
The paper focuses on historical aspects of performance of the System of lessons analysis and dissemination in the Armed Forces of Ukraine in the Special Period: from April 2014, when the Anti-Terrorist Operation began in the east of our country, until December 2018, when the Ukrainian Armed Forces started to build a prospective Lessons Learned System.

For the reason that the development of the new Lessons Learned System has been based on the previous System of lessons analysis and dissemination there is an acute need to research the history of organizational learning in the Armed Forces of Ukraine in the Special Period. An importance and relevance of this scientific and practical task is also determined by the enduring Russian armed aggression against Ukraine and existing threats of the large-scale Russian military invasion of Ukraine as well as by absence of the tailored studies in the Ukrainian historiography.

The article includes an assessment of functioning of the System of lessons analysis and dissemination during the Adaptation stage (final phase) which took place after the Stagnation (December 1991-May 2013) and Reformation (May 2013-April 2014) stages. The four main components of the System are considered: organizational structure; formalized process of military learning; lessons learned tools; lessons learned training.

The research is focused on performance of the System of lessons analysis and dissemination for acquisition and transformation of knowledge that was obtained from combat experiences of the Ukrainian Armed Forces in the the Special Period. Using of the System of lessons analysis and dissemination in the Special Period (2014 – 2018) has significantly improved the Ukrainian Armed Forces operational capabilities. Despite
these successes, the Donbas war in the Eastern Ukraine (2014 till now) has showed an ineffectiveness of the above-mentioned System and revealed an urgent need for cardinal improving of the Ukrainian military learning.

**Keywords:** experience, organizational learning, lessons learned process, System of lessons analysis and dissemination, the Armed Forces of Ukraine, Special Period.

**Introduction.** In military affairs, especially during wars (combat operations), effective organizational learning was, is and will be the driving force of the evolutionary development of the armed forces. In modern science, organizational learning is interpreted as a process by which a military organization (armed forces, service of armed forces, arm (branch), military unit, etc.) uses new knowledge gained from experiences or researches to adjust organisational doctrines and procedures to minimize the risk of repeating mistakes and increase the chance of successes and victories in the future (Dyson, 2020: 15).

For the first time semi-formal lessons learned (LL) procedures were used in the armed forces of Germany and Great Britain during the First World War (Dyson, 2020: 17-18). An Organisational Learning Concept was first stated by Richard Cyert and James March in 1963. The American scientists at their work „A Behavioral Theory of the Firm” proved the importance of organisational LL structure and appropriate management of the LL process to ensure effective organisational learning (Cyert and March, 1963).

At the end of the twentieth century, with the rapid development of information and communication technology (ICT), the Organisational learning concept was upgraded and the Knowledge management theory was developed as the further evolution of the concept (Dyson, 2019; Dyson, 2020). This theory is aimed to improve the efficiency of acquisition, storage, archiving, recovery and dissemination of obtained knowledge within the "internal" (organizational) environment, as well as gaining of knowledge and experiences from the "external" (non-organizational) environment to achieve successful knowledge transformation (Dyson, 2019; Nonaka and Ikujiro, 1991).

The modern advanced LL doctrines are focused on studying of ways of improving the use of implicit knowledge at the individual and organizational levels, use of the ICT achievements to increase the efficiency of the LL processes. Today the world's best practices of organisational learning countries are characterized by the development of the permanent formal procedures to improve the dynamic organizational capacities in obtaining knowledge, learning experiences,
effective management, dissemination and transformation of the acquired knowledge and experiences (Dyson, 2020: 15).

**Problem statement.** Since Ukraine left the Soviet Union in 1991 till 2018, the Ukrainian Armed Forces (UAF) have used a System of lessons analysis and dissemination (SLAD) for capturing the training and combat experiences (Pashchuk Y. and Pashkovskyi V., 2019: 36; Pashchuk Y., 2021: 45-46). The SLAD is defined as a set of lessons learned methods and techniques for using prescribed LL organisational structure and tools to execute analysis and dissemination of the acquired lessons (Pashchuk Y., 2021: 45-46).

