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The American Multi-Domain Operation as a response to the Russian concept of New Generation Warfare

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Abstract

America's unipolar balance of power created after the end of the Cold War is inevitably coming to an end. The dynamic economic growth of the People's Republic of China, lasting uninterruptedly since the 1980s, the reconstruction of spheres of influence by the Russian Federation, the world war on terrorism with the accompanying costly wars in Iraq and Afghanistan, economic crises systematically weakening the economies of Western countries in 2001, 2007 and 2020, and the COVID-19 pandemic – these are just some of the many causes of geopolitical changes. Parallel to the weakening position of the United States, countries such as the Russian Federation are increasingly boldly challenging the current balance of power, provoking armed conflicts and destabilizing countries located in Central and Eastern Europe. The purpose of this article is to present the American Multi-Domain Operation concept as a response to the Russian concept of new generation warfare by which the country successfully led to the annexation of Crimea, the war in Donbas, and the political destabilization of Ukraine. The main research problem resulting from the assumed goal was to answer the following question: what is a Multi-Domain Operation and how do the United States intend to compete and win in the armed conflict taking place in Central and Eastern Europe with the Russian

Federation? The following research methods were used to solve the research problems: the method of cause-effect and institutional-legal analysis, method of examining documents, and the method of analysis and criticism of literature. The monographic and comparative methods were also used. However, the main role was played by deductive reasoning which enables the identification of facts based on an in-depth analysis of source data. Taking into account the preliminary research, the author proposed the following research hypothesis: a Multi-Domain Operation is another American operational concept describing the security environment, and the Russian and American way of war. The USA will achieve victory in a possible armed conflict by locating and neutralizing the enemy's anti-access – area denial capabilities, and then destroying its forces in the disputed area.

Keywords: Multi-Domain Operations, New Generation Warfare, United States, Russian Federation, Central-East Europe

Американская концепция многозонной операции как ответ на российскую концепцию войн нового поколения

Аннотация

Однополярный баланс сил Америки после окончания холодной войны неизбежно подходит к концу. Динамичный экономический рост Китайской Народной Республики, продолжающийся непрерывно с 1980-х годов, восстановление сфер влияния Российской Федерацией, мировая война с терроризмом и сопровождающие ее дорогостоящие войны в Ираке и Афганистане, экономические кризисы, систематически ослабляющие экономики страны Запада в 2001, 2007, 2020 годах, пандемия COVID-19 – вот лишь некоторые из многих причин геополитических изменений. Параллельно с ослаблением позиций США такие страны, как Российская Федерация, все более смело бросают вызов существующему балансу сил, провоцируя вооруженные конфликты и дестабилизируя страны, расположенные в Центральной и Восточной Европе. Цель данной статьи – представить американскую концепцию многозонной операции как ответ на российскую концепцию войн нового поколения, посредством которых Россия успешно привела к аннексии Крыма, войне на Донбассе и политической дестабилизации Украины. Основной исследовательской проблемой, вытекающей из поставленной цели, стал ответ на вопрос: что такое многозонная операция и как США намерены конкурировать и побеждать в вооруженном конфликте в Центральной и Восточной Европе с Российской Федерацией? Для решения исследовательских задач использовались следующие методы исследования: метод причинно-следственного, организационно-правового анализа, документального исследования и анализа и критики

литературы. Использовались также монографический метод и сравнение. Однако главную роль сыграли дедуктивные рассуждения, позволившие выявить факты на основе глубокого анализа исходных данных. Принимая во внимание предварительное исследование, автор выдвинул следующую исследовательскую гипотезу: многозонная операция является еще одной американской оперативной концепцией, описывающей обстановку безопасности, а также российско-американский способ ведения войны. США добьются победы в возможном вооруженном конфликте, обнаружив и нейтрализовав средства противодействия доступу противника, а затем уничтожив его силы в спорном районе.

Ключевые слова: концепция многозонной операции, войны нового поколения, США, Российская Федерация, Центральная и Восточная Европа

Introduction

In 2013–2015, a range of scientific works were published in the Russian Federation, and a series of speeches were given, indicating Russia's evolving perception of war. In early 2013, General Staff Chief of the Armed Forces of the Russian Federation Valery Gerasimov gave a speech at the Russian Academy of Military Science during which he emphasised the need to employ non-military war-making methods by the Russian army, including the protest potential, covert military measures, and special forces' activities. In late 2013, an article was published in *Military Thought* by Reserve Colonel S.G. Chekinov and retired General-Lieutenant S. A. Bogdanov, outlining the growing significance of information superiority. These authors claimed that the victory in both present and future armed conflicts would depend on the use of information technologies enabling to provide intelligence, reconnaissance, control, and communications. In early 2015, General-Lieutenant Andrey V. Kartapolov, Chief of the Main Operations Directorate of the Russian General Staff, gave a speech at the Russian Academy of Military Science during which he said that non-standard forms and methods were being developed for the engagement of the Russian Armed Forces, which would make it possible to level the enemy's technological superiority (Thomas, 2017). The above changes entailing the key role of psychology, the significance of the population as the "centre of gravity", and disinformation were named as new-type warfare or new-generation warfare (NGW). Their efficiency was proven during Russia's military interventions in Crimea and Eastern

