PERSPECTIVES ON ADAPTING MILITARY STRUCTURES TO THE REQUIREMENTS OF CURRENT AND FUTURE OPERATIONAL ENVIRONMENTS

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Approaching the current and future operational environments requires that military structures and, in particular, the tactical ones, should have the ability to conduct operations, regardless of the campaign themes (peace military engagement, peace support operations, security operations, and combat operations), which involves the simultaneous or successive use of tactical activities and core functions in order to generate the desired effects and, implicitly, to attain the end state. In this regard, an operational adaptation of the tactical military structures is required, generating, at the same time, implications at the level of the force structure, not only by reconfiguring the organic headquarters (HQ), but also by reorganising the combat (CBT), combat support (CS) and combat service support (CSS) forces. Therefore, highlighting the specific aspects of the combat power’s adaptation, by analyzing the established war fighting functions (WFF), the finality of the article will seek to identify the main adjustments of the military decision making process (MDMP), as a fundamental planning methodology used by tactical military structures, with organic staff.

Keywords: COE; FOE; operational adaptation; combat power; WFF;
INTRODUCTION. WHY AN OPERATIONAL ADAPTATION OF MILITARY STRUCTURES?

Nowadays, the approach of operational environments requires that commanders, military staffs (Headquarters – HQ) and subordinate forces should have the ability to continuously adapt, even within the same operation, involving successive operational changes in all phases of the operations process (planning, preparation, execution, assessment). This requirement is based on the lessons learned from recently completed or on-going military operations, such as Operation Inherent Resolve (OIR), whose common denominator was that the initial plan survived only in the early hours of execution, as what was anticipated in the planning did not correspond to the reality on the ground, because the conditions of the operational environments changed in relation to the dynamics of the combat actions.

Given these conditions, the following question arises: “What are the characteristics of current and especially future operational environments that planners should take into account in the operations process?”. The answer to this question is quite difficult, requiring a thorough analysis and interpretation of specialised sources.

In order to identify the reference characteristics of the operational environments we should first understand it from a holistic perspective. In this sense, the operational environment is defined by intelligence specialists as “a mixture of conditions, circumstances and influences that affect the engagement of capabilities and decision-making by the commander” (JP 3-0, 2017, p. IV-1). It also includes the following factors (JP 3-0, 2017, p. IV-1):

- physical areas – defined by the air, land, sea, space domains;
- information environment – includes cyberspace;
- electromagnetic spectrum (Electromagnetic Spectrum – EMS);
- other factors.

Analysing figure 1, it can be seen that within these factors the relationships between own forces, adverse, neutral or other interest audiences can be defined.

Relating all these factors (figure 1) to recent operational contexts such as those in Ukraine, Afghanistan, Syria, Iraq, etc. we can establish that they generated real difficulties in determining the specific parameters, because the operational
environments were classified as volatile, uncertain, complex and ambiguous (Volatility, Uncertainty, Complexity, Ambiguity – VUCA). Consequently, the current operational environments (COA) and especially the future ones (Future Operational Environment – FOE) will be characterised by (Karaoguz, 2016, p. 8):

- **volatility** – coagulated by the presence of instability in the operational environment/area of operations (Area of Operations – AO) from the perspective of information exchange and the specific of the situation;
- **uncertainty** – results from the difficulty of understanding the situations and the predictability of the effects generated as a result of the changes of the operational contexts;
- **complexity** – consists in the multitude of actors present in the operational environment, on the one hand, and on the other hand the manifestation of the confusion of problems, due to the difficulty of defining the relations between causes and effects;
- **ambiguity** – given by the lack of clarity in visualising and understanding the situational contexts (the principle action – reaction – counteraction) as a result of the erroneous definition of the Common Operational Picture (COP).
Certainly, the visualization and understanding of the characteristics of COE/FOE are correlated with the time horizon, and on this principle it can be concluded: the longer the time horizon of visualising the operational environments, the more pronounced the VUCA type characteristics will be.

OPERATIONAL ADAPTATION
– IMPERATIVE OF THE COE/FOE APPROACH

In order to identify the possibilities for the operational adaptation of military structures to the specific of the COE/FOE, we will start from the analysis of combat power, as there were operational contexts where friendly forces have faced difficulties in applying it at the right time and decisive place.

