

Multi-Domain Operations for Small NATO Countries Preparing for Future Warfare

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Abstract

The paper discloses theoretical approach of multi-domain military operations (later – MDO) and how it might be used by small NATO countries. Hereby NATO MDO is being understood as multinational approach, operational goal focused, joint armed force operations. Additional to this future warfare insights are being provided revealing difficulties of small NATO countries facing MDO or even higher level of military operations. In order to meet the goal of the article content analysis was executed disclosing various perspective on MDO and its' application using official, public available information sources. The results of the paper determine difficulties for small NATO countries to execute MDO or even higher profile operations and for this case its' leads to necessity to integrate national armed forces into bigger ones like NATO alliance. Final outcome of the paper disclose that modern warfare requires more than just MDO but rather joint all domain operations (later – JADO). Hereby JADO is new venue to face future conflict which goes beyond military domain and for this purpose small countries have to adopt accordingly.

Keywords: *multi-domain operations, joint all domain operations, operational levels, operational goal, joint armed forces, NATO.*

The Nature of Multi-Domain Operations

Throughout the time since the beginning of 20th century warfare evolved rapidly. We already face two World wars and many other different types of armed conflicts. That hugely boosted development of the theory of war. While primary warfare has been conducted in a single domain, now it raises above conventional war understanding. Given this entry point MDO evolves into modern warfare. Hereby earlier in the cold war huge technological advancement led to diminishing of boundaries between single domain operations and that led to emerge of joint operations. Still on the time of mid to late 20th century only three military domains were identified: land, air and sea. Technologies in the 21st century has changed the operational environment including two new domains of space and cyber. After these domains were identified USA in 2015 recognized necessity of military strategy to achieve strategic objectives effectively with simultaneous action across multiple areas and domains.

US FM 3-0 operations [18] states, that MDO are the combined arms employment of joint and Army capabilities to create and exploit relative advantages that achieve objectives, defeat enemy forces, and consolidate gains on behalf of joint force commanders. Here it is disclosed that MDO concept is based on army approach to military operations. Moreover, this field manual outlines the scope of army military operations and emphasizes its' commitment to maintaining readiness for large-scale operations. Also, it explains how Army forces address challenges and execute MDO within a joint and multinational framework. The crucial element is that leaders must comprehend the operational environment. Another part of manual states that multinational operations is a collective term to describe military actions conducted by forces of two or more nations, usually undertaken within the structure of a coalition or alliance. It is noteworthy that a dimension of multinationalism is being added to MDO concept.

To sum up USA developed MDO concept it has 3 predominant

determinants. First is focus on operational goal. On the joint level of warfare, it looks after the most effective means to deliver effect on military operation success. Hereby army is just an element that support joint force commanders’ decisions. In the concept it targets objectives in order to achieve large scale operational or campaign goals. Second is the joint level implementation. Given this in the most military cases it is army centric operations. Still even USA MDO concept is determined as army concept which allows joint force commander to reach their goals. USA itself has 11 combatant commands [2] which provide effective use of USA armed forces regardless of the branch in order to achieve goals during peace or war time. On the NATO level it is being used on 3 operational level command [12]: Brunssum, Naples and Norfolk. Given this it discloses the 3rd predominant determinant of either national or multinational approach. On both levels it is possible to conduct large military operation but still only few countries own such capability. Even USA declares about necessity to integrate multinationalism. To sum up **MDO is multinational approach, operational goal focused, joint armed force operations.**

MDO is being quite limited due to necessity to have a certain capability in order to reach operational goals. Firstly, in military terms operational goal and its’ analysis disclose what is the scale and scope of it and what level of military units required to successfully conduct such operation. Hereby, it is commonly well known 3 levels and their primary capabilities / units (see Table No. 1):

1 table. The level of operation and its’ primary units

Operational levels	Primary units
Tactical	Battalions, Brigades, Regiments
Operational	Divisions, Corps, Field armies
Strategic	Theater armies, Joint task forces (JTF), Combatant Commands

Source: developed by author using NATO official website
and U. S. Department of Defense material.