Ukraine (Donbas), also pointing out the flaws of the American approach to non-conventional warfare (Fedyk, 2017). Along with changes in its war-making practice, the Russian Federation has strengthened its anti-access/area denial capabilities in the form of developing missile capabilities designed to destroy land targets, anti-ship ballistic missiles, anti-aircraft defence systems, missile defence systems, and radio-electronic warfare means. These make it possible to conduct new generation warfare, not only against countries without guarantees of alliance and those which are politically unstable, but also against NATO countries, such as the Baltic countries, by isolating the disputed territory and gaining dominance in the air (Kopeć, Wójtowicz, 2018, p. 37).

Taking into account Russia's successes in Ukraine in years 2013–2015 and the fact that the global balance of power has been challenged, the United States have introduced a number of doctrinal, organisational and technological changes in their armed forces to prepare the army for confrontation with the Russian Federation in Central and Eastern Europe. The purpose of this article is to present the most important doctrinal change, namely the Multi-Domain Operation (MDO) concept. At the initial stage of the research, the author posed the main research question and several detailed research questions. The main research question was formulated as follows: How are the United States Armed Forces going to fight and win against the Armed Forces of the Russian Federation, which are using the rules of next generation warfare? The detailed questions were as follows: What were the reasons that prompted the Pentagon to build the concept of a Multi-Domain Operation? What is this concept? What is the Russian and American way of war?

In order to get to know the objective reality of the diagnosed problem, the method of cause-effect and institutional-legal analysis was used in the research, together with the method of examining documents, and the method of analysis and criticism of literature. The monographic and comparative methods were also used. However, the main role was played by deductive reasoning which enables the identification of facts based on an in-depth analysis of source data.

The article consists of an introduction, four substantive sections and concluding remarks. The first substantive section concerns the reasons for establishing and the origin of the MDO concept. It describes changes in the

perception of threats by the United States, the strengthening of U.S. military presence in Europe, and first publications on MDO developed by the Training and Doctrine Command. The second section presents MDO characteristics. It features a definition of MDO, changes occurring in the security environment and the geographic space of an operation. Finally, the third and fourth sections describe the Russian and American war-making practice. They respond to the questions of how these two parties are planning to fight and win in a future armed conflict.

The origin of and reasons for establishing the Multi-Domain Operation concept

The origin of the Multi-Domain Operation and the Multi-Domain Battle dates back to the annexation of Crimea, the war in Donbass in Eastern Ukraine and the changing perception of military threats by the U.S. government. By 2014, in connection with the announced U.S. pivot to the Pacific and a firm belief in the stability of the international system, the United States had successively reduced their military presence in Europe, with involved the liquidation of the 170th and 172nd mechanised brigades stationed in Germany. The U.S. approach to the European operational area changed after the annexation of Crimea by the Russian Federation. The European Reassurance Initiative (subsequently renamed as the European Deterrence Initiative, EDI) was launched to finance operations intended to increase the American presence in Europe. The EDI budget in 2015 was \$985 million, rising to \$3.4 billion in 2017, and then to \$4.8 billion in 2018, and to \$6.5 billion in 2019. The programme covered the costs of Operation Atlantic Resolve, the storage of U.S. Army military equipment in Europe, and the reactivation and maintenance of the 2nd Fleet of the Navy in the Atlantic Ocean (Świdziński, 2019). Also in 2015, work began on a new operational concept to prepare the armed forces for war against the Russian Federation in Central and Eastern Europe. On 15 April 2015, Robert O. Work, United States Deputy Secretary of Defense, delivered a critical speech at the U.S. Army War College devoted to the preparation of the U.S. Armed Forces for future military threats. In his opinion, U.S. adversaries in the future would be able to challenge the American military dominance in all five domains – land, sea, air, space and cyberspace (Wójtowicz, Król, 2018,

