

THE ROLE OF THE NORTH ATLANTIC ALLIANCE IN THE CRITICAL ENERGY INFRASTRUCTURE PROTECTION

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Abstract: *The North Atlantic Alliance considers that energy is nowadays an indispensable part of security. Hereby we cannot talk about security without analysing the energy side, with all its implications, including the critical energy infrastructure. But the security of "critical infrastructure" is affected by vulnerabilities, risks, threats, failed states and aggressions. Finding out vulnerabilities determine the identification of threats under which the terrorist attacks are imminent. Taking into account that NATO and EU share the same vital security concerns, an enhanced co-operation in the field of critical energy infrastructure protection may constitute one of the common projects of practical and efficient co-operation development.*

The usual definition of energy security can be summed up as the simple availability of resources, in sufficient quantities and at affordable prices, but the concept is perceived differently at the global stage, given the developments occurred in the international security environment. In this context, the energy-exporting countries are focusing on maintaining the "security of demand" for their exports, which eventually are generating the biggest percentage of the governments' revenue. For the developing countries, the energy security lies in their ability to adapt quickly to their new dependence from the global markets. In the United States and Europe, the main problem is how one can manage dependence from the imported strategic resources. Currently, the energy security is not just an average economic policy goal, but has become a constant concern for the national economies and beyond. Thus, the current model of energy security, born from the 1973 crisis, focuses mainly on how to manage any disruption of supply in resources from the producing countries. Therefore, the concept of energy security should be extended in order to include the protection of the entire energy supply chain and infrastructure through providing alternative sources of supply, the identification of alternative energy routes, security of sources and routes and also the existing transport and environmental protection.

The energy infrastructure is represented by the large dynamical systems which are corresponding to physical resources, services, facilities engaged in computing activities, networks and infrastructure elements that are interconnected, all of which are likely to generate multiple threats and risks. The energy infrastructure includes: oil and gas production, refining, processing and storage / storage, including pipelines; electricity production; electricity transmission systems, gas and oil transmission systems; distribution systems for electricity, gas and oil distribution systems; production, processing and storage of nuclear materials.

In the NATO acceptance, the critical infrastructure

consists from those facilities, services or information systems of which failure or destruction has a destabilizing impact on national security, on the economy, public health and safety. The „security of critical infrastructures" is affected by vulnerabilities, risks, threats, and the estates of danger and even aggressions.

The vulnerabilities of „critical infrastructures" are ordinary conditions, processes or phenomena that reduces their responsiveness capacity from existing or potential risks or favor their emergence and development, with consequences in terms of functionality and utility.

Developments in the recent years have increased the amount of vulnerabilities in the society where the protection of critical energy infrastructures requires new concepts of energy and analysis behavioral tools of such systems and their impact on the elements they serve. The sensitivity of energy infrastructures depends on their particular role in the structure of that particular part, on the stability and functioning of a system or process, and also by the condition of interdependence. In the current system, a critical infrastructure directly depends on another one, often using the same resources to operate or under different circumstances to provide certain infrastructure resources used by another infrastructure to operate. Identification at the global level the vulnerable energy infrastructures is a current concern, given that the most likely targets are vulnerable and whose destruction could have catastrophic consequences. According to NATO report on "Energy Security": critical infrastructure protection energy cooperation" were identified as critical vulnerable infrastructure the following: tanks, tankers, ports, oil rigs, pipelines and terminals, liquefied natural gas infrastructure (LNG), power grid and other facilities.

Note: In the US alone there are more than 150 refineries 4000 abroad platforms, 160 000 miles of pipelines, facilities for the management of 15 million barrels of oil per day from exports and imports, 10,400 power plants, 160 000 miles of high voltage transmission lines and millions of

miles of power distribution lines, 410 underground storage of natural gas and 1.4 million miles of natural gas pipelines.

Aggression against „critical infrastructures” materializes especially in violent or nonviolent actions, held by armed means, electronic or psychological or informational based on strategies or plans developed by an entity (state, pressure groups, non-state actors, centers of power).

In the current security context, the most common form of aggression is represented by the *informational aggression* – characterized by unprovoked actions (attacks, operations, campaigns), taken against the information field for the purpose of affecting information, information systems and decision processes.