The System of lessons analysis and dissemination inherited military learning capabilities from the former Soviet Armed Forces and had three main phases of development (Pashchuk Y. and Pashkovskyi V., 2019: 36-38; Pashchuk Y., 2021: 45-46): Stagnation (December 1991–May 2013), Reformation (May 2013–April 2014) and Adaptation stages (April 2014–December 2018). The armed aggression of the Russian Federation against Ukraine that had started in 2014 (Verkhovna Rada of Ukraine, 2015) became a main cause and catalyst for the radical transforming of the System of lessons analysis and dissemination. The SLAD was redirected and focused primarily on learning of the UAF combat experiences. Using the SLAD over Adaptation phase has produced some very important outcomes that significantly improved the operational capabilities of the Ukrainian Armed Forces. On the other hand, during the Anti-Terrorist Operation (ATO: from 13 April 2014 till 30 April 2018) and Joint Forces Operation (JFO: from 30 April 2018 till now) (Ukrainian Pravda, 2014; Law of Ukraine, 2018) the performance of the SLAD have displayed some limitations in preventing the UAF ability to address all challenges and make use of potential best practices in the Ukrainian military.

Based on deep analysis of the SLAD and world best practices in organisational learning, in August of 2018 the UAF leadership made a decision to create a fundamentally new prospective Lessons Learned System (LLS) (LL, 2018). The Road Map for forming of the LLS was developed in November 2018 and in January 2019 the new System was launched (Pashchuk Y., 2021: 44-46).

Since the LLS development has been based on the previous System of lessons analysis and dissemination there is an acute need to research the history of organizational learning in the Armed Forces of Ukraine in the Special Period (Decree of the President of Ukraine, 2014).
An importance and relevance of this scientific and practical task is also determined by the enduring Russian armed aggression against Ukraine and existing threat of the large-scale Russian military invasion of our country as well as by absence of the tailored studies in the Ukrainian historiography.

The aim of the paper is to research the historical aspects of performance of the System of lessons analysis and dissemination in the Armed Forces of Ukraine in the Special Period (April 2014 –December 2018), and investigate the dominant features of the Ukrainian military learning during this time.

The main part of the article. In order to improve fundamentally the troops training and enhance the UAF operational capabilities, in May 2013 the Ukrainian military leadership launched the SLAD reforming based on the NATO assistance and the world best practices in organisational learning (Pashchuk Y., 2021: 52-54). The planned transition in the UAF military learning have not been fully implemented before the Russian invasion in Ukraine.

The armed aggression of the Russian Federation against Ukraine, that had led to the Moscow's annexation of Crimea in March 2014 and beginning of Donbas war in April 2014, became a main cause and catalyst of the radical SLAD transforming. At that time the Russian military and information superiority, transient nature of wide-ranging combat operations and weaknesses of the Ukrainian security and defense agencies in responding to the "hybrid warfare" have necessitated the cardinal changes in the UAF organisational learning and actually led to the beginning of adaptation of the SLAD to new severe challenges.

The SLAD adaptation stage was launched under extremely difficult conditions of the Special Period (Decree of the President of Ukraine, 2014) when the time factor was decisive. Since the beginning of the Anti-Terrorist Operation, the amount of information about the war experience has increased significantly compared with peacetime. Almost all military bodies at all levels were involved in collecting and analysing the experiences of UAF employment in the Anti-Terrorist Operation, but such activities were not properly organized and coordinated. None of the military bodies, including the Military-scientific department of the UAF General Staff that had been responsible for coordination of the LL process, did not have clearly defined authorities to organize the UAF organisational learning.
Despite this, some very important documents with analysis of the combat experiences and lessons learned were developed and disseminated in the UAF organisations in May and June 2014. These electronic and printed publications included the vital review of bad and good practices of the Ukrainian troops during the first two months of the Anti-Terrorist Operation, as well as essential recommendations on remedial actions and studied tactics, techniques, and procedures of the enemy.

