Analysis of the features of hybrid warfare

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Abstract

The article summarizes the arguments and counterarguments within the scientific discussion on the identification of features of hybrid warfare.

The purpose of the study is to identify the key features of hybrid warfare, their systematization for further study of trends, patterns, and principles in the subject area. To achieve the goal of the study: analysis of scientific sources to identify the existing features of the phenomenon of hybrid warfare, their systematization, and grouping by relevant areas, formulated conclusions and prospects for further research.

The relevance of the study is confirmed by the presence of a wide range of both domestic and foreign scientific publications, which collectively emphasize the general trend of changing the priority in the use of non-military instruments (methods) in resolving interstate conflicts over the military.

The identification of the peculiarities of hybrid warfare in the article is investigated in the following logical sequence: domestic and foreign scientific publications, individual guidelines are analyzed.

Methods of analysis, synthesis, and systems approach became the methodological research tools.

The object of the research is the phenomenon of hybrid war as a modern form of resolving contradictions at the interstate level.

The article notes an increase in all-around readiness to rapidly adapt to changing vectors and instruments of possible aggression through flexible adaptation of state institutions, the armed forces, and the consciousness of the population to new challenges.

The results of the study can be useful for scientists and managers who study problems of national security, development of the security and defense sector, and defense planning.

Key words: war, hybrid war, hybrid warfare, hybrid threats, features of war.

Introduction

Today, scientists studying the military sphere, the art of warfare are faced with the problem of the phenomenon of hybrid war.

The phenomenon of hybrid warfare is nothing new. Therefore, the modern hybrid conflict has systematized not only all known modern military but also non-military tools and methods.

The globalization of economic and political processes has led to the fact that the negative impact of the existing conflict affects not only the economic, political and social situation between the conflicting states, but indirectly on other countries.

Trade embargoes, energy wars, logistic and transit restrictions, along with the use of political, information and other tools and methods of a non-military nature, lead to destabilization of the socio-economic situation not only in a single country, but also in the region as a whole. And as a result, global uncontrolled migration, activation of anti-state political forces, criminals, which together lead to destabilization of the situation not only within the country – the object of aggression.

According to Article 17 of the National Security Strategy of Ukraine (On the decision of the National Security), in order to restore its influence in Ukraine, the Russian Federation, continuing the hybrid war, systematically uses political, economic, information-psychological, cyber and military means. The groupings of the armed forces of the Russian Federation and

their offensive potential are strengthening, large-scale military exercises are regularly held near the state border of Ukraine, which indicates that the threat of a military invasion remains.

The publication of the Strategy is the starting point for the development of a number of other planning documents in the areas of national security and defense, which will determine the ways and tools for its implementation.

At the same time, in order to develop adequate counter-actions to hybrid aggression, there is an urgent need to study the features of hybrid war in order to find and formulate the corresponding trends, patterns and principles, which together will allow state institutions to quickly adapt to the threats that have occurred in the future.

Material and methods

The following methods of theoretical and empirical research were used in the research, namely: comparison, analysis, synthesis, induction, deduction, system approach.

This study continues the analysis of the phenomenon of hybrid war begun in the study (Loishyn, A., Tkach, I., Tkach, M., & Shevchuk, V., 2021). So, during the period of the study, a large number of domestic and foreign sources were identified, which talk about the problems of hybrid wars. Among foreign scientists, research should be highlighted: R. Walker, V. Gerasimov, F. Hoffmann, T. Huber, G. Isserson, F. Kappen, D. Kilkullen, E. E. Messner, D. McQueen, V. Nemeth and others. Among domestic scientists should highlight the works of: A. Akulshin, V. Begma, V. Gorbulin, A. Datsyuk, O. Ezha, G. Zhekalo, S. Kudinova, A. Zaruba, I. Zastap, A. Zolotar, Yu. N. Karpchuk, S. Kuznets, Kompantseva, S. Kudinova, V. Lipkan, E. Magdy, D. Muzychenko, L. Nikiforova, V. Petrik, G. Pevtsov, A. Poplavsky, A. Poshedin, Yu. Punda, Y. Radkovtsiy, I. Ruschenko, D. Sidorenko, N. Listen, A. Snytko V. Telelym, M. Trebino, V. Shevchuk, L. Shipilova, A. Shiyana, G. Yavorska, etc.

The purpose of the article is to identify the key features of the phenomenon of hybrid war, their systematization for further research of trends, patterns and principles in the subject area.

