

Forensic science activity in globalization context

Pavlos Kipouras *^a, Inessa Ovsianynkova **^b

* Prof of “Scuola Forense di Grafologia”, Prof of “Scuola di Grafopatologia Forense”, Prof of “Scuola Superiore di Perize” (Prato, Italy), Athens, Greece, ORCID: <https://orcid.org/0000-0002-4021-7584>, e-mail: kippaolo@gmail.com

* PhD Student, Scientific Center «Hon. Prof. M. S. Bokarius Forensic Science Institute», Kharkiv, Ukraine, ORCID: <https://orcid.org/0000-0002-3351-7781>, e-mail: hniise@hniise.gov.ua

^a Project management, Methodology.

^b Conceptualization, Writing — original draft.

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International forensic science activity in modern realities is becoming increasingly popular and characterized by increasing globalization processes in international relations, creation of a single information space, in which transnational relations of human rights and law enforcement organizations and forensic institutions, as well as individual forensic experts and scientists specializing in forensic science and forensic science activity.

This article purpose is to consider standardization and accreditation procedures (as the main areas of international cooperation in the field of forensic science activity in the context of globalization) and key tools for recognizing research results and forensic expert conclusions. Emphasis is placed on the fact that application of international standards in the field of forensic science is a priority that contributes to increasing reliability, transparency and confidence in forensic evidence and conclusions made by forensic expert.

It was emphasized that one of the important factors in improving efficiency of forensic science at the international level is cooperation with the European Network of Forensic Science Institutes (ENFSI) whose main activity is to improve information exchange of in forensics and improve of forensic science quality. Certain steps are proposed on the way for ensuring forensic expert independence, improving quality of forensic expert conclusions provided and effectiveness of forensic science activity in general.

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Research Problem Formulation

In the context of globalization, each State is trying to create its own tools for solving urgent problems relying on the support of other states. This is due to the fact that global problems are deterministic; they have not yet solved one, as another emerges in time, even more complex.

An important role in preventing and overcoming globalization challenges is to develop effective governance mechanisms. One way or another, modern world should come to terms with the irreversibility of modern globalization processes and develop mechanisms to mitigate or even prevent their negative effects.

One of the important mechanisms for solving and preventing global problems is the developed cooperation between the states in the political, economic, humanitarian, information and military fields ¹. This statement also applies to forensic science. Its effective development in the current conditions of globalization and democratization of public relations necessitates thorough research and implementation of international experience in this field, bringing national legislation in line with modern

international standards and strengthening international cooperation between its actors.

Analysis of Essential Researches and Publications

In recent years, globalization has become one of the most widely used concepts in various scientific fields, while a single conceptual system of views on understanding its content and the impact nature has not yet been formed. As a multifaceted concept, globalization has several dimensions: financial, economic, political, etc. ² Clarifying essence of *globalization* concept causes a lot of discussions in scientific community, within which they comprehend theoretical and methodological approaches to this category content and create appropriate research areas and schools of thought. Globalization as a social phenomenon in different research traditions is viewed from different angles. At the same time, despite numerous attempts by scholars to offer a meaningful interpretation of this concept, it still remains methodologically contradictory and has a rather vague semantic meaning.

Thus, according to N. Kosolapov, "*Globalization is a qualitatively independent, complex system of phenomena and relations,*

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- 1 E.g.: Войтович Р. В. Вплив глобалізації на систему державного управління (теоретико-методологічний аналіз) : монографія / за заг. ред. д-ра філософ. наук, проф. В. М. Князева. Київ, 2007. С. 639. URL: <http://www.dut.edu.ua/ua/lib/1/category/1179/view/1730> (date accessed: 24.11.2021).
 - 2 Yameogo C. E. W., Omojolaibi J. A., Dauda R. O. S. Economic globalisation, institutions and environmental quality in Sub-Saharan Africa. *Research in Globalization*. 2021. Vol. 3. 100035. P. 1–9. DOI: 10.1016/j.resglo.2020.100035 (date accessed: 24.11.2021).

holistic in its systemic but internally contradictory"³.

An important role in the context of clarifying essence of globalization belongs to the distinction between categories of *globality* and *transnationality*. This approach, in particular, is shared by M. L. Cheshkov, who understands transnationality as a moment, aspect of globalization with its spaces⁴.

A slightly different position in understanding this distinction belongs to U. Bek, who identifies transnational forms with international, macro-regional, intra-national ones⁵. Accordingly, he considers globalization through its multilevel and ambiguity of concrete existence forms.

