

Specific Features of Special Investigative Operations in the Context of Military Operations

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Abstract

The full-scale invasion has caused significant changes to the mechanism of special investigative operations, which has established the need to analyse, systematise and improve existing knowledge and practices, considering the specifics of this phenomenon arising in the context of military operations. Considering the relevance of the issue, the research is intended to determine the specifics of searching for the objects of operational investigative activities (missing persons, fugitives from justice). To achieve this purpose, the research used a set of methods of scientific cognition, which included the method of synthesis, systematisation, comparison, historical, statistical and formal-dogmatic methods. The research analysed effective approaches to the development of search strategies during military operations, including using technology, specialised groups and data analysis to find targets. The specifics of changes in the situation on the battlefield and its impact on investigative operations were identified.

Keywords: Intelligence Services, Security, Training of Operational Personnel, Intelligence, New Technologies, Cooperation and Coordination.

Introduction

Special investigative operations (SIOs) are undoubtedly a mechanism that in the context of modern Ukraine has been a particularly significant subject of research, due to the real need for its regular use. A full-scale war has established many new challenges for the work of operational personnel and, therefore, it is particularly significant to explore how professional training, the latest technologies (drones, satellites, artificial intelligence) and other factors affect the conduct of SIOs (Shahini et al., 2022). The research focuses on the aspect of ensuring the protection of confidential information in the context of military operations when the risk of leakage is high. In addition, the issue of security of operational personnel is significant, since the conditions of military operations endanger the safety of operatives (Imasheva et al., 2018). Considering the nature of military operations, there is a lack of compliance with international human rights standards, but, therewith, search operations should be conducted in compliance with the rights and

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dignity of individuals, subject to scrutiny and balancing between the right to security and the rights of the individual. Instead, the conditions of military operations pose a problem of coordination in a military conflict, when various law enforcement units and military structures must actively cooperate (Curanovic, 2022; Spytyska, 2023).

I. Repilo et al. (2022) examined various aspects of planning and strategic decision-making within the North Atlantic Treaty Organisation (NATO). The main focus of the research is on the methods of war planning, their variability and their demonstrable use by NATO member states. Nevertheless, the research explored using the latest technologies and cooperation between different military structures, which proved to be useful for the research on SIOs. The work of I.V. Hlibovuch et al. (2022) examined the requirements for representatives of special operations forces in terms of their physical and psychological fitness. The author analysed the main requirements and characteristics that they must meet, including physical characteristics, military training, and combat skills. Particular attention was devoted to the psychological readiness of servicemen for stressful situations and dangerous tasks. The methods of training psychological resilience, stress and emotional regulation, which are determined as the foundation of completed tasks during military operations that constantly provoke critical situations, are explored. The research by O.P. Frolov (2022) identified various aspects of SIO used in the framework of investigative or detective activities by law enforcement agencies. The author explored the concept of SIO as a special type of activity of law enforcement agencies or investigative institutions designed to collect limited information to detect, stop or investigate crimes. In addition, the author examines the organisational aspect of SIO, in particular, how such operations are planned, coordinated and executed by law enforcement agencies. Equally importantly, the author has proposed many of their definitions of key concepts, including the term “special operation”, which has developed theoretical findings in this area.

The researches by O. Pomortseva et al. (2023) and D. Kunertova (2023) considered the advantages of using geographic information systems and drones as determining factors for the success of SIO in military operations. O. Pomortseva et al. (2023) argued that the speed of decision-making in military operations depends both on the availability of information and the speed of response. It was noted that developed interfaces of modern software tools will facilitate this process. Among the main tasks was to analyse the specifics of using technology and software in military operations, and to develop a general scheme for using human resources in war (Tanchak et al., 2022; Zhansagimova et al., 2022). It was proposed to use satellite communications, modern intelligence methods and interaction between headquarters and units, which could significantly affect the mobility and

productivity of operations. The work of D. Kunertova (2023) examined the impact of using unmanned aerial vehicles (UAVs) on the dynamics and nature of hostilities during the conflict in Ukraine. The author examined how using this technology has changed military tactics, strategies and outcomes of hostilities, and evaluated the functions and tasks performed by drones in the context of hostilities.

