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 DOI 10.51582/interconf.19-20.05.2023.019

Development trends in criminalistics in the era of digitalization

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Abstract.

The actual problems of modern trends in the development of criminalistics in the era of digitalization are investigated. The current state, tasks and main trends of the modern development of criminalistics in real today's conditions in the conditions of war and the processes of digitalization of all spheres of life of our society are determined and analyzed. The most promising areas of scientific research in modern criminalistics in the era of digitalization are identified and characterized. It is substantiated that in modern realities it is important to take into account modern trends in the development of forensic science associated with the formation of its individual branches: digital, medical, aerospace, nuclear and military criminalistics. It is noted that the emergence and formation of new areas of criminalistics are primarily due to scientific and technological progress and the rapid development and implementation of the latest digital technologies, including artificial intelligence. It is believed that in the modern realities of the military in Ukraine, the problems of criminalistic support for the investigation of war crimes, crimes against humanity and genocide, taking into account international experience and the active use of digital technologies in law enforcement, are of particular importance. It is noted that the success of the implementation of the tasks of modern criminalistics largely depends on the European vector of development of domestic science, taking into account the best international experience in combating modern crime, which also actively uses the latest digital technologies and the capabilities of artificial intelligence in its criminal activities. Particular attention should be paid to the criminalistic training of investigators, prosecutors, forensic experts in the field of digital technologies.

Keywords:

*criminalistic knowledge
digital criminalistics
forensic examination
criminalistics
digital technologies
war crimes
digital evidence
investigative standards
digitization
artificial intelligence
criminalistic didactics*

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Introduction. Modern processes of activation of digitization of all spheres of state activity, in turn, necessitate the improvement of the system of law enforcement agencies and the prosecutor's office, judicial bodies. There is a transition of the existing traditional system to a new reality - a digital one, in which digital information is an integral attribute [4, p. 202], as in the work of criminal justice bodies, on the one hand, and modern criminal activity, on the other [35, p. 98]. This, in turn, determines the current trends and prospects for the development of legal science, including criminalistics, which is at the forefront of the fight against crime. In Ukraine, criminology has chosen the European vector of development. European approaches are also found in the application of evidentiary standards during criminal proceedings [64, p. 83].

It is obvious that today's digital reality is closely related to the emergence of new forms of crime - cybercrimes, information fraud, a large number of cyberattacks on enterprises and institutions, including state databases [12, p. 897]. Undoubtedly, such threats require the development of the latest approaches to combating crime, modernization and updating of the system of criminal justice bodies to modern conditions and global threats [23, p. 37]. This leads to the intensification of the use and spread of digital technologies in investigative, judicial and expert activities.

In today's realities, the 21st century is often called the era of digital technologies and global threats. Today, the use of digital information and modern information technologies is not just the latest technological trend or fad - it is actually a new digital reality [30, p. 97], which is based on social innovations and advanced digitalization technologies [44, p. 290]. It is obvious that in today's conditions digitalization processes act as an important strategic direction for the future development of the advanced states of Europe and the world, including Ukraine, which has chosen the European vector of development.

Today, digitalization has become not only a modern trend in the development of society, but is also becoming a significant factor in the economic, social, political and international growth of the state. It is now important to

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grant Ukraine the status of a candidate for EU membership, which created an additional impetus for the activation of transformations in the digital sphere. In this regard, an important event was the fact that Ukraine joined the «Digital Europe» Program until 2027, the goal of this program is to activate the recovery of the economy and the digital transformation of Ukraine [30]. Under such conditions, the formation of a single digital market with the EU and the approximation of the digital sector of Ukraine to the European one became a priority direction of the state policy of digital transformations in the conditions of martial law [37, p. 326].

In addition, the military Russian aggression and the introduction of martial law in Ukraine on February 24, 2022 significantly affected all areas of our lives. On the territory of Ukraine, the Russian military commits mass murders of civilians, destruction of infrastructure facilities and citizens' homes, rape of women and children, and looting [10, p. 136]. Crimes committed by the military of the Russian Federation on the territory of our country are extremely large-scale, and their recording, documentation and investigation require the study of a significant volume of events, the careful collection of a large mass of evidentiary information, the involvement of experts and specialists, and the conduct of a huge number of forensic studies and various types of forensic examinations [16, p. 145].