p. 70). He also highlighted the need to transform the American army and equip it with weapons which would let it fight an adversary that has guided missiles, anti-aircraft weapons, anti-missile weapons, etc., at its disposal. Upon concluding his speech, Work called for commencing work on a new operational concept for the army, which he named as Air Land Battle 2.0 (*Deputy...*, 2015). Chief of the Training and Doctrine Command Gen. David Perkins, another influential person in the Pentagon, expressed a similar view. According to Perkins, in contrast to the Cold War period and the concept of AirLand Battle which was then prevalent, the U.S. Armed Forces must be prepared to confront several types of adversaries, such as international powers, failed states, or terrorist groups. Moreover, taking into account the course of armed conflicts in Ukraine and Syria, U.S. troops in future armed conflicts will be forced to operate in the conditions of high self-reliance and sufficiency, and often in temporary isolation (Dilanian, Howard, 2018). The assumptions of the new operational concept were presented in several documents, including *Multi-Domain Battle: Evolution of Combined Arms for the 21st Century 2025–2040* published by the Training and Doctrine Command in 2017 (*Multi-Domain Battle...*, 2017) and the *FM 3-0 Operations* field manual published in December 2017 (*Field Manual...*, 2017). Initially, the concept was called Multi-Domain Battle. With time, the name was changed into Multi-Domain Operation to better reflect the wide scope of rivalry and conflict with adversaries, and the importance of conducting military operations within Joint Forces. The renaming of the concept was also influenced by remarks formulated as part of the NATO Urbanization Project 2035, which highlighted the growing importance of urbanised areas in armed conflicts, comments from the U.S. Army Mosul Study Group that had analysed the battle for Mosul in Iraq during the war against the Islamic State, and the course of exercises and war games organised as part of the Joint Warfighting Assessment (*The U.S. Army...*, 2018). In 2019, the conduction of Multi-Domain Operations was the primary objective of the organised Joint Warfighting Assessment. Back then, American soldiers focused on such problems as assessing MDO in practice, conducting operations in an echelon formation, the organisation of U.S. troops and subdivisions in the Multi-Domain Task Force, improving the readiness of the armed forces, as well as command and control in a Multi-Domain Operation (Morrison, 2019).

Characteristics of the Multi-Domain Operation concept

The Multi-Domain Operation concept was the fourth U.S. operational concept to emerge, following the AirLand Battle (ALB) concept at the turn of the 1970s/1980s, the AirSea Battle (ASB) concept in 2010, and the Multi-Domain Battle concept in 2017. It was developed for the European operational area and was meant as a response to the Russian concept of new generation warfare and Russia's aggression in Ukraine. Although the terms Multi-Domain Operation and Multi-Domain Battle have appeared in many documents and academic papers, a clear definition explaining what they mean has not been provided yet. The NATO terminology database published by the NATO Standardization Office provides a definition of "domain" and "operational environment", but it does not include "Multi-Domain Operation". The term has not been precisely defined by most of the NATO countries. In the U.S. Armed Forces document titled *The U.S. Army in Multi-Domain Operation in 2028*, released in 2018 by the Training and Doctrine Command, MDO was presented as a concept proposing a range of solutions to conduct war against an adversary with anti-access/area denial (A2/AD) capabilities by U.S. troops as part of combined forces between 2025 and 2050. A key element of MDO is the integration of the capacities for conducting military operations across all five domains – land, sea, air, space and cyberspace – to effectively deter and win against an adversary both at the rivalry and armed conflict stages. In addition, according to the authors of the concept in question, victory against an adversary with A2/AD capabilities would not be possible without disintegrating its air and missile defence systems, gaining freedom of manoeuvre, and then destroying its land formations. The attainment of these objectives would make it possible to force the adversary to a ceasefire, as well as to build a new international order and to return to rivalry (*The U.S. Army...*, 2018, p. iii). The characteristics of a Multi-Domain Operation was undertaken by the U.S. Air Force, whose officers developed the Multi-Domain Command and Control (MDC2) concept. It was presented as a coordinated effort to obtain information from all sources for effective planning and coordination of operations by commanders (Grest, 2019). Lockheed Martin Corporation used the term Joint All-Domain Operation (JADO). It consists in having at one's disposal capabilities enabling

commanders to quickly predict the enemy's next moves, to hinder their plans and to advance to a new level of precision of conducted operations (Kahn, 2020). In the Polish scientific circles, the subject matter of Multi-Domain Battle and Multi-Domain Operation was discussed on the *Strategy & Future* portal (Bartosiak, 2020), where an article on conventional deterrence of the USA and NATO on the eastern flank was published, on *Defence24*, where an article on the most recent changes in the U.S. military strategy was released (Dąbrowski, 2019), in *Przegląd Sił Zbrojnych* featuring an article by Radosław Marzec, *Multidomain operation - a new concept or evolution of a combined operation*, and on June 22, 2021, the Doctrine and Training Center of the Polish Armed Forces conducted a webinar on operations in a multi-domain environment (*Operacje w środowisku wielodomenowym...*, 2021).

The Multi-Domain Operation concept presented by the Training and Doctrine Command addresses many of the issues and challenges pertaining to the present and future battlefield. It describes the changes taking place in the operational environment, threats to U.S. national security, levels of rivalry between the United States and its adversaries, the Russian and American war-making practice, the intended geographic space of an operation, the three assumptions which the authors view as necessary to be met in order to win the war, and the new technologies that will be used by both parties to a conflict. Russia and China have been unequivocally identified as the greatest threats to U.S. national security. These countries have been gradually undermining the standards of international law and the current global balance of power with the United States in the dominant position. In recent years, Russia has developed anti-access/area denial capabilities which would make it difficult for allied troops to enter the disputed area should one of the NATO countries be attacked. Furthermore, according to the authors, in view of the Kremlin military involvement in Georgia, Ukraine and Syria, one should expect that in the near future attempts will be made to undermine the cohesion of the Treaty and the U.S. military guarantees offered to Europe. China, in turn, acts as the biggest competitor to the United States in the Western Pacific due to its in-depth strategy and economic growth opportunities. Unlike Russia, it has an innovative economy and technological infrastructure, including the world-leading microelectronics industry and artificial intelligence sector, thanks to which

China may become the second military power in the next 10-15 years' perspective (*The U.S. Army...*2018, p. 7).