A particularly important role in elucidating globalization essence belongs to the field of economic sociology, which methodological basis are research papers of such researchers as M. Weber, T. Veblen, E. Durkheim, M. Polanyi and others⁶. Thanks to these researches, for the first time globalization essence processes is sociologically substantiated.

No less important for the attempt to clarify the meaning of globalization is the school of international political

economy, especially developed in the Anglo-Saxon countries. The globalization essence is explained by most researchers who represent this area through the relationship between interstate relations and the economy. R. Underhill, L. Weiss, D. Held and others⁷ raise the question of the extent to which foreign policy affects world economic processes and thus leads to establishment of common standards of socio-economic and political development.

Indeed, currently approximation of national legislation to civilized world standards in the field of human rights requires compliance with international legal and professional standards. In globalization context, improving process of forensic science efficiency should take place not only by improving the legal regulation of forensic science and expanding the range of forensic expert tasks but by adopting and implementing the best World and European experience.

In the professional legal readings, the subject topic was international standards of human rights, evidence, pre-trial investigation, and other standards in the field of justice. The issue of international standards of forensic science is also

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- 3 Косолапов Н. Глобализация: сущностные и международно-политические аспекты. *Мировая экономика и международные отношения*. 2001. № 3. С. 69–73.
 - 4 Чешков М. А. Смысл противостояния: не альтернативность, но вариабельность. *Там же*. 2002. № 6. С. 28–39.
 - 5 Бек У. Общество риска. На пути к другому модерну : пер. с нем. Москва, 2000. С. 123.
 - 6 Е.г.: Вебер М. Соціологія. Загальноісторичні аналізи. Політика ; пер. з нім. О. Погорілий. Київ, 1998. 534 с. ; Veblen T. *The Theory of the Leisure Class: An Economic Study of Institutions*. New York, 1899. 400 p. ; Ibidem. *The Place of Science in Modern Civilisation and Other Essays*. New York, 1919. 476 p. ; Дюркгейм Э. Социология. Ее предмет, метод, предназначение ; пер. с фр. А. Б. Гофмана. Москва, 1995. 352 с. ; Polanyi M. *Science, Faith and Society: Eighteenth Series Riddell Memorial Lectures*. London, 1946. 84 p.
 - 7 Е.г.: Coleman W. D., Underhill G. D. *Regionalism and Global Economic Integration*. London, 1998. 264 p. DOI: 10.4324/9780203058350 (date accessed: 24.11.2021) ; Weiss L. *The State Augmenting Effects of Globalisation*. *New Political Economy*. 2005. Vol. 10. № 3. P. 345–353. DOI: 10.1080/13563460500204233 (date accessed: 24.11.2021) ; Ibidem. *The Myth of the Powerless State: Governing the Economy in a Global Era*. Oxford, 1998. 280 p. ; Held D., McGrew A. *Globalization theory: approaches and controversies*. Cambridge – Massachusetts, 2007. 288 p.

the subject of research in the works of many scholars and practitioners⁸. At the same time, we should agree with O. P. Uhrovetskyi and V. Ye. Malanchak, who consider the prerequisites for improving efficiency of forensic science to improve its legal basis, build a model of cooperation between forensic science institutions of Ukraine and EU countries based on international standards, human rights and freedoms in the field of justice, at the same time calling these preconditions theoretical and applied issues, that are still insufficiently developed and which need more attention from the scientific community⁹. According to O. M. Kliuiev, the participation expansion of forensic institutions in international cooperation, strengthening their role in the further development of the theory and practice of criminalistics and forensic science is a topical issue at the present stage¹⁰.

Thus, the solution of these issues is relevant for further research in order to form a theoretical and legal framework and practical recommendations.

Article Purpose

For considering standardization and accreditation as the main areas of

international cooperation in the field of forensic science in globalization context.

