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MARITIME SAFETY, SECURITY AND DEFENSE OF TODAY AND TOMORROW

ABSTRACT

In this paper, an attempt has been made to present and discuss the factors defining the today's state of maritime safety, security and defense; the most probable changes in the nearest future; as well as the most probable factors that might influence the maritime safety, security and defense in the further future. The above considerations have the general character and regard both the European Union's maritime countries and the United States.

Keywords: Maritime Safety, Security, Defense.

INTRODUCTION

Each maritime country has to realize three main maritime functions: safety, security and defence. The first one means the safety of life and property at sea from the environmental and operational threats, as well as the safety of maritime environment from pollution by the ships. On the national level the maritime safety is being achieved as the result of the existing maritime safety legal framework; operating the global and regional navigational infrastructure, but mainly as the result of operation of the highly specialized maritime operational services. Each maritime country possesses many kinds of maritime operational services. Most important of them are:

- aids to navigation service;
- hydrography and navigational information service;
- ships classification, survey, certification and inspection services;
- Search and Rescue (SAR) service;
- marine environment protection service, etc.

The maritime security is the security from the terrorism, piracy and similar threats, as well as effective interdiction of all the illicit activities on sea such as pollution of the marine environment; illegal exploitation of sea resources; illegal immigration; smuggling the drugs, persons, weapons and other matters that can be

used for terrorist activities. The maritime security is achieved mainly as the result of the operation of the proper national maritime services such as: Coast Guard, maritime police, Customs services, Immigration services and some other [1, 2, 13].

It should be added that in this paper the term “Coast Guard” means the national maritime security service responsible for realization of the maritime security function. However, these services only in the United States and Canada are named as Coast Guard [14]. In the Member States of the EU, there exist different names of the national maritime security services, such as: Border Guard, Maritime Police, Maritime and Coast Guard Agency (MCA) [13] and many others. Also the scope of tasks that realize these services differ considerably in the each particular Member States of the EU. The above is the result of the historical tradition of the development of these services. The European Union considers that the above situation is not favorable for the closer cooperation and therefore tries to unify these services, i.e. to unify not only their names but also the scopes of the competences of these services. [19]

The maritime defense is the constituting part of the national military defense. For the Member States of the EU it means the defense of national territorial integrity; defense of the sea lines of communication and other national maritime assets; contribute to the peace and security in the different world’s areas; and assists the national security services in the crisis and distress situations. Ensuring the maritime defense is the main objective of naval forces [6].

In the not distant past the above mentioned functions, i.e. maritime safety, maritime security and maritime defense functions were realized by the organizational structures (Coast Guard and Navy) that operated absolutely separately.

However now, but more precisely, in some last years, the above mentioned situation began to change. These changes express themselves in the new situation of the national maritime services. The main national operational services, in fact the Coast Guard and Navy, have been constrained to cooperate closer and closer, and even they have begun to realize the tasks that constituted not their own functions. The most characteristics function in this respect is the maritime security functions that besides the Coast Guard or similar services, has begun to be realized also by the navy and other maritime operational services.

The main reason, and at the same time the turning point of the above changes was the outbreak of the Global War on World Terrorism (11.09.2001).

The above process of closer and closer cooperation of the main national maritime services did not cease to exist but it continues to develop and becomes more and more important. Taking the above situation into consideration the conclusion can be drawn that besides the global threat of terrorism, there must exist also some other important reasons that result in the stepwise integration of the maritime safety, maritime security and maritime defense functions in a kind of the new super function, i.e. in the integrated function of maritime safety, security and defense [4, 5, 6].

THE REASONS OF THE PRESENT CHANGES IN THE MAIN NATIONAL MARITIME FUNCTIONS

The main changes in the maritime safety, security and defense functions express themselves mainly in the following situation:

- maritime security tasks that in the past were realized almost exclusively by the Coast Guard or similar security services, there are being now, in higher and higher degree, realized also by the two other services, which are national operational services and the navy;
- the tasks of the maritime defense that in the past were almost exclusively realized by the navy, are now being realized, in higher and higher degree, by the other maritime services.

It should be also mentioned that the issues of maritime safety begin to be the exclusive issues of national operational services and begin to be also the issues of two other main maritime services. It is the result of the permanent growth of danger of pollution of marine environment by the ships, and the necessity of prevention such pollution, as well as combating the consequences of pollutions if they occurred.

