

OPINIONS REGARDING THE NEW CHALLENGES TO THE CRITICAL INFRASTRUCTURES

Gheorghe UDEANU

“Nicolae Bălcescu” Land Forces Academy, Sibiu,
udeanu@armyacademy.ro

Abstract: *In Romania, the protection of critical infrastructure is seen as a dynamic process, with a variable geometry, which requires constant reporting to the various types of threats of the external environment: terrorism, organized crime, illegal migration, border insecurity, etc. For this reason, any process of designing/redesigning the concept of national critical infrastructure protection should relate to the complexity and the fluidity of the present international security environment and the fundamental reason of any initiative regarding this process is enhancing the status of "vector of stability" at the Eastern border of the European Union and NATO, considering that many of the transnational threats facing Europe originate from this area.*

Keywords: multiple crises, critical infrastructures, protection of critical infrastructures, a common platform for cooperation, strengths, weaknesses, opportunities, threats, challenges

Introduction

The profound changes in the security environment of the 21st century, were due to the evolution of the global security over the last decade, which has confirmed that the success of the actions and the stability can be the result of multidimensional cooperation of the international community by valuing the dialogue within institutional framework and by activating the decisive role that the major international organizations have in defining the state of the world's security.

At present, the trends towards regionalization and fragmentation have become the main elements generating tension and risk factors due to the proliferation of the number of entities acting on the global scene. At the same time, other types of risks and threats like ethnic unrests, drug, radioactive substances and human beings trafficking, organized crime, redividing areas of influence remain in actuality.

In this context, it is undoubtedly the fact that the interests and objectives of security can be achieved within a unitary framework of international cooperation, which would manifest itself not only in extreme situations such as those in the United States-September 11, 2001 or Spain-March 11, 2004, but also in the global economic, social and financial context.

So far, Romania has not been target of any terrorist actions but there are opinions that such events may occur in the future, following the obtaining by our country of the status of a NATO and EU Member State, as well as due to the participation of the Romanian troops in various theatres of operations.

For the reasons listed above, at the level of the state's management a decision was adopted, that of drawing up some strategic planning documents which place the activity of critical infrastructure protection among the national security components.

1. Defining the protection of critical infrastructures. The reflection of the concept in the Romanian legislation

Critical infrastructure protection issue is permanently in the attention of specialists, representing a constant concern to them. The field of critical infrastructure protection is generally addressed as a subsystem of the national security system.

From a strictly theoretical point of view, the critical infrastructure protection is "any activity that aims at ensuring the functionality, continuity and integrity of national/ European critical infrastructures in order to deter, mitigate and neutralize a threat, risk or a weak point.

In a non-exhaustive enumeration, critical infrastructure protection includes activities in succession concerning the risks assessment, the classified information protection, design of security plans of the critical infrastructure operators, designation of liaison officers and the way of achieving communications, as well as exercises, reports, revaluations and updates of the documents drawn up. [1]"

Critical infrastructure protection is closely linked to the legal provisions, which allow for achieving and maintaining a balance based on:

- ❖ social consensus required for the best performance of the social ensemble under the legal regulations in force;
- ❖ defense of and respect for fundamental rights and freedoms of citizens;
- ❖ defense of public and private property;
- ❖ defense of the supreme values in order to promote social progress and affirmation in a democratic society.

The relevant legislation should cover all the normative acts in force which regulate the activity of the protection of critical infrastructures, including those relating to the organization and functioning of authorities with powers in this direction, as follows:

- ❖ The Emergency Ordinance of the Romanian Government No. 98, of 3 November 2010, on the identification,

designation and protection of critical infrastructure;

- ❖ Law No. 18 of March 11, 2011 for the approval of Government Emergency Ordinance No. 98/2010 related to the identification, designation and protection of critical infrastructures;
- ❖ the Romanian Government Decision No. 1198, of December 4, .2012, in designating the national critical infrastructures;
- ❖ the Romanian Government Decision No. 1,110, of 3 November 2010, on the composition, tasks and organization of the interinstitutional working group for the protection of critical infrastructures;
- ❖ the Romanian Government Decision No. 1.154, 16 November 2011, for the approval of critical cross-cutting criteria thresholds related underlying potential national critical infrastructure identification and approving the methodology for applying critical cross-cutting criteria thresholds related and determining the level of criticality;
- ❖ the Romanian Government Decision No. 718, of 13 July, approving the national strategy on protection of critical infrastructures;
- ❖ decisions of the Prime Minister of the Romanian Government;
- ❖ Order of the leaders of the public authorities responsible for the sectoral criteria and critical thresholds associated with them.

2. The external dimension of the critical infrastructure protection

Although, apparently, the protection of critical infrastructures is subsumed only to the internal framework of a state, however, an extensive approach of this concept leads to the conclusion that, in the future, an integrated approach to problems at European level, under the conditions determined by the free movement of people and goods, the internationalization of crime, organized crime and terrorism is absolutely necessary.