Considering the above, the purpose of the research was to explore the phenomenon of SIO, considering all the specifics of today. After reviewing the literature in this area, it can be stated that this, at the very least, required an assessment of the development of the latest technologies, training of operational personnel and cooperation between law enforcement units and military structures, considering international experience and practice.

Materials and Methods

The research used a combination of methods of scientific knowledge that complemented each other and contributed to a comprehensive disclosure of the research subject. The most useful were the following methods: historical, systematisation, statistical, formal-dogmatic, comparison and synthesis. However, notably, to clarify specific issues that may have arisen in the course of the research, for example, regarding legal or technological issues, special methods from the above-mentioned areas were used, which were auxiliary to the writing.

In particular, the historical method was used to explore historical examples of SIO in military conflicts. In addition, the author analysed the development of such operations during different historical periods and determined how their current state correlates with the current example of Ukraine. The systematisation method influenced the consideration of SIO as a component of the military activity system. The author analysed the interaction of different parts of the system and considered the impact of various factors on the functioning of this system. The statistical method was particularly relevant for the research, based on the collection and analysis of statistical data on various official registers and the number of imported and otherwise acquired equipment that could potentially be used in the course of operational and investigative activities.

The other method was formal-dogmatic, which was used to analyse the texts of laws, regulations and legal doctrines related to SIO. In addition, the method of comparison proved to be appropriate, as it identified different aspects of the phenomenon, considering the military actions in Ukraine. In addition, it highlighted similarities and differences in methods, strategies and legal regulation using examples from different international systems. As for the synthesis method, it allowed summarising various theoretical approaches, concepts and principles to establish a comprehensive understanding of SIO in the context of military

operations. To explore the subject of the research, it was necessary to establish legal guidelines and systematise the formal and informal sources of law governing this area. For this purpose, the legal principles and current legislation of Ukraine regulating SIO were used, in particular, the Law of Ukraine No. 2135-XII “On operational-investigative activities” (1992).

In developing the theoretical framework related to the key points of the research (examining staff training methods, assessing the effectiveness of using the latest technologies, forms and manifestations of cooperation and coordination), many academic studies and scientific researches by leading scholars who have explored this or related subjects were used. Thus, in the course of the research, the authors referred to the works of Ukrainian, Polish, American, Romanian, Serbian, Uzbek and Baltic colleagues who have thoroughly explored one or another aspect related to the issues raised in the course of the research. In addition, a systematic collection of statistical data provided by official institutions, such as the Ministry of Defence of Ukraine and the Cabinet of Ministers of Ukraine, was conducted. This information included data related to the technological capabilities that can be provided for the implementation of SIO and the number of potential targets of these transactions according to the registers maintained by the above-mentioned bodies and other competent authorities.

Results

The SIO is a system of measures designed to solve problems related to the identification of one of the grounds provided for in Article 6 of the Law of Ukraine No. 2135-XII “On operational-investigative activities” (1992). There are four main grounds among them:

1. Availability of information to be verified using operational and investigative measures and methods (for example, information on missing persons; persons preparing to commit a criminal offence; and persons hiding from pre-trial investigation authorities).

2. Inquiries from state bodies, institutions and organisations in some cases; vetting of persons holding positions in intelligence agencies or involved in cooperation with such agencies.

3. In cases provided for by the Law of Ukraine No. 912-IX “On exploration” (2020).

4. Availability of summary materials provided by the State Financial Monitoring Service of Ukraine.

Each of the above grounds was identified as significant in the context of a detailed examination in this area, but, in this research, the emphasis was placed on the analysis of search operations and their specific features in the context of military

operations. Since on 24 February 2022, due to the full-scale military aggression of the Russian Federation on the territory of Ukraine, a significant part of the territory was involved, and a situation arose in which operational and investigative activities became particularly relevant. It is explained by the fact that the search and tracing of missing persons, abducted and captured during the hostilities, and persons hiding from law enforcement agencies, has become particularly large-scale and identified difficulties caused by the hostilities, including a threat to the safety of operational personnel, the presence of enemy forces, mines and traps, the possibility of contact with the aggressor's armed forces, and the specifics of using auxiliary tools to improve the effectiveness of the SIO (Boyd-Barrett, 2023).