It is proposed to achieve the research objectives by decomposing it:

- 1) to identify the existing features of the phenomenon of hybrid war;
- 2) to systematize the identified features by grouping them according to relevant areas;
- 3) to formulate conclusions and prospects for further research.

Results and discussion

Considering the historical events from the end of the last century to the present, the "eastern neighbor" is initiating hybrid conflicts in order to achieve strategic goals.

Through the rapid global trend towards the

globalization of economic and political processes, the negative impact of the hybrid aggression from the Russian Federation against Ukraine affects the economic and political processes in other states as participants in international organizations in the political sphere and as participants in the process of world trade and logistics in the economic sphere.

In the internal functioning of any country, there is also a struggle between various political forces to maintain one or another political and economic course. At the same time, a retrospective analysis of historical events shows that from time to time there are political discussions about the influence of other countries on political processes within the state. Usually this is financial support from political forces in exchange for further relevant interests of the sponsoring country.

In the study, through the analysis of existing approaches to the definition of the term "hybrid war", a universal definition of this concept was formulated (Loishyn, A., Tkach, I., Tkach, M., & Shevchuk, V., 2021).

According to the explanatory dictionary, the term "feature" is listed as "originality, specificity of something" or "a distinctive attribute or aspect of something" (Slovnyk ukrayins'koyi movy).

That is, exploring the phenomenon of hybrid war and its features, two interrelated directions of research of the lower level arise: the definition of the peculiar features and specific features inherent in the phenomenon of hybrid war, which collectively distinguish it from other wars.

In the study of wars in the 21st century, M. Trebin determines the main goal of a war depending on its generation (Trebin, M., 2005):

The first generation – the destruction of the enemy, the seizure of territories;

The second generation – the destruction of the enemy, the seizure of territories and values;

The third generation – the defeat of the enemy's armed forces, destruction of the economy, and the seizure of territory;

The fourth generation – the defeat of the enemy's armed forces, the destruction of economic potential, the overthrow of the political system;

The fifth generation – a war to destroy each other;

The sixth generation – it is undermining the

economy, the management system, the life of the state and the destruction of military facilities.

Analysis of the purpose of the war, depending on its generation, showed that starting from the first generation, the means of warfare were consistently improved in the direction of increasing firepower and the range of destruction until the moment when the force of firepower became fatal both for the one who uses it and for that on whom the weapon is aimed at. This gave impetus to the development of not only high-precision weapons, but also for alternative means (tools) of warfare: cybernetic, informational, economic, political, and the like.

The use of these tools in combination with the use of special operations forces and the protest mood of the population has shown greater efficiency in achieving certain strategic goals.

In addition, in his next study, M. Trebin notes that one of the features of the hybrid war against Ukraine is the presence of a period of escalation, which begins with peaceful "antigovernment" actions and protests that develop into an armed civil conflict with subsequent external intervention of the aggressor country. Hybrid warfare combines conventional and nonconventional methods of warfare with the widespread involvement of illegal armed groups and criminals with the simultaneous diplomatic cover of hybrid aggression (Trebin, M., 2014; Svitova hibrydna viyna)

In the collective monograph of the Institute for Strategic Studies of Ukraine V. Gorovenko referring to the publication of V. Gerasimov notes that the main idea of the hybrid war is political goals achieved through (Gerasimov, V., 2016; Svitova hibrydna viyna):

- 1) Minimal armed impact;
- 2) Undermining its military and economic potential;
 - 3) Informational and psychological pressure;
 - 4) Active support of the internal opposition;
 - 5) Partisan and sabotage methods.

Said aptly collectively identifies one of the main features of the hybrid war – to minimize the impact of armed, with simultaneous use of other non-military tools and technologies.

Considering the above, we can conclude that there is another feature of hybrid warfare – the optional establishment of full and total control over the territory of the target country.

According to the scientist-futurologist Y. N. Harari, in the modern conditions of the functioning of the economy, the capture of territories, mineral deposits no longer come to the fore. Technical and institutional knowledge is the actual economic assets of the present time (Harari, Yu. N., 2018).

Telelym V., D. Muzychenko, Yu. Punda Analyzing the course of recent conflicts reach to the conclusion that the main signs of a conflict that can be considered hybrid are (Telelym V., Muzychenko D., Punda YU., 2014):

- 1) The use of illegal armed formations and sabotage and reconnaissance forces;
 - 2) Drawing civilians into conflict;
- 3) Demonstration actions of the armed forces of the aggressor country along the state border;
- 4) Blocking decisions aimed at neutralizing the conflict on conditions unfavorable for the aggressor country, directly with its participation in international organizations;
- 5) Informational and psychological impact aimed at destabilizing the situation within the conflicting state;
- 6) Confrontation between states in the political, economic, social, informational and other spheres.