Such challenges today determine the modern trends in the development of legal science, including criminalistics, which is at the forefront of the fight against crime. Under such conditions, today's challenges and threats necessitate the formation and introduction of innovative approaches in forensic protection against military criminal offenses and war crimes. Therefore, the problems of criminalistic investigation of war crimes and crimes of genocide in the conditions of war and the modern realities of the spread of digital technologies in law enforcement practice are becoming particularly relevant now.

Results and discussion. First of all, it is worth noting that in Ukraine during the war there was a transformation of crime, which significantly influenced the change in the priorities of the tasks of criminalistics and the specifics

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of the formation and application of forensic knowledge in modern conditions [22, p. 15]. The most important task of criminalistics today is the development and application of means, techniques and methods that allow collecting, researching, and using evidentiary information in the conditions of war and global threats of modern times in the world. Under such circumstances, the question arises of actualizing and increasing the role of criminalistics in the conditions of war, processes of digitalization and European integration.

One of the main tasks in Ukraine today is to fight back against the military aggression of the Russian Federation, to ensure the restoration of the violated rights and freedoms of our citizens, as well as to ensure the principle of the inevitability of the responsibility of those guilty of crimes related to the invasion of the Russian occupation forces on the territory of our state [14 , p. 385]. Therefore, today there is a rather urgent need to develop the problems of criminalistic support for the investigation of war crimes committed by the Russian military, in order to use all available national and international legal mechanisms to bring to criminal responsibility all those guilty of this war, to compensate for damage, to restore the rule of law and justice , as well as proving the inevitability of the punishment of all war criminals involved in the war in Ukraine [36, p. 223].

Now in Ukraine there are already the first completed investigations of war crimes and even verdicts. As we can see from the open court hearings, during the investigation of each individual war crime, the prosecutor's office does not always establish a cause-and-effect relationship with the decisions of the highest military and political leadership of the Russian Federation, and is limited, as a rule, only to the executors, that is, the Russian military of the lowest ranks. As practice shows, pretrial investigation bodies are often forced to balance between the speed and completeness of the investigation, since there is a lack of resources and evidence for both indicators, as well as their correct and high-quality documentation. At the same time, it should be taken into account that a poor-quality investigation can lead

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to the acquittal of war criminals, which will have a particularly negative effect for Ukraine during the consideration of such cases by courts of international jurisdiction.

In view of the above, today it is important to take into account that for the trial of war crimes and military criminal offenses, in particular, both for the courts of Ukraine and for any international court, it will be fundamental to establish a cause-and-effect relationship between the guilty actions of the aggressor country and not only individual Russian military occupiers, but also the military and political leadership of the Russian Federation and the consequences that followed, that is, the damage caused [13, p. 83]. Correct work with the evidence base is quite important for this, in particular, the collection, documentation and investigation of war crimes should be carried out taking into account international experience and European standards of evidence.

In such realities today, one of the most important trends in modern criminalistics is the integration of knowledge, the creation and offering of innovative developments in science aimed at solving the tasks of combating crime in wartime and the effective formation of evidence that can be used in both national and international courts [38, p. 95]. An innovative direction in the development of criminology is the development and implementation in practice of criminalistic protection against modern crime [63], including war crimes. This requires the activation of the development and implementation of advanced technologies, which are based on the application of modern criminalistic knowledge, adhering to the standards of evidence in criminal proceedings and the widespread use of digital technologies and artificial intelligence [45, p. 37]. In this case, we can talk about the formation of new scientific directions in criminalistics (digital, medical, nuclear, genoscopic, aerospace, military criminalistics), the emergence of which is determined by modern trends and tasks of the development of science.

Today, the question of increasing the effectiveness of the investigation of modern crime, including war crimes and cybercrimes with the help of digital technologies [33, p. 12],

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is a pressing issue. Under such circumstances, it is necessary to talk about the activation of the problems of the formation of a new scientific direction – «Digital Criminalistics» [50, p. 283; 17, p. 178]. Other terms are used to denote this direction – «Computer Forensic» [26, p. 29], «Electronic criminalistics» [11, p. 79], «Criminalistics in computer systems» [65, p. 189].

In the theory of criminalistics today, it is noted that the modern development of digital criminology today takes place in three main directions: 1) the formation of a separate scientific field in criminalistics; 2) application of special knowledge when working with digital evidence; 3) conducting forensic examinations (in particular, computer-technical examination) [66, p. 23]. In view of this, it is clear that the prospects for the further development of modern criminalistics in the conditions of the information society, digitalization and military realities of today are impossible without the wide use of innovative and fundamental knowledge in the field of digital criminalistics. Therefore, today this new field of criminalistics is developing dynamically, the scientific prerequisites for the formation of theoretical and methodological foundations in this field of knowledge and prospects for their application in practice have been created [39, p. 83].