The future operational environment will be one where smaller armies will fight on an expanded battlefield, performing tasks in all possible domains – land, sea, air, space, cyberspace. In the land domain, urbanised areas will be of particular importance, as this will be where the final outcome of a battle or campaign will be determined. The geographic space of the operation, similar to the Multi-Domain Battle concept, is divided into seven areas: Strategic Support Area, Operational Support Area, Tactical Area, Close Area, Deep Manoeuvre Area, Operational Deep Fires Area, and Strategic Deep Fires Area. The Strategic Support Area is an area up to 5000 km from the front line in allied countries, where strategic troops will be deployed to prepare for power projection towards areas closer to the front line. The Operational Support Area is an area located up to 1500 km from the sites where battles will be fought and includes lines of communication, command bases, airfields, military garrisons and operational troops. The Tactical Support Area is an area up to 500 km from the front line. This is where troops and sub-units ready to support the military forces engaged in direct combat, or to manoeuvre towards the Deep Manoeuvre Areas, will be deployed. The Close Area and the Deep Manoeuvre Area cover the front line and an area up to 100 km towards the allied country, and up to 100 km towards the adversary country. These are also sites where land forces will operate and direct combat will take place. The U.S. Armed Forces will be in charge of defending these sites or taking them back once they become occupied by enemy forces. The next two areas – the Operational Deep Fires Area and the Strategic Deep Fires Area – are located in the adversary country. The Operational Deep Fires Area is an area up to 500 km from the front line, where military targets will be destroyed by allied forces in all domains. It is also where special forces will operate. The Strategic Deep Fires Area, in turn, is an area up to 1000 km from where fights will be conducted. This is an area of the enemy country where operations may be restricted given the potential political and military consequences (*The U.S. Army...*, 2018, p. 8).

The Russian war-making practice

While the American and Russian war-making practice will differ, in both cases the activities will consist of three stages: rivalry (subliminal aggression), an armed conflict (war), and a return to rivalry. At the rivalry stage, Russia will seek to weaken the alliances between the United States and European countries. To this end, it will use media campaigns, information warfare, social media, false narratives, cyber attacks and soft power. Conventional military forces will also be employed, demonstrating the ability to rapidly transition to armed conflict. An example of this type of operations was the series of snap drills carried out in 2019 and 2020. In 2019, in addition to the officially planned major military exercises Tsentr 2019 and Union Shield 2019, the Russian Armed Forces also conducted combat readiness checks of several brigades in the western and southern military districts, which had not been previously announced. These were attended by more than 30 000 soldiers and involved 5000 units of military equipment (Dura, 2019). An unexpected combat readiness check of the western and southern military districts was also announced in 2020, with as many as 150 000 soldiers, 26 000 units of military equipment, and more than 400 aircraft and helicopters involved in the manoeuvres (Sabak, 2020a). The escalation of tension in the form of unannounced military exercises will likely be used in the future by Russia as one of the most common tools in the framework of new generation warfare. Moreover, at the stage of subliminal aggression, elements of unconventional warfare will also be employed. In those countries which Russia intends to destabilise politically, its special forces will be deployed and armament will be supplied to local paramilitary troops. These will carry out subversive and terrorist activities, organise direct attacks on pre-selected targets, and carry out military reconnaissance. Their objective will be to lead a local social revolt during which a U.S. ally (a NATO country) will lose control of a part of its territory (*The U.S. Army...*, 2018, p. 10).

Once subliminal aggression turns into an open armed conflict, Russia's objective will be to separate Joint Forces and to build a keep-out zone or A2/AD at the strategic and operational levels, which will be very difficult for the main American forces to penetrate. A key role at this stage will be played by long-range, mid-range and short-range fires systems. These will

