

CRITICAL INFRASTRUCTURES AS STRATEGIC OBJECTIVES IN HYBRID WARFARE

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Abstract: *The current and future war is of hybrid nature, in which military actions are complementary to actions of economical, political, ideological and diplomatic nature. In this communication, I refer to the domains in which we encounter critical infrastructures and I demonstrate that these critical infrastructures are objectives of strategic importance for both the defender and the attacker.*

Keywords: *hybrid warfare; critical infrastructure; strategic objectives; social field; political field; economic field; military field; public authority.*

In the current and future warfare, hybrid actions have a higher and increasingly important share, primarily because human society is and will be increasingly hyper-technological. The capabilities of analysis and data and information transfer have increased exponentially from one day to the next, the informatisation of social domains is a reality, infrastructures of any kind tend to become vital and therefore critical, and so on.

“The Emergency Ordinance no. 98/2010 on the identification, designation and protection of critical infrastructures defines the domains and the cross-domain criteria underlying the identification of critical infrastructures as follows:

- *the criterion regarding victims, assessed according to the possible number of deaths or injuries;*
- *the criterion regarding economic effects, assessed in terms of the importance of economic losses and/or degradation of products or services, including possible effects on the environment;*
- *the criterion regarding the effect on the population, assessed in terms of the impact on its trust, physical suffering or disruption of daily life, including the loss of essential services.*
- *Cross-domain criteria are not cumulative for the identification of essential/non-essential critical infrastructures.¹”*

In this context, I propose to analyze which are the strategic objectives of the hybrid warfare and which of the critical infrastructures will become strategic objectives to be attacked before, during and after the end of military hostilities.

In addition, starting from the sectors listed in the above-mentioned ordinance (energy, information and communication technology, food, health, national security, administration, transport, chemical and nuclear industry, space and research, etc.), I propose to define new ones or to redefine the existing ones.

Practically, in the hybrid warfare, “the main possible fields of interest will be targeted: political, informational-media, diplomatic, economic and military.”²

The political field is the leading field of society and is the number one strategic objective in any war, so including in the hybrid warfare. Specifically, the action against the political is carried out for the “decrease of the cohesion and efficiency of the governing act”³ through:

- identifying and exploiting the weaknesses of political leadership;
- vulnerability and reduction of the state control in all areas, including security, public order and defense areas;

¹ Ordonanța de urgență nr. 98/2010 privind identificarea, desemnarea și protecția infrastructurilor, Monitorul oficial nr 757 din 12 noiembrie 2010, art.9 (3).

² Drd. Viorel-Cătălin Mihalcea, *Infosfera, Fundamente și ținte ale războiului hibrid în acțiunile belighe contemporane*, Revistă de studii de securitate și informații pentru apărare, Anul X nr. 1/2018 pp. 16-17.

³ *Ibidem*, p. 16.

- compromising the political and administrative leadership;
- exploiting the corruption phenomenon in order to destabilize society in general;
- cybernetic and physical attack on the information and informatics system at political and politico-military strategic level.

The political field has not been clearly defined so far as a field that contains sectors of activity with a critical dimension. From my point of view, the political field, as a whole, is critical because it represents the "nervous system" of society, a system without which society cannot function.

The public authorities responsible for identifying and defining critical infrastructures in the political sector could be the government itself, through the general secretariat. I consider that the subsectors in the political field would be:

- the legislative subsector: holding the capacity to elaborate normative acts essential for the optimal functioning of the society (parliament, local councils,) and the related technical structures;

- the administrative subsector: holding the capacity to implement the political decisions and the legislation (government, institutions of the prefect, mayors) and the adequate technical apparatus;

- the subsector designated to inform the population regarding political and administrative decisions of strategic interest (state and private media institutions).

From the perspective of strategic military action during the hybrid war, the aggressor will target the elements of the political system as follows:

- the network of basic and reserve strategic politico-military and military command points, with all the communication elements through cyber, energy-information attacks, and bombings with classical or nuclear ammunition;

- the system of strategic and political decision-making through agencies of influence, techniques of control and manipulation of the population;

- the government, ministries, parliament sites and the sites of local public authorities through the act of physical assault, cyber attacks, ideological influence, corruption and manipulation of the population.

In conclusion, the political field through its specific characteristics is critical and manifests itself as a critical infrastructure and implicitly as a strategic objective targeted by the aggressor.

The media information field is the second field of importance in a hybrid war, after the political one. The population of the opposing state is the most important strategic target in the current and future war.

In the classical war, the population was the target of direct aggression by the opponent's armed forces. The evolution of the global society, the treaties, the international criminal law and the international humanitarian law limit or even forbid the direct physical actions directed against the population. These restrictions have led to the emergence of new forms of aggression against the population, of a psycho-informational and imagological nature.

The values to which the opponent's population relates to become the main objective and mode of action in hybrid warfare. The modification of the set of national values is achieved through actions such as:

- erroneous presentation of social facts and actions with national implications and consequences;

- changing the behaviors and social attitudes of the population through specific manipulation and influencing;

- population control through manipulation in order to change the political structure and the will to fight;

- determining the increase of the population's dissatisfaction regarding the political and administrative power of the state.