The findings of the research forced the analysis of statistics that directly connected all aspects of SIO in the context of hostilities and allowed to assess the specific picture of the situation established by the full-scale invasion. According to the Ministry of Internal Affairs of Ukraine's wanted register (2023), about 52.8 thousand people are hiding from the state authorities. According to the unified register of missing persons under special circumstances, as of May 2023, at least 23,000 people were officially confirmed as missing as a result of hostilities (Cabinet of Ministers of Ukraine, 2023). The research identified these figures as constantly growing and establishing conditions under which the competent authorities and their staff face the impossibility of solving their tasks in a short time. However, considering military operations, the modern world is conducive to maximising the effectiveness of investigative operations, which is possible by improving such key aspects as training and education of personnel, technological development and the impact of modern technologies, and cooperation and coordination between various structures and units, including international ones, that conduct SIO.

The research identified the professional training of the staff involved in the relevant activities as one of the most important factors in the SIO's success. First of all, it was necessary to determine the entities that had the relevant powers in this area. Based on the current legislation of Ukraine, in particular, the Law of Ukraine No. 2135-XII "On operational-investigative activities" (1992), a structure was modelled to evaluate the number and system of competent authorities in the research area in Table 1.

Table 1

General structure of bodies and their subdivisions responsible for operational and investigative activities

Name of the authority	Name of the unit that conducts operational and investigative activities in the relevant body
National Police	<ul style="list-style-type: none"> • criminal police; • special police.
State Bureau of Investigations	<ul style="list-style-type: none"> • operational management; • operational-technical management; • internal control management; • personal security management.
Security Service of Ukraine	<ul style="list-style-type: none"> • operational divisions of the Central Office; • operational divisions of regional authorities; • operational divisions of military counterintelligence authorities.
Foreign Intelligence Service of Ukraine	<ul style="list-style-type: none"> • agent intelligence; • operational-technical divisions; • internal security division.
State Border Guard Service of Ukraine	<ul style="list-style-type: none"> • intelligence authority of the central executive authority that implements national policy in the field of state border protection; • internal security and personal security division; • operational documentation division; • operational-investigation division; • operational-technical division.
State Protection Department	<ul style="list-style-type: none"> • operational security support division (exclusively to ensure the security of persons and objects subject to state protection).
State Penitentiary Service of Ukraine	<ul style="list-style-type: none"> • penitentiary and detention facilities.
Intelligence agency of the Ministry of Defence of Ukraine	<ul style="list-style-type: none"> • operational divisions; • operational-technical divisions; • internal control division.
National Anti-Corruption Bureau of Ukraine	<ul style="list-style-type: none"> • detectives; • operational-technical divisions; • internal control division.

Bureau of Economic Security of Ukraine	<ul style="list-style-type: none"> • detective division; • operational-technical divisions.
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Source: developed by the authors based on Law of Ukraine No. 2135-XII “On operational-investigative activities” (1992).

Eventually, the research concluded that such an extensive system has established a situation in which it is difficult to ensure that the personnel of such units are fully trained, considering the risks that they may potentially face during SIO. Thus, considering that the country is in a state of war, there is a special need to protect Ukraine from threats to national security and citizens, which should be ensured primarily by highly qualified personnel. The research has determined that this can be achieved through an approach based on improving skills, increasing military readiness, developing leadership skills, improving technical knowledge and establishing a stable psychological state of personnel. To implement such an approach, a set of measures should be implemented, covering a variety of practical exercises in different areas, where all elements of training are closely interconnected. In the course of analysing the scientific developments in this area, the authors of the research conclude that staff training should be based on the following main areas:

1. Operational-tactical training: the foundation of training for operational personnel, which includes the following sub-areas: tactical medical training (providing skills and knowledge for immediate and effective medical care for injured persons in conditions where access to medical facilities is limited or impossible); psychological training (training designed to ensure psychological stability, efficiency and ability to withstand stress while performing duties); special firearms training – (it includes firearms skills, use of firearms and tactical training for effective work in a possible conflict situation); physical and combat training – (training and development of physical skills and abilities of employees by ensuring optimal physical fitness for effective performance of duties in demanding conditions).

2. Information security: employees must be able to protect confidential and sensitive information during SIO to prevent data leakage, and unauthorised access and maintain the efficiency of operations.

3. Technical training: personnel conducting operational and investigative activities in the context of hostilities should be able to use technical means to obtain information and evidence in the context of hostilities easily and mobilise them. Employees must be able to use various technical means (UAVs, satellites, artificial intelligence systems, analytical software) that can be useful in operational and investigative activities in hostilities (Babak et al., 2020).