Exploring the signs of "hybrid war" Y. Radkovets notes that the content of this form of conflict is not the physical destruction of the enemy's armed forces, but the imposition of his will on the population by attracting a wide array of information impact through the media and Internet resources (Radkovets, Yu., 2014).

Studying the issues of the peculiarities of the hybrid war against Ukraine in the sphere of the experience gained by the Air Force of the Armed Forces of Ukraine A. Alimpiev and G. Pevtsov (Alimpiyev, A., Pyevtsov, H., 2017), determine the characteristic features of hybrid warfare, the main of which are:

- 1) The absence of an official declaration of war by the aggressor country;
 - 2) Conducting an outreach campaign;
 - 3) Active use of asymmetric warfare and

network warfare;

- 4) The use of illegal armed formations under the cover of civilians;
 - Sabotage and terrorist actions;
- 6) The use of means of economic and political pressure, etc.

Researching the issue of hybrid aggression of the Russian Federation against Ukraine I. Pronza (Pronza, I., 2016) notes the features of hybrid war:

- 1) Aggression without an official declaration of war;
- 2) Concealment by the aggressor country of its participation in the conflict;
- 3) Widespread use of irregular armed formations;
- 4) The aggressor's disregard for international norms of warfare and existing agreements;
- 5) The application of measures of political and economic pressure;
- 6) Propaganda and counter-propaganda using dirty information technologies;
 - 7) Confrontation in cyberspace.

The scientist also to do emphasis that a hybrid war is planned under the information war strategy, the goal of a hybrid war is not to capture certain territories, but primarily to create chaos in these territories.

Yavorskaya G. in the study of the nature of hybrid war defines the peculiarity of hybrid war – complete victory in the military plane, unlike traditional war, is impossible for one of the parties (Yavorskaya, G., 2016; Lasica Daniel T.).

Vartanova O. (2015) considers the main feature (distinction) of hybrid warfare to be the widespread use of special knowledge, technologies, intelligence tools, the use of tactics and methods of terrorism.

Averyanova N. (2018) studying the information-psychological aspect points to the main goal of the hybrid war – the consciousness of the society of the country-object of aggression. The scientist notes that a hybrid war does not require significant financial resources to wage it, unlike a full-fledged conventional war.

Aleshchenko V. (2016) analyzing the information and psychological aspect of hybrid war, defines the characteristic feature of hybrid war as the information and psychological component combined with military and non-

military tools and methods, where the target of influence is not the enemy, but the population, which is "liberated".

According to A. Senchenko (2017), the specifics of conducting a hybrid war does not differ from other types of wars that have taken place in history, where confrontation also took place in the economic, political, diplomatic spheres.

Exploring the forms of armed conflict A. Fedenko and V. Panasyuk (2018) note that there are at least two main differences between the new form of war (hybrid war):

- 1) The specific weight in the use of nonforceful methods of conflict resolution over forceful ones, the widespread use of the "fifth column" — opposition movements, communities;
- 2) Accelerated legalization of pseudopolitical forces whose activities are aimed at destabilizing the political situation.

Smolyanyuk V., in his study of the political system of society in the context of a hybrid war, supports the opinion that hybrid warfare combines conventional and non-conventional methods of warfare with the widespread involvement of illegal armed formations, mainly aimed at human consciousness through, including informational impact (Smolyanyuk, V., 2019).

Having carried out a structural and functional analysis of the security aspects of European integration policy in the context of countering Russian aggression A. Datsyuk and A. Poshedin, (2019) highlight the following features of hybrid wars:

- 1) Simultaneous defeat of the economic, political, social and information, information and telecommunication systems, violations of ethnic and religious relations in society and military infrastructure;
- 2) Implementation of centralized control in planning and conducting operations (single control center);
- 3) Advantage in the use of non-military tools and methods to achieve the set goals;
- 4) The hidden nature of the use of military tools and methods in armed aggression;
 - 5) There is not official declaration of war.

Mikheev Yu., G. Chernyavsky, Yu. Turchenko, A. Pinchuk (2016) in a study to define the definition of "hybrid war" (Mikhyeyev, Yu., 2016) highlight the following signs of a hybrid conflict:

- 1) The use of illegal armored formations, criminals, special operations forces, weapons and military equipment of the Russian armed forces;
 - 2) The use of civilians in conflict;
- 3) Conducting demonstration actions of the armed forces of the Russian Federation along the border of Ukraine, the threat of their use;
- 4) Blocking international initiatives to resolve the conflict;
- 5) Destabilization of the social and political situation as a result of information and psychological impact;
- 6) Building up confrontation in non-military spheres of state functioning.