While there are many discussions on which level MDO kicks in it should be noted that the common sense goes to at least brigade level. While some countries have specific designated brigades to conduct MDO other do not. Regular infantry brigade is commonly understood as the backbone of ground manoeuvre capability but there is brigade level formation like Multi-Domain Task Forces (brigade level), Fires Brigades and other which significantly contributes to operational goal and enhance higher echelon unit to fight across multiple domains. Most common specialized brigade MDO examples are integration of joint and coalition forces, leveraging emerging technologies throughout different domains, precisions of long-range fires and targeting capabilities which requires intense coordination among other units on the operational theatre and incorporation of electronic and information warfare. There were several attempts to try to conduct MDO on even lower level like battalion, but it hasn't succeeded. Such examples might be identified in Russian warfare doctrine developed concept of Battalion tactical group (later – BTG) [15]. First war experience of Russian BTG identified in 2014 Russia-Ukraine conflict where its' operation was unsuccessful and still had quite a lot of weaknesses. Russian BTG attempt to conduct MDO failed due to several reasons. Firstly, such small units is heavy dependant on logistics [10] which in most cases leads to the limitation of the scale of operation and adversary force. Next consists of BTG vulnerabilities [4] mainly failing operations by facing bigger units and especially facing defence in depth or attrition principles of warfare. The third big part is that Russian BTGs were incompatible with large scale operations [5]. NATO still has battalion size battlegroups which contribute to Alliance situational awareness, interoperability and responsiveness [13]. These units are still operational and combat capable. Moreover, there units are primary response force with the national forces to face adversary and enable NATO force for joints response.

To sum up it is possible to state, that MDO covers all operational levels, but still, it differs throughout the whole concept of their

use. Russian armed force already changed their BTG concept and went back to brigade / regiment level units for tactical level approach. Meanwhile NATO is developing MDO focused force with multinational approach and joint armed force focus. In MDO all 3 operational levels work together by conducting tactical actions, providing operational coordination, and executing strategic guidance. Still MDO has no unified abbreviation even along the NATO countries, but it has common sense of necessity and understanding of the essence of such operations.

MDO in Small NATO Countries and Its' Integration into NATO MDO

In order to describe small NATO countries, the criterion of the number of active military personnel in the armed force was considered. Hereby the limit of at least 25 000 were implied. Furthermore, this criterion is ground on ability to form up infantry brigade or larger unit which might be capable to conduct MDO separately. Official statistic discloses, that there are at least 6 NATO countries (excluding Iceland due to different defence model) which do not reach 10 000 active personnel. The whole data is provided in the graph below (see Picture No. 1).



Picture No. 1. NATO active personnel in the armed forces by countries

Source: developed by author using Statista data [1].

Countries' reserves enable to downsize its peacetime military expenditure while preserving a force prepared for an armed conflict. Given this wartime structure or armed force structure expends and significantly increase. Ujházy [17] discloses the role of reservists and even implements definition of modern reservists' concept. It states that countries must train their forces to meet multinational approach with operational goal focus. That include active personnel and reserves. Additionally, countries have different force structures which expend armed force to even higher level. For examples countries are preparing their armed forces to use ministry of interior units, territorial defence units, commandant structure, separate volunteering models and etc. The key success for MDO along this huge structure is training. Based on this NATO faces big challenges in security and standardization. Szenes [16] states that the main aim of the Alliance is to achieve the organic joint effect. In the twenty-first century technology, capability and capacity will mean that no force will exclusively own any domain and yet all forces will need to be credibly effective across all seven domains of military effect: air, sea, land, cyber, space, information and knowledge. The same challenges are being identified by USA armed force. Kallberg [7] states that the challenge is NATO MDO integration and creating an able, coherent fighting force. That confirms the initial statement which defines **MDO as multinational approach, operational goal focused, joint armed force operations**. Practical MDO implementation in training is constantly increases in scale. It is noted that MDO essence in training is not a new trend but rather increased perspective into the future warfare. First larger scale MDO in Europe were executed in 2021. The U.S.-led Defender Europe 21 exercises and associated smaller manoeuvres Swift Response, Fires Shock, Immediate Response, and Saber Guardian were executed through different NATO countries in Europe [9].

