubok (date accessed: 11.11.2022).

11 Заічко О. В. Op. cit.

12 Сторчоус О. Кримінальна відповідальність за самовільні порубки лісу : навч. посіб. Київ, 2012. 116 с. URL: https://fleg1.enpi-fleg.org/fileadmin/ufs/04.%20Program%20Information/4.02%20Program%20Components/4.02.05%20Public%20Awareness/Criminal_Liability_UA.pdf (date accessed: 11.11.2022).

13 Ibidem. С. 9—10.

As stated by O. M. Budiachenko, "*according to the analysis of case materials, the most widespread are loggings conducted without special permit, i.e. without wood ticket (so-called illegal logging)*"[14]. Therefore, he suggests the following definition for illegal logging: *"it is a socially dangerous act committed with inflicting harm to social relations protected by law regarding the rational use of the forest fund, trees, shrubs that are not separated from the stump and are damp-growing (live) and grow in forests, protective and other forest plantations, in nature reserves or in the territories and sites of nature reserve fund"* [15].

I. H. Bohatyrov and A. V. Savchenko believe that illegal logging takes place if it is carried out:

1) without special permit certified by a corresponding document (logging permit or wood ticket) and issued by the competent authority;
2) in the availability of permit, but failing to comply with conditions envisaged in it concerning the place, method and terms of logging, number and species of trees and shrubs (logging does not take place in allocated area; prior to the beginning or upon expiration of terms stipulated in the permit; logging of valuable and rare trees and shrubs listed in the Red Book of Ukraine, and other trees of exceptional importance for preservation of biodiversity, etc.);
3) in the availability of permit for continuous sanitary logging, but non-complying with restrictions established regarding the area, terms and technologies of work [16].

It should be stressed that Article 39 of Chapter 6 *Functional Division of Forests* of the Forest Code of Ukraine stipulates that *"forests of Ukraine are divided into the following categories according to their ecological and socio-economic significance and depending on the main functions they perform: 1) protective forests (perform mainly water protection, soil protection and other protective functions); 2) recreational and health-improving forests (perform mainly recreational, sanitary, hygienic and health-improving functions); 3) forests for environmental, scientific, historical and cultural purposes (perform special environmental, aesthetic, scientific functions, etc.); 4) exploitable forests"* [17].

In case of establishing the fact of illegal logging of forest or its theft, criminal offense is classified according to the following articles of the Criminal Code of Ukraine: Art. 185 *Theft* and Art. 191 *Misappropriation, embezzlement, conversion, or property by malversation* of Section VI *Criminal offenses against property* and Art. 246 *Illegal logging or illegal transportation, storage, and sale of timber* of Section VIII *Criminal offenses against environment* [18].

14 Будяченко О. М. Кримінальна відповідальність за незаконну порубку або незаконне перевезення, зберігання, збут : дис. … канд. юрид. наук. Одеса, 2020. 258 с. URL: http://dspace.oduvs.edu.ua/bitstream/123456789/1479/1/Disertatsiya_Budyachenko_O.M.pdf (date accessed: 11.11.2022).

15 Ibidem. C. 121.

16 Богатирьов І. Г., Савченко А. В. Кримінальна відповідальність як сучасна проблема кримінального права України. *Підприємництво, господарство і право*. 2016. № 2. С. 133—137. URL: http://nbuv.gov.ua/UJRN/Pgip_2016_2_27 (date accessed: 11.11.2022).

17 Лісовий кодекс України від 21.01.1994 р. № 3853-XII (зі змін.). URL: https://zakon.rada.gov.ua/laws/show/3852-12#Text (date accessed: 11.11.2022).

18 Кримінальний кодекс України від 05.04.2001 р. № 2341-III (зі змін. та допов.). URL: https://zakon.rada.gov.ua/laws/show/2341-14#Text (date accessed: 11.11.2022).

In conformity with Part 1, Article 246 of the Criminal Code of Ukraine, *"illegal felling of trees or shrubs in forests, protective and other forest plantations, transportation, storage, sale of illegally felled trees or shrubs that have caused substantial damage shall be punishable by a fine of one thousand and one thousand and five hundred tax-free minimum incomes, or arrest for a term of up to six months, or restriction of liberty for up to three years, or imprisonment for the same term"* [19].

In addition to the Criminal Code of Ukraine, forest legal relations are governed by:

- The Constitution of Ukraine containing rules of direct effect that can be directly enforced in the process of implementing criminal law relations (in particular, Article 66 of Chapter II stipulates that *"everyone is obliged not to harm nature, cultural heritage and to compensate for any damage he or she inflicted")* [20];
- The Forest Code of Ukraine (in particular, Part 1, Article 89 of Chapter 16 *Implementation of forest protection and conservation* specifies that *"protection and conservation of forests in the territory of Ukraine shall be carried out by: State Forest Guard, acting as part of the central executive authority implementing the state policy in the field of forestry, the executive authority of the Autonomous Republic of Crimea for forestry, and enterprises, institutions and organizations under their management; forest protection of other permanent forest users and forest owners"* and in Article 90: *"the main tasks of the State Forest Guard are: implementation of state control over compliance with forest legislation; ensuring protection of forests from fires, illegal logging, protection from pests and diseases, damage due to anthropogenic and other harmful effects.")* [21];
- Resolution of the Cabinet of Ministers of Ukraine *On Approval of the Regulation on the State Forest Protection, Forest Protection of Other Forest Users and Owners of the Woods* [22]*;*
- The Law of Ukraine *On Environmental Protection* (in particular, Part 1, Article 12 of Section II stipulates that duties of citizens in the field of environmental protection are: *"a) preserve nature, protect, and use its resources efficiently in accordance with the requirements of environmental protection legislation; b) carry out activities in compliance with the environmental safety requirements, other environmental standards and limits on the use of natural resources; c) not to violate the environmental rights and legitimate interests of other entities; d) pay fines for environmental offences; e) compensate for damage caused by*