Malyarchuk T., C. Briggs Yu. and Danik investigating the military components of the hybrid war by, systematize and highlight the following features: (Nye J. S.; Deptula, D. A., Marrs, J. R., 2009; Rappert, B., 2003; Goffman, F. G., 2006; Madden, D., 2014; Duggan, P., 2015; Danik, Yu, 2017).

- 1) The transition from strategic control to operational control, which is based on real-time battlefield control simultaneously with an informational advantage over the enemy;
- 2) Extension tool of warfare based on the basis of robotics, stealth technology;
- 3) Conducting asymmetric combat operations;
- 4) Increasing dependence on information and psychological means of warfare.

After analyzing domestic sources for the identification of views on the features of hybrid warfare, attention should be paid to foreign research in the subject area.

Therefore, researching the nature of hybrid war, Erik Reichborn-Kjennerud and Patrick Cullen (Reichborn-Kjennerud, Er., Cullen, P., 2016) note the difficulties in determining the beginning and end of hybrid actions, the vagueness of their boundaries, which leads to the conclusion about the form of permanent war, in which it is increasingly difficult to

distinguish between its legal component, coercive diplomacy and war itself.

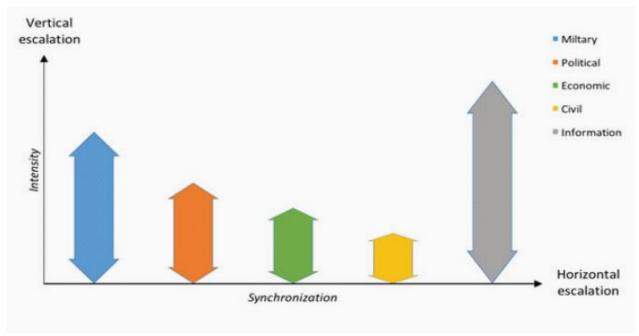


Fig.1. Intensity and synchronization of the use of hybrid aggression (Reichborn-Kjennerud, Er., Cullen, P., 2016)

Scientists highlight an essential feature of hybrid warfare, which is not only the use of specific tools, but the fact that these tools are used in a coordinated and synchronized manner to create a synergistic effect through centralized control and strategic coordination of all tools (elements).

The figure (Figure 1) shows that the tools (elements) of a hybrid war can be applied in vertical and horizontal escalation, which allows both expanding the set of tools (elements) and increasing the intensity of its elements. Thus, a set of measures carried out in the context of horizontal elements at a low level of conflict escalation can, as a rule, be carried out with the least publicity by means of appropriate cyber and operations and political economic intentions that are unclear for understanding the target country of aggression, which are difficult to define as an act of aggression. Moreover, some elements will never approach the level of significant escalation, which provides for the stage of open aggression (open phase of deployment).

Further, Andrew Mumford and Jack McDonald note the peculiarities of hybrid war, which is the difficulty of identifying hostile intentions and actions in all spheres in achieving strategic goals by the aggressor country (Andrew Mumford).

In the monograph "Strategic Consequences of Hybrid Wars: Theory of Victory", the American military general D. Lasika is inclined to believe that the object of the hybrid war is precisely the public consciousness on which the corresponding influence is aimed at changing the vector of the worldview. In addition, the features include a combination of means of information-psychological and military influence (Lasica D. T.).

- D. Lasika highlighted the features of "hybrid wars":
- 1) The predominance of the information and psychological component;
- 2) The object of influence is social consciousness.
 - 3) An indefinite form of hybrid warfare.

Janis Berzins also emphasizes the peculiarity of hybrid war, which consists in the cognitive and psychological aspects of its conduct during a certain number of phases (stages) (Janis Berzins).

Herta L. (Herţa, Laura-Maria, 2017; Herţa, Laura-Maria., 2016) examining the forms of

asymmetric conflict, indicates that in fourthgeneration wars, war and peace will be so blurred to understand, including due to the possibility of the absence of a physical battlefield, or fronts. The resolution of contradictions can occur simultaneously in settlements, rural areas, cyberspace, etc.

