



LAND FORCES IN THE FUTURE OPERATIONAL ENVIRONMENT

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Abstract: *The complexity of the operational environment generated by new risks and threats makes military structures to seek new ways of dealing with conflict in the future. Although the analysis indicates that the possibility of a traditional interstate conflict for Romania appears to be minimal, despite the new conflicts that occurred near the borders of our country, state-versus-state conflicts are still possible worldwide. However, future conflicts will most likely continue to have a hybrid character and manifest through domestic violence, terrorism, insurgency and criminality, as well as through land battle. To the challenges identified above, ground forces will have to develop the conceptual, organizational and human dimensions.*

Keywords: *land forces; operational environment; conflict; risks and threats.*

Introduction

The latest events that occurred in the international environment are a confirmation of a well known fact concerning the nature of conflict which is its fast evolution. Unfortunately, this rapid evolution often involves a constant grow of the complexity of the operational environment in which land forces act, alongside the other national security components.

Of course the complexity of the battle space is not a new concept either and derives from the fact that war is essentially a human activity. It emerges from the number of soldiers and weapon systems and their interaction with the enemy, terrain and population. The human, psychological, political and cultural dimensions of the conflict combined with the specificity of the local environment result in uncertain and complex conditions for land forces to operate in.

Taken in the account the assertions above it is obviously that in order to deliver an adequate answer to the new challenges of the security environment, future land forces will have to reconsider their conceptual approaches and tools. This re-evaluation initial point must be to thoroughly analyse the current and future threats and risks, then to redefine the future conflicts character, in the same time with a close examination of the factors that influence land

operations. Once these three elements are correctly described we can adapt the conceptual approaches to operations of the land forces and redefine their future roles in the future environment.

Even if this study is concentrated on the specificity of land environment we must not forget that the potential of military forces derives from a number of other elements too, such as: the critical importance of joint operations, close collaboration with other governmental agencies, allies and partners. Also this analysis is a starting point for discussions with allies and international agencies as future operations will most likely be combined, joint, intra-governmental, inter-agency and multinational (CJIIM).

Threats and risks

The international security environment as described by the National Security Strategy is constantly changing and, while some tendencies can be foreseen by the existing programmes and strategies, other remain uncertain.

Thus we can state that, while there is no predictable future, a pattern can be established using precedents, change resistant elements, and modelling, experimenting and analysing tendencies even if the result will maintain a speculative character. The only obviously thing is that the world becomes more and more complex due to the rapid movement of ideas, peoples, capital and information, the spreading of global networks and the growth of multi-polarity. Human interaction

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is another element that also becomes more fluid as a direct consequence of the communications technologies revolution.

Even if the operational environment is characterised by volatility and uncertainty, there is no obvious or apparent large scale threat to the security and freedom of Romania. The probably of a traditional inter-state conflict, despite the new emerging conflicts near our borders, seems to be minimal for Romania, but has not vanished globally. State-on-state conflicts are still possible due to regional rivalries and the contraction of U.S. military and global hegemony.

As part of an inter-governmental approach, national defence needs the ability to focus not only on the security threats and risks identified by the National Defence Strategy, but also on a better evaluation of the factors affecting the operational environment, in order to determine the root causes of and catalysts for the conflict that produce these threats. More than that, a better cultural understanding and the influence of political and strategic situations, as perceived by the adversary, is critical.

Future conflicts will most probably keep their hybrid character and their manifestations through domestic violence, terrorism, insurgency or criminality, as well as land battle. Organised crime network, migration and extremism are a seriously international security threat and it is multiplied by the power of internet which plays a leading role in connecting the criminal and extremism elements offering them the ability to operate and respond flexibly. In this context, we can state that the threat of internet attacks, orchestrated by motivated and capable individuals, as well as state actors, will probably increase, thus the dependency of national security system to new emerging technologies being both an advantage and vulnerability.

In the context of the participation of land forces to multinational operations to manage conflicts abroad, there is a high probability that they will be engaged in all dimensions of the battle space, by adversaries with different capabilities, ranging from rudimentary and unsophisticated defence systems to well integrated and layered ones. The emerging of adversaries that combine insurgent organisation and tactics with last generation technologies further complicates the operational environment, thus asymmetric response to a conventional force in the future might include unmanned vehicles or

surface-to-surface ballistic missiles.

The proliferation of weapons of mass destruction amongst states and non-state actors will escalate the risk of conflict, so it is probable that land forces will fight against enemies that use chemical, biological, radiological, and nuclear weapons. This means that land forces must have the necessary capabilities to deter, defend and counter such attacks.

Other risks that could transform into threats to national security are the struggle for resources, in the context of the constant growth of population, the emerging of new economies, political instability, uneven distribution of access to resources, and the growing risk of man made disasters, all of these leading to the necessity of humanitarian operations.

Whenever we analyse the manner in which land forces will operate there are some factors that need to be taken into account: terrain, political, diplomatic, economic, legal, military, technology, human resources, logistics and information.