Main Content Presentation

Nowadays, ties between countries are deepening, transforming different States into a single global system. Globalization has a significant impact on modernization of national public administration systems. It provides new opportunities for human development, becoming “*integration of interests and opportunities in real time*”, canceling historical time and, to some extent, even space. Theoretically, currently, any country and any nation, regardless of the specifics of its history, can enjoy economic, geopolitical and technological advantages that open up before if they are opened to the international community¹¹. Globalization concept, forming a certain categorical complex to describe nature and character of civilizational changes has its own semantic load. This concept is actively used to describe modern changes in life, transition of humanity to a qualitatively new level; from the national-state to the transnational phase of societies and the post-industrial, informational phase of social development in general. Globalization concept has become one of

- 8 E.g.: Ключев О. М. Міжнародні стандарти та міжнародне співробітництво у сфері судово-експертної діяльності в Україні. *Актуальні питання судової експертизи та криміналістики* : зб. мат-лів міжнар. наук.-практ. конф., присвяч. 95-річ. створ. ХНДІСЕ ім. Засл. проф. М. С. Бокаріуса (Харків, 10–11.10.2018). Харків, 2018. С. 5–8 ; Чернявський С. С., Чорноус Ю. М. Міжнародні стандарти судово-експертної діяльності. *Актуальні питання судової експертизи і криміналістики* : зб. мат-лів міжнар. наук.-практ. конф.-полілогу (Харків, 15–16.04.2021). Харків, 2021. С. 86–88.
- 9 E.g.: Угровецький О. П., Маланчак В. Є. Напрямки формування сучасного теоретичного підґрунтя судово-експертної діяльності в Україні. *Судова експертиза: сучасність та майбутнє* : зб. мат-лів кругл. столу (Львів, 25.01.2018). Львів, 2019. С. 132–135.
- 10 Kliuiev O. International Research Cooperation is Effective Mechanism for Forensic Science Improvement. *Archives of Criminology and Forensic Sciences*. 2021. № 1(3). P. 34–40. DOI: 10.32353/acfs.3.2021.02 (date accessed: 19.11.2021).
- 11 Войтович Р. Модернізація державного управління в умовах глобальної інтеграції. *Вісник Національної академії державного управління при Президентові України*. 2013. № 2. С. 14–23. URL: http://nbuv.gov.ua/UJRN/Vnadu_2013_2_4 (дата звернення 24.11.2021).

the most common tools for analyzing social processes in modern social science ¹².

Globalization has boosted productivity and economic growth for decades. It has helped integrate developing countries, spread technology, knowledge, culture and create an interconnected global community ¹³. Globalization in its modern version leads to *reformatting* structure of the modern world resulting in adjusting national systems of government, changing economic strategies, political and spiritual development creating a continuous interdependence of states that is the world basis. Interdependence of countries is increasing unifying and standardizing conditions and factors of development of individual states that is a kind of indicator of determining sustainability level of nation states, their potential to meet globalization challenges, that currently become the main criterion for integration. Only State that has an active governance system, implements its own geopolitical development strategy, maximally protects sovereignty, orients itself in global space and most importantly, has effective mechanisms of influence and manages them is able to resist such globalization challenges ¹⁴.

Specificity of the current globalization stage is primarily that it is a multifaceted process of significant change. It is known that the main condition for globalization is formation of a single political space,

that should ensure the development of a single political language that would serve as a basis for understanding between world cultures. Without this, the political dialogue of civilizations remains at the level of nominal constructions, and is by no means a political practice of effective development of states ¹⁵. T. O. Kolomoiets and P. O. Baranchyk rightly noted that in today's globalized world, the problem of rule of law goes beyond State borders ¹⁶. Without avoiding the development of legal science and law, globalization processes have their own specifics in various fields, including forensic science.

Modern challenges in the field of forensic science are due to a number of important factors, the main of which is the growth of transnational crime; international terrorism; illegal migration; digital transformation of all branches of human activity; rapid development of information technology and telecommunications; problems with respect for human rights ¹⁷. Without integration with the international community, it is not possible to fully provide justice with quality expertise, so it is necessary to learn from foreign experience and use these developments to improve the efficiency of forensic science in our country. This is the reason for the need to improve forensic science in Ukraine with its transfer to a new level of use of specific expertise using the best world practices.

12 Шайгородський Ю. Глобалізація: неминучість концептуальних змін. *Політичний менеджмент*. 2012. № 3 (54). С. 64–75.

13 Chimmanee K., Jantavongso S. Practical mobile network planning and optimization for Thai smart cities: Towards a more inclusive globalization. *Research in Globalization*. 2021. Vol. 3. P. 1–15. DOI: 10.1016/j.resglo.2021.100062 (дата звернення 24.11.2021).

14 Е.г.: Войтович Р. В., Солоха М. Т. Глобалізаційні процеси в сучасному світі : навч.- метод. мат-ли ; уклад. Г. І. Бондаренко. Київ, 2013. С. 4.