One of the most appropriate definitions given to combat power is “the application of fighting power through warfighting functions” (AJP 3.2, 2016, pp. 2-27), using “leadership and information” (Wade, 2015, pp. 1-22). By the way, information is used in the sense of exchanging information between their own structures, but also between them and other cooperation structures. The configuration of the combat power, used as a starting point in the process of adapting it, is highlighted in table 1.

Table 1: Elements of combat power

<table>
<thead>
<tr>
<th>Combat power</th>
<th>+ leadership (multiplies and unifies the combat power elements)</th>
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<tbody>
<tr>
<td>WFF</td>
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<tr>
<td>intelligence</td>
<td>allows understanding the enemy and all elements of the operational environment (ADP 3-0, 2019, p. 5-4)</td>
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<tr>
<td>information activities</td>
<td>affects information systems, influencing the behavior of interest audiences (AJP 3.2, 2016, p. 2-16)</td>
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<tr>
<td>command and control</td>
<td>allows commander to synchronise and converge the elements of combat power (ADP 3-0, 2019, p. 5-3)</td>
</tr>
<tr>
<td>fires</td>
<td>ensures the use of direct/indirect fires, air and missile defence and joint fires to engage targets (Wade, 2015, p. 1-23)</td>
</tr>
<tr>
<td>protection</td>
<td>preserve the combat power necessary to fulfill specific missions (ADP 3-0, 2019, p. 5-6)</td>
</tr>
<tr>
<td>sustainment</td>
<td>provides services of all classes in order to maintain and expand operational capacity (ADP 3-0, 2019, p. 5-5)</td>
</tr>
<tr>
<td>movement and manoeuvre</td>
<td>ensures the mobility and use of forces in order to obtain advantageous positions over the enemy (ADP 3-0, 2019, p. 5-3)</td>
</tr>
<tr>
<td>+ information (understood as communication between structures)</td>
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On the other hand, the adaptation of combat power should be correlated with the standards for the development of military capabilities to operate in the context of the COE/FOE, as follows:

- operational flexibility and mental agility of leaders;
- modularity and versatility of forces;
- strategic/operational deployment and tactical mobility of forces;
- the personnel’s expeditionary mentality of the deployable structures;
- integration of Artificial Intelligence (AI) at the HQ level and CBT, CS, CSS forces.

Therefore, taking into account the VUCA-type characteristics of the COE/FOE and the standards of military capability development presented above, we will adapt the combat power, making adjustments at the level of each WFF, as follows:

- command and control ($C_2$) – should be applied in the sense of mission command in order to encourage disciplined initiative and freedom of action of subordinate leaders; in this way, commander and HQ will be able to perform specific tasks related to operational requirements within COE/FOE (table 2).

**Table 2: Mission command tasks (ADRP 6-0, pp. 1-4-1)**

<table>
<thead>
<tr>
<th>Primary tasks</th>
<th>Commander tasks</th>
<th>HQ tasks</th>
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<td></td>
<td>- drive the operations process by understanding, visualizing, describing, directing and assessing operations; - develop tems, not only within own structure, but also including joint, interagency, intergovernmental, multinational (Joint, Interagency, Intergovernmental, Multinational – JIIM) partners; - inform and influence the audiences inside/outside their structures.</td>
<td>- conduct the operations process including planning, coordination, execution and assessment; - conduct the management of knowledge and information; - conduct inform/influence activities; - conduct cyber electromagnetic activities.</td>
</tr>
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</table>

**Additional tasks (driven by commander and conducted by HQ)**

- drive/conduct deception operations;
- drive/conduct engagement operations (pointed to local population);
- intal/operate/maintain $C_2$ network;
- drive/conduct airspace control;
- drive/conduct information protection.
• intelligence and information activities – merged in a single WFF, will generate an accentuated active character by using the intelligence products obtained in order to influence the behavior of the audiences present in the COE/FOE;
• fire support – should be used to generate second-order effects, consisting in modeling the behavior of interest audiences in the desired direction;
• protection – although this is important for all the components of operational capability, its main effort should be to protect the morale of fighters, representing “a product of the synergy of all the components of combat power” (AC 71940, 2017, p. 3-8);
• sustainment – should be substantially amplified, assuming its fulfilment from a JIIM perspective;
• movement and maneuver – used on the principle of manoeuvrist approach, it will allow significant amplification of combat power by developing constructive activities (involves the employment of the moral component of supporters and neutral parties), before launching the disruptive actions against the opponent (involves the employment of moral, conceptual and physical components); the principle of manoeuvrist approach is represented in figure 2.