Criminalistics today corresponds to the development of modern digital technologies, creating means and methods of the possibility of extracting forensically significant information from a new type of media. Thanks to scientific and technical progress, it is possible to use digital technologies in law enforcement activities, which accelerates the process of pre-trial investigation, allows for a more complete formation of the evidence base in the investigation of criminal offenses [7, p. 53], and subsequently ensures the quality and effectiveness of the judicial review of materials criminal proceedings according to European standards [16, p. 143].

In the special criminalistic literature [28, p. 275], today there are various scientific approaches to defining the essence and concept of digital criminalistics, determining the role and place in the system of criminalistics and

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forensic sciences. One group of scientists indicate that digital criminalistics is a separate branch of forensic science, which is a system of scientific methods for researching digital evidence with the aim of facilitating the detection and investigation of criminal offenses [29, p. 290]. Another notes that digital forensics is related to the process of collecting, obtaining, preserving, analyzing and submitting digital evidence for the purpose of obtaining operative and investigative information, evidentiary information and carrying out investigations and criminal prosecutions in relation to various types of criminal offenses [17, p. 177], including cybercrimes and war crimes committed by the military of the Russian Federation on the territory of Ukraine.

Some sources indicate that digital criminalistics forensics is «a branch of criminalistics that focuses on criminal procedural law and evidence related to computers and related devices» [20, p. 29], such as mobile devices (for example, telephones and smartphones), game consoles and other devices that function via the Internet (for example, devices for health and fitness and medical devices) [53, p. 321]. In addition, digital criminalistics is related to the process of collecting, obtaining, preserving, analyzing and presenting electronic (digital) evidence in pretrial and judicial proceedings. Therefore, digital criminalistics can be a strategic direction in the development of criminalistic science [65, p. 192]. In our opinion, in view of the above, it can be stated that the subject of digital criminalistics is the regularities of detection, recording, preliminary investigation, use of computer information, digital traces and means of their processing in order to solve the tasks of detection, disclosure, investigation and prevention of criminal offenses , as well as the development, based on this knowledge, of the patterns of technical means, methods, and methodological recommendations aimed at optimizing activities to combat criminal offenses in the digital space [40, p. 147].

The object of digital criminalistics is, on the one hand, criminal offenses (crimes) associated with the use of computer (digital) technologies and social relations arising in the course of detection, disclosure, investigation and prevention

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of criminal offenses (crimes) , when the detection, recording, research, use of computer information, digital traces and means of their processing is carried out, and on the other hand, the activity of law enforcement agencies regarding the investigation of such criminal offenses and the issue of the development and application of forensic methods, methods, and means of using computers computer (digital) technologies in the fight against crime in the digital space. Therefore, digital criminalistics is a branch of criminalistics that studies the patterns of occurrence and use of digital traces and, based on the knowledge of these patterns, develops technical means, techniques and methods for detecting, recording, extracting and researching digital information (evidence) and means of processing it for the purpose of disclosure , investigation and prevention of criminal offenses.

We believe that it is necessary to clearly distinguish digital criminalistics as a separate field of criminalistic knowledge, aimed at the study of digital traces, on the one hand, and on the other - the use of digital technologies in the investigation and judicial proceedings, that is, the process of digitization of criminalistics as a natural modern stage of its development and formation, which provides for the implementation of digital technologies in various fields of forensic technology and forensic examination, to the very process of pre-trial investigation [29, p. 288]. Therefore, the modern tasks of digital forensics are the search and analysis of digital traces, data analysis (including metadata), collection of evidentiary information in the digital environment [2, pp. 10-13].

It is understood that digitalization is the transformation of information into digital form, when analog (physical) data collection and processing systems are replaced by technological systems that generate, transmit and process a digital signal about their condition, which leads to a reduction in costs, to the emergence of new information possibilities [42, p. 232]. In a broad sense, it is the process of transferring functions and activities previously performed by people and organizations to the digital environment. Digitization of criminalistics may include

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several aspects, including: 1) the use of digital technologies to increase the effectiveness of the investigator's search and cognitive activity, effective organization of this activity, and optimization of the interaction of various bodies in the investigation of criminal offenses; 2) the use of information and communication (informational computer) technologies for the investigation of criminal offenses, which contributes to the algorithmization of the pre-trial investigation process as a whole and its individual stages [46, p. 93]; 3) solving didactic tasks in the field of training, retraining, advanced training of investigators, criminalistic investigators, forensic experts, exchange of experience [10, p. 105].