To sum up it could be stated that NATO is leading into MDO concept development and also practical implication into practice. Hereby US led concept of MDO is striving to adopt to modern warfare facing future challenges in the global armed force conflicts

perspective. While facing alterations in NATO operational/strategic levels in MDO it is necessary to understand national contribution to such operations. According to this, the new roles for NATO countries' armed force rises.

First part of this section already disclosed criterion for small NATO countries which will be focused from national perspective. While there are several such type countries we will look after examples on Estonia, Latvia and Lithuania cases. In these armed forces Latvian highest army unit is brigade, meanwhile in Estonia and Lithuania it is division. All the forces are land-centric and all other domains mainly focusing supporting army operation which comes to MDO level. In principle brigade level units covers 5–20 km width of frontline, while division 10+ km. It differs based on operation theaters and their characteristics. If you take into consideration that it is far away for an effective defense line focusing on the integrity of the country. Given this, more capabilities excluding national ones needed. For this purpose, the innovation of NATO's deployment model for collective defence of the enhanced Forward Presence (later – eFP) were implied and taken into action (see Picture No. 2).



Picture No. 2. NATO enhanced forward presence

Source: Leuprecht [8].

This particular model is precise MDO model covering multinational approach, it is operational goal focused corresponding to NATO plans in the region and also partially supported by other domains. On the national level few significances come to various types of possible conflict escalation and its' relation to MDO. On the given examples in case of conflict there are national forces and Multinational Battle Groups (eFP) already in place facing crises and altogether being first response forces. That led to the basic level of MDO. For follow up development of the crises and escalation of conflict the transition from national perspective to collective must be met. Also, it increases the scale of MDO while different NATO force structures taking over responsibilities from the national capabilities. The most challenging part on transition is to meet specific standards on operations and coordinate it. Successful transition led to higher level operations which already covers strategic / operational level going into armies, joint task force, Combatant Commands levels. On this stage small NATO countries forces are not the leading but rather supporting high command intents. Still, it is crucial operational actor which conducts or supports MDO.

Summarizing NATO small countries MDO it is important to stress out the level of MDO, stage of conflict, role of national armed forces. Also, it requires to highlight the importance of training. Simplified summary of NATO small countries involvement into MDO is being depicted in the table below (see Table No. 2):

2 table. The assessment of 3 Baltic States
national security determinants

The state of country	National armed force (NATO framework)	NATO (Allied) armed forces	National training
Peacetime	Conducts low profile MDO on training basis	Cooperates with national armed force on training basis	Trains according NATO standards seeking best operational performance in operational theatre
Crisis	Prepares for deterrence and defence (low profile MDO)	On place prepares for follow up operations. Out of place force prepares to act according to NATO plans	National training prepares for mobilisation, continues training according NATO standards
Wartime	Acts as first response forces (low / medium profile MDO)	Supports national armed forces, acts according to NATO planning	Mobilisation plan kicks in
Wartime (NATO main force in place)	Integrates into NATO armed forces (high profile MDO)	Take over operational theatre (high profile MDO+)	Restoration and reinforcement

Source: developed by author.

Even small NATO countries have to take in consideration enabling their MDO into NATO planning processes. Additionally, all the training in the small NATO countries has to be standardized according to NATO in order to support NATO operational and national goals. While the process enabling MDO is going on, no practical testing (excluding training and exercise) has been tested so far.