Conceptually, the protection of critical infrastructure in Romania is closely

connected with that of the States of the region, and in these circumstances, any approach to this matter can be made only in the context in which it is seen as part of an integrated system at European level.

Moreover, under the circumstances that instability and globalization are a challenge to the national interest of the states, the protection of critical infrastructures is a prerequisite to security, general progress and prosperity.

An integrated system for the protection of critical infrastructures in Europe is all the more necessary as, in many situations, it has been seen that, when facing unconventional threats that globalization brings about, the security issues cannot be solved but through joint actions and efforts of all the states.

Moreover, at the level of the European Community prerequisites have created to achieve such a system through:

➤ *setting up a common platform for cooperation (CIWIN) which provides:*

- ⇒ common identification and clarification of risks that tend to affect, either simultaneously or consecutively, several states or regions of the planet, that is, paths of action on cooperation to prevent and combat these threats;
- ⇒ exchange of best practices and lessons learned among the agencies;
- ⇒ development of regional projects;
- ⇒ the continuation by most of the states of the processes of harmonization of legislation;

➤ *continued boosting and diversifying relations with neighbours*, in line with the national interests of the states, with their declared interests and fundamental objectives underlying the new security architecture at the beginning of the millennium.

➤ *developing of common policy in the field of reference.*

The interest of the majority of European States towards maintaining an atmosphere of mutual trust, makes the regional

cooperation a useful and indispensable tool to achieve this goal.

Specifically, all states in the area of interest of organised crime and, effectively, no country can ensure security through individual actions and unilateral measures.

The tensions and risks were multiplied exponentially, and the most profound impact the international terrorism has, is undoubtedly a strategic threat. This new kind of terrorism, closely tied to the fundamentalist religious movements, threatens the very existence of the states.

The international context requires the establishment of new rules in the field of internal security. Redefining the rules of strengthening internal security environment, more briefly, the critical infrastructure protection, raises numerous problems, especially in the conceptual plan. The difficulty of this process is determined by the fact that a number of factors such as the increasing professionalization of the criminal environment, the internationalization of organized crime, strengthening the merger of criminal environments and the world of politics is evolving without any restrictions in the absence of consensus in approaching this issue or in the absence of a model of internal security. Thus, at the level of each state, the concept of protection of critical infrastructures has been developed according to the specific socio-economic regime. Therefore, it can be stated that the protection of critical infrastructures is a phrase that record simultaneous evolutions with those of the companies and the states.

In this context, the functioning of the rule of law can no longer be conceived without an appropriate legal framework in the field of critical infrastructure protection, designed to prevent, and, if they occurred, to deal with disturbances in the concerned social areas.

For example, **the United States of America**, have launched and implemented the concept of *Homeland Security* which essentially refers to the national effort at all levels of government in order to safeguard

the territory against internal and external, natural and technological disasters. The term is used in the USA meaning defense of the national territory, also being used when reference is made to the USA Department of Homeland Security (D.H.S) as a structural entity.

In the USA the concept integrates the responsibilities of several governmental agencies and entities including, among others, the National Guard, Federal Agency for Emergency Management, Coastal Guard, Customs and Border Protection, etc. The Bush administration consolidated many of these activities under the authority of D.H.S. However, many of the activities with the relevant implications remained outside the authority of D.H.S., e.g. the FBI and CIA as well as the Department of Defense or the Department of Health which plays an important role in achieving national defense.

In essence, Homeland Security requires focusing on the national effort to prevent terrorist attacks on the USA., reducing vulnerabilities to terrorism while minimizing the effects and reconstruction, if they occurred.

The declared goal of Homeland Security lies in preparation and emergency response (for cases of terrorism and natural disasters), voluntary health care, police, fire and emergency management; the work of internal information, largely today within the FBI.; emergency protection infrastructure; the security of the borders, both on land, and sea; securing of transport, including air and sea transport; biological defense; detection of radioactive and radiological materials; research on the security technologies of the future.

The concept has been appropriated by other Nations, for example, in 2003, Canada has created the Ministry of Public Safety and Emergency Preparedness.

In the age of globalisation, instabilities caused by challenges such as terrorism-considered the leading exponent of organized crime, the regional conflicts and the risk of proliferation of weapons of mass destruction, human trafficking or illegal migration, rapidly influenced the world security which has seen transformations much slower than actual threats. Virtually, no country has managed to restructure the systems of order and public security in time and to adapt them to the requirements of the new situations, the reality that-unfortunately, had disastrous results.