15 Ibid. С. 6.

16 Коломoeць Т. О., Баранчик П. О. Принципи адміністративного права : монографія. Запоріжжя, 2012. С. 69.

17 Смирнова С. А. Современные тренды развития судебной экспертизы. *Судебная экспертиза: вчера и сегодня* : сб. мат-лов науч.-практ. конф., посвящ. 70-лет. Республик. центра судеб. эксперт. им. Х. Сулаймановой (Ташкент, 30.06–01.07.2021). Ташкент, 2021. С. 13–18.

Globalization processes of in forensic science are implemented primarily through adaptation of national legislation on forensic science to European and unification of forensic research methods for all forensic institutions by accrediting them in accordance with international quality standards¹⁸. Many scholars and practitioners aptly point out impossibility of forensic science existence within a single state and emphasize the need for forensic science responsibility in the country to comply with national principles and international legal and professional standards¹⁹.

International standards exist in any field of legal regulation, but they are often identified with standards regulating technical field, as they are the most common.

However, currently it is difficult to imagine any area of public life in which there are no generally accepted international standards²⁰. Standardization is the main mechanism for organizing and maintaining a high level of quality in forensic science.

International conventions enshrine the principles of protection of human and civil rights, namely: the right to a fair trial within a reasonable time and the obligation of the state to effectively investigate any violations of fundamental human rights. Adherence to these principles should reassure everyone that forensic experts use reliable research techniques to obtain objective data, regardless of forensic agency or private expert will conduct the research²¹. Implementation of international standards in national legislation increases confidence in forensic expert conclusions and allows to reach a higher level of development of public relations (in particular, in forensic science activity).

The *international standards* term is used in various spheres of public life: it describes the requirements for certain activities, considering international law, world experience and practice of individual states. According to the Law of Ukraine: *On Standardization*, “*international standard is standard adopted by an international organization for standardization and available to a wide range of users*”²².

- 18 E.g.: Сімакова-Єфремян Е. Б. До питання про взаємозалежність європейських інтеграційних процесів і тенденцій інтеграції спеціальних знань в Україні. *Теорія та практика судової експертизи і криміналістики* : зб. наук. пр. 2017. Вип. 17. С. 152–158. DOI: 10.32353/khrife.2017.18 (date accessed: 19.11.2021).
- 19 E.g.: Клименко Н. І., Купрієвич О. А. Міжнародне співробітництво судово-експертних установ. *Вісник кримінального судочинства*. 2015. № 4. С. 130–134 ; Клименко Н. І. Міжнародне значення судово-експертної діяльності. *Судово-експертна діяльність: сучасний стан та перспективи розвитку* : зб. мат-лів кругл. столу. Київ, 2015. С. 165–168. URL: <http://elar.naiu.kiev.ua/jspui/handle/123456789/9038> (date accessed: 20.11.2021) ; Матвеевський О. В., Бабін Б. В. Міжнародно-правові стандарти судової експертизи та їх національна реалізація. *Прикарпатський юридичний вісник*. 2018. Вип. 1 (22). Т. 4. С. 73–79. URL: http://www.pjv.uoua.od.ua/v1-4_2018/16.pdf (date accessed: 19.11.2021).
- 20 Русецький А. А. Про організацію судово-експертної діяльності: міжнародний аспект. *Теорія та практика судової експертизи і криміналістики* : зб. наук. пр. 2017. Вип. 17. С. 158–165. DOI: 10.32353/khrife.2017.19 (date accessed: 19.11.2021).
- 21 E.g.: Андреева О. Б., Шарапова О. В. Визначення наукової обґрунтованості судово-експертних методик крізь призму міжнародного досвіду. *Актуальні питання судової експертизи та криміналістики* : зб. мат-лів міжнар. наук.-практ. конф., присвяч. 100-річ. від дня народж. д-ра юрид. наук, проф., засл. діяча науки і техн. Укр. М. В. Салтевського (Харків, 07–08.11.2017). Харків, 2017. С. 85–87.
- 22 Про стандартизацію : Закон України від 05.06.2014 р. № 1315-VII (зі змін. та допов.). URL: <https://zakon.rada.gov.ua/laws/show/1315-18#Text> (date accessed: 19.11.2021).

Thus, international standard is the one developed by the *International Organization for Standardization* (ISO). According to the Great Explanatory Dictionary of the Ukrainian language: “*International in relation to relations between peoples and countries existing between nations, extends to; in which representatives of different countries and peoples take part, and “standard is norm, sample, measure”*”²³.