Taking into account the outlined approaches to the formulation of the features of hybrid war, it is necessary to reflect the features determined in our opinion in the monograph, which today most of all among the available source base, in the open access reflects the features of hybrid war (Svitova hibrydna viyna):

- 1) The status of an undeclared war leads to the absence of clearly defined timelines and boundaries;
- 2) The lack of clear goals achieved by hybrid warfare;
- 3) The simultaneous management of asymmetric, simultaneous, inconsistent actions on many operational planes;
- 4) The impossibility of a clear definition of direct and indirect losses incurred, both by direct participants in the conflict, and by those who receive a negative indirect economic or other impact through the multi-vector nature of the conflict and the absence of a generalized array of statistical information;
- 5) The proportion of the negative impact of the non-civilian population is not due to the direct influence of an armed (military) nature, but due to the deterioration of the socioeconomic, environmental, epidemiological situation;
- 6) The interstate uncontrolled migration of the population;
- 7) The broad support by the aggressor country of anti-state political forces within the target country;
- 8) The concealment of facts of economic and political aggression;
- 9) The increasing the role of the information component of hybrid warfare.

In our opinion, one more feature should be taken into account – the economic impact of international sanctions is reflected not only on the parties to the conflict, as a result of which the "neighbors", in order to neutralize the

negative indirect influence, are trying to resolve the conflict on peaceful conditions, which are not always beneficial for the target country of aggression. Therefore, only the target country of aggression is interested in the realization of its national interests.

A feature of the hybrid war should also be considered the presence of a powerful information and propaganda influence through a network of religious organizations on the territory of the country-target of aggression.

Analysis of the Law of Ukraine "On National Security" showed the lack of definition of hybrid war / hybrid threat in the document. Also, in the decision of the National Security and Defense Council of Ukraine dated September 14, 2020 "On the National Security Strategy of Ukraine", the issue of hybrid threats occurs only twice: in the context of taking into account the lessons of hybrid aggression against Ukraine and the continuation of the hybrid war by the Russian Federation, which systematically applies political, economic, information-psychological, cyber and military means to restore their influence in Ukraine. But there is no clear definition of hybrid war, or hybrid threat in the documents (On national security).

A preliminary analysis showed that the regulation of hybrid warfare in international legal documents is also insufficient (Petryk, K., Kanars'kyy, Yu., 2015; Loishyn, A., Tkach, I., Tkach, M., & Shevchuk, V., 2021).

Therefore, through the specific nature of the difficulty of defining the boundaries and the "umbrella" definition of hybrid war, one of its key features can be singled out – the complexity of its legal regulation.

But in our opinion, it should be repeated that the main feature of modern hybrid warfare is the absence of an official declaration of war by the aggressor country, including covert aggression using all available tools and methods of a military but not military nature.

Thus, the analysis made it possible to identify the following features of hybrid warfare:

In the field of armed struggle:

1) Demonstration actions of the armed forces of the aggressor country, including on the eve of the adoption of important international or government security decisions;

- 2) The active using and simultaneous conduct of asymmetric, network, inconsistent actions (combat actions) on many operational planes;
- 3) The combination of conventional and nonconventional methods of warfare with the widespread involvement of illegal armed groups, sabotage and reconnaissance forces, special operations forces, weapons and military equipment of the armed forces and criminals, including under the cover of the civilian population;
- 4) The hidden nature of the use of military tools and methods in armed aggression;
- 5) The minimization of military impact, while using other non-military tools and technologies;
- 6) The non-necessity of establishing full and total control over the territory of the target country;
- 7) The combining means of informationpsychological and military influence;
- 8) The physical destruction of the enemy's armed forces is not the main goal;
- 9) The military victory, unlike traditional war, is impossible for one of the parties;
- 10) The widespread use of special knowledge, technologies, intelligence tools, the use of tactics and methods inherent in terrorism;
- 11) The centralized control of the aggressor country when planning and conducting operations (single control center);
- 12) The uncertainty of boundaries and forms of hybrid warfare.

In the information and social plane:

- 1) The increasing the proportion of the information component in hybrid warfare;
- 2) The widespread use (involvement) of the civilian population in the conflict;
- 3) The building up information and psychological impact on the population to destabilize the situation inside the target country;
- 4) The public consciousness is one of the main objects of hybrid war, the behavior of the civilian population in the conflict acquires a decisive role;
- 5) The imposing their will on the population through the use of wide information and

- propaganda influence using the media, the Internet and religious organizations, including using dirty information technologies
- 6) The widespread use of the "fifth column" opposition movements, communities;
- 7) The proportion of the negative impact of the non-civilian population is not due to the direct influence of an armed (military) nature, but due to the deterioration of the socioeconomic, environmental, epidemiological situation;
 - 8) The confrontation in cyberspace.