19 Кримінальний кодекс України ... . URL: https://zakon.rada.gov.ua/laws/show/2341-14#Text (date accessed: 11.11.2022).

20 Конституція України від 28.06.1996 р. (зі змін. та допов.). URL: https://zakon.rada.gov.ua/laws/show/254к/96-вр#Text (date accessed: 11.11.2022).

21 Лісовий кодекс України ... . URL: https://zakon.rada.gov.ua/laws/show/3852-12#Text (date accessed: 11.11.2022).

22 Про затвердження Положення про державну лісову охорону, лісову охорону інших лісокористувачів та власників лісів : Постанова КМУ від 16.09.2009 р. № 976 (зі змін. та допов.). URL: https://zakon.rada.gov.ua/laws/show/976-2009-п#Text (date accessed: 11.11.2022).

pollution and other negative impact on the environment." [23];

- Resolution of the Cabinet of Ministers of Ukraine *On the Approval of Special Fees for Calculating the Amount of Damage Caused by the Violation of the Legislation "On Nature Reserve Fund of Ukraine*" which stipulates the following:
- *'1. Approve special fees for calculating the amount of damage caused by violation of the legislation on the nature reserve fund within territories and objects of the nature reserve fund due to:*
  illegal logging or damage to trees and plants that have lignified stem, to the extent of growth cessation;
  damage to trees and plants with lignified stem to the extent of growth non-cessation (non-stop growth);
  destruction or damage to forest crops, natural undergrowth and self-seeding, seedlings or saplings..." [24];
- other by-laws, draft laws and amendments to legal regulations in terms of regulation as to special use of forest resources and forest protection, as well as international acts in the field of environmental protection and environmental crime counteraction (illegal logging of trees).

As noted previously, illegal logging is conventionally divided into two groups depending on subjective composition of offense (crime).

1. Loggings carried out without special permit (that is, without logging permit, or they are also called unauthorised loggings). These are common ways of forest harvesting in the lack of right to harvesting. Subjects of such loggings are persons who have no legal relationship with the forest sector. For special use of forest resources of state importance (timber harvesting during felling for primary use), logging permits are issued by territorial authorities of forestry and hunting.
2. Loggings carried out on the basis of special permit, in the course of which serious violations were committed. Such loggings are carried out in the availability of permission document, but with non-compliance with conditions stipulated in it:
   a) not those trees specified in the permit (in particular, not those species or trees that are generally prohibited to cut down);
   b) not in areas specified in the permit (outside areas allocated for logging);
   c) not in the amount (exceeding the limit) specified in the permit;
   d) not within the terms specified in the permit (prior to the beginning or upon their completion) [25].

23 Про охорону навколишнього природного середовища : Закон України від 25.06.1991 р. № 1264-XII (зі змін. та допов.). URL: https://zakon.rada.gov.ua/laws/show/1264-12#Text (date accessed: 11.11.2022).

24 Про затвердження спеціальних такс для обчислення розміру шкоди, заподіяної порушенням законодавством про природно-заповідний фонд : Постанова КМУ від 10.05.2022 р. № 575. URL: https://zakon.rada.gov.ua/laws/show/575-2022-п#Text (date accessed: 11.11.2022).

25 Сторчоус О. Op. cit. С. 9—10. URL: https://fleg1.enpi-fleg.org/fileadmin/ufs/04.%20Program%20Information/4.02%20Program%20Components/4.02.05%20Public%20Awareness/Criminal_Liability_UA.pdf (date accessed: 11.11.2022).

According to Part 1, Art. 69 of the Forest Code of Ukraine, *"special use of forest resources in the allocated forest area shall be carried out with a special permit – a logging permit, or a wood ticket, issued free of charge"* [26].

Primary causes of illegal logging (as specified by State Forest Resources Agency of Ukraine):

- *social:* low level of socio-economic development in rural areas (high level of unemployment among population harvesting timber for satisfying vital needs, low wages, low investment activity, etc.);
- *economic:* gaining quick benefits by individual citizens or organized groups who harvest large-sized and valuable timber assortments for processing or commercial sale (main consumers of such timber are sawmills (power saw benches) operating outside applicable legislation) [27].