In such a complex and controversial era, tackling with simplicity the questions related to the protection of national and European critical infrastructures, the lack of foresight and involvement in identifying and solving the problems *simply means, abandoning the main problems.*

3. The present situation of the protection of critical infrastructures in Romania reflected by the main elements of SWOT analysis on the community of this field

The evaluation of the present geopolitical and geo-strategic environment highlights the tensions at the external borders of the EU and NATO amid the exponential multiplication of the risks arising from the intensification of the phenomenon of radicalization, xenophobia and intolerance etc.

This situation generates a major potential of assaulting the internal security, public safety and democracy. In this context, the effort of the whole community in the field of the protection of critical infrastructures is increasingly directed towards finding forms and methods of preventing and combating the phenomenon of crime, along with the elimination of the dysfunctions that may affect the safety of the critical infrastructures.

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> • creation and operationalization of specialized structures in the field; • multiple possibilities of training and professional training; • work environment well organized and disciplined; • the appropriation and use of new management tools in line with developments at European level; • active relationships with similar international institutions; • well-structured regulatory framework; • the high level of training of personnel; • open to new, discounted to innovation; • consistency in the adoption of sectoral policies and strategies; • rational use of resources. 	<ul style="list-style-type: none"> • internal communication difficulties which generate a certain resistance to change; • low financial motivation of the existing staff; • lack of adequate premises and computer equipment and communication; • frequent changes in the Government architecture.
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> • Romania's integration into the EU, which has led to: <ul style="list-style-type: none"> • the development of partnerships with similar structures in the member states; • the acquisition and implementation of best European standards in the field; • continuation of the process of modernization in order to meet the necessary standards to increase the level of protection of the designated national critical infrastructure; • political environment readiness to support regulations which confer more efficiency to the state's authorities in the field of critical infrastructure protections. 	<ul style="list-style-type: none"> • social tensions that could degenerate into acts of disturbance of public order; • rising unemployment amid deepening economic crisis; • changing legislation, carrying out with difficulty of the process of promoting the projects of normative acts; • increased mobility of staff within the institutions which may lead to diminishing the level of specialization of the staff structures; • diversification of the criminal spectrum, and the emergence of new modes of operation; • possible refractory attitude of some representatives of central public administration in support of the necessary actions for the raising of the level of the protection of national and European critical infrastructures.

4. Risks and threats to critical infrastructure protection

Risk factors and threats of internal environment in the current context, the essential responsibility of the state is to manage, with authority, particularly the risks and vulnerabilities of purely domestic nature, which inevitably influence the

positioning of Romania in the international security environment. Through the attention paid to these internal factors, Romania can, on the one hand, to set up, further on, into a leading provider of regional and international security and, on the other hand, it can transform the achievement of the objectives of supported and sustained

economic and social development, into a substantial and specific resource for the security of the country.

Analysis of factors of internal risk requires both theoretically and practically their structure into four major categories: economic, social, legal and political.

The economic risks can be identified in the following situations:

- lack of vision and promoting some inefficient economic programs in the field of privatization and restructuring of industrial sectors (mining, machine construction, chemical industry) and agriculture;
- maintaining some shortcomings in organizing the regulatory framework specific to sectors having national and European critical infrastructures;
- functioning, without any form of effective control.

Social Risks identified in the reform process:

The main social phenomena which can cause disruptions in the functioning of the objectives designated as national critical infrastructures emphasize their vulnerability to crises and can cause some negative developments.

These risks are generated by the transition to a market economy and can be grouped mainly in:

- hesitant reactions of some state institutions in the face of aggravation of crime trends and the disruption of public order, with the direct effects in the reduction of social solidarity and cohesion;
- a more pronounced increase of the differences between various sections of the population in terms of the standard of living;
- failure to comply with the environmental standards and environmental protection, favoring the emergence of some natural disasters.

Risks arising from politics:

The lack of political consensus or the formation of conjunctural political alliances led, not infrequently, to 'disputes' that have generated unwanted effects:

- the inconsistency in goal setting of the economic priorities;
- political interest in capturing some profitable economic sectors;
- protection of interests of a group through the restriction of economic activities towards opponent economic groups;
- the promotion of populist economic policies, without keeping track of identifying and implementing real, viable economic programs, for the protection of national critical infrastructures.

Risk factors of legislature nature:

- instability of legal regulations associated with the inconsistency of application of existing laws and legislative procedures;
- loopholes and inconsistency of laws, resulting in ambiguity or lack of certain aspects, solving by different laws of some similar aspects, without a clear boundary between them, frequent modification of some legislative acts, all of which are likely to create confusion and different interpretations in law enforcement;
- the repeal of regulations, creating legislative vacuum, which has led to a decrease in the authority of organs concerned with the implementation of and compliance with the law, along with the corruption of the finality of the act of Justice;
- impaired perception and implementation of specific legislation related to classified information;
- elaboration of normative acts that regulate the activity of newly established bodies, without the necessary financial support to ensure their proper functioning.