Conceptual approach of land operations

Having established the context in which land forces will operate and taking into consideration the factors that will influence their actions we can establish the conceptual framework within which future land forces will conduct operations.

One of the main concepts of this framework is the manoeuvrist approach, seen as an indirect approach with the purpose of influencing the adversary's behaviour in order to achieve the objective, not as the classic movement of troops in the field. It is a tool that focuses on understanding and targeting the conceptual and moral components of the adversary fighting power and represents the "supreme excellence" of the famous Chinese strategist Sun Tzu quote "*to fight and conquer in all our battles is not supreme excellence; supreme excellence consists in breaking the enemy's resistance without fighting*".

Manoeuvrist approach has long been considered the most effective way to defeat an opponent and has evolved to place understanding and influence at the centre of the philosophy. It focuses on applying strength against vulnerability and recognizes the importance of cohesion and will, in ourselves, our allies and our adversaries.

Manoeuvre is now multi-dimensional; it is about seeking to gain advantage over an opponent in the information dimension, including cyberspace, as



well as the traditional dimensions of maritime, land and air. This in turn requires the integration at a lower level of a greater range and complexity of capabilities, including joint, inter-agency and multi-national, with many of these previously regarded as exclusively for use as operational and strategic level assets. When manoeuvre is conducted amongst people and the infrastructure that sustains them, it makes influencing perceptions the central factor in success. This manoeuvring of the mind, rather than just physical movement, is a key element of the manoeuvrist approach.

Another conceptual framework within which land forces will operate is the *Understand to Influence* framework, which is based on the idea that even if the main purpose for armed forces is to fight, they should also be able to threaten to use, or manipulate the idea of force to shape perceptions and secure influence in pursuit of national objectives.

This framework has three essential, interdependent components of statecraft: understanding, power and influence, and highlights two imperatives: the need for exploitation and the critical requirement to seize and use the initiative.

The capability to understand and to process information, combined with the application of power, produce the output of influence, because warfare, in all its aspects, is essentially about influencing human beings and their perceptions. In short, the greater the level of understanding, underpinned by the ability to apply power, the greater the ability to influence.

The need to understand is at the core of every operation as understanding provides the context for making effective decisions, applying power and managing associated risks as well as subsequent effects. Sufficient understanding of the full environment is vital for: preventing or deterring conflict; pre-empting threats; conducting risk assessments; developing good tactical comprehension; effective capacity building; and delivering an effective strategic narrative.

As for the power, it is defined as the factors that enable one actor to manipulate another actor's behaviour against his preferences and represents the primary means by which states, and other actors in the international system, are able to pursue their security influence. In short, power is the ability to influence people or change the course of events.

A force that is capable of conducting an effective land operation represents an important source of

power and has the role of discouraging potential adversaries. If the end state can be achieved by persuasion rather than coercion, or prevention rather than intervention, the course of implied force, rather than applied force, should be taken. However, no such implication of force is credible if it is not reinforced by intent and capability. If the implication of force fails to influence sufficiently, there will be no choice but to apply it.

Influence, as a component of the conceptual framework, is not just about messaging and media, but how audiences interpret and understand our words and deeds. The committal of military force has a profound influence, and the understanding of the influences the land force wishes to have from the outset, need to be planned, and then orchestrated, across all military activities. This is particularly the case for land forces operating where all actions are closely observed, and effects are nuanced. Small sub-units, or individuals, can have disproportionate effect from the tactical to the strategic level through their actions and, over time, land forces have a persistence and closeness that allows deep and enduring influence to be established.

The future roles of land forces

In order to efficiently accomplish the demands and meet the challenges described above, land forces will have to develop forces capable to deliver three overlapping purposes. The first requirement is to construct a professional and highly capable land force which is able to conduct complex combined arms operations and the full range of missions and tasks set by the National Defence Policy.

Secondly, deriving from the first requirement, land forces needs a flexible force structure capable of operating in a multi-national environment and accomplishing specific missions in a theatre of operations. This requirement also includes activities such as common training and exercises, experience exchange visits and other forms of interaction that will lead to foster cooperation in the defence field with member states of the alliances and regional initiatives in which Romania is part of.

The third purpose is the capability of land forces to support local and central civil authorities in managing the situations for which they are mandated, especially disaster relief. Therefore, well trained, equipped and led land forces will form the central capability across the full spectrum of conflict.



Future land operations are likely to use highly mobile air and ground forces to exploit information gained from a wide array of manned and unmanned ground and air sensors, as well as network analysis, communications interception and cyberspace monitoring. As previously shown, the manoeuvre will have a multi-dimensional character with influence being the principal result. Adversaries will seek to deny freedom of manoeuvre of friendly forces ranging from the physical terrain to cyberspace, and will seek to attack the command and control, as well as logistic networks. It is likely that military forces, including land forces, will require troops trained, and equipped, to undertake defensive and offensive cyber operations.