Cyclical nature of illegal logging is inextricably linked to the ups and/or downs of economic activity in the country. Statistics on the scope of forest violations provided in the public report of the Head of State Forest Resources Agency of Ukraine, state that *"the largest volume of logging was discovered in forests of enterprises of Zakarpattia Regional Department: 9.5 thousand cubic meters (SE 'Irshavskyi Forestry': 4.5 thousand cubic meters, SE 'Yasinya Forestry': 2.2 thousand cubic meters); of Kharkiv: 2.9 thousand cubic meters (SE 'Zhovtnevy Forestry': 1.0 thousand cubic metres); of Kherson: 2.0 thousand cubic metres (SE 'Holoprystanske Forestry': 1.2 thousand cubic meters); of Vinnytsia: 1.6 thousand cubic meters and Dnipro: 1.5 thousand cubic meters (SE 'Verkhnedneprovsky Forestry': 1.0 thousand cubic meters)"* [28].

This report also contains the following information: *"investigation into circumstances of illegal loggings demonstrates that main reasons for increase in their number are activities of technically equipped criminal groups, low level of population procurement, which is forced to satisfy its vital needs in illegal way, along with a great number of unregulated private sawmills buying illegally harvested timber. To a great extent, the spread of illegal logging in the southern and eastern regions of Ukraine contributes to the lack of budget funding for retaining 11 employees of the state forest protection, which prompts them to quit their jobs at their own will; consequently, impressive areas of forests are left unattended. During 2016–2021, the number of employees of the lower level of state forest protection decreased by more than 2,000 people, impeding high-quality exercise of powers by state forest protection"* [29].

Let's study into the *forest crime* scheme in Ukraine (according to Interpol and World Wildlife Fund):

1) logging (cutting down more than allowed by State Forest Resources Agency of Ukraine, or even cutting down without permits, or within natural reserves or their buffer zones);
2) transportation (without permits or several batches with permit issued

26 Лісовий кодекс України … . URL: https://zakon.rada.gov.ua/laws/show/3852-12#Text (date accessed: 11.11.2022).

27 Охорона лісів від незаконних рубок / Державне агентство лісових ресурсів України. URL: https://forest.gov.ua/napryamki-diyalnosti/lisove-gospodarstvo/ohorona-i-zahist-lisiv/ohorona-lisiv-vid-nezakonnih-rubok (date accessed: 11.11.2022).

28 Публічний звіт голови … . URL: https://forest.gov.ua/storage/app/sites/8/публічні%20звіти/publichniy-zvit-za-2021.pdf (date accessed: 11.11.2022).

29 Ibidem.

for one batch, transportation of more valuable timber according to documents for less valuable timber, crossing checkpoints for bribes);

3) processing (mixing batches of legal and illegal timber; according to the documents, a different amount of timber is processed than it actually is, or a different grade of wood is indicated);
4) export (unavailability of certificates for timber, their forgery or use of previous documents for new batches of goods, as well as transportation of one type of wood under the guise of another: for example, round timber, which export is prohibited from Ukraine, can be exported under the guise of firewood);
5) sale (buyers are provided with misleading information regarding the origin of timber or timber products or forge environmental certificates for products).

Forest crime increasingly quickly created adapts to new conditions and obstacles by governments and the environmental community, which can be traced on the basis of statistics on circulation of timber and its products between Ukraine and European Union states[30].

Investigation of environmental crimes against the environment, arising due to illegal logging, necessitates application of specific expertise from various fields and conducting relevant research, as the range of questions in such cases is rather extensive. For the purpose of investigating this type of crime, it is essential to appoint different types of forensic examinations in different expert specializations, as a result of which it is possible to obtain answers to questions raised. Therefore, forensic examination can be viewed as the most efficient way to fulfil investigative tasks in cases of crimes against the environment in general and illegal logging in particular, provided strict observance of requirements of criminal procedure law concerning appointment and conduct of this investigative action[31].

Analysis of law enforcement practice in the field of illegal logging and specialized literature gives grounds for proposing the following list of other forensic examinations, which appointment helps in solving addressed tasks: dactyloscopic, trace-evidence, forensic-economic, engineering-ecological and merchandising research, etc. We believe it is expedient to supplement this list with the latter, since during pre-trial investigation and trial of cases related to illegal logging, there is a necessity to determine the market value of round timber.

In National Standard 1 *General Principles of Valuation of Property and Property Rights* the *market value* term is defined as *“the value for which alienation of the appraisal object is possible on the market of similar property at the measurement date according to the agreement concluded between the buyer and the seller, after carrying out appropriate marketing, as long as each of the parties acted with knowledge of matter, prudently and without coercion”*[32].

Carrying out forensic examination implies availability of professional skills and abilities in the corresponding field, which basis is a combination of different

30 Кротюк А. М. Op. cit. DOI: 10.33270/01211181.24 (date accessed: 11.11.2022).

31 Олійничук Р. П. Op. cit. DOI: 10.35774/app2020.03.166 (date accessed: 11.11.2022).

32 Про затвердження Національного стандарту № 1 «Загальні засади оцінки майна і майнових прав» : Постанова КМУ від 10.09.2003 р. № 1440 (зі змін. та допов.). URL: https://zakon.rada.gov.ua/laws/show/1440-2003-п#Text (date accessed: 11.11.2022).

types of specific expertise and certain experience of their application in various situations. To resolve addressed tasks (questions), forensic experts in their practice use certain methodological approaches and research methods in the course of forensic examinations, which also fall within their competence.