Thus, international standards are a source of critical information, as they contain norms and rules based on advances in various fields of technology, technology and practical experience and recognized by consensus by representatives of all stakeholders²⁴.

Standardization of forensic activity is considered as a tool for building institution management system of providing quality and efficient research and, as a result, meet the needs of customers.

In the context of the of forensic science reform, world experience in the form of international standards should be taken as a basis and move in the same direction with colleagues from the entire forensic community of countries that share this approach. The efforts of professionals to influence changes in legislation and regulations should be aimed at developing uniform rules and regulations under which all subjects of forensic science, forensic

science activity and all stakeholders will receive a result that will beyond doubt²⁵.

European practice of implementing legal standards indicates the existence of mandatory standards and standards that are of a recommendatory nature²⁶. Mandatory standards are based on legal norms that require proper conduct. This standard specific mostly recognizes the general development legal system direction, because by their legal nature, these rules are norms-principles and have a constitutive nature.

Optional standards are of a recommendatory nature and are a product of international law of the XX century, when the speed of their development did not coincide with capabilities and desires of individual States.

The division of European legal standards into outlined varieties has led to the functioning of law in the usual sense which is binding and “soft” law²⁷.

It should be noted that it is in the process of development of standardization in European law is a kind of development of social relations in the European Union (hereinafter referred to as *EU*). Defining the European legal standard as a separate category of European law, we should note that this term is used broadly as a legal standard that contains elements such as general principles of EU law and

23 Великий тлумачний словник сучасної української мови (з дод. і допов.) / уклад. і голов. ред. В. Т. Бусел. Київ ; Ірпінь, 2005. 1728 с.

24 Марценюк М. М., Гвоздецька І. В. Міжнародні стандарти якості. *Вісник Хмельницького національного університету. Економічні науки*. 2012. № 3. Т. 2. С. 154—156. URL: http://nbuv.gov.ua/UJRN/Vchnu_ekon_2014_3%282%29__35 (date accessed: 19.11.2021).

25 Татарнікова Т. О. Стандартизація судово-експертної діяльності. *Місце недержавної судової експертизи у забезпеченні судочинства України* : мат-ли Всеукр. наук.-практ. конф.-дискус. (Київ, 19.10.2020). Київ, 2020. С. 56—59. URL: <http://nndes.org.ua/images/18112020.pdf> (date accessed: 20.11.2021).

26 Е.г.: Хаустова М. Г. Міжнародні стандарти в контексті євроінтеграційних процесів в Україні. *Вісник Національної академії правових наук України* : зб. наук. пр. 2017. № 2 (89). С. 44—45. URL: http://nbuv.gov.ua/UJRN/vapny_2017_2_6 (date accessed: 19.11.2021).

27 Ibid. С. 44.

common EU values (they relate to human, environment, economic issues, etc.)²⁸.

Implementation of European standards in the activities of national forensic institutions is an extremely promising area for forensic science development. European legal standards are formed within two largest regional international associations: Council of Europe and the EU. The Council of Europe primarily sets standards in the humanitarian field (protection of human rights, environmental protection, constitutional law), that is determined by the objectives and purpose of its functioning. EU through directives, regulations and other regulations sets standards for most areas of life of the EU population²⁹.

Currently, requirement related to the recognition of research results at the international level is becoming relevant. Thus, for the international recognition of measurement results, activities of any laboratory should meet requirements of international standards. According to these requirements, all EU forensic laboratories should be accredited to international standard³⁰. Currently, in international practice, in order to increase the reliability of forensic results and reduce judicial errors, general forensic laboratories are actively accredited for compliance with

ISO/IEC 17025 - General Requirements for the Competence of Testing and Calibration Laboratories and ISO/IEC 17020: Conformity assessment – Requirements for the operation of various types of bodies performing inspection “considering ILAC-G19:08/2014³¹.

On the basis of these international standards, a comprehensive peer review of all factors influencing the results of peer reviews is conducted and used to evaluate forensic laboratories around the world. These standards are used by accreditation bodies to assess the following factors:

- technical staff competence
- validity and acceptability of research methods (tests);
- accuracy of measurements and calibration to national standards;
- serviceability, calibration and maintenance of measuring and testing equipment;
- testing environment;
- selection, processing and transportation of research objects and samples;
- quality assurance of test and measurement data³².