Figure 2: Increasing fighting/combat power – manoeuvre approach
(Ducheine, Haaster, 2014, p. 7)
On these adjustment principles and adding engagement as a new WFF, the initial configuration of combat power (table 1) is transformed into the one in table 3.

Table 3: Combat power adapted to the COE/FOE requirements (Tudorache, 2020, p. 85) (a version)

| + leadership (multiplies and unifies the combat power elements) | engagement allows relationship between military force and unified action partners (TRADOC Pam 525-8-5, 2014, p. 5) | movement and manoeuvre applied as manoeuvre approach |
| WFF | intelligence information activities are included | C2 applied as mission command | protection main effort on protecting the warriors’ moral |
| fires aimed at modelling the behaviour of audiences | sustainment performed from JIIM perspective | |

Further developing the issue of operational adaptation of military structures, the adjustment of combat power (table no. 3) generates implications at the level of planning methodologies, especially at the tactical level, involving adjustments to the military decision making process (Military Decision Making Process – MDMP).

ORGANISATIONAL IMPLICATIONS

The operational adaptation of military structures to the requirements of operating within the COE/FOE automatically generates an adaptation of the organisational structure able to direct the adjusted combat power. This adaptation of the organizational structure should be done, both at the level of the HQ and for organic CBT, CS and CSS forces. A variant of tactical modular structure able to support the adapted combat power is presented in figure 3. This structure of the infantry battalion is designed for Stability and Support Operations (SASO), given that the estimates of military specialists state that most likely such structures will be used for to perform SASO within the FOE.

Analysing the organisational structure above, at the level of the HQ the main adjustments consist in:

- development of cultural capability by integrating cultural experts (Subject Matter Expert – SME), cultural advisers (CULAD) or foreign area officers (FAO) within the established modules (S2, S3, and so forth) or in the framework of another on its own; these new elements will facilitate the operationalisation
of the cultural aspects specific to the other interest audiences in the operations process;

- AI integration, at least within modules $S_3$ and $S_2$, for optimizing the information cycle, COP development and the support for its understanding, optimising the activity of the Tactical Operations Centre (TOC), support for the adjustment decision-making during execution, and so one.

On the other hand, at the force level, some adjustments of their organization are given by:

- CBT – the company’s command should be supported by AI capabilities for the purpose of advising it; infantry platoons and fire support platoon, by integrating AI into them, in the form of Lethal Autonomous Weapons (LAWs) will have improved capabilities on the efficiency and effectiveness of firing;
- CS – on the principle of CBT forces, the CS could also be augmented with AI capabilities in order to amplify firepower able to provide CBT forces with robust fire support;
- HQ – this company will support the battalion HQ in the exercise of engagement as WFF (table no. 3), having mandatory in its organic elements such as military police (MP), specialized in civil-military cooperation (CIMIC), dedicated to obtaining information from human sources (Human Intelligence – HUMINT), FAO, other elements specialised in carrying out information operations (IO).
Therefore, the adapted combat power can be directed within the COE/FOE to the decisive place and moment, by adjusting the organisation of the HQ, on the one hand, and on the other hand reconfiguring the organisational structures of the subordinate forces, regardless of their typology.

**CONCLUSIONS**

At the end of this article, it can be concluded that the operational adaptation of forces should have a continuous character, because both the COE and especially the FOE have an accentuated dynamics, constantly changing their physiognomy. What is certain is that the operational adaptation aims as an end state to develop those capabilities that allow forces to operate in VUCA-type environments, regardless of their amplitude.

The operational adaptation should also be done taking into account the standards of military capability development with leadership implications by developing mental agility and building the expeditionary mentality. As expected, the greatest impact of the development of these standards occurs at the level of forces, involving the development of operational flexibility, promoting modularity and versatility, improving tactical mobility, and the AI integration.

The main challenge that arises is the difficulty of developing these capabilities on short term and in complete volume, and in this regard, we should prioritise or, in other words, we should find the answer to the following question: *What standard/standards should we start with to obtain operational adaptation?*

Given that the main effect of adaptation is change, we should start with operational flexibility, but not from an overall perspective that would involve meeting the other standards, but strictly focusing on the formation and development of a high capacity for immediate response.

Finally, in order to adapt the military structures to the requirements of operating within the COE/FOE, achieving the high immediate reaction capacity of the deployable force can take shape by reconfiguring the existing combat power, rethinking the established planning methodologies and, last but not least, reorganizing the CBT, CS, CSS forces.

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