The investigation of war crimes and military criminal offenses in Ukraine has its own characteristics, caused by the rapid development of digital technologies, which determines certain specifics, which are caused by: 1) the wide possibilities of users of smartphones and other means with photo and video recording functions to document war crimes, broadcast events online, to spread information without borders through the Internet, social networks, mass media, blogs, etc., thus reaching millions of user audiences; (2) broad possibilities of monitoring, tracking various objects, establishing their geolocation, etc., big data processing using tools of criminal analysis, cyber intelligence; (3) digitization of forensic and forensic activities, which significantly increases the quality, accuracy and speed of evidence collection; (4) the gradual transformation of the model of criminal proceedings from paper to electronic, which already at the stage of the transitional paper-electronic model significantly affects the process of proof [8, p. 54].

As we can see, a huge array of various forensically significant information, including digital, requires a constant search and formation of the latest approaches to the detection and collection of evidence of war crimes [24, p. 77]. Among them, the application of artificial intelligence technologies [57], in particular digital forensics tools, is of particular importance. Since the beginning of the 90s of the 20th century, the volume of

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digital information has grown so much that in 2020, the UN, with the participation of more than 150 experts, prepared a special practical guide "Berkeley Protocol on the Effective Use of Data from Open Sources of Digital Information in the Investigation of Violations of International Criminal Law, Human Rights and IHL" (Berkeley Protocol, 2020) [6], which contains standards and methodological approaches to "collection, preservation and analysis of publicly available information (social networks, satellite images, etc.), which can be presented as evidence in criminal proceedings.

In addition, digitalization of the evidence process is facilitated by the creation of specialized sites that offer a fairly simple scheme for downloading information and evidence about war crimes (<https://dokaz.gov.ua/>; <https://warcrimes.gov.ua/>). Moreover, we have examples of the creation of a database of war crimes by human rights organizations, both in Ukraine (for example, the Ukrainian Helsinki Human Rights Union) and at the international level (Sunflower project). The information obtained in this way can help plan the investigation of war crimes, put forward forensic versions, ensure procedural savings of resources and means.

As the practice highlighted in open sources shows, today in a situation of full-scale aggression, digital forensics tools significantly help in the detection, disclosure and investigation of war crimes. It was thanks to the tools of digital criminalistics and data from open sources that the facts of mass murders and war crimes committed in the cities of the Kyiv region between February 27, 2022 and March 31, 2022 were established. The Armed Forces of Ukraine, having liberated the city of Bucha, found a large the number of bodies of civilians just lying on the roads. After the release of footage of these bodies, the Russian authorities began to promote the idea that this was the order and the bodies were dumped after the liberation of the city. However, satellite images helped to prove that the bodies appeared during the Russian occupation. In this context, mass burials cannot be forgotten. Since they are mostly located in temporarily occupied territories and there is no access to them, digital forensics, namely the analysis and comparison of satellite

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images, can significantly help in identifying the culprits. This is what happened with the mass burial near the church of St. Andrew in Bucha, which was recorded on Maxar satellite images [21].

In the process of gathering evidence, the persons involved in the commission of such crimes were identified, and further, during their investigation, four main groups of sources of forensically significant information about such war crimes can be identified, in particular: personal sources (testimony of witnesses, victims, suspects (prisoners) about the circumstances of the event); material sources (material situation, places of destruction, abandoned equipment, things, weapons, ammunition, explosive objects that did not detonate, fragments of ammunition, corpses with signs of violent death; traces of biological origin in cases of torture, rape; materials and substances (soil, water, etc.), testifying to the facts of the use of prohibited weapons, the facts of contamination of the ecosystem with dangerous substances, etc.); digital sources (materials of photo and video recording of events, data of electronic, computer and telecommunication networks, geolocation data of vehicles equipped with GPS beacons, data from open sources of digital information, etc.); documentary sources (protocols, orders, orders, orders, plans for military operations, supply orders, personal documents of combatants, financial documents, etc.) [9, p. 372]. For our research, digital sources are of particular importance, as they are related to digital information and digital traces [54, p. 155].