Methodological approaches should be understood as general ways of assessing property value, stemming from basic principles of appraisal, which the forensic expert applies in the course of their activities in order to fulfil assigned expert task [33].

Conducting forensic merchandising examination while investigation of crimes related to illegal logging involves determining the market value of round timber. Accordingly, the object of this forensic examination is round timber (in particular, firewood for industrial and non-industrial use). While performing such research, a forensic expert may apply comparative approach: this is analysis of sales and offer prices with a corresponding adjustment of differences between comparison objects and appraisal object [34].

Timber is understood as wood materials that have preserved their natural physical structure and chemical composition and are produced by dividing logged trees and logs into parts (lengthwise or crosswise) for further use or processing; timber obtained by crosswise separation of the trunk of logged tree is considered round [35].

Recently, Ukrainian forest industry has switched to new national wood quality standards harmonized with European ones. They substantially amended approaches to determining size and quality characteristics of timber. If earlier commercial timber (round timber) in Ukraine was divided into three grades (I, II, III), which had a number of assortments based on their purpose (that is, commercial wood and fuel wood were harvested: firewood suitable for use only as fuel); then starting from 2019, there has been a new division of timber (as in European countries) into four quality classes (A, B, C, D) [36].

The principle of classification according to the European round timber standardization system is not based on the assortment (purpose), instead, it is based on indicators of size and quality of logs (larger diameter and minimum content of wood defects at the established increment corresponds to high-class quality):

- **A**: timber of the highest quality class predominatly originating from the lower part of the log, with clear wood or with minor defects that do not limit its use;
- **B**: timber of the average quality class without special requirements for clear wood and with knots within the mean value for each species;
- **C**: timber below the average quality class, in which defects are allowed that slightly reduce natural properties of timber as material;
- **D**: timber that does not comply with any of the previous quality classes, of which timber can still be acquired for further use;

33 Ibidem.

34 Ibidem.

35 Про затвердження Інструкції з ведення електронного обліку деревини : наказ Міндовкілля від 27.09.2021 р. № 621 (зі змін. та допов.). URL: https://zakon.rada.gov.ua/laws/show/z1343-21#Text (date accessed: 11.11.2022).

36 Троханенко О. М., Комісарова А. Д., Верба В. В. Op. cit. DOI: 10.51989/NUL.2021.4.41 (date accessed: 11.11.2022).

- remaining round timber of which it is impossible to obtain sawn timber for general use (they are classified as firewood for industrial and non-industrial use) [37].

The following classification of timber is given in the Instructions on keeping electronic records of timber:

"firewood for non-industrial use: timber of coniferous and deciduous type of wood, cut lengthwise and crosswise and/or chopped, used as fuel in such household wood-burning devices as stoves, fireplaces and central heating systems;

firewood for industrial use: coniferous and deciduous timber in the form of logs peeled from knots, usually with bark, intended for industrial use in production of heat and electricity, chips, shavings, pyrolysis, hydrolysis, etc. They can also be used, under contract (agreement) terms, as raw materials for production of wooden boards. At the request of consumer, they can be supplied both as round and split materials" [38].

According to calorific value, firewood intended for use as fuel, generation of heat and electricity, as well as pyrolysis is divided into the following groups of species:

- birch, oak, beech, ash, hornbeam, maple, elm, larch;
- pine, alder;
- spruce, cedar, fir, aspen, linden, poplar, willow [39].

Timber is obtained by mechanical processing of fallen trees and their parts. The trunk of fallen tree, cleaned of branches, top and stump, is called tree whip.

Conducting merchandising examination when assessing the market value of round timber first of all involves additional involvement of a specialist to measure timber, who must determine qualitative and quantitative characteristics of assortment (for round timber, these are the tree species, quality class, diameter, length; for firewood, these are tree species, species group, industrial / non-industrial use, diameter, length) and provide obtained results to a forensic expert for merchandising examination.

Forensic merchandising examination to determine the market value of round timber as well as firewood for industrial or non-industrial use should be carried out according to the following algorithm.

1. At the initial stage, it is vital to determine belonging of studied goods, taking into account measurements carried out by a specialist in the forest industry, using the measurement and calculation methods in compliance with ТУУ and ДСТУ (dimensions, volume / quantity).
2. To identify investigated objects at the market.
3. To determine the value of 1 cubic metres of timber at the moment of criminal offense commission on the basis of analyzing actual values of timber taking into account sections and area of harvesting according to the data of State Forest Resources Agency or price information placed on the websites of forestries as price lists.
4. To assess the market value of timber per units of volume considering species

37 Ibidem.

38 Про затвердження Інструкції з ведення … . URL: https://zakon.rada.gov.ua/laws/show/1440-2003-п#Text (date accessed: 11.11.2022).

39 ТУУ 00994207-005:2018 Деревина дров'яна. Класифікація, облік, технічні вимоги. URL: http://www.mdoffice.com.ua/pdf/tehnichni_umovi_1908021524.pdf (date accessed: 11.11.2022).

of tree, species group, industrial or non-indutrial use, diameter, length (for firewood) at prices at the moment of commiting criminal offense, applying the comparative approach.

Therefore, merchandising examination of round timber involves not only understanding the essence of the *round timber* concept, its classification features in compliance with new national standards, but also application of a corresponding algorithm in the course of such research, taking into account measurements provided by a specialist in the forest industry.