Obviously, a key capability will be a coherent intelligence, surveillance and reconnaissance system, but the rapid evolution in this domain has to be balanced to ensure the continued relevance of combined-arms manoeuvre, and fire and movement. Adversaries will probably seek to counter technological advantages using new, asymmetric methods, this fact requiring the adoption of new approaches such as: air defence against unmanned air systems, a reinvigorated effort towards chemical, biological, radiological and nuclear defence and capabilities to deny the adversary access to, and exploitation of, the electro-magnetic spectrum.

The term Intelligence, Surveillance, Target Acquisition, Reconnaissance (ISTAR) needs to be re-examined and re-evaluated in order to reflect the operational requests. There is a need to return to more precise language of reconnaissance as the primary means of observing to locate and ascertain. However, reconnaissance is more than just "scouting", it will be about engagement, comprehension (situational awareness and analysis) and understanding (comprehension and judgement). Reconnaissance assets must develop and exploit the tactical situation, not just find the exploitable gaps by traditional means.

Even if mechanised infantry will be a core capability around which the manoeuvre will be built, the complexity of the future battle space will require the use of small and robust combined-arms teams able to fight dispersed. Also, mobility support will be a critical element and so engineer support, especially assault engineers, will be much more requested to fight within complex environments, such as urban terrain.

Armour, with its protection and ability to

provide precision fire, will be required primarily to provide intimate support to dismounted infantry, although armour should continue to be capable of defeating an adversary by shock action and ground manoeuvre. Control and integration of joint and organic precision fires, both physical and virtual, will have to be co-coordinated and synchronised as far down as sub-unit level.

From the command and control point of view, the demands of the future operating environment are such that small and mobile formation headquarters are likely to be unable to collate, process and disseminate the level of information and understanding required to generate the mixture of comprehension and agility that is needed to retain the initiative in complex modern conflict. Land forces are likely to be geographically dispersed and decentralisation is likely to be the operating principle through networked command and control. There will be a need for flat information structures and rich information services available at the tactical level.

Finally, in the future operating environment there will be significant compression and blurring between the tactical, operational and strategic levels, thus campaign planning tools, designed to manage complexity at the operational level, will be required routinely at the tactical level. Increased weapon ranges and more capable communication systems have expanded the scale of the battlefield exponentially so what was once corps and above battle space is often now within the capabilities of a division.

Conclusions

The character of war will continue to change and evolve, but many of its features, especially those linked to the human nature, will remain. The future will continue to be characterised by uncertainty, complexity and volatility, so that the future land forces will have to be able to fight and operate in complex environments, and to be adapted to deal with the diverse character of the future conflict by applying the new conceptual framework philosophy.

The complexity of modern conflict, allied to the dynamic nature of the information environment, demands an adaptable and integrated approach with a land force capable of regenerating to meet the inevitable requirements for sufficient mass, balance, persistence and specialism. With technology



enabling the greater volume and integration of information, future land forces must develop greater expertise and capabilities in information management, exploitation and assurance.

Capability planning will need to develop a land force that is balanced so that it can efficiently adapt to emerging threats and risks. To achieve this, critical capabilities will need to be identified, maintained and developed, along with those that that can be preserved and used only when required and with those that can be permanently deleted.

Future adversaries will probably attempt to exploit the vulnerabilities of the cyber space dependence, so the land forces personnel will have to understand these vulnerabilities and actively train and prepare to be able to maintain the freedom of manoeuvre in all domains. Due to future threats and risks from cyber space there is a need for resilience and capable communication and information systems that can be rapidly reconfigured in order to maintain operational capability of land forces. There will also be a need for specialised forces capable of conducted cyber defensive and offensive actions in order to ensure the security and integrity of the command and control system.

A strong moral component of fighting power and military discipline will remain a mandatory requirement for future land forces, investment in education will help to ensure that the future leaders will be able to operate with modern concepts such as manoeuvrist approach and understand to influence.

Combined-arms manoeuvre remains at the heart of the use of land fighting power, but the future force must structure, equip, train and operate not just with all of the traditional tools, but also with an ever-increasing range of capabilities (like cyber),

and in closer concert with the other services.

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BIBLIOGRAPHY

1. Barry B., *Trends in Land War since 9/11*, International Institute for Strategic Studies Paper, 2011.
2. Coker C, *Rebooting the West – The US, Europe and the Future of the Western Alliance*, RUSI Whitehall Paper, Volumul 72, 2009.
3. DCDC, Army Doctrine Publication (ADP), *Operations*, 2010.
4. Joint Concept Note 2/12, *Future land operations concept*, 2012.
5. National Security Strategy, București, 2009.
6. National Defence Strategy, București, 2008.
7. Sun Tzu, *The art of war*, Editura Antet, București, 2007.
8. U.S. Army and U.S. Marine Corps, *Gaining and Maintaining Access*, 2012.