The media information field is a critical field because one of the most important needs of the population is that of information which in turn combines perfectly with the need for socialization and this approach makes sense from a critical perspective.

The public authorities responsible for identifying and defining critical infrastructures in the media information sector could be ministries, such as the Ministry of Research, The Ministry of Innovation and Digitalization, the Ministry of Education or the Ministry of Culture.

The subsectors that belong to the media information field are:

- the written and audio-video information production and distribution subsector and related transmission systems (cable television networks, Internet, etc.)
- the subsector of religious cults and non-governmental organizations;
- the subsector of national governmental organizations.

If the strategic objective of this field is the population, then the critical infrastructures and the afferent sectors that serve them would be:

- media trusts, networks and mass information channels;
- non-governmental organizations;
- religious cults;
- government organizations with a major social impact on the population.

By operating the concept of strategic informational media objective, we can say that the opponent will hit its critical elements through:

- informational and psychological attacks on the religious faith of the population;
- physical and image attacks directed against religious institutions and their heritage;
- physical, mental and informational attacks against religious leaders and opinion leaders.

In conclusion, the media information field, although apparently not a critical infrastructure, is a key field and a first strategic objective, due to its importance and social role.

The diplomatic field has been and will be extremely important both in peacetime and during war, regardless of the type of warfare, be it classical or hybrid. Diplomacy can be considered a weapon, but at the same time, it can be the target of the opponent's aggression.

Therefore, diplomats are the most exposed to the aggression of the opponent, even if they are protected by international law. Through diplomacy, political information is transmitted and received, informatisation which serves as the basis of which decision-makers apply appropriate measures in relation to the given situation.

The diplomatic system of a country is the infrastructure whose criticality is given by the relationship with the political factor in whose service it acts on behalf of the nation it represents. Through diplomacy, agreements, treaties, alliances, sanctions, etc. are obtained that make possible the optimal social action, including the military.

Through diplomacy, the aggressor will follow:

- discrediting the political, economic and social regime of the target state;
- blocking the mechanisms of international collaboration in various fields, including in the military field;
- blocking or annulment of international agreements (treaties) to which the target state is a party and which facilitates a series of major activities and actions;
- exclusion from international organizations or blocking (diminishing) the activity of the state in their framework.

The Ministry of Foreign Affairs is the public authority responsible for this area. Depending on the situation, The Ministry of National Defense and the Foreign Intelligence Service may be responsible for the diplomatic sector to the extent that the action to protect critical diplomatic infrastructure is required.

The subsectors in the field of diplomacy are:

- the subsector of the permanent representations of the state (the system of embassies and consulates);
- the subsector of the representations in international political, politico-military, economic or other organizations;
- the subsector of the institutions that collect, process and disseminate information of strategic interest;
- the subsector of governmental organizations that promote the national interests at international level.

Like in the other areas, the aggressor will have as strategic objective the specific critical infrastructure, in this case the diplomatic one.

The concept of diplomatic infrastructure as a strategic objective to be defended should be understood from the perspective of the criticality of the diplomatic field, which together with the political one give meaning to the social existence of a state.

The elements of the diplomatic critical infrastructure can be:

- embassies and consulates;
- permanent representations at the international organizations;
- informatics and information systems for collecting and transmitting data and information specific to the field.

The mode of action will be:

- physical and cybernetic actions upon the main elements of the system;
- psychological and imagological.

In conclusion, the diplomatic system of a country is also a critical structure, and the elements that compose it will always be the preferred target of the aggressor.

The economic field is an essential field of society without which the other fields cannot exist. Thus, economy ensures the optimal functioning of the global social system, including the military. The concordance between the level of economic development and war is a law of armed warfare that clearly expresses the indissoluble link between the two. You cannot conquer or defend yourself if the economy does not provide you with the necessary weapons and logistics.

The criticality of the economic field is well known, and most of the infrastructures defined as critical belong to this sector.

The economic field is represented in Ordinance 98/2010 by the sectors: energy, information and communication technology, food, transport, chemical and nuclear industry, space and research.

The strategic economic objectives targeted by the adversary will be the critical infrastructures that serve the functioning of the following systems: energy, information, food production and distribution, water supply, chemical and petrochemical, research, development, innovation, transport.

As a mode of action, the opponent who adopts the hybrid form of war will act in three directions:

- energetic, classical, physical – direct attack on the elements of critical infrastructures;
- informational, cybernetic – attack on the informatics systems of the critical infrastructures
- implosive (from within) – attack by agents of decisional influence (persons with decision-making functions in management, boards of directors, system of government who decide in favor of the opponent).

In conclusion, critical infrastructures are strategic objectives targeted by the enemy in hybrid warfare during its preparation through soft actions (cyber attack, psychological, imagological, decisions by agents of influence, etc.) and hard action (physical, energetic attacks focused on the essential elements).

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