Given the direct link between energy supply and the security of allies and also the direct nature of some of the threats, the energy security has become a topic of discussion within NATO.

Alliance did not have a traditional role in the energy security issue, being exceeded by the allied forces by providing guaranteed access to fuel for troops and their equipment. In the *NATO Strategic Concept of 1999* is stipulated that the *"Alliance security interests will appear (...) in the event of supply disruption with vital resources"* at the moment there is no agreement among allies regarding the definition of NATO Policy in ensuring energy security. However, concerns about energy market developments and risks faced by the member countries led to a reassessment of the role that NATO could play in this field. In this context, between 22-24 of February 2004 in Prague, the Alliance has initiated *NATO Forum on Energy Security and Technology*. This debate prefigured the energy security issue at the Riga Summit in November 2006. At that meeting, the Heads of State and Governments called for focusing on the international effort to assess risks facing the infrastructures and to promote the security of these infrastructures.

The North Atlantic Council (NAC) was tasked with the identification of *"areas where NATO can provide support in order to protect the security interests of the Alliance."* This point of interest for energy security was also included in the *Comprehensive Political Guidance, adopted in Riga, in which is stated that the "instability due (...) to interruption of supplies of vital resources" is the main risk that NATO will face in the next 10-15 years.* Ensuring the energy security of the Alliance remains a highly sensitive subject of debate because many energy routes are positioned in the immediate vicinity of the Russian Federation and in maximum area of strategic importance for the Russian interests. Given the fact that the West is vitally interested, primarily due to its dependence on energy imports, in a normal setting in political

and economic relations with the Russian Federation, its direct involvement in a very sensitive issue for the Russian interests cannot be achieved easily. In this context, the proposal made in February 2006 by the Prime Minister of Poland to create a *European Collective Defense Pact* on the energy security dimension, including a clause similar to that set out in Article 5 of NATO founding treaty was desired not only by Warsaw but also by other eastern European countries.

Resuming discussions on the behalf of the NATO energy involvement was made at the Summit in Bucharest, given the significant vulnerabilities of the energy and energy critical infrastructures in the Member States. The consultation of the report on "NATO's role in energy security" of the North Atlantic Council at the Bucharest Summit where the Heads of State and Government adopted a list of areas where NATO should be involved in order to ensure the energy security. These areas range from: *"cooperation and exchange of information and intelligence, stability projection, promotion of the international and regional cooperation, management and protection of critical energy infrastructure"*. Therefore, in the Alliance leadership and in particular at the level of the Secretary-General, were made practical proposals which are achievable in the future.

➤ *Monitoring and assessment of the energy security situation.*

At the organizational level of NATO, it is envisaged, first, the establishment of a monitoring and evaluation mechanism in order to keep an eye on the developments related to energy security. It involves regional political consultations with the allies and partners, based on the analysis and intelligence reports of the national military intelligence structures. Collaborations with members of the specialists within the community such as those from the International Energy Agency (IEA) and those from the major energy companies could play an important role. A high NATO committee could be entrusted to follow the issue closely and to prepare it before the North Atlantic Council, the highest decision-making body of NATO. Also, another group primarily concerned with economic issues could be called upon to support this initiative due to the direct link between the energy security, economics and market trends. With regards to the exchange of information and intelligence, the North Atlantic Council may establish an *Intelligence Analysis Cell for Energy Security* given the set up of a similar intelligence structure which was created to address terrorism proved to be a success. Also, the *Special Committee of the Alliance* could play a positive role in facilitating the exchange of intelligence between different entities in the field of energy security. In addition to the sharing of the national intelligence among Allies, NATO's

maritime operations could monitor the shipping lines that are insufficiently covered by national capabilities. The coverage of such areas could be used to generate a maritime picture that could be made available to all NATO members and partners. This is because, *except the United States, no other NATO member has sufficient naval forces to defend oil transport routes, both to their own benefit and for supplying the Allies.*

This initiative concerning the monitoring of the maritime space could be linked to the intelligence network of NATO's command, in particular through the *Intelligence Fusion Centre*.