Multi-Domain Operations Perspective for Modern Warfare

The Geneva Academy of International Humanitarian Law and Human Rights [6] states that “today, it monitors more than 110 armed conflicts and provides information about parties, the latest developments, and applicable international law. Some of these conflicts make the headlines, others do not. Some of them started recently, while others have lasted for more than 50 years”. The variety of conflicts and future war constantly develops based on various trends in means of execution of warfare. Armed forces focus on military joint functions [3] which is crucial element for MDO. For this case MDO do not require to be multinational, but other two parts of operational goal focus and joint armed forces operation are necessary. McEnany [11] states that the centrepiece of MDO is multi domain task force (later – MDTF). It is stated that MDTFs are a logical response to the era of strategic competition. It is noteworthy to mention that only large militaries are capable to execute MDO by themselves and small militaries relies on alliances. MDTF are inherently joint, but modern warfare already crossed pure military domain aspects. Association of the United States Army [11] provides new term of Joint-All Domain Operations. JADO asserts that prevailing in the next war will require rapidly integrating effects across all domains – land, sea, air, space and cyberspace – to present adversaries with multiple, simultaneous dilemmas. Hereby JADO is a different approach towards military operations. While MDO focuses on army focus effects on operation, the JADO focuses on integrated effects across all domains. JADO origins incorporates MDO into their objectives. JADO is looking into strategic war objectives and effects. Given this even exploiting cyberspace, technological advance countries able to reach deterrence effects against their adversaries. In this particular case MDO might not even required still it is an option or even a part of deterrence effect. Nowadays only several countries are able to conduct JADO by themselves. Given this small NATO countries do not own capabilities to execute JADO alone. Looking for the future the same

idea as MDO, small countries rely on the common understanding of security issues and contributes to JADO in similar contribution as they do for MDO. NATO [14] implements emerging and disruptive technologies along the whole forces. Current focus goes to artificial intelligence (common refer as AI), autonomous systems, quantum technologies, biotechnology and human enhancement technologies, space, hypersonic systems, novel materials and manufacturing, energy and propulsion, next-generation communications networks. MDO as a part of JADO is already losing its' center focus in military operations. It is possible that army focused operational goals using joint armed force approach is just a supportive concept for JADO. Military already partially covers new cyber and information domain as it is military domains, but on the other hand future warfare and global national interest grows.

Various authors disclose that future warfare has way more “grey zone” compared to previous wars. It is possible to include cyber and information domains into JADO, but it is a must to extend them even beyond military domain. Nowadays adversaries use various means to maintain power or influence others in order to stay in global power ranking. For this case modern warfare require to cover not only military but also space, economic, private sector involvement and other domains. It is essential to develop comprehensive strategies in addressing complexities of modern warfare environment. Even biggest global powers struggles maintaining this comprehensive approach. Small NATO countries face the same challenges and it's even harder for them to meet their national interest.

To sum up it is clear that future modern warfare will face most of the domains even beyond military ones. For this case small NATO countries could use alliance format in order to prepare for such conflicts starting MDO and even higher JADO. Additional NATO format allows countries joint development of different aspect for future warfare. Such examples are NATO agencies and entities like NATO Science and Technology Organization, NATO Communications and Information Agency, NATO Support and Procurement Agency and others. All NATO members contribute

to the common goal of guarantee the freedom and security of its members through political and military means.

Conclusion

Summarizing MDO concept it is hard to clearly describe the essence of it due to various reasons. First of all, it is based on point of view where it's either national or allied like NATO format. Even nations have different approach and statements on MDO. Hereby we should stress out that initially MDO has been developed by USA and later transcribed into diverse approach of separate military doctrines. For this case article suggests using the description of MDO stating that it is **MDO is multinational approach, operational goal focused, joint armed force operations**. Keep in mind two key vital elements, that this description is based on NATO perspective and the second clarifies army focus. Using this term, it is clear that small NATO countries do not execute MDO but rather integrates into NATO MDO. On the national level MDO might be applicable only with a certain capability in place. For the NATO small countries, it is important to clearly understand the level of operations they are able to conduct separately. It also creates more fog of war then conflict is not clear, fight is being executed in unpatterned manners and the stage of conflict has not clear distinction. Small NATO countries conduct has limited resource face serious threats given this the key to successful defence is integration into NATO force structure. For this case military decision-making process has to incorporate national and NATO planning procedures. That enables them to integrate into large scale MDO. Finally, MDO is not the highest point of modern warfare. It is possible to argue, that conflict lines across different domains diminishes and for this case a new JADO model might required. From the authors perspectives JADO is even higher level of military operations. Still various countries already crossed the line of application of conventional military means in wars given necessity to adopt military training beyond military domain.

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