As we can see, in the modern world almost all human activity, including that of war criminals, is accompanied by a kind of «trace picture», among which digital traces take a special place [52, p. 98], as an important source of forensically significant information [25, p. 23]. It is digital, and not electronic, traces that currently form the basis of the evidence base during the investigation and consideration of crimes and criminal offenses of the category under consideration. In digital traces, despite the constantly changing form of storage of information, one thing remains constant – this is the digital encoding of this information, which has become quite widely used, replacing

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the analog signal. Taking into account these arguments, in our opinion, today it is necessary to talk about digital traces that remain in virtual space [67, p. 99].

Digital traces in forensics are material invisible traces that contain forensically significant information (information, data), recorded in digital form on physical media and can be detected, recorded and examined using certain digital devices [3, p. 91]. Today, such traces are files and their excerpts, storage devices of RAM and traffic, service information about these files, which are created by digital devices (English digital device) - technical devices or devices designed to receive and process information in digital form using of digital technologies [41, p. 173]. It can also be a certain category of items belonging to computer tools, in particular software products, text and graphic documents; multimedia files; databases; program files; system reports and application logs, etc. As a rule, they are used by criminals when committing criminal offenses, leaving a kind of «footprint» of digital traces. Therefore, a digital trace is forensically significant computer information about the events (actions) of a criminal offense, reflected in digital information in the material environment, in the process of its origin, processing, storage and transmission.

It can be seen that digital traces are specific traces, because, remaining as a result of certain events, they are reflected on material objects, although in some cases the period of their existence is quite short. By origin, digital traces are technological, since the formation of these traces is determined by the specifics of the implementation of information technologies, and information technologies are also used to transform them into a perceptible form. According to the mechanism of trace formation, they can be classified as electronic or electromagnetic, depending on the medium in which they are displayed - solid-state or magnetic disks. There may also be mechano-optical digital traces that are formed in the structure of the material of the optical disk under the influence of laser beams.

Today, the lack of a clear understanding of the nature and features of digital traces entails either a complete loss or a devaluation of the evidence base regarding the

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investigated criminal offenses. That is why, from the point of view, it is necessary to develop the concept of digital traces of methods of their acquisition, research and analysis both in an individual aspect and as part of a complex trace. In this regard, it is worth noting that a digital trace has a certain system of signs and properties, among which the impossibility of perceiving such a trace directly by the senses, but only with the help of special devices and programs, that is, working with them requires the application of special knowledge, is of particular importance non-traditional methods, methods and procedures for their detection, fixation, research and evaluation as evidence in the future [51, p. 443]. The success of the disclosure and investigation of such criminal activity will be possible only with the integration of criminalistic and special knowledge in the field of IT technologies, programming and the level of training of the investigator and the relevant specialist who will be involved in the investigation and the process of collecting digital information.

In turn, digital evidence requires the latest approaches to its collection, storage, use and research during evidence in criminal proceedings [1]. The development of Ukrainian scientists regarding the methods of investigation of criminal offenses committed in cyberspace, the construction of their criminalistic characteristics, and the determination of the algorithm of their investigation deserve attention [58, p.281], as well as the specifics of using special knowledge and conducting forensic examinations during the investigation of this category of criminal offenses [59, p. 16]. «Digital evidence» in criminology means actual data presented in digital (discrete) form and recorded on any type of medium, which become available for human perception after computer processing [31, p. 259].

In the conditions of military aggression of the Russian Federation against Ukraine, traditional forensic means and forms of gathering evidence of war crimes and military criminal offenses can work to a limited extent due to the danger for all participants of investigative (search) actions, as well as the impossibility of direct access to the scene of the incident. Therefore, there is a need to use

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digital criminalistics tools [18, p. 165]. In view of the above, in our opinion, the means of digital forensics, which help in the detection and investigation of war crimes and contribute to the inevitability of the punishment of war criminals, are gaining a certain scientific and practical interest, which are highlighted in the professional literature [3, p. 115].

Among them, attention is focused on the following: search by keywords and hashtags, the lists of which have been prepared in advance, monitoring of radars and official monitoring systems of Marine Traffic vessels, analysis of satellite images, use of "big data" analysis technology (Big Data); analysis of geolocation tags, research of photo and video materials in public access and provided to the investigation, use of programs for the analysis and processing of digital images, research of telephone conversations, analysis of electronic devices, analysis of game systems, system for recognizing faces and searching for them in relevant databases (in Ukraine use the Clearview Af facial recognition application to identify potential criminals and the dead) [19, pp. 31-37]; digital analysis of the behavior of individuals, groups of people and their relationships; digital forensic intelligence based on open sources, etc. [27, p. 23]. It can be seen that in modern conditions of war, the following areas of application of digital forensics are gaining special importance: obtaining information from mobile devices of seized phones of participants in criminal proceedings; obtaining information from personal computers of individuals and legal entities; obtaining information from servers and other information stores in organizations and institutions; obtaining information about radio frequency identifiers, GPS trackers, sensors, stationary and mobile measuring devices using geolocation, video surveillance and positioning systems; receiving information from network services that establish voice and video communication between computers via the Internet, such as ICQ, Skype, WhatsApp, Viber, Telegram and others.