include S-300 and S-400 anti-air systems, with ranges from 40 km to 400 km, used to destroy large high-value targets, precision-guided munition (PGM), manned aircraft, unmanned aerial vehicles, etc., in addition to anti-ship missiles such as the Bastion-P mobile set, referred to in NATO's nomenclature as SS-C-5, with a range of 130 km (Dalsjö, Berglung, 2019, p. 27). The above-mentioned systems, currently deployed in seven "no-go" bubbles, e.g. in the Kaliningrad Oblast, the Kola Peninsula and the Crimean Peninsula, will change their position during an armed conflict in Central and Eastern Europe, using camouflage techniques, in order to avoid destruction by NATO aircraft (Gawęda, 2018). Along with the defensive systems, offensive weapons will be employed – ballistic missiles, offensive electronic warfare and artillery. The Armed Forces of the Russian Federation will use Iskander M ballistic missiles and Iskander K cruise missiles. The range of the former is 450 km or 700 km when equipped with a lighter warhead (Dalsjö, Burgling, 2019, p. 37). They will be used to destroy targets at all depths of the battlefield – command centres, arms depots, and logistics centres. These ballistic missiles will go hand in hand with Su-30 aircraft equipped with supersonic Ch-32 missiles with an estimated range of 600-1000 km and new hypersonic missiles which have not yet been marked (Sabak, 2020b). Massive artillery fire, in turn, will destroy allied troops located in close proximity to the disputed territory. As part of offensive electronic warfare, the Russians will attempt to disrupt space reconnaissance and communications carried out via space platforms, which will prevent the United States from effectively commanding missions and conducting ISR (intelligence, surveillance and reconnaissance) operations. What is more, during an armed conflict, the Russians will use unconventional warfare and elements of information warfare. Special forces and local paramilitary groups will support conventional military forces through reconnaissance and direct strikes, and through maintaining the sites that have been covered. Along with military operations, an information narrative will be developed to target amicable political leaders, international opinion and the population of the disputed area. The narrative will advertise Russian points of view and the successes attained during fights. Depending on how the situation on the frontline develops, Russia will have certain opportunities to further escalate tensions and isolate the disputed area. To this end, threats of exploiting the

full potential of conventional troops and of using nuclear weapons will be uttered (*The U.S. Army...*, 2018, p. 13).

The end of war and the advancing into the third stage of the conflict – a “return to rivalry” – will take place when Russia achieves the political objectives it had set before the military operation began. Of key importance at this stage will be the information narrative through which the Kremlin will justify the gains it has achieved. Conventional troops and paramilitary units will control the disputed area, destroying all the remaining strong points. At the same time, the capacity for further escalation of the conflict will be preserved. Reconnaissance and the monitoring of power projection capabilities will be continued within the territory of the USA and its European allies. Even if Russia sustains significant losses in terms of people and military equipment, it will continue to highlight its readiness to fight and defend the captured territories with nuclear weapons and irregular methods (*The U.S. Army...*, 2018, p. 14).

One of the most frequently used terms to describe the modern Russian way of warfare is the concept of new generation warfare or the Gerasimov doctrine. This concept is also referred to as a synthesis of other concepts of warfare that have emerged in the last few decades in Russian intellectual circles, such as: rebel war, diffusion war, non-linear war or the Russian concept of information warfare. It assumes the blurring of differences between civilians and soldiers, the growing importance of paramilitary units (rebels, terrorists, partisans), the key importance of psychological and informational operations, the domination of non-military means over military ones, and the use of the so-called potential of protest in aggressive societies. According to General Gerasimov, military operations conducted on the basis of the potential of a protest take the form of political isolation, the application of economic sanctions, blockades of communication routes, threats of the use of force, and the introduction of a contingent of international peacekeepers to an unstable area under the pretext of defending human rights (Thomas, 2017). Taking into account the course of the armed conflict in eastern Ukraine in 2014–2015 and the annexation of Crimea by Russia, the new generation warfare in practice consists of several elements: political subversion, proxy sanctuary, intervention, compulsory deterrence and manipulation during negotiations. Political diversion is based on the activity of

intelligence, conducting psychological and informational operations in order to deepen the ethnic and linguistic differences in the opponent's country, corrupt politicians and build relationships with local officials. Substitute sanctuaries mean places that have been taken in the enemy's territory - police stations, local government centers, airports, and military bases. Intervention is the next stage in the conflict, during which the Russian Federation conducts sudden, unannounced military exercises on the border with the target state. At the same time, pro-Russian paramilitary units are secretly supplied with weapons, and training camps and logistic bases are being built. Compulsory deterrence consists of taking a number of actions aimed at limiting the escalation of the conflict, preventing the enemy from obtaining support from other states, or preventing a retaliatory operation from being carried out on its part. Within its framework, Russia deploys tactical nuclear weapons near the state border, announces strategic missile forces exercises, or conducts aggressive airspace patrolling. Manipulation during negotiations takes place when the provisions of a truce are abused. Despite the ceasefire, the Russian side fails to fulfill its mutual obligations. It is still paramilitary units that fight the enemy, generating personal losses and losses in military equipment on its side. There are also diplomatic activities aimed at destroying alliances between enemy countries and preventing other countries from getting involved in the conflict (Karber, Thibeault, 2016).

The American war-making practice

Given the Russian anti-access/area denial capabilities and war-making practice, the Multi-Domain Operations concept responds to a range of questions which the United States have posed: how should the combined forces contest the Russian Armed Forces in the first stage of the conflict in order to prevent further escalation, political destabilization of the disputed area, and eventually the outbreak of war? How should the combined forces penetrate enemy A2/AD systems restricting access to all support areas (Strategic Support Area, Operational Support Area, and Tactical Support Area)? How do the combined forces disintegrate A2/AD systems preventing operational or tactical manoeuvre towards the enemy land? How will the combined forces use the freedom of manoeuvre gained in order to defeat the adversary in the