Enterprises of the forestry complex use price franking (timber distribution points). The Occupational Safety and Health Regulations for forestry and forest industry workers distinguish between the following types of landings: upper, lower, and intermediate timber landings and hauling routes. *"The upper timber landing is a timber landing located near logging road (highways, narrow-gauge railway) or a water body intended for temporary storage of wood raw materials, its loading on vehicles for further transportation to lower timber landings or points of consumption, intermediate timber landings, and if necessary, its processing (cleaning trees from branches and knots, full or partial bucking, debarking, etc.). The Lower Landing is a forest enterprise production site, where wood raw materials are pre-processed, sorted, and partially processed, timber and sawdust are stored, shipped to consumers and/or transported to woodworking shops of commercial timber, firewood for technological needs. An intermediate timber landing is timber industry landing where removal of wood raw materials by some means of transport ends and starts by others (to lower timber landings or points of processing or consumption). It is allocated for temporary storage of wood raw materials. Hauling routes (portaging, cable ways, ground timber chutes, lakes, tributaries of rivers and other water bodies) that connect upper timber landings, and sometimes even intermediate timber storage sites with cutting areas, or those which separate sections are located outside cutting areas»* [40].

Ecological disaster caused by deforestation can be prevented if plans for conservation and rational use of natural resources are implemented, as well as if criminal activity related to illegal logging is prevented. To prevent environmental crimes associated with illegal logging, Ukraine maintains the Unified Register of Logging Tickets and electronic accounting system of timber, checks the legality of timber origin (according to the tag and car number, under the waybill), monitors internal consumption of domestic unprocessed timber, etc.

Conclusions

The war in Ukraine made certain adjustments in prospects for the development of forestry, which should stimulate the search for new ways of urgent reforms in the forestry sector. Problems that have been arising since the beginning of hostilities negatively affect the environment. As a result, today Ukrainian forests can be conditionally divided into two groups: the first includes forests in territories temporarily occupied by the enemy or located in the cobat zone, and the second includes the rest

40 Про затвердження Правил охорони праці для працівників лісового господарства та лісової промисловості (зі змін.): Наказ Державного комітету України з нагляду за охороною праці від 13.07.2005 р. № 119. URL: https://zakon.rada.gov.ua/laws/show/z1084-05#Text (date accessed: 11.11.2022).

of forests. The protection of forests in occupied territories and in the combat zone is a serious problem, since scheduled logging of forests, carried out in peacetime by state and communal forestry, is practically not carried out; equipment is stolen or damaged; large-scale forest fires provoked by explosions and other factors are frequent; many foresters are at the front.

The entire Ukrainian economy has suffered huge devastating consequences, therefore the priority tasks for the Ministry of Ecology and Natural Resources of Ukraine, State Forest Resources Agency of Ukraine are to ensure the legality of all loggings in areas where hostilities are not taking place as well as to prevent corruption schemes in the timber market.

Since environmental crimes happen all the time, forensic merchandising examination to assess timber market value gains significance, as forensic examination is the most efficient way of fulfiling investigative tasks in this area.

Conducting forensic merchandising examination while investigation of crimes related to illegal logging involves determining the market value of round timber and firewood for industrial or non-industrial use.

Merchandising examination of timber involves obtaining timber measurements from a specialist in the forest industry, understanding their classification features based on new national standards, and applying the algorithm for determining their market value.

New challenges taking place under martial law require employees of the Expert Service of the Ministry of Internal Affairs to respond quickly while solving addressed forensic tasks both at the stages of the pre-trial investigation and subsequent court proceedings.

Особливості проведення судової товарознавчої експертизи, пов’язаної з незаконною порубкою лісів в Україні

Ірина Сівчук

Статтю присвячено дослідженню особливостей проведення судової товарознавчої експертизи під час розслідування злочинів, пов’язаних із незаконною порубкою лісів в Україні. Обґрунтовано негативний вплив незаконної порубки на навколишнє середовище та зазначено зміни, які виникають на територіях порубаних лісів. Натомість порубки, пов’язані з веденням лісового господарства, спрямовані на забезпечення охорони, оздоровлення, посилення захисних властивостей та підвищення продуктивності лісів та інших лісогосподарських угідь. Метою статті є теоретичне обґрунтування особливостей проведення судової товарознавчої експертизи з визначення ринкової вартості круглих лісоматеріалів під час розслідування злочинів, пов’язаних із незаконною порубкою лісу, та виокремлення ключових аспектів проведення такого дослідження за допомогою запропонованого алгоритму дій. Проведене дослідження ґрунтується на застосуванні порівняльного підходу, що передбачає аналізування цін продажу та пропозицій такого виду лісоматеріалів. Також розглянуто визначення термінів «лісоматеріали», «круглі лісоматеріали», їх класифікацію та характеристику. Товарознавча експертиза круглих лісоматеріалів передбачає отримання вихідних даних щодо вимірювання параметрів деревини та застосування певного алгоритму дій із метою визначення їх ринкової вартості. Проаналізовано нові національні стандарти якості деревини та

обґрунтовано необхідність залучення фахівця-спеціаліста лісової промисловості під час проведення судової товарознавчої експертизи.