The Ukrainian military leadership were understanding the utmost importance of studying of combat experiences and therefore had identified two dominant priorities in improving of the UAF organisational learning: creation of the LL organisational structure in the combat zone and developing adequate LL Standard operating procedures.

Thus, on August 3, 2014, a LL section has been established at the Anti-Terrorist Operation HQ and included 2-3 officers who are appointed on the rotational basis from 4 to 8 months (MSR, 2018: 40). Later, in June 2015, the LL sections were also created in each sector of the ATO zone (MSR, 2018: 40). The main problem in manning such LL bodies was that the appointed officers had not had the adequate LL training and proper experience in organizational learning. At that time a training courses for LL training of the UAF personnel and primarily LL staff did not exist.

In addition to the permanent LL bodies in the ATO headquarters, the special mobile LL groups have been created and involved in learning the war experiences (MSR, 2018: 43). These groups have been often formed from the General Staff representatives and relevant experts from the Ukrainian military research and education institutions. The main objective of these groups was to complete high-quality studies of combat experiences of the UAF troops when they were deploying in the ATO zone or after their withdrawing from this area to the permanent stations.

The Temporary LL Standard operating procedures, which had been adopted on August 9, 2014 (SOP, 2014), became an extremely important step in improving the UAF organizational learning. This document describes the general procedures for studying of the ATO experiences and clearly defines the military bodies that are responsible for organizing and coordination of the LL process.

In addition, the new table of periodic LL reports (14 documents) about the observations and analysis of combat experiences was
approved by the Chief of the UAF General Staff on October 30, 2014 (MSR, 2018: 39-40). The scope and content of the formal reports was revised in January 2016 (MSR, 2018: 40-41). The above-mentioned essential changes in the SLAD performance can be considered as a key point in initiating of transition from the semiformal to formal organizational learning in the Armed Forces of Ukraine. “Within a period of two years (2014-2016), in the relatively difficult situation which the Ukrainian state found itself (economic collapse, entanglement in long-lasting positional warfare in the east of Ukraine), significant changes were made in the UAF to improve its condition and to make it better suited to current challenges” (Wilk A., 2017: 6).

Regardless of some progress in military learning, for example, effective using of best practices in the training of the Army snipers and employment of the unmanned aviation systems, the UAF leadership could not be satisfied with the SLAD functioning. The completed in August 2016 analysis of the SLAD performance has identified the main existed problems in the Ukrainian military learning (MSR, 2018; MSR, 2020):

- Reporting of the obtained experiences and lessons learned in the chain of command "military unit (battalion, brigade) – HQ of the ATO sector – Anti-Terrorist Operation HQ – UAF General Staff" was carried out very slowly (sometimes 2-4 weeks);
- The combat experiences were mainly spread only within the services of the Armed Forces or their arms and branches;
- The lessons acquired by most of all military units were not usually shared to other units.

Based on the foregoing analysis some urgent remedial actions had been accomplished:

- The commanders of military units are authorized to transmit high priority information on combat experience directly to the Center of operational standards and methods in training of the UAF troops, as well as make direct inquiries to this body to obtain needed information on lessons learned;
- Every military unit has to keep a register of combat experience in which any soldier might freely write observations about important issues, their main causes and ways to solve them. The assigned officers in military units are responsible to analyze the register records and report directly to their commanders weekly;
- The LL personnel at the ATO headquarters develop regular information bulletins with analysis of the most important information on
combat experience. The printed and electronic bulletins are disseminated to all military organisations of the Armed Forces of Ukraine.