The main reason of this is not only the outbreak of the maritime terrorism in the world's dimension. This factor is of course the decisive, however, the outbreak of world's terrorism has also in high degree intensified the influence of many other factors as for example the economic, political, military and social. Lets try to enumerate the most important of them:

- collapse of the Soviet Military Block and coming into being the multipolar world with its religious, ethnic, national and other conflicts. The collapse of this military block resulted also in very considerable decreasing the probability of the military conflicts between maritime countries;

- further polarization between the “world of the wealth” and the “world of the destitution”. This process generates the very unstable geographical regions in the respect of maritime security. In these regions exists very high level of terrorist attacks’ threat, piracy threats as well as threat of ships capturing and their abduction. To the region of very high security risk belongs now such region as Persian Gulf, Arabian Sea, and areas of Indian Ocean, the Gulf of Guinea [7]. The very high risk of piracy attacks exists also on the approaches to Malacca Strait and on the South China Sea;
- fast growing the new economic, political, military and social world’s regions, such as the European Union, China, India and Brazil, very fast change the world situations that existed before. These new world’s geographical regions result also in the decreasing the role of the United States not only in the economic aspect but also in the political and military aspects;
- the further fast process of globalization express itself also in the very fast growing the international commerce, and in transportation by sea. The world economy is tightly interconnected. Over the past four decades, total sea borne trade has more than quadrupled. They are visible but very vulnerable symbols of the modern distribution strategy [16];
- process of climate change results also in the ecological and social disasters. Hence, the necessity of development crisis response capabilities to response to these kinds of maritime calamities;
- very fast progress of science and technologies, especially in such technologies as global positioning and global communication technologies and many other information technologies, is very favorable for ensuring the maritime safety and security but it also facilitates the terrorist activities. This progress facilitates also proliferation of nuclear weapon as well as other kinds of weapons of mass destruction (WMD) that can become also the weapons of terrorists.

PRESENT STATE OF THE MARITIME SAFETY, SECURITY AND DEFENSE FUNCTIONS

For the Member States of the European Union the main criterion of the distribution of the areas of realization of the maritime safety, security and defense functions between the main maritime services, constitutes the geographical location of the realization areas towards the own coast:

- in the areas close to the own coast, the functions of the maritime security and maritime defense have been realized by the Coast Guard and other security services, and Navy;
- in the areas located far from the own coast, the functions of the maritime security and maritime defense have been realized by the naval forces, mainly in the form of the maritime security operations.

However, as it was already mentioned, the above principle regards mainly the maritime countries of EU and maritime countries being the members of NATO. The maritime safety function in European Union and in its Member States is being realized on the three levels of maritime safety management [3, 6].

- the first and the highest level of management constitutes the International Maritime Organization. It creates the legal and operational basis for maritime safety and security of the whole shipping industry;
- the middle level of maritime safety management constitutes the Vessel Traffic Monitoring and Information System (VTMIS) of the European Union. Main objective of such System is to considerable increase the maritime environment protection from pollution by ships and enhance the level of maritime security on the sea areas of the European Union [12];
- the lowest, i.e. the national level of maritime safety management constitutes the network of the maritime operational services.

In Figure 1, there are shown the institution, legal instruments, systems and services that realize the maritime safety function.

The maritime security function is not the new main maritime function. However, the importance of this function, has grown incomparable after the 11.09.2001. There exist two main kinds of geographical areas in which this function is being realized. First kinds of areas constitute the maritime areas of each Member State of the EU. The second kinds of areas are the far-away areas where exist very high risk for maritime security. In the first kind of maritime areas the maritime security function is being realized by the Coast Guards and Navies of the Member States of the EU. In the second kind of areas the maritime security function is being realized mainly by the navies of maritime states operating in these areas, mainly in the form of Maritime Security Operations conducted by the maritime NATO forces or the EU forces.

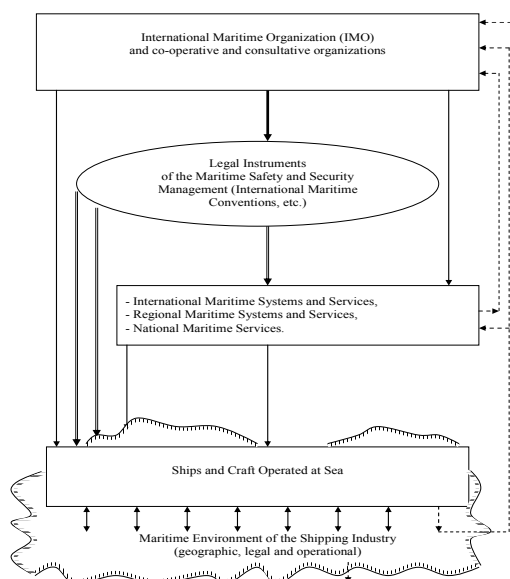


Fig. 1. Institutions, legal instruments, systems and services of the maritime safety and security function

It should be added that in the relation to the shipping industry the maritime security function constitutes together with maritime safety function one compound function, i.e. the maritime safety and security function of the shipping industry. In Figure 2, there are shown the main means and ways of the realization of the compound maritime safety and security function of shipping industry on the maritime areas of the European Union.

The United States “National Strategy for Homeland Security” (July 2002) [14] in the following way defines the Critical Mission which are: intelligence and warning, border and transportation security, domestic counterterrorism, protecting critical infrastructure and key assets, defending against catastrophic threats, emergency preparedness and response. This mission have the general character and therefore they fully regard all Member States of the European Union.