Ключові слова: *круглі лісоматеріали; екологічні злочини; незаконна порубка лісу; товарознавча експертиза; дров'яна деревина промислового використання; дров'яна деревина непромислового використання; клас якості лісоматеріалів.*

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Declaration of Competing Interest

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VI Kharkiv International Legal Forum — a Crucial Event of Legal Direction

One of the largest events in the legal sphere this year, despite the war in Ukraine, is holding the VI Kharkiv International Legal Forum at Yaroslav Mudryi National Law University on October 4—7, 2022. The event was attended by more than 1,000 specialists in various branches of law from all Ukrainian regions and 30 countries of the world (including Great Britain, the USA, France, the Netherlands, Germany, Italy, Switzerland, Denmark, Norway, Lithuania, Slovenia, Slovakia, Serbia, Azerbaijan, Kazakhstan, Uzbekistan, Taiwan, Malaysia, Brazil, etc.). More than 40 speakers joined the discussion: widely known Ukrainian and foreign jurists, employees of state law enforcement agencies, representatives of leading international courts (in particular, the International Criminal Court, the European Court of Human Rights) and scientific institutions, as well as non-government human rights organizations, etc.

Today, Kharkiv International Legal Forum is the nationwide event of legal orientation, organized due to the close and fruitful cooperation of the Ministry of Economy, the Ministry of Education and Science, the Ministry of Justice, the National Academy of Legal Sciences of Ukraine, and Yaroslav Mudryi National Law University (in accordance with Order No. 656-p of 19.09.2018 of the Cabinet of Ministers *On Holding the Kharkiv International Legal Forum*). Although Russia's unjustified and unprovoked aggression against Ukraine prevented the organization of the Forum in the usual offline mode, the participants had the opportunity to discuss the most pressing issues for the global community during online events. This scientific and practical action addressed a number of the most pressing legal problems in the conditions of war and global threats of the 21st century and combined many thematic

areas and forms of their implementation, including panel discussions, satellite events, round tables, presentations, master classes, lectures, etc.

The forum was opened by ***Anatoliy Getman***, Rector of Yaroslav Mudryi National Law University, Doctor of Law, Professor, Honored Worker of Science and Technology of Ukraine, the State Prize of Ukraine Laureate. He noted that the Kharkiv International Legal Forum is the platform for more than 1,000 guests from all corners of Ukraine (in particular, 40 Ukrainian and foreign speakers) to discuss the most pressing legal issues of our time during global panel discussions and practical thematic events because *at the time of full-scale Russia's invasion of Ukraine, solving urgent issues of protection of war victims, legal protection of the affected population and compensation for the damage is on the agenda of every state institution, every scientific institution or non-governmental organization operating on the territory of Ukraine and beyond. The panel discussions of the VI Kharkiv International Legal Forum are devoted to the role of international forensic institutions and the modern challenges of protecting persons affected by the war in Ukraine. Researcher of these complex questions and finding answers to them is the task of this meeting. For this reason, the discussion with the participation of widely known national and international experts, employees of national bodies working in this field, representatives of key international forensic institutions — the International Criminal Court, the European Court of Human Rights, leading educational and scientific institutions, non-government human rights organizations will bring significant benefit to Ukraine and all Ukrainians affected by aggression, war crimes, crimes against humanity and, presumably, genocide*.

Within the framework of the Forum, which has been organized for the sixth time on the basis of Yaroslav Mudryi National Law University, 10 panel discussions took place:

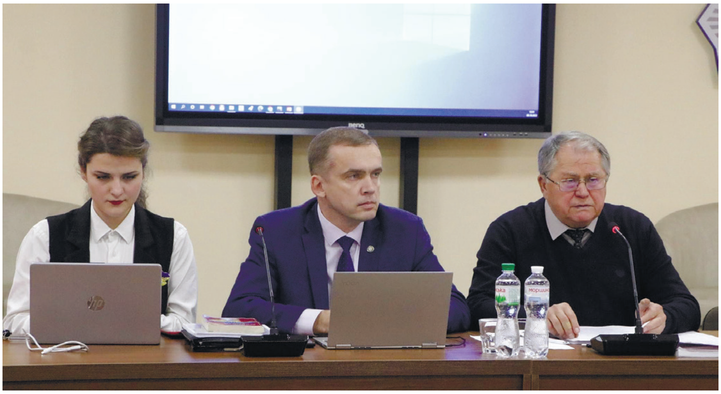
1) *Protection of War Victims in Ukraine*;
2) *International Standards of Civil Justice: Wartime Challenges and Adaptation to EU Legislation*;
3) *Ukraine's path to EU Membership: challenges and perspectives*;
4) *Sustainability in transition: corporate respect for solidarity*;
5) *Ukraine – EU: problems and directions of adaptation of financial legislation*;
6) *Problems of adapting the criminal legislation of Ukraine to the acquis communautaire of the European Union*;
7) *Platform solutions: legal aspect of interaction between the state and taxpayers*;

8) *Scandinavian approach to sustainable development: history and current trends*;
9) *Food security in the conditions of global challenges: national-legal and international aspects*;
10) *Law and War: Voices of Philosophers*.