➤ *Security assistance for the Allies*

Given the new international security risks, NATO is able to provide security assistance to its allies. This could involve flexible measures ranging from security assistance to an ally or a group of allies, and to conduct even a NATO operation to secure in case of need the vulnerable energy-related infrastructure. According to the Article 4 of the founding Treaty, NATO could deploy "*Security Assistance Packages*" made especially in order to support one or more allies, plus the peculiarities that would require such an initiative. This aid package could include *plans to strengthen the maritime and aerial patrols, to protect the national communication and information networks or even to assist to the disaster response efforts using the Civil Emergency Plan mechanisms and those of the Euro-Atlantic Coordination Disaster Response Centre*. In exceptional cases, the essential elements in the energy field could be protected through the involvement of the *NATO Rapid Reaction Force*.

➤ *Maritime surveillance and threat-based response*

A third possible role for NATO could be the involvement in the maritime surveillance. Although the states retain responsibility for the protection of their own territorial waters, NATO could develop a 'niche' capability in dealing with the security aspects of the maritime lanes of communication.

CONCLUSIONS

This brief analysis on the role of the North Atlantic Alliance in the critical energy infrastructure protection assumes that, at the present, the energy is a genuine security issue. Therefore, we cannot discuss about security without taking into account the energy component alongside with the analysis of all the summed-up aspects in the critical infrastructure. The security of the "Critical Infrastructures" is affected by vulnerabilities, risks, threats, different estates of danger and aggressions. The vulnerability detection based on the analysis of risk factors, determines the identification of threats to critical energy infrastructure. Certainly, from all the threats, the terrorist aspect is the most stringent, but this doesn't mean that any other threats can be neglected. In a market so dependent on oil and gas, the threats to energy supply, suggests the need for a strategy on energy critical infrastructure, which among other aspects, can prevent interruptions or to minimize their effects. Regarding the cooperation aspect it is important to highlight the fact that the extensive discussions and consultations between the Euro-Atlantic partners do not necessarily imply an automatic agreement and that NATO will assume and require a leading role in energy security. It is obvious that the protection of critical infrastructure or the response options in the case of crisis with the involvement of the military forces are only a part of the overall package of initiatives necessary to ensure the security of the energy supply. For example, there are already a number of initiatives of the G8 countries, the EU, the

Operation *Active Endeavour*, which showed its usefulness in terms of security in the Mediterranean Sea after September, 11, 2001 could be used as a model. Thus, a multinational maritime group (also involving partners who are not belonging to the Alliance) could be created in order to deter attacks against the vessels transporting liquefied petroleum gas (LPG) with the aim of protecting, in particular the strategic maritime points in the case of heightened threats or conflicts. This will require an active approach to provide an answer based on the information or on the threats themselves.

➤ *Interdiction operations*

Given the previously carried out actions, NATO could conduct out interdiction based operations, designed to secure the supply of oil or gas in an actual crisis or conflict.

Note: An example (although not constituted in a NATO initiative) is the "*Operation Earnest Will*" (1987-1988) carried out to protect the Kuwaiti oil tankers during the Iranian-Iraqi war. Thus the Alliance's ability to manage the maritime escort operations in the short term in protecting oil rigs and terminals, in assisting the national authorities to protect port loading / unloading facilities and the protection of the refineries and the storage points of crude oil and natural gas. A played role of NATO in the field of energy security involves the development of operational planning usually for the specific scenarios and planning for the multinational naval forces and other relevant forces which could be involved. The accomplishing of the NATO's role in energy security involves important issues such as the development of relations with other organizations and partner countries alongside with the development of some military operations, which are "intelligence based". Therefore appears the need to tie these different standards of work in a political-military concept on energy security. The four possible roles for the Alliance could form the core of this concept.

International Energy Agency and of the other groups to enhance energy security. These actors are focusing on providing of a more universally accepted Energy Charter, thus opening the markets to foreign investment or in reducing the dependency of the fossil fuels based economies.

Also, given Russia's leading role in the energy security, it is understood the fact, that the issue should become a regular topic of the NATO-Russia Council consultations, just as it has been already included on the expert- level agenda of the Ukraine -NATO meetings. The energy security has the potential to create a major crisis or, at least, to attempt in ensuring the guaranteed purveyance of the required supplies, therefore could increase the shape of the foreign policies and priorities of the NATO member states and of the other players around the world. Given that NATO and the EU face the same vital security concerns; an increased cooperation in the protection of the energy infrastructure can be achieved through a practical and effective development and cooperation at the levels of the joint projects.

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