Recently, the role of international cooperation in the field of forensic science is growing steadily³³. In order to improve forensic methods and form

28 Ibid. С. 45.

29 Ключев О. М. До питання міжнародного співробітництва в галузі судової експертизи. *Теорія та практика судової експертизи і криміналістики* : зб. наук. пр. 2018. Вип. 18. С. 154—162. DOI: 10.32353/khrife.2018.17 (date accessed: 20.11.2021).

30 Ibid. С. 159.

31 Наранович О. В., Оноприенко С. А., Спасенко И. О. Необходимость аккредитации судебно-экспертных лабораторий. *Судебная экспертиза: вчера и сегодня* : сб. мат-лов науч.-практ. конф., посвящ. 70-лет. Республик. центра судеб. эксперт. им. Х. Сулаймановой (Ташкент, 30.06.—01.07.2021). Ташкент, 2021. С. 40—45.

32 ILAC V4:05/2011. Преимущества аккредитации для лаборатории. URL: <https://kca.gov.kg/uploads/editor/611246afc3d52.pdf> (дата звернення 20.11.2021).

33 Filipenko N., Spitsyna H., Shynkarenko I., Tsymbalisty V. Implementation of Preventive Activity; Foreign Experience in Criminological Work of Forensic Science Institutions. *Electronic Scientific Journal Socrates*. 2021. № 1 (19). P. 32—39. DOI: 10.25143/socr.19.2020.1.032-038 (date accessed: 24.11.2021).

common standards of forensic science, information exchange and other important tasks, a large number of organizations are successfully operating in the modern world today, which indicates the constant interest of the international community in the field of forensic science. As one of the leading factors in ensuring mutual recognition of expertise, quality of expert proceedings, as well as the formation of the basis for international integration of forensic organizations within regional and global processes, the world forensic expert community considers the process of accreditation of forensic laboratories.

Accreditation (from Latin. *accrēdere: trust*) is an effective way to demonstrate the level of technical competence of any laboratory (including forensic science one) and is a kind of means to improve the working quality, services and products. According to the Law of Ukraine: *On Accreditation of Conformity Assessment Bodies* (paragraph 2 of Article 1) *“Accreditation of conformity assessment bodies” <...> – certification by the national accreditation body of Ukraine that conformity assessment body meets the requirements of national standards harmonized with relevant international and European standards <...> and if necessary, any additional accreditation requirements in the relevant areas to carry out certain conformity assessment activities”*³⁴.

Within the accreditation procedure, standardization procedure is formalized according to a certain algorithm. Accreditation of forensic science laboratories is a reliable reflection of

their technical competence recognized internationally. Accreditation is usually carried out by an accreditation body within a single system³⁵. Accreditation of testing laboratories in accordance with the requirements of *ДСТУ EN ISO/IEC and EN ISO/IEC 17020* means that the results are not only justified but recognized standards that will not change under any circumstances (for example, if laboratory staff changes, etc.).

The accreditation purpose is to ensure a unified technical policy in the field of conformity assessment, creating conditions for mutual recognition of the results of accredited bodies at international level. Accreditation bodies, testing laboratories, metrological services and other participants in the system of technical regulation of metrology go through the accreditation procedure. Accreditation system is the basis for recognizing the results of confirmation of compliance both in Ukraine and abroad³⁶.

In view of the above, the main task of international accreditation in the field of forensic science is to ensure international recognition of domestic forensic expert conclusions by confirming their competence, so accreditation of forensic laboratories based on principles and procedures agreed at the international level is paramount step towards building mutual trust.

Main advantages provided by the laboratory accreditation are:

- determining general requirements for demonstrating laboratory

34 Про акредитацію органів з оцінки відповідності : Закон України від 17.05.2001 р. № 2407-III (зі змін. та допов.). URL: <https://zakon.rada.gov.ua/laws/show/2407-14#Text> (date accessed: 20.11.2021).

35 Е.г.: Антилевская Ю. А. О некоторых вопросах качества судебно-экспертной деятельности. *Криміналістичний вісник*. 2017. № 2 (28). С. 32–39. URL: http://elar.naiu.kiev.ua/bitstream/123456789/16745/1/Visnik_2-28-2017-32-39.pdf (date accessed: 24.11.2021).

36 Хоша В. В., Мануленко О. В. Перспективи розвитку судово-експертних установ Міністерства юстиції України в аспекті вступу до європейської системи EFNSI. *Теорія та практика судової експертизи і криміналістики* : зб. наук. пр. 2009. Вип. 9. С. 244–249.