During the Forum, satellite events were also planned, namely a workshop with a presentation of the new Center of Excellence *Artificial Intelligence, Discrimination, and Prediction*; the webinar *The procedure for appointing judges: what are the possible reforms to increase the legitimacy of the Constitutional Courts?*; round table *Discussion of models of cooperation of domestic law schools with foreign partners in the conditions of war in Ukraine*.

The panel discussion *Protection of War Victims in Ukraine* deserves special attention (co-organizers: Research Center for Transitional Justice of Yaroslav Mudryi National Law University, Leibniz Institute for East and Southeast European Studies, Project *Sunflowers*, Center for International Humanitarian law and transitional justice), within which Ukrainian and foreign scientists raised many pressing issues regarding the protection of the rights of victims of Russian aggression and compensation for war victims with the help of international law and human rights.

The work of the panel consisted of two components: *The Role of International Judicial Institutions in the Protection of Victims of War* (moderator — Dr. ***Cindy Wittke***, Regensburg, Germany; Head of Political Science Research Group, Leibniz Institute for East and Southeast European Studies (IOS)) and *Current Challenges of the Protection of Victims of War in Ukraine* (moderator — Dr. ***Ewa Hofmańska***, President of the Foundation Sunflowers).



Reports were made by ***Mykola Gnatovskyy***, Judge at the European Court of Human Rights (*Protection and Redress to Victims of War Through International Law of Armed Conflict and Human Rights Law in the Context of Russia's War Against Ukraine*); ***Paolina Massidda***, Principal Counsel of the Office of Public

Counsel for Victims (OPCV) at the ICC (*Securing the Rights of Victims Before the ICC*); ***Anton Korynevych***, Ambassador-at-large in the Ministry of Foreign Affairs of Ukraine (*The Road to Establishment of the Special Tribunal for the Crime of Aggression against Ukraine*); ***Oksana Senatorova***, Director of the Research Centre for Transitional Justice (RCTJ) at Yaroslav Mudryi National Law University, a fellow at Leibniz Institute for East and Southeast European Studies (*Gordian Knot of Approaches to Define the Victim of Armed Conflict and Redress: Cut or Untie*); ***Kateryna Busol***, Senior Lecturer at the National University of Kyiv-Mohyla Academy and a fellow at the Leibniz Institute for East and Southeast European Studies (*The Dynamics of Conflict-Related Sexual Violence in the Russia-Ukraine Armed Conflict and Survivors' Preferences for Reparations*); ***Alla Fedorova***, PhD, Associate Professor of the Department of Comparative and European Law of the Institute of International Relations of Taras Shevchenko National University of Kyiv, expert of the Council of Europe Projects *Internal Displacement in Ukraine: Development of Durable Solutions. Phase II* and *Development of social human rights as a key factor of sustainable democracy in Ukraine*, international expert of the European Social Charter Department of the Council of Europe (*The Case-law of the European Court of Human Rights Regarding Compensation for Damage Person's Life and Health During Armed Conflicts*).

Foreign and Ukrainian scientists tried to find out answers to by far the most critical and significant issues: fragmentation of victim protection in various fields of international law; different approaches to identifying war victims in Ukraine, gaps in legal protection of victims; possible mechanisms for protecting the rights of victims of this armed conflicts (International Criminal Court, European Court of Human Rights, Special Tribunal for Aggression, special compensation mechanism, etc.); judicial, quasi- and extrajudicial mechanisms as means of compensation for harm to victims; the role of victims in victim-oriented processes of transitional justice in Ukraine; women and children as the most vulnerable categories of victims in this war; reparation strategy for victims of ongoing armed conflict.

Scientists drew attention to the fact that international crimes committed during this war should be prosecuted in all possible jurisdictions, both national and international (International Criminal Court, Special Tribunal for the Crime of Aggression against Ukraine), and victims should receive legal protection and compensation for damages. The problem of reparations is complicated by the lack of unified international instruments and mechanisms for responding to such challenges — compensating such a significant number of victims. Every branch of international law (humanitarian, criminal, human rights) has a different definition of the concept of a victim. Only a few of them have effective reparative mechanisms with limited competence: the jurisdiction of the European Court of Human Rights is limited by Russia's withdrawal from the European Convention on Human Rights, and the International Criminal Court can only compensate victims of crimes committed by persons found guilty.

The panel discussion aroused the special attention of the Forum participants *Problems of adapting the criminal legislation of Ukraine to the acquis communautaire of the European Union* (moderator — ***Yuriy Baulin***, Professor, Doctor of Law, Professor of the Department of Criminal Law in the Yaroslav Mudriy National Law University, Head of the Working Group on the Development of Criminal Law of the Committee on Legal Reform, Academician of National Academy of Legal Sciences of Ukraine), the work of which was simultaneously on four discussion platforms: Ukrainian — at Lviv State University of Internal Affairs; Polish — at Jagiellonian University; Lithuanian — at Vilnius University and Croatian — at University of Zagreb.