Risk factors and threats in the international environment:

- the development, consolidation and specialization and the internationalization of organized crime and attracting members of local groups and elements, including the territory of our country in the international circuit of the illicit traffic of weapons, explosives, toxic and radioactive substances;
- the proliferation of illegal trade with light weapons and the increase of the possibility of escape from the control of the weapons of mass destruction;
- manifestation of the tendencies of empowerment of some areas or even regions, based on ethnic or religious criteria;
- technological or natural accidents with transboundary effects;
- diminishing access to strategic resources, top information technologies and equipment.

Unconventional - asymmetric risks -aimed at attacking the vulnerable points of the civil societies:

- expansion of networks and terrorist activities;
- the proliferation and uncontrolled diversification of technologies and nuclear and radioactive materials, weapons, the informational aggression, etc.;
- ethnic-separatist terrorism development;
- increasingly interfering of terrorism with drug and weapons trafficking;
- concern of the terrorist organizations to create a semi-permanent infrastructure of terrorism;
- improvement of tactics, methods and means of action, make terrorism an ever-evolving phenomenon, becoming, day by day, more harmful to mankind.

5. Strategic elements of critical infrastructure protection

The national concept of protection of national critical infrastructures is

implemented in an international context characterized by a deep financial and economic crisis with obvious tendencies of globalization.

The effects of the financial crisis are felt in the developed European States, which are already experiencing significant slowdown of economic growth or even economic downturn.

In this context, the Romanian Government has promoted a coherent set of policies and measures in the field of protection of national critical infrastructures, ensuring a favourable evolution of the internal security environment, assuming the completion of **4 strategic objectives**: [2]

1. ensure of the unitary character of the procedures for the identification, designation and protection of European and national critical infrastructures;
2. configuration and operationalization of the national early warning system through the integration of all networks and existing information-organizational capabilities;
3. correct evaluation of the level of vulnerability of critical infrastructures and identification of the measures needed to preventive intervention and its decreasing;
4. development of cooperation at national, regional and international levels in the field of critical infrastructures.

In order to meet the mentioned objectives the Action Plan for implementation, monitoring and evaluation of the objectives of the national Strategy for critical infrastructure protection was drafted and approved by the Prime Minister's decision no. 43 of 22 February 2012.

The document aims to boost efficiency of activities, decentralization of skills, awareness of the responsible public authorities in the field of reference and implementation of integrated management in the process of analysis, forecasting, planning and evaluation.

Through the implementation of the established measures the harmonization and compatibility of institutional construction with similar structures in the European Union will be ensured, according to the

recommendations expressed by European bodies and commitments with regard to the protection of critical infrastructures.

The national interests require directing of efforts, in order to ensure the existence of the unitary, indivisible, sovereign, and independent national Romanian State and its consolidation as a state of law, guarantor of respecting and the development of democratic values. In this context, to ensure a high level of security national and European critical infrastructures constitutes a guarantee that the objectives will be achieved in the shortest possible time through proactive engagement of all components with responsibilities in this area.

The developments of recent decades have highlighted a Europe in constant and deep change. In an environment as complex and dynamic as it is that of the protection of critical infrastructures, the existence of clear objectives is essential. This is why the ability and capability to define, for future, the missions in an adequate vision to the possible fundamental realities, generate the capacity to adapt the common European concepts in this multidimensional field. In the absence of measures leading to the implementation of these concepts, there are major obstacles in the achievement of the strategic objectives.

References

[1] Art 3 letter c) from the Emergency Ordinance of the Romanian Government No. 98, of 3 November 2010, on the identification, designation and protection of critical infrastructure

[2] The Romanian Government decision No. 718/2011 approving the National strategy for critical infrastructure protection

Bibliography

Directive No. the Council of Europe, 114 of 8 December 2008 on the identification and designation of European critical infrastructure and the assessment of the need to improve their protection

The European Commission's communication on the European Program for Critical Infrastructure Protection

Working document of the European Commission concerning a new approach to the European Program for Critical Infrastructure Protection

The Emergency Ordinance of the Romanian Government No. 98, of 3 November 2010, on the identification, designation and protection of critical infrastructures

Law No. 18, of 11 March, 2011, for the approval of Government Emergency Ordinance No. 98/2010 related to the identification, designation and protection of critical infrastructure

The Romanian Government decision No. 1,110, of 3 November 2010, on the composition, tasks and organization of the interinstitutional working group for the protection of critical infrastructures

The Romanian Government decision No. 718, of 13 July, approving the national strategy on critical infrastructure protection

The Prime Minister's decision No. 43, of 22 February, approving the action plan for the implementation, monitoring and evaluation of the objectives of the national strategy for critical infrastructure protection