Close Area or the Deep Manoeuvre Area? How are the combined forces to compete effectively with the Russian military forces after the end of military operations to consolidate the sustained victory and to adapt to the new security environment? Therefore, the turning point in the potential war with the Russian Federation will likely be the penetration and disintegration of anti-access/area denial systems, then gaining the freedom of manoeuvre and using it to win the conflict. According to the authors of the concept, victory will be possible as soon as the following three assumptions are met: the application of the calibrated force posture, the construction of multi-domain formations and convergence (*The U.S. Army...*, 2018, p. 16). The calibrated force posture means the ability to manoeuvre and redeploy forces at strategic distances. On the one hand, this acts as a conventional deterrent, emphasising American credibility and guarantees of alliance. During the war, on the other hand, it enables allies to promptly take the initiative even when the enemy temporarily gains advantage. In practice, the application of the calibrated force posture involves, *inter alia*, a forward presence, the development of expeditionary forces, the strengthening of the fleet and strategic air transport, the construction of joint allied C2 systems, or the Host Nation Support capabilities. Many of the above-mentioned activities are already taking place in Central and Eastern Europe. NATO's advanced presence has been pursued since 2016 and consists of four combat groups located in Estonia, Latvia, Lithuania and Poland. Since 2014 the Atlantic Resolve operation has been implemented by the U.S. Armed Forces, including the following three components: the Combat Aviation Brigade, the Armoured Brigade Combat Group and a logistics component. Sub-units of the Armoured Brigade Combat Team were deployed in the Baltic countries, Poland, Romania and Bulgaria (Świdziński, 2020). In 2019, the NATO Joint Support over Enabling Command reached operational capability in Ulm (Germany). Its main duties include ensuring the security and freedom of movement of NATO forces in the member countries' territories (*New NATO...*, 2019). Multi-domain formations are troops and sub-units which will have the capability to operate in all domains simultaneously. They will thus have their own anti-aircraft and anti-missile defence systems, unmanned aerial vehicles, and access to information from the ISR. Their independence will allow for both defensive and offensive operations towards the enemy land (tactical or operational

manoeuvre). These will be based in several locations in an echelon formation, which will allow them to fight in temporary isolation and to quickly provide assistance to their troops in case they are encircled. Formations of this type can operate at the military theatre, field army, corps, division and brigade levels. The third requirement to be met by the combined forces as part of MDO is convergence. This implies integrating the capabilities to conduct military operations in all possible domains and operational environments. Regardless of the time and location, multi-domain formations will conduct operations in physical, virtual and cognitive environments, destroying the enemy's weak points, thus breaking its A2/AD systems (*The U.S. Army...*, 2018, p. 20).

At the rivalry stage, the actions of the U.S. Armed Forces will aim to achieve three crucial objectives: deterring the outbreak of an armed conflict and maintaining the balance of power favourable to the USA, countering the adversary's efforts to escalate the conflict, and preparing for the prompt redeployment of troops in the event of an outbreak of war. Military advisers will be sent to the allied country with the aim of thoroughly analysing the operational environment, with a particular focus on the disputed area where direct fights are likely to occur. Then, regular troops will be deployed as part of a rotational forward presence and additional troops as part of joint military exercises. These exercises will provide an opportunity to test the ability to perform strategic and operational manoeuvres, i.e. the rapid redeployment of troops from the United States to Europe and the ability to launch an attack on the enemy. American military formations will counter enemy reconnaissance operations and conduct their own ISR in an attempt to determine the place where anti-aircraft and anti-missile defence systems, as well as ballistic missile launchers, are based. Military intelligence will play a special role in the event of Russia's conducting unplanned military exercises. Using aerial imaging reconnaissance methods, high-altitude ISR balloons, and electronic intelligence, the allied forces will collect any useful information on the number of troops participating in the exercises, their scenario and course (*The U.S. Army...*, 2018, p. 28). In 2019, unmanned solar-powered ISR balloons were tested at the order of the Southern Command of the U.S. Armed Forces. These balloons move in the stratosphere - 65 000 feet above the Earth, collecting information from a 25-kilometre area below them. They can be used to monitor state

borders, to detect drug trafficking routes, to analyse the consequences of natural disasters or to gather information from military training sites (Harris, 2019). Moreover, the tasks of the allied forces at the subliminal aggression stage will be to misinform the enemy as to the deployment of their own armed forces, to expand defence capabilities in the Operational Support Area against ballistic missile strikes, and to present to the public their own information narrative which is an alternative to the information presented by the Russian party (*The U.S. Army...*, 2018, p. 29).