The experience of their countries, which have already gone through the process of adapting the national criminal legislation to the acquis communautaire (hereinafter referred to as AC), was shared by ***Włodzimez Wrubel***, Professor, Dr.Hab., Head of the Department of Criminal Law of Jagiellonian University and ***Dominik Zayonc***, Associate Professor of the Department of Criminal Law of the same university (*Criminal Code and Implementation of the Requirements of the Legal Acts of the European Union in Polish Criminal Law*); ***Suntsana Roksandich***, Doctor of Sciences, Associate Professor, Professor of the Department of Criminal Law of University of Zagreb (*Implementation of the requirements of the legal acts of the European Union into the national Criminal Code: the experience of Croatia*); ***Gintaras Švedas***, Professor, habilitated doctor, Head of Criminal Justice Department of Vilnius university (*Implementation of requirements of legal acts of the European Union to national criminal law: features of the process and main difficulties (experience of Lithuania)*).

Ukrainian tasks in this area and the ways of their implementation were reported by ***Mykola Khavroniuk***, Doctor of Law, Professor of the Department of Criminal and Criminal Procedural Law at the National University of Kyiv-Mohyla Academy (*Problems of adapting the provisions of the General part of the current and prospective criminal legislation of Ukraine to the EU criminal law*); ***Yurii Ponomarenko***, Doctor of Law, Head of the Department of Criminal Law at Yaroslav Mudriy National Law University (*Implementation of acqui communautaire requirements to the provisions of the Special part of the criminal legislation of Ukraine*).

Based on the results of the scientific reports and their discussion, the panel discussion participants agreed on the following:

1) in the field of substantive criminal law, there are at least 30 directives, framework decisions or other acts that directly reflect AC of the European Union; some more AC acts contain definitions of concepts relevant to criminal law;
2) AC acts contain norms of at least the following institutions of the General part of criminal law:
   - limits of the criminal law in space,
   - incompleteness of criminal offense,
   - complicity in a criminal offense,
   - punishment,
   - exemption from punishment,
   - other criminal legal means for individuals,
   - grounds for liability of a legal entity,
   - criminal legal means for legal entities;
3) The special part of criminal legislation should implement the requirements of the AC regarding the following criminal offenses:
   - terrorism,
   - human trafficking,
   - sexual exploitation of women or children,
   - illegal trade in narcotics,
   - illegal arms trade,
   - money laundering,
   - corruption,
   - forgery of means of payment,
   - computer,
   - fraud in the sphere of EU financial interests,
   - market abuse,
   - sea pollution,
   - illegal entry, transit or residence,
   - racism and xenophobia.

   (For all these criminal offenses in the acts of the Criminal Code, certain or all signs of their components are stipulated, and for most of them — also the types and sizes of punishments.);
4) aside are the requirements of some acts, which provide for circumstances that increase or decrease the severity of the criminal offense and which can be implemented both in

the norms of the General Part (institution of punishment) and in the norms of the Special Part (construction of qualified and privileged components);

5) the requirements for the implementation of the AC into national criminal legislation for states that are candidates for EU membership are stricter than for states that are already EU members. Therefore, Ukraine is obliged to provide the monitoring committee with comprehensive information on the implementation of each of the requirements in its national criminal law;
6) the implementation of the requirements of the AC does not mean the mechanical transfer of their texts to the national legislation and must take into account the features of the main criminal law institutions of the relevant state, the structuring of its criminal law, its terminology, the used techniques of legislative technique, etc.;
7) in modern Ukrainian realities when the work on the draft of the new Criminal Code (hereinafter referred to as CC) has already reached its final stage, the implementation of the requirements of the AC to national criminal legislation involves the simultaneous bringing into line with EU standards both the prescriptions of the current Criminal Code and the provisions of the draft of the future Criminal Code. Ultimately, the adaptation of the prescriptions of the current CC to the requirements of the AC will contribute to the approval of the relevant provisions of the new CC.

During the plenary session, Forum participants, foreign and Ukrainian scientists actively discussed the presented reports and formulated recommendations for solving the most pressing and debatable problems that became the subject of discussion. The problems of international cooperation in various areas of jurisprudence, the exchange of positive foreign experience in law enforcement and law enforcement activities have gained special importance. It is worth noting separately the close interaction of Ukrainian and foreign scientists in the development of promising directions for improvement and ways of solving current problems of domestic and international legislation.

VI Kharkiv International Legal Forum has become an important event of the legal direction and the legal sphere this year. The discussion panels of the Forum made it possible to create a platform for fruitful professional discussion of practical challenges to the domestic legal system and judiciary during the war, as well as further adaptation of Ukrainian legislation to

EU legislation. The forum became an open international platform for a transparent and open polylogue about the problems most relevant for the world legal community, for discussion and development by Ukrainian and foreign experts of joint approaches to solving urgent legal problems in the context of war, global threats of the 21st century on the way to further sustainable development civilization.

In today's realities, the Kharkiv International Legal Forum and legal science united scientists from all countries of the world, gave hope for our victory and the advent of peace on the entire planet, outlined the prospects for further peaceful and sustainable development. We are deeply grateful to everyone who supports Ukraine in this difficult time! We will overcome injustice with the rule of law, injustice with truth, war with peace! Glory to Ukraine!

*Information was prepared by **Viktor Shevchyuk**,*
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- Conclusions (main research results in a clear, consistent, logically presented form in compliance with set goal)*;*
- References (the list of used sources transliterated according to the Roman alphabet, for example, on the site of Vernadsky National Library of Ukraine: *http://nbuv.gov.ua/node/929*);
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