4. Legal training: personnel conducting detective and investigative activities in the context of hostilities must understand the laws and regulations governing detective and investigative activities. Personnel must know their rights and obligations and the rights and obligations of persons who are the objects of detective and investigative activities in the context of military operations.

Based on all of the above, the next significant stage of the research was the assessment of modern technologies, as the outcome of SIO and their effectiveness largely depend on the introduction and optimal use of the latest technological tools in the context of military operations. These technologies allow collecting, processing and analysing information faster and more efficiently, improving the ability of operational and investigative services to respond to challenges and ensure more successful results. For this reason, the research focused on specific emerging technologies and assessed their advantages and limitations in Table 2.

Table 2

Advantages and limitations of the latest technologies used in SIO

<i>Technology name</i>	Advantages	Limitations
<i>Drones (UAV)</i>	They can perform surveillance and reconnaissance at a great distance from the operator. They increase the volume and accuracy of intelligence information. They can be used to attack enemy targets without the involvement of pilots.	They depend on the presence of stable connections with the earth's base. Exposed to the possibility of signal interception or destruction. Cannot engage in close contact or interaction with the public.
<i>Satellites</i>	Provide a wide view over large areas. Can collect and transmit information regardless of weather conditions. Capable of long-term surveillance from space.	Expensive to develop and launch. Have limited ability to visualise details on the ground. Require sophisticated systems for processing and analysing the information collected.

<i>Artificial intelligence systems</i>	Capable of fast processing of large amounts of data. May identify patterns and dependencies that are not obvious enough. Used to predict situations and detect anomalies.	Require a lot of computing power. Can be sensitive to incorrect data and incorrect algorithms.
<i>Analytical programmes</i>	Help to analyse large amounts of information and find dependencies in it. Enables fast and accurate data analysis. Can help you make informed decisions in real time.	May be limited by the quality of the input data and depend on the correct choice of data. Requires specialists to program and configure. No substitute for human expertise and understanding of the context.

Nowadays, the impact of these technologies can hardly be overestimated, as evidenced not only by Ukraine's experience. The United States is one of the leading countries in using modern technologies in military activities. The US experience has demonstrated the active use of drones, satellites, artificial intelligence systems and analytical software for intelligence and search operations (Hardy, 2023). Another relevant example was Israel, which is constantly on military alert and uses drones and advanced technologies in intelligence missions to help the military find and neutralise threats in real-time (Srirangam et al., 2023). China's activities were identified as significant, as it primarily focuses on the development of its technologies in the field of advanced technologies to support its intelligence and surveillance operations. As for NATO, it draws on a variety of technologies and resources from its members to support intelligence and investigative operations, which indicates a high level of cooperation and coordination (Saxi, 2022; Mustafin and Kantarbayeva, 2021).

Ukraine, by far, uses the most modern technology products for reconnaissance and SIO. The shortage of military drones forced the mobilisation of civilian drones, re-equipping them for military use, and developing and manufacturing their drones. During the full-scale war in Ukraine, 28 models of different types of Ukrainian-made drones were adopted for service. According to official sources, the production of some categories of drones in Ukraine has increased 100-fold compared to last year (Sokolova, 2023). As of 2023, the number of UAV operators as a result of the Army of Drones project has increased to 10 thousand pilots, and on 14 August 2023, a charity initiative of the Come Back Alive

Foundation, UNITED24, and MONOBANK launched a fundraiser for 10 thousand kamikaze drones for the defence forces, which underscores the significance of this technology but indicates its rapidly depleting nature.

In general, the volunteer contribution of charitable foundations and organisations can hardly be overestimated, as they were the ones who provided the army with advanced technologies at the beginning of the full-scale invasion. The reporting of well-known foundations in three important areas: drones, UAVs and vehicles – demonstrated that there is a great need among military structures and operational units for these developments, and the amount of technology required to meet the entire real demand is constantly growing in Figure 1. As for the vehicles that are supposed to ensure efficient logistics and mobility of investigative personnel, in the first four months of the war alone, 10.7 thousand vehicles were imported into Ukraine for the needs of the Armed Forces of Ukraine (AFU). Considering the factor of military operations, constant clashes with enemy groups, and the risk of encountering enemy traps and mines, the research has demonstrated that under such conditions there is a great risk not only to the safety of operational personnel but to all technological ammunition.