In the political (international political) and economic plane:

- 1) The lack of an official declaration of war;
- 2) The diplomatic cover for hybrid aggression;
- 3) The concealment, non-recognition of the facts of economic and political aggression;
- 4) The applying of means of economic and political pressure;
- 5) The undeclared confrontation between states in the political, economic, social, informational and other spheres;
- 6) The simultaneous defeat of the economic, political, social and information, information and telecommunication systems, violations of ethnic and religious relations in society, military infrastructure;
- 7) The building up confrontation in nonmilitary spheres of state functioning
- blocking 8) The decisions aimed neutralizing the conflict on conditions unfavorable for the aggressor country, directly with its participation in international organizations;
- 9) The aggressor's disregard for international norms of warfare and existing agreements;
- 10) The conducting at the preparatory stage "anti-government" actions and protests, which develop into an armed civil conflict with external intervention of the aggressor country;
- 11) The accelerated legalization of pseudopolitical forces whose activities are aimed at destabilizing the political situation;
- 12) The broad support, including financial support by the aggressor country, of anti-state political forces within the target country;
- 13) The impossibility of a clear definition of direct and indirect losses incurred, both by

direct participants in the conflict and by those who receive negative indirect economic or other influence due to the multi-vector nature of the conflict and the lack of a generalized array of statistical information;

14) The difficulty in regulating hybrid warfare

due to the lack of clear boundaries and the "umbrella" nature;

15) The widespread use of substitution of concepts and distortion of historical facts in their favor.

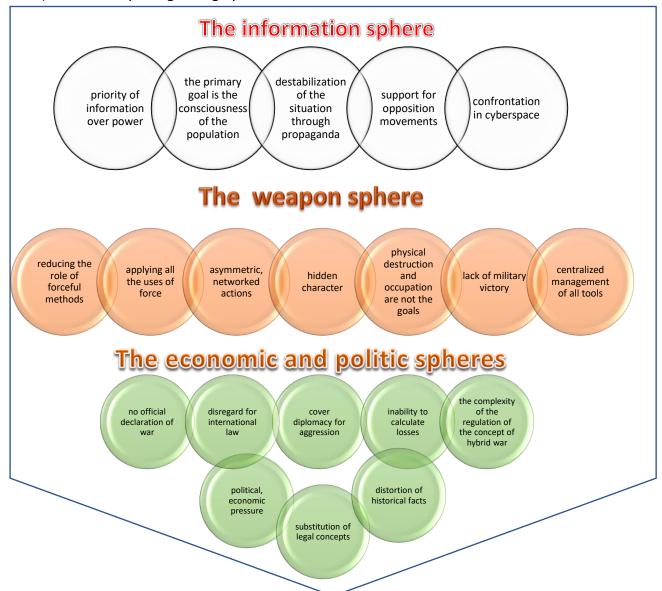


Fig. 2. The main features of hybrid war (warfare).

The analysis carried out in the article allows grouping the identified features and, for clarity,

depicting them in a figure (Fig. 2).

Conclusions

During the study, an opinion was identified regarding the low cost of waging a hybrid war, but in our opinion it is impossible to agree with this, because waging a hybrid war in information, political, economic, military and other spheres not only requires significant

economic capabilities of the aggressor country, but and requires significant economic efforts to improve the functioning of its economy in the face of international sanctions and political isolation. The economic indicators of the consequences of waging a hybrid war in the Russian Federation are covered in great detail in the monograph of the Institute for Strategic Research, edited by V. Gorbulin.

The economy of the Russian Federation from the imposed sanctions annually loses 2% of GDP; the outflow of total net capital is estimated at 160-170 billion dollars (Svitova hibrydna viyna). That is, in its totality, another feature, which consists in an indirect negative impact on the economies of countries that are not directly parties to the conflict. It can be noted that in the course of each conflict there are negative economic consequences, but here one should take into account the legal absence of the establishment of a conflict, the conduct of official hostilities and the fact of economic damage from sanitation pressure not only in the country against which the aggression is being conducted. The world globalization of economic and political processes testifies to the close dependence of countries on each other, and as a consequence – the overall deterioration of economic indicators.

The identified features show that confrontation in politics, economy, information and cyberspace has been added to the usual plane of resolving contradictions in the course of interstate conflicts – land, sea, air.

The above allows us to conclude that the rapid scientific and technological progress gives rise to new types of tools and features of their application, which can be used in war.