Some research on the SLAD performance, including the survey, that was conducted in the UAF National Army Academy in early 2020, defined that at the beginning of the Donbas war (2014-2016) the open-source materials from the Internet had been more commonly used for experience sharing than all other formal means of the UAF knowledge dissemination (Pashchuk Y., 2020). At that time, the UAF organisational learning had not yet been properly organized. There were not enough electronic and printed publications with relevant, updated information about gained combat experiences. Also at that time, no electronic LL databases were used. The Interactive Electronic Lessons Learned Database (IELLD) was launched within the UAF secure military network only on 31 October 2017 (MSR, 2018: 46-48). Above all can be considered as the main reason why most interviewees referred to the predominant use of the informal method for transferring combat experiences and sharing knowledge during pre-deployment and rotation in the field at the beginning of the Russian aggression. Only 6 respondents (11.8%) used the Electronic publications and 1 interviewee (1.9%) applied the resources of the IELLD before their deployment to the ATO/JFO area, while a large percentage (21.6% – 11 interviewees) of those respondents who received information about combat experience from the Internet, in particular from "open" websites (Pashchuk Y., 2020).

After 2016 the situation with disbalance of formal and informal way of knowledge dissemination has been changed. Particularly, it was done after launching the IEELD and cardinal improvements in the UAF organisational learning. From 2017 to 2019, more than 300 bulletins on war experience have been uploaded to IEELD and over 180,000 visits to this database have been recorded (LL, 2018:2).

The combat experiences and knowledge gained since 2014 have had the most impact on changing of the UAF performance. Using the SLAD in the Special Period has produced the following main outcomes that significantly improved the UAF operational capabilities (Pashchuk Y. and Pashkovskyi V., 2019: 36-37; MSR, 2018: 66-67):

Refinement of published military doctrines, particularly Field Manuals for various arms and services;

Changing of the UAF tactics, techniques, and procedures to match the needs of modern warfare, with special emphasis on the irregular warfare conducted by Russian troops in Ukraine;
Overall modernization and improved quality of the UAF organisational structure and equipment.

Even though, numerous issues in the SLAD functioning have not be solved (Pashchuk Y. and Pashkovskyi V., 2019: 37; MSR, 2018: 67-68):

- Overall lack of awareness and understanding of the Lessons Learned (LL) process at all levels of rank and organizational structure;
- The absence of endorsed LL doctrine and standard operating procedures on lessons learning and knowledge transformation;
- Underdeveloped LL organizational structure which tasks personnel with managing LL process;
- While deeply engaged with routine activities, staff of headquarters at all levels were not likely prioritize attention towards the LL process;
- Commanders usually resisted the outward flow of honest and candid observations within their organizations because of their inability to receive and digest constructive criticism;
- Due to prevailing command climate existing throughout the UAF, soldiers hesitated to submit their honest observations and contribute to the LL process due to fear of reprisal from their commanders;
- Observations that have been gathered in the absence of a unified template (format) frequently failed to thoughtfully identify root causes and also omit the inclusion of proposed remedial actions;
- Often the quality of LL analysis was poor due to insufficient time to prepare, lack of proper training with academic techniques in conducting analysis, as well as low levels of information assurance;
- Sometimes after completing the analysis phase of the LL process, the identified lessons were not implemented;
- There was no substantial timeline for when remedial actions should be fully integrated with the desired effectiveness;
- Inconsistent LL training for all UAF personnel, especially with the omission of LL courses for assigned LL personnel;
- Sharing of lessons learned was ineffective, primarily due to collected experiences not being properly categorized and archived, as well as unreliable access to the LL Database using of obsolete software.

These limitations with the SLAD have been preventing the UAF abilities to address all challenges and make use of the potential best practices in the Ukrainian military. These disadvantages have not been properly addressed primarily due to the absence of a standardized LL concept, underdeveloped procedures for gathering and managing observations, their subsequent analysis, as well as LL dissemination.
Five years of the Russian aggression against Ukraine (2014-2018) has revealed an urgent need for cardinal improving the UAF lessons learned capabilities. The SLAD had exhausted all its possibilities and in August of 2018 the Ukrainian military leadership made the decision to focus an initiative on significantly improving of the UAF learning by creating a fundamentally new prospective Lessons Learned System. This effort was also driven by the priorities of the Ukrainian foreign policy towards gaining the NATO membership and fully embracing interoperability.