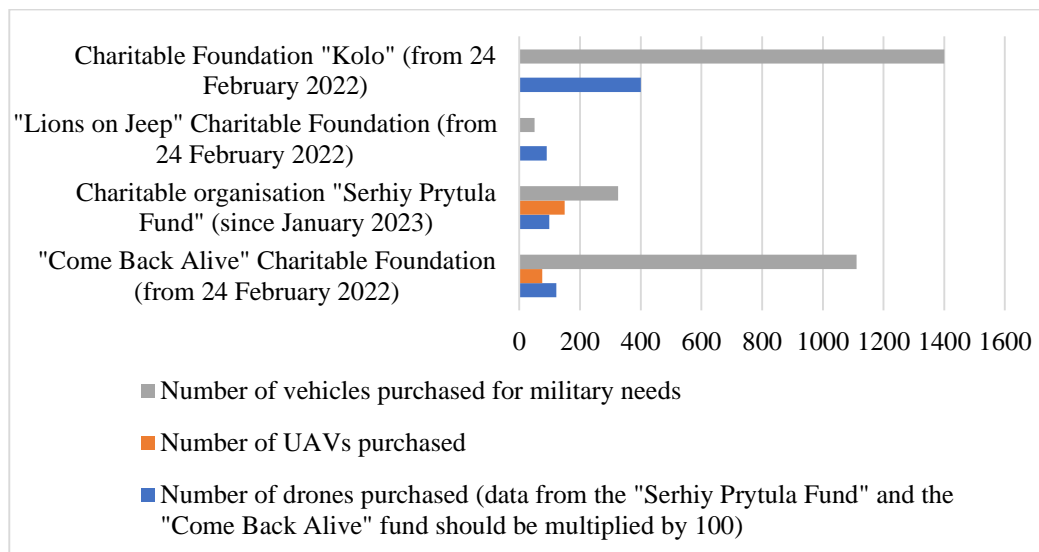


Figure 1. Statistics on the latest technologies purchased by charitable foundations and organisations to meet military needs

However, it is not enough to provide operational personnel with the latest technologies, as a set of factors must be in place to ensure their successful use, which includes many aspects. First and foremost, access to appropriate financial

resources was identified as crucial, as countries and organisations that pay great attention to military funding and innovation tend to achieve better results. The availability of highly skilled scientists, engineers and technical personnel was identified as essential, as it helps to develop and implement the latest technologies with the effective use of scientific knowledge (Jakubik et al., 2017; Karshalova et al., 2017). In addition, the research highlighted the interaction between military structures and industrial companies as a significant point, which allows for faster implementation of new developments and using finished products. Testing new technologies in special conditions caused by military operations, and adapting them to the specific needs of intelligence and surveillance operations is of practical importance (Dolzhenko et al., 2020; Mustafin, 2015). On the other hand, a high level of leadership and political support allows for more effective implementation of new technologies and necessary changes in organisational processes (Haliantych et al., 2021). Based on the previous factor, the research identified the aspect of openness to cooperation with other countries, organisations and scientists as essential, which should facilitate access to advanced developments and technologies.

The research demonstrated that in the context of military operations, SIO are conducted by different structures and units, which, in particular, logically follows from the information provided in Table 1. Based on this, the research has identified several ways of interaction and communication between law enforcement units. However, this should not be limited to them, as military operations require active cooperation with military structures such as the army or special forces and even with competent units of allied countries or international organisations (Ginters and Aizstrauta, 2018). Therefore, the following guidelines for cooperation and coordination have been developed:

1. Mutual planning and active discussion of available information at meetings held as part of joint operational meetings of heads of operational divisions.
2. Joint execution of complex special operations and implementation of specific operational and investigative measures that require the perfect use of resources and interaction of various actors.
3. Ensuring effective internal interaction between operational units is based on an organisational model that provides for active cooperation with pre-trial investigation authorities in the course of implementing operational materials.
4. Systematic joint holding of colleges, meetings, conferences, and publication of guidelines, newsletters and journals.
5. Structured exchange of operational data and confidential information as a manifestation of fruitful bilateral interaction, in which the integral interest of both

parties serves as an essential foundation for the successful completion of specific tasks.