Therefore, the main task comes to the fore not only to counter the identified threats, but to readily adapt to changing the vectors and instruments of aggression through flexible adaptation of state institutions, the armed forces, and the consciousness of the population to new challenges.

References

Aleshchenko, (2016). Fenomenolohiya ٧. "hibrydnoyi viyny" ta yiyi osoblyvosti u vykonanni rosiys'koyi federatsiyi: informatsiyno-psykholohichnyy aspekt [Phenomenology of "hybrid war" and its features in the implementation of the Russian Federation: information and psychological aspect]. Viys'kovo-spetsial'ni nauky, 1(34), 6-11.

Alimpiyev, A., Pyevtsov, H. (2017). Osoblyvosti hibrydnoyi viyny RF proty Ukrayiny. Dosvid, shcho otrymanyy Povitryanymy Sylamy Zbroynykh Syl Ukrayiny [Features of the hybrid war of the Russian Federation against Ukraine. Experience gained by the Air Force of the Armed Forces of Ukraine]. Nauka i tekhnika Povitryanykh Syl Zbroynykh Syl Ukrayiny. 2(27), 19-25.

Andrew Mumford and Jack McDonald, "Ambiguous Warfare", Report produced for the DCDC, October 2014.

Aver'yanova, N. (2018). Konsolidatsiya ukrayins'koho suspil'stva v suchasnykh umovakh hibrydnoyi viyna [Consolidation of Ukrainian society in modern conditions of hybrid war]. VISNYK Kyyivs'koho natsional'noho universytetu imeni Tarasa

Shevchenka, 1(18), 5-7.

Danik, Yu, Malyarchuk, T. and Bryhhs, S. (2017). Hibrydna viyna: vysokotekhnolohichni, informatsiyni ta kiberkonflikty [Hybrid warfare: high-tech, information and cyber conflicts]. Zv'yazky: *Shchokvartal'nyy zhurnal*, 2, 5–27.

Datsyuk, A., Poshedin, O. (2019). Strukturno-funktsional'nyy analiz bezpekovykh aspektiv polityky yevropeys'koyi intehratsiyi v umovakh protydiyi rosiys'kiy ahresiyi v hibrydniy viyni proty Ukrayiny [Structural and functional analysis of security aspects of European integration policy in the context of counteracting Russian aggression in a hybrid war against Ukraine]. Teoriya i praktyka publichnoho upravlinnya. Zbirnyk naukovykh prats' NADU, 1, 61-68.

Deptula, D. A., Marrs, J. R. (2009). Global Distributed ISR Operations: The Changing Face of Warfare. *Joint Force Quarterly*, *54*, 110-115.

Duggan, P. (2015). Strategic Development of Special Warfare in Cyberspace. *Joint Force Quarterly*, 79, 46-53.

Fedenko, O., Panasyuk, V. (2018). Hibrydna viyna yak forma zbroynoyi borot'by [Hybrid

- war as a form of armed struggle]. Visnyk L'vivs'koho universytetu. Seriya mizhnarodni vidnosyny, 44, 102-109.
- Gerasimov, V. (2016). Po opytu Sirii [Based on the experience of Syria]. *Voyenno*promyshlennyy kur'yer, 9(624).
- Goffman, F. G. (2006). Complex Irregular Warfare: The Next Revolution in Military Affairs. *Orbis*, *3*, 395-411.
- Harari, Yu. N. (2018). 21 Lessons for the 21st Century. London: Jonathan Cape. ISBN 1787330672.
- Herța, Laura-Maria (2017). Hybrid Warfare A Form of Asymmetric Conflict, International conference Knowledge-Based Organization. 23(1), 135-143. DOI: 10.1515/kbo-2017-0021
- Herţa, Laura-Maria. (2016). Russia's Hybrid Warfare. Why Narratives and Ideational Factors Play a Role in International Politics. On-line Journal Modelling the New Europe, 21, 55-56.
- Janis Berzins, "Russia's New Generation Warfare in Ukraine: Implications for Latvian Defense Policy", National Defense Academy of Latvia, Center for Security and Strategic Research, Policy Paper, No.2, April 2014.
- Lasica Daniel T. Strategic Implications of Hybrid War: A Theory of Victory. 2012. [s.l.]. 66 p
- Loishyn, A., Tkach, I., Tkach, M., & Shevchuk, V. (2021). Analysis and systematization of approaches to understanding the concept of "hybrid war". *Journal of Scientific Papers* "Social Development and Security", 11(1), 145-162. DOI: 10.33445/sds.2021.11.1.15
- Lasica D. T. Strategic Implications of Hybrid War: A Theory of Victory: Monograph / D. T. Lasica. USA, 2009. Available from: http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA513663.
- Madden, D., Hoffman, D., Johnson, M., Krawchuk, F., Peters J., Robinson, L. and Doll Abby. (2014). Special warfare: The Missing Middle in US Coercive Options. Santa Monica, CA: RAND.
- Mikhyeyev, Yu., Chernyavs'kyy, H., Turchenko Yu., V., Pinchuk, O. (2016). Definitsiyi ponyattya "Hibrydna viyna" [Definitions of "Hybrid war"]. Zbirnyk naukovykh prats' Viys'kovoho instytutu Kyyivs'koho