- competence to perform specific tests or calibrations;
- creating and maintaining trust ambience and guarantees for customers and consumers to provide quality service in the field where the laboratory is accredited;
- continuous improvement of activities due to regular inspections by the accreditation body;
- expanding market share by recognizing laboratory results by market participants;
- reduction of time spent on proving laboratory competence;
- motivation increase, qualification and staff competence due to regular inspections by accreditation body;
- assistance in development and implementation of the laboratory quality system;
- creation of conditions for mutual recognition of activity results of accredited bodies and results of measurements at the international level;
- ensuring a common technical policy in the field of conformity assessment and reduction of technical barriers;
- reflection of positive dynamics of the development of methodological support of accredited bodies by differentiating scientific research;

- organization of wide information exchange (in particular, information and reference arrays of samples) with accredited bodies on a single methodological basis, etc.³⁷

In the context of standardization generated by modern globalization processes, membership in international forensic organizations, in particular in the European Network of Forensic Science Institutions, is also an important step in ensuring international standards of forensic science. The modern version of globalization is accompanied by the homogenization of the world, which leads to the emergence of new actors in the world, the so-called transnational governance structures, which begins countdown to a new form of world self-organization³⁸. Leading and most developed association of forensic institutions, which contributes to improving the quality of forensic science and improving the mutual exchange of information during forensic activities, is the European Network of Forensic Institutions (hereinafter referred to as *ENFSI*) founded in 1995. It is recognized European Network of Forensic Science Institutes which aim is support for science and researches, international cooperation and competence, education, development in the field of forensic science. *ENFSI* members are 73 institutions from 39 European countries³⁹.

37 Е.г.: Лилова Ю. Ю., Заковирко О. М. Щодо діяльності міжнародної організації із стандартизації. *Актуальні питання судової експертизи та криміналістики* : зб. мат-лів міжнар. наук.-практ. конф., присвяч. 100-річ. від дня народж. д-ра юрид. наук, проф., засл. діяча науки і техн. Укр. М. В. Салтєвського (Харків, 07–08.11.2017). Харків, 2017. С. 87–89 ; Наранович О. В., Оноприенко С. А., Спасенко І. О. *Op. cit.* ; Хоша В. В. Міжнародний досвід акредитації судово-експертних установ і його використання в Україні. *Криміналістичний вісник*. 2019. № 1 (31). С. 20–26. DOI: 10.37025/1992-4437/2019-31-1-20 (date accessed: 24.11.2021).

38 Войтович Р. В. *Op. cit.* С. 72.

39 Інститут спецтехніки та судових експертиз СБУ став членом Європейської мережі судово-експертних установ / Офіційний сайт Служби безпеки України. URL: <https://ssu.gov.ua/novyny/instytut-spetstekhniky-ta-sudovykh-ekspertyzh-sbu-stav-chlenom-yevropeiskoi-merezhi-sudovoekspertrykh-ustanov> (date accessed: 20.11.2021).

The more forensic agencies join the ENFSI, the more fruitful the cooperation in this area will be.

The impact of ENFSI on society, development of science and technology is that manufacturers of equipment and tools for forensic science bring their products in line with ENFSI standards. The main attention is focused on unification, certification and standardization of methods of forensic examination and improving quality of forensic examinations⁴⁰.

The main activity of ENFSI is to achieve a high level of organization in the field of forensic science by developing quality of forensic services at all proceeding stages: from the scene to the court, provided by the following conditions:

- membership in ENFSI combines production, scientific and methodological capabilities of forensic institutions;
- expansion of ENFSI membership strengthens the trust of law enforcement agencies and courts;
- establish and maintain business relations with other organizations whose activities are related to criminalistics and forensic science;
- activities of all ENFSI member institutions implementing modern research methods, international standards and ensure the competence of experts in various types of forensic science are strongly encouraged⁴¹.

It should be recognized that membership in ENFSI is an important strategic direction of development for all domestic forensic science institutions, as

it provides high international standards of forensic science activity, interaction on a wide range of issues with European partners opens new and promising development areas⁴². At the same time, the lack of general funding for international forensic activities can negatively affect quality of forensic expert conclusions and image of the State in general on the world forensic science arena.