These recommended ways of interaction will contribute to the effective implementation of the SIO, which the research explained by the need for operational units to plan strategically and actively share information. In addition, the joint execution of complex special operations and the cooperation of different actors, the interaction between operational units and pre-trial investigation agencies, and the systematic exchange and publication of experience can help to improve investigative activities and ensure successful outcomes.

Discussion

The research of O. Klimishen et al. (2023) focused on the research of modern methods of ensuring aviation search and rescue operations; analysis of technical means for detecting emergency aircraft; development of proposals for the transfer of information from the control point on board to the ground control centre; selection of optimal media for specialised equipment and individual models of video surveillance and data transmission systems. Unlike this research, the researcher's work focused on explaining primarily the technical aspects related to the latest technologies that may be useful, including in the course of SIO.

The work of M. Albakjaji and R. Almarzoqi (2023), where the authors describe the role of digital technologies affecting international relations, using the example of the war between Russia and Ukraine. In the context of operational and investigative activities, this research proved to be particularly useful in exploring such concepts as "cybersecurity" and "cyberattack". Moreover, the work was not limited to cybersecurity, but generally examined the impact of digital technologies, including social media, media and artificial intelligence, as part of a system that has a significant impact on international cooperation and interaction (Mustafin and Kantarbayeva, 2022; Rybchynskyi, 2022).

Another significant development in this area was the research by V. Jitariuc (2022), which was devoted to the research of various aspects and categories of SIOs. The author analysed various types of SIO, such as search for missing persons, and activities to solve crimes in conditions of military danger. In addition, the work provides a more detailed examination of the structure and functions of organisations responsible for SIOs. In addition, various methods used during the SIO (investigative activities, criminal analysis, use of technical means) were explored. Regarding the practical relevance of the researcher's work, the author evaluated specific examples of operations where the effective use of methods and tools yielded positive results.

Significant for the research were the works of J. Tebinka (2023) and J.R. Lindsay (2020), which allowed evaluating the context of hostilities through a historical lens. It provided an understanding of how SIOs were implemented in other wars, including the Second World War and the Iraq War, which is directly related to the then and nowadays development of technology, the level of possible cooperation between units and geopolitical implications. The work of J. Tebinka (2023) examined Anglo-Polish cooperation in special operations. Particular significance was devoted to the intelligence aspects of this partnership. In general, such active interaction and cooperation in wartime can still be considered a worthy example of international cooperation in the course of SIO. The research of J.R. Lindsay (2020) examined the consequences and adaptation of US forces during the operation in Iran. Difficulties and features were explained by the fact that the command's controlled practice became isolated, forcing both internal and external actors to adapt (Repnikova et al., 2022). The work went on to examine the isolated practice, which was particularly important when it came to an operational tactical unit that had close ties to the fighting and extensive opportunities for analysing facts on the ground. In addition, the author explored the Special Operations Task Force's information system and compared it to other units that performed similar missions (Joint Special Operations Command) or operated in the same environment (US Marines).

An essential research to explore the subject of the current research was the work of V.M. Turanjanin and J.V. Stanisavljević (2021), which allowed evaluating the experience of the Baltic States in search operations, although the focus of the work was primarily on the legal component of this phenomenon. The analysis of the research led to the conclusion that special investigative measures are one of the most significant initiatives in the fight against serious criminal offences. The authors analysed the impact of Lithuanian criminal procedure legislation on the case law of the European Court of Human Rights in the field of operational investigations. In the second part of the research, the authors examined the decisions made in Latvia, where a significant number of special investigative actions were identified. Finally, the authors examined the Estonian legal context in detail. In this part of the work, the positions of the European Court of Human Rights are individually considered and analysed in detail, based on the decisions taken in this context. While the variety of special investigative measures indicates their wide range, the majority of decisions in all three legal systems are in line with the standards set by the European Court of Human Rights (Karasayev et al., 2023).

The work of Uzbek scientists G. Akhmedova and E.D. Oybek Ugli (2023) investigated aspects of the introduction of modern technologies in conducting operational and investigative actions through the analysis of using advanced

technologies and artificial intelligence in the work of law enforcement agencies on the examples of the United States and China. The author concludes that, based on the successful experience of these countries, high-quality support of technologies and artificial intelligence, which are defined as auxiliary attributes of operational and investigative activities, contributes to more timely detection of crimes and more effective crime prevention.