The most difficult stage for the U.S. Armed Forces during a potential conflict with Russia will be the start of the next phase, i.e. regular military operations. The concept recommends that all U.S. units involved in the advanced presence should be scattered and should move along different routes as this will reduce losses and make it more difficult for the enemy to detect them. In the Close Area, U.S. troops, supported by allied troops, will show resistance, hindering the enemy's operations. It is assumed that fights in urban areas, causing the aggressor to suffer the greatest losses, will be of special importance. Information on the attack directions and the quantity of Russian forces will be collected through ISR in all domains by reconnaissance satellites, manned aircraft, unmanned aircraft, balloons and SIGINT (signals intelligence). It will be of utmost importance to collect data on the location of the enemy's long-range missile systems, and air and missile defence systems (*Options...*, 2020). At the same time, Russian ISR capabilities will be destroyed by air defence systems and anti-satellite weapons. A strategic manoeuvre will be carried out from the U.S. military bases in North America with the aim of redeploying significant forces towards the disputed area. These should reach Europe within a few days or, at a maximum, a few weeks. In the initial days of ongoing fights, special forces and agents will operate on the territory of the allied country, alongside regular Russian Armed Forces. It will be one of the main tasks for the allied troops to combat them, given their knowledge of the area and their own networks of informers in pro-Russian political organisations and national minorities. The military police, secret services and counter-terrorist units will be engaged in combating this type of threat (*The U.S. Army...*, 2018, p. 36).

The disintegration and destruction of Russian anti-access/area denial capabilities will constitute the turning point during the war - that is the

moment of the initiative being taken by the American party. The search for these capabilities will begin at the rivalry stage and will continue through to an armed conflict, with the adversary seeking to hide them by changing their location or by using camouflage. Detecting long-range weapons will likely prove the most problematic. In this case, artificial intelligence algorithms will be used to collect and analyse large amounts of data coming from all possible sensors and devices. The search for long-range weapons will be coordinated at the field army level. Information on their location will be passed to the commanding officers who will decide which system will be utilised to destroy them. This may be artillery shelling, rocket fire involving long-range precision fire, or the fifth generation manned aircraft F-35 (*The U.S. Army...*, 2018, p. 38). Weapons of this kind are currently among the modernisation pillars of the U.S. Armed Forces. Work is currently in progress as regards, *inter alia*, new precision-guided munition with MLRS and HIMARS, its range exceeding 400 km, which is expected to eventually replace TACMS/ATACMS (*Drugi test...*, 2020). Once the long-range weapons are destroyed, attempts will be made to destroy medium-range and short-range weapons. Despite the fact the Russian Federation has far more weapons of these types at its disposal, it is expected that determining their location will not be as problematic as with long-range weapons. Having eliminated some or all of the enemy's anti-access/area denial capabilities, the allied forces' rocket and artillery fire will be targeted at the Close Area, and at land forces and irregular troops deployed there, thereby weakening their potential against the approaching assault (*The U.S. Army...*, 2018, p. 41).

The gained freedom of manoeuvre will then be used to carry out an operational manoeuvre to isolate enemy units, followed by a tactical manoeuvre to defeat them. At the same time, the search for the medium-range weapons that have not been previously destroyed will be continued. It is anticipated that the Russian command, in view of the growing losses of its military equipment, will restrict the use of medium-range weapons while the allied forces moving deeper into the enemy land will, nonetheless, make the Russian army employ them, by which they will be exposed to destruction. The operational manoeuvre will be carried out at the level of a division – a military unit with capabilities to conduct operations in all domains. This will include aircraft, UAV (unmanned aerial vehicle) squadrons, short-range

air defence systems, units utilised to conduct cyber-warfare, and manoeuvre troops. By deploying brigades in appropriate locations and by conducting offensive operations both in space and cyberspace, enemy troops and sub-units will be isolated – not only in the physical environment (encirclement), but in the virtual and cognitive environment as well. The allied forces will also conduct continuous artillery shelling on the approaching Russian troops, thus making it difficult to break the ring of encirclement (*The U.S. Army...*, 2018, p. 43). The final element of the ongoing armed conflict will be the tactical manoeuvre conducted at the brigade or brigade combat team level. Its objective will be to perform a direct attack on isolated enemy positions and to effect complete enemy breakdown. It is assumed that the brigades enjoying a high degree of autonomy will be capable of conducting continuous operations for 72 to 96 hours (*The U.S. Army...*, 2018, p. 44).

Once the military operations end, the third stage of the conflict, referred to as a “return to rivalry”, will begin. The task of the U.S. Armed Forces and the allied country’s armed forces will be to use their military success to pursue strategic objectives. The military activity will focus on the following three tasks: physical protection of the disputed area and its population, the establishing of long-term deterrence methods, and the adaptation of and adjustment to the new security environment. Taking into consideration the fact that U.S. adversaries such as Russia have both nuclear weapons and extensive conventional forces at their disposal, military capitulation and the signing of a formal peace treaty seems rather unlikely. The end of war would involve a temporary ceasefire and a return to rivalry that had been ongoing before it began. The disputed area will be secured both through military presence, and through reconnaissance and cyber operations. The allies will also concentrate on information warfare consisting of publicly advertising the political and military successes in the allied and enemy countries. It will also prove necessary for the government to return to temporarily lost areas as quickly as possible, and to provide public services to the local population. Long-term conventional deterrence will be pursued by employing a range of methods. These may include forward military presence, joint defence planning, military exercises, the rebuilding of the defence capabilities of the allied country’s armed forces or munition restocking. The adaptation to the new security environment will involve transforming it in the direction most favourable

to the United States. Nonetheless, the armed forces will retain their ability to promptly resume the offensive in case the Russian Federation decides to once again challenge the balance of power (*The U.S. Army...*, 2018, p. 46).