The Lessons Learned System is defined as a set of the lessons learned methods and techniques for using prescribed LL organisational structure and tools to execute the overall standardized LL process including analysis and remedial actions phases (LL, 2020: 19-21). The building of the above System means the final transition from semi-formal to permanent formal organizational learning in the Armed forces of Ukraine (Dyson T., 202: 2).

Conclusions. Using of the System of lessons analysis and dissemination in the Special Period (April 2014 – December 2018) has allowed to significantly improve the Ukrainian Armed Forces operational capabilities. During this wartime the military leadership have tried to adapt the SLAD to the needs of the UAF in organisational learning.

The Donbas war (April 2014 – present) has indicated an ineffectiveness of the SLAD and proved that this System has exhausted its capabilities. All main components of the System (organizational structure, formalized process of military learning, lessons learned tools, lessons learned training) have required fundamental modernization based on the world best practices. It is, therefore, the Ukrainian Armed Forces leadership launched creation of the prospective Lessons Learned System to improve the Ukrainian military learning.

In the face of real threats of the large-scale Russian military invasion of Ukraine it is extremely important to complete forming of the Lessons Learned System and conduct its successful performance to increase the efficiency of the UAF training and employment, reduce the risks of repeating mistakes and increase the chances for successful operations and victories.
References


LL (2018). Plan to create a prospective Lessons Learned System in the Armed Forces of Ukraine. UAF General Staff. 27 November 2018. 7 p. [In Ukrainian].

LL (2020). Doctrine for Lessons Learned Process in the Armed Forces of Ukraine. VKP 7-00(01). 01 July 2020. 30 p. [In Ukrainian].


Пашук Ю.М., Пашковський В.В., Звонко І.М.
ФУНКЦІОНАВАННЯ СИСТЕМИ УЗАГАЛЬНЕННЯ І ПОШИРЕНИЯ
ДОСВІДУ У ЗБРОЙНИХ СИЛАХ УКРАЇНИ В „ОСОБЛИВИЙ ПЕРІОД”
(2014 – 2018)

У статті досліджені історичні аспекти функціонування Системи узагальнення і поширення досвіду Збройних Сил України в особливий період – з квітня 2014 року, з моменту початку Антитерористичної операції на Сході нашої держави, до січня 2019 року, коли розпочалося створення перспективної Системи вивчення і впровадження досвіду. Потреба у вивченні історії організаційного вивчення та впровадження у Збройних Силах України у вказаний період зумовлена тим, що формування перспективної Системи вивчення і впровадження досвіду базується на організаційній структурі та основних здобутках попередньої Системи узагальнення і поширення досвіду. Важливість і актуальність даного науково-практичного завдання визначається тим, що на сьогодні досі триває збройна агресія Росії проти України та існує висока ймовірність російського пономаштабного вторгнення до нашої держави, а також тим, що в українській історіографії відсутні дослідження, присвячені вищезазначеному питанню.


Застосування Системи аналізу та поширення досвіду в особливий період (2014–2018) значно покращило оперативні можливості Збройних Сил України. Незважаючи на ці успіхи, результати війни на сході України показали неефективність вказаної Системи та визначили загальну потребу кардинального вдосконалення організаційного вивчення і впровадження досвіду.

На основі передового досвіду та практики держав-членів НАТО у січні 2019 року у Збройних Силах України розпочалося створення перспективної Системи вивчення та впровадження досвіду, що базується на використанні досягнень та основних переваг попередньої Системи узагальнення та поширення досвіду.

Ключові слова: досвід, організаційне вивчення та впровадження досвіду, процес вивчення та впровадження досвіду, Система узагальнення та поширення досвіду, Збройні Сили України, особливий період.