In addition, the work of L.G. Oprean (2023) can be highlighted, in his research analysed using the latest technologies in military operations, which allowed for a comprehensive assessment of the impact of technology, considering its advantages and limitations. The research emphasised that recent decades have led to significant technological breakthroughs in various fields, which is particularly evident during military conflicts. The research indicated that the growing use of drones has become an integral part of military operations. Drones have demonstrated many advantages due to their high accuracy, low visibility, and the ability to attach additional equipment in the form of radars, weapons, and modern communication systems (Zadorozhniuk, 2023; Levchenko et al., 2023). The authors determined that the current reality and prospects dictate that the actions of drones will be key to achieving the desired results of the military or SIO. Therewith, noted that modern forces must be prepared to conduct both active and passive defence against these new threats to ensure effective protection (Barabash et al., 2022; Komilova et al., 2021).

Detailed research on the issues of professional training of operational personnel and military was conducted by G. Minculete and C. Grigoras (2022). This research was based on the fact that the current challenges facing military leaders necessitate continuous professional development in line with the requirements of global and regional military realities. It requires continuous education and training, using the intellectual and practical tools necessary for successful military and investigative operations in different situations – in peacetime, crisis or possible armed conflict (Ginters, 2019; Balbayev and Carbone, 2014). The research highlights some aspects that determine the professional behaviour of personnel and help to master the art of effective and successful operational leadership in tactical structures. Finally, the authors conclude that in the future, the heads of tactical operational structures must constantly learn and develop, as the role of a leader will become increasingly complex. Thus, the establishment and development of new education and training programmes were identified as key elements in ensuring a decent professional level of operational staff (Horbachova et al., 2022).

Summarising the data from all the studies reviewed, it can be concluded that the military context requires SIO units and their leaders to be highly trained and adapt to new challenges. Using advanced technologies, such as intelligent systems,

drones, modern weapons and advanced communication networks, is becoming a necessity for effective detective work in the context of military conflicts (Grega and Nečas, 2022). In addition, Ukraine should evaluate and adopt the positive experience of foreign countries in the field of detective operations, and areas related to it. Therefore, only the research and improvement of existing practices in terms of personnel training, effective use of the latest technologies and efficient cooperation and communication between different operational structures can ensure maximum productivity of special investigative actions in Ukraine, considering military operations and the risks associated with them.

Conclusions

The research on the subject established that the SIO was adjusted to the military conditions that Ukraine is currently experiencing. Under the current legislation, five main grounds may give rise to the initiation of operational and investigative activities, but as a result, the main ground was identified as the availability of information that should be verified through operational and investigative measures. An analysis of official registers identified the number of people reported missing as of May 2023 (23 thousand) and the number of people hiding from state authorities (about 52.8 thousand), which led to the conclusion that the competent structures are overwhelmed with a significant amount of work. The research on the system of operational units identified an extensive mechanism that is not easy to provide with exclusively highly qualified personnel who are ready for the risks caused by military operations. Considering all the important aspects, the authors have developed four main areas of training for operational personnel, as it was concluded that only such multi-vector training will provide employees with all the necessary skills.

The research on the impact of new technologies on the course of the SIO was ultimately assessed as crucial, since increasing the efficiency of the tasks depends on the rational use of the latest technologies, such as UAVs, satellites, and artificial intelligence systems. The analysis of technologies identified the advantages and limitations of specific examples of equipment that can be used in the SIO process, which identified their real prospects for application. The data analysis of the actions of the Ukrainian state and society led to the conclusion that the demand for the latest technologies for a country at war is particularly high and proved the significance of developing capacities in this area. A comprehensive analysis demonstrated that the successful use of technology is influenced by access to appropriate financial resources, the availability of highly qualified specialists, testing of such technologies in specific conditions, and improved cooperation between different departments. As a result of the special attention paid to the latter factor, five

different types of cooperation and coordination were identified, each of which can be improved and supplemented. In general, the research on the subject has identified the main features related to the conduct of SIO during hostilities, but future work in this area could focus on exploring the specifics of respecting the rights of civilians during SIO, and explore the problem of ensuring their safety in such conditions. In addition, the issue of the impact of SIO on the post-war recovery process remains understudied.

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