Concluding remarks

The Multi-Domain Operation concept constitutes one of the landmark changes that have taken place in the U.S. Armed Forces since the emergence of the Russian concept of new generation warfare and the Russian Federation's undermining of the global balance of power in Central and Eastern Europe. It ultimately breaks with the perception of terrorism as the main threat to U.S. security, making a clear reference to Russia and China as countries calling the international leadership of the United States into question. It further describes the American war-making practice enabling the defeat of the Russian army conducting new generation warfare by breaking its anti-access/area denial capabilities and then destroying its troops in conventional combat. According to the author of this publication, the MDO concept justly divided armed conflicts into three stages, indicating that the rivalry stage, also referred to as "stage zero", starts long before the outbreak of direct combat. Taking into consideration the NGW theory and practice, and the significance of the civilian population, the need for intensive information warfare at each stage of the conflict should also be recognised. Its objective will be to strengthen the morale of the local population and that of the allied troops, as well as to build the appropriate information narrative and to present to international opinion the course of fights and victories. The planned American military presence on the allied country's territory and the fight against Russian influence at an early stage of rivalry also provides an opportunity to counteract Russian destabilisation activities. On the other hand, the Multi-Domain Operation concept, like the Multi-Domain Battle and AirSea battle concepts, focuses on the military war-making methods and the use of military forces. It lacks a "broad view" of the issues involved in modern warfare and a description of how the non-military tools available to the USA can be used.

Moreover, the importance of the MDO should be analysed in a much broader manner than merely focusing on a set of suggestions for military

commanders, indicating how to win against an adversary with technologically advanced A2/AD systems. It has defined the needs regarding armaments and directions for technological modernisation of the U.S. Armed Forces. In October 2019, a new transformation strategy – the Army’s Modernization Strategy – was published by the Pentagon, which identified six priorities that should be implemented to prepare the army for combat in a Multi-Domain Operation: long-range weapons, new generation combat vehicles, the future vertical lift, new military ICT networks, air and missile defence, and means of supporting soldier lethality (*The Army’s...*, 2020). Moreover, the MDO may act as the prelude to another American revolution in military affairs (RMA) – one which will change the war-making method, the armed forces organisation, and the emergence of new military technologies. Among these technologies, artificial intelligence will be of crucial importance. While describing the Multi-Domain Operation concept, Lieutenant General Eric Wesley of the U.S. Army Futures Command emphasised that artificial intelligence would play a vital role in gaining superiority over the enemy. Omnipresent sensors will enable the collection of real-time data by satellites, manned aircraft, unmanned aerial vehicles and ships, which will then be disseminated to every soldier involved in the operation. Artificial intelligence is also meant as a tool which, once a target is detected, will suggest the most effective weapons to neutralise it, thus enabling operations to be conducted as fast as possible (South, 2019).

After the war in eastern Ukraine, the Russian-Ukrainian war of 2022 is another test of the effectiveness of the Russian way of warfare and a test verifying the main assumptions of the MDO. Contrary to the events of 2014–2015, it is run by Russia in violation of the principles of the NGW. The demoralisation process carried out by the Russian secret services on Ukrainian society has not been completed. There has been no disintegration of the state, and no surrender of the armed forces, or the escape of the political elite from the country. The public space is dominated by the Ukrainian information narrative depicting Russian military losses, damaged military equipment and the death of high-ranking officers. Russia opted for a full-scale armed conflict in which it engaged most of the land forces supported by Rosgvardiya. The accumulated forces were estimated at 170,000 soldiers and 120 tactical battalion groups (Wilk, 2022). The lack of air domination,

stretched lines of communication and NATO intelligence support provided to the Ukrainian side led to Russian defeats in the Battle of Kyiv (25.02.2022-31.03.2022), the Battle of Kharkiv (24.02.2022–14.05.2022) and the Battle of the Siverskyi Donets River (5.05.2022–13.05.2022). Nevertheless, the assumptions of the MDO and the directions of transformation of the US Armed Forces turned out to be very accurate. Despite the passage of years, artillery still remains the “queen of wars”, responsible in Ukraine for 60–70% of the losses suffered by both sides (Świerkowski, 2022). Therefore, it is crucial to gain an advantage over the enemy within the range of artillery fire. The Battle of Kyiv was another example of the renaissance of armored and mechanized troops. Therefore, purchasing programs aimed at acquiring new generations of tanks and infantry fighting vehicles seem justified.

The content of this article does not exhaust the topic related to the present and future significance of MDO. It can act as a starting point for further research on issues related to the Multi-Domain Operation concept, as well as to security and political stability of Central and Eastern Europe, such as the role and importance of the United States’ allies in Europe at the rivalry and armed conflict stages, directions of technological transformation of the Polish Armed Forces, the Polish-American military cooperation within the MDO framework, the American military presence in Europe, or the military use of artificial intelligence.

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