- natsional'noho universytetu imeni Tarasa Shevchenka, 51, 124-130.
- Nye J. S. Soft Power. Foreign Policy. 1990. № 80. pp. 153-171.
- On national security. Law of Ukraine. June 21. 2018, № 2469-VIII.
- On the decision of the National Security and Defense Council of Ukraine of September 14, 2020 "On the National Security Strategy of Ukraine". Decree of the President of Ukraine No. 392 (2020). Available from: https://zakon.rada.gov.ua/laws/show/392/2020#Text
- Petryk, K., Kanars'kyy, Yu. (2015). Metody hibrydnoyi viyny Rosiyi proty Ukrayiny Napryamy protydiyi. [Methods of hybrid war of Russia against Ukraine. Directions of counteraction]. Information technology and security, 3/1 (4), 30-37.
- Pronza, I. (2016). Hibrydna rosiys'ko-ukrayins'ka viyna yak zahroza yevropeys'kiy bezpetsi [Russian-Ukrainian hybrid war as a threat to European security]. *Naukovyy zhurnal "Politykus"*, 1, 126-130.
- Radkovets, Yu. (2014). Oznaky tekhnolohiy "hibrydnoyi viyny" v ahresyvnykh diyakh Rosiyi proty Ukrayiny [Signs of "hybrid war" technologies in Russia's aggressive actions against Ukraine]. *Nauka i oborona*, *3*, 36-42.
- Rappert, B. (2003). Non-lethal Weapons as Legitimizing Forces? *Technology, Politics, and the Managament of Conflict*. Abington, UK: Routledge.
- Reichborn-Kjennerud, Er., Cullen, P. (2016). What is Hybrid Warfare? *Policy Brief*, 1. Available from: https://core.ac.uk/download/pdf/52131503.pdf
- Senchenko, O. (2017). Novyy vyklyk lyudstvu hibrydna viyna [A new challenge to humanity a hybrid war]. Visnyk Knyzhkovoyi palaty, 5, 41-45.
- Slovnyk ukrayins'koyi movy: v 11 tomakh [Dictionary of the Ukrainian language: in 11 volumes]. No 5. 1974. P. 779.
- Smolyanyuk, V. (2019). Politychna systema suspil'stva v umovakh hibrydnoyi viyny: spryamovanist' transformatsiy [The political system of society in a hybrid war: the direction of transformations]. *Visnyk*

- Natsional'noho yurydychnoho universytetu imeni Yaroslava Mudroho, 2(41),70-87.
- Svitova hibrydna viyna: ukrayins'kyy front: monohrafiya [World hybrid war: Ukrainian front: monograph] / za zah. Red. V. P. Horbulina. Kharkiv: Folio, 2017. 496 s.
- Telelym V., Muzychenko D., Punda YU. (2014). Planuvannya syl dlya vykonannya boyovykh zavdan' u "hibrydniy viyni" [Planning forces to perform combat missions in a "hybrid war"]. Nauka i oborona.. № 3. S. 30-35.
- Trebin, M. (2005). Viyny XXI stolittya [Wars of the XXI century]. AST; Minsk: Urozhay.

- Trebin, M. (2014). Hibrydna viyna yak nova ukrayins'ka real'nist' [Hybrid war as a new Ukrainian reality]. *Ukrayins'kyy sotsium*, *3*, 113-127.
- Vartanova, O. (2015). Sotsial'no-ekonomichni naslidky hibrydnoyi viyny na skhodi Ukrayiny [Socio-economic consequences of the hybrid war in eastern Ukraine]. *Bulletin of Mykhailo Ostrogradskyi KrNU*, 3(92), 40-44.
- Yavorskaya, G. (2016). Hibrydna viyna yak dyskursyvnyy konstrukt [Hybrid warfare as a discursive construct]. *Stratehichni priorytety*, *4*(41), 41-48.