Conclusions

Modern globalization and integration processes of implementation of international norms into national legislation set new goals and objectives for the implementation of international quality standards in domestic forensic science. The study of international experience and practice of state regulation of such activities opens new perspectives for improving its efficiency and improving quality and professionalism of forensic expert research. Implementation of international quality standards in forensic science is a priority and a guarantee that the international community at the highest level recognizes the conclusions of forensic experts in Ukraine. Fruitful cooperation with ENFSI is important factor in improving efficiency of forensic science activity at the international level.

An important direction in development of forensic science support of justice is the need for clear legislative regulation of guarantees for forensic expert activities of at the national and international levels. At the same time, sufficient state funding for this activity should be leading factor that will positively affect the image and quality of

40 Хазиев Ш. Н. Международные судебно-экспертные организации (часть 1). *Теория и практика судебной экспертизы*. 2009. № 1 (13). С. 171–177.

41 Де Киндер Я. Европейская сеть судебно-экспертных учреждений (ENFSI). *Теория и практика судебной экспертизы*. 2011. № 4 (24). С. 200–204.

42 Чернявський С. С., Чорноус Ю. М. *Op. cit.*

forensic expert research. Implementation of proposed measures will not only ensure forensic expert independence, make results of his work better but significantly increase efficiency of forensic science activity in general.

Судово-експертна діяльність в умовах глобалізації

Павлос Кіпоурас, Інесса Овсянникова

Міжнародна судово-експертна діяльність у сучасних реаліях набуває дедалі більшої популярності й характеризується посиленням глобалізаційних процесів у міжнародних відносинах, утворенням єдиного інформаційного простору, в умовах якого більш ефективними стають транснаціональні зв'язки як правозахисних і правоохоронних організацій, так і судово-експертних установ, а також окремих судових експертів та науковців, що спеціалізуються на питаннях судової експертизи й судово-експертної діяльності.

Метою статті є розглядання процесів стандартизації й акредитації як основних напрямів міжнародного співробітництва у сфері судово-експертної діяльності в умовах глобалізації і провідних інструментів визнання результатів дослідження та висновків судового експерта. Акцентовано увагу на тому, що застосування міжнародних стандартів в галузі судової експертизи є першочерговим завданням, яке сприятиме підвищенню надійності, прозорості й упевненості в судових доказах і зроблених експертом висновках.

Підкреслено, що один із важливих чинників підвищення ефективності судово-експертної діяльності на міжнародному рівні — співпраця з Європейською мережею інститутів судової експертизи (ENFSI), основним напрямом діяльності якої є покращення взаємобміну інформацією в галузі криміналістики. Запропоновано певні кроки на шляху до забезпечення

незалежності судового експерта, підвищення якості наданих ним висновків та ефективності судово-експертної діяльності загалом.

Ключові слова: акредитація; глобалізація; ефективність; міжнародне співробітництво; судово-експертна діяльність; стандартизація.

Судебно-експертная деятельность в условиях глобализации

Павлос Кипоурас, Инесса Овсянникова

Международная судебно-экспертная деятельность в современных реалиях приобретает всё большую популярность и характеризуется усилением глобализационных процессов в международных отношениях, созданием единого информационного пространства, в условиях которого значительно эффективнее становятся транснациональные связи как правозащитных и правоохранительных организаций, так и судебно-экспертных учреждений, а также отдельных судебных экспертов и учёных, специализирующихся на вопросах судебной экспертизы и судебно-экспертной деятельности.

Целью статьи является рассмотрение процессов стандартизации и аккредитации (как основных направлений международного сотрудничества в сфере судебно-экспертной деятельности в условиях глобализации) и ключевых инструментов признания результатов исследования и заключений судебного эксперта. Акцентируется внимание на том, что применение международных стандартов в сфере судебной экспертизы является первоочередной задачей, способствующей повышению надёжности, прозрачности и уверенности в судебных доказательствах и сделанных экспертом выводах.

Подчёркнуто, что один из важных факторов повышения эффективности судебно-экспертной деятельности на международном уровне — сотрудничество

с Европейской сетью институтов судебной экспертизы (ENFSI), основным направлением деятельности которой является улучшение обмена информацией в сфере криминалистики и повышение качества судебных экспертиз. Предложены определённые шаги на пути к обеспечению независимости судебного эксперта, повышению качества предоставленных им выводов и эффективности судебно-экспертной деятельности в целом.

Ключевые слова: аккредитация; глобализация; эффективность; международное сотрудничество; судебно-экспертная деятельность; стандартизация.

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Declaration of Competing Interest

The authors declare that they have no conflict of interest.

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