To a large extent, the success of the implementation of the tasks of documenting war crimes depends on the standardization of the investigation process, the

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algorithmization of procedural actions, high-quality interaction between units, taking into account the foreign experience of investigating criminal violations of international humanitarian law. It is important to develop specific and sub-specific forensic methods of investigation depending on different situations and the type of war crime and violation of international humanitarian law, in particular, on the category of persons against whom an attack (strike) was carried out; depending on the object directly attacked (blow); depending on the means by which the attack (hit) was committed; depending on the method of committing illegal actions against the person (persons); depending on the territorial feature; depending on the norms of a special part of the Criminal Code of Ukraine [8, p. 54], etc.

No less important is the connection of using special knowledge when collecting digital traces, determining the possibilities of forensic research, evaluating and using the results of forensic examinations in evidence in the conditions of the activation of the use of digital technologies [67]. Currently, objects in digital form are submitted for forensic examination, both on separate media and on computer systems. Therefore, to legally obtain digital traces, it is necessary to use appropriate special knowledge, as well as to conduct forensic computer-technical examination and examination of telecommunication systems and means (examination of digital and analog devices) [66, p. 12–17].

The spread of computer information technologies contributes to the further development of the algorithmization of the pre-trial investigation process and ensuring the efficiency and effectiveness of the trial. Therefore, we consider the following promising areas of innovative scientific research in forensics: documentation and investigation of war crimes committed by the Russian military in Ukraine; search for missing Ukrainians and identification of those killed in the war in Ukraine; the use of digital forensics to identify, record and investigate war crimes committed by the Russian military in Ukraine; activation of the application of special knowledge and the conduct of forensic expert studies to determine the amount of damages suffered by individuals and legal entities as a result

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of Russian armed aggression; development and application of innovative forensic products to improve the effectiveness of the investigation of war crimes and military criminal offenses; forensic support for the activities of the International Criminal Court and other international courts and tribunals; construction and application of an appropriate system of separate forensic methods of war crimes and other criminal offenses related to the military aggression of the Russian Federation against Ukraine, etc. [55, p. 360].

The mentioned problems should be taken into account during the formation of programs, educational disciplines of the methodology of teaching criminalistics, the formation of criminalistic didactics in modern conditions [56, p. 123].

Conclusions. Thus, we can come to the conclusion that the modern paradigm of criminalistics should be aimed at the further development and formation of digital criminalistics in order to effectively solve new tasks in the conditions of martial law and processes of digitalization of society. At the same time, the process of digitalization of criminalistics is a natural stage of development and formation of modern criminalistic knowledge, which involves the introduction of digital technologies in various fields of criminalistics, forensic expertise, and legal practice. Particular attention should be paid to increasing the role of criminalistic didactics, in particular, forensic training of investigators, prosecutors, courts, detectives, criminalistic investigators, forensic experts in the field of digital technologies. Under such circumstances, the initiation of a new profession and the training of a digital criminalist in legal educational institutions are quite relevant today.

It is important to take into account the modern trends in the development of criminalistics related to the formation of its new directions, in particular, *digital criminalistics*, which will make it possible to significantly increase the role and applied value of the application of forensic knowledge in the modern realities of wartime and global threats to world civilization. Strengthening and activating the practical component during the teaching of criminalistics acquires significant importance. In addition, taking into account the modern tasks of adapting criminalistic knowledge

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to the conditions of war and reforming domestic legislation to international EU standards, the problems of adapting and modernizing criminalistic knowledge to modern requirements of practice are quite relevant. Modern criminalistic has chosen the European vector of development. Therefore, European approaches should also be found in the application of evidentiary standards during criminal proceedings. To a large extent, the success of the implementation of the tasks of criminalistic depends on the European development of science, the standardization of investigation and judicial proceedings, taking into account the best foreign experience in the era of digitalization.

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