The United States “National Strategy for Maritime Security” (September 2005) [15] defines the following threats for this security:

- national-state threats;
- terrorist threats;
- transnational criminal and piracy threats;
- environmental destruction;
- illegal seaborne immigration.

The United States “A Cooperative Strategy for 21st Century Seapower” (October 2007) is the common strategy of all the three maritime military services, i.e. Maritime Corps, Navy and Coast Guard [16]. This strategy defines 6 core capabilities but two of them can be considered as the core:

- maritime security;
- humanitarian assistance and disaster response.

The maritime defense function, as was stated above, is being now closer and closer integrated with the maritime security function, but these two functions penetrate also each other and begin to create one function, i.e. maritime security and defense function.

The subject of the maritime defense function, in relation to the maritime Member States of the European Union and the NATO had been already presented and discussed above. Therefore, we want and will try to discuss shortly the subject of, also already mentioned, the new maritime strategy, i.e. “A Cooperative Strategy for the 21st Century Seapower” [16]. It is the strategy of all three maritime military services of the United States.

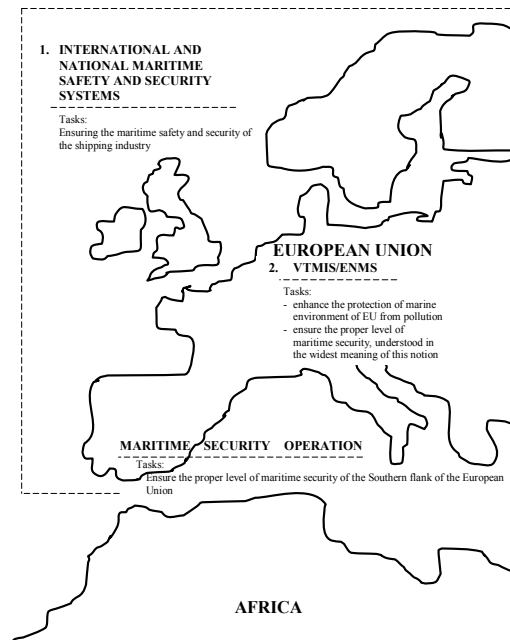


Fig. 2. The main means and ways of realization of the compound maritime safety and security function on the maritime areas of the European Union

From the substance and content of this strategy can be concluded that this Strategy is not only the maritime strategy of the United States' Seapower but also the strategy of all the political and military partners of the USA. This Strategy defines 6 core capabilities that comprise the essence of the US maritime power and reflects an increase in emphasis on these activities that prevent war and build partnerships:

1. Forward Presence.
2. Deterrence.
3. Sea Control.
4. Power Projection.
5. Maritime Security.
6. Humanitarian Assistance and Disaster Response.

The last two core capabilities have been already discussed. Therefore below, we will try to discuss shortly the first 4 core capabilities of the US Sea power which are in the reality the navy operational concepts. Two of these strategies existed already in the past (2nd and 3rd). However, two other strategies (1st and 4th) are considerable new: "Forward Presence" and "Power Projection" have been formulated and applied by the US Navy and Marine Corps in the last 16 years, i.e. after the collapse of the Soviet Union's Sea power. Initially these strategies were called as: ". . . From the Sea" (1992) and "Forward . . . from the Sea" (1994).

The "Deterrence" strategy (2nd core capability) was formulated and applied during the cold war. It was especially relevant with regard to the use of nuclear weapons. Now, the concept of "Deterrence" strategy expresses the truth but mainly the US military policy that "preventing the war is preferable to fighting wars".

The presented all the 4 core capabilities of the Marine Corps, Navy and Coast Guard, together with 2 other core capabilities discussed before ("maritime security" and "humanitarian assistance and disaster response") constitute the essence of the US "A Cooperative Strategy for 21st Century Sea power".

EXPECTED CHANGES IN THE MARITIME SAFETY, SECURITY AND DEFENSE FUNCTIONS

In 21st century, besides of discussed above, there are more and more frequently expected other kinds of threats, i.e. natural and other threats that have the global character. Such threats are called the "global calamities". The natural calamities constitute also the component part of the global calamities.

There have been commonly agreed that the following calamities are considered as the global calamities [17]:

- terrorism;
- climate changes;
- emergent diseases (some contentious forms of incurable virus diseases);
- wars;
- volcanic eruptions;
- asteroid/planet – death from the above;
- methane release (from the continental shelves);
- doomsday devices (nuclear, chemical, biological, etc.);
- strange matter experiments (that can result in global catastrophe).

The natural calamities are not the new events. They were known from ever, however, the frequency and intensity of these calamities are becoming now higher and higher. That is the result of the climate change but that might be prevented or whose result might be mitigated. Among the global calamities the most dangerous for our planet – Earth and for humans' existence on it, is the climate change.

Taking the above facts into consideration we can draw the following conclusions regarding the expected changes in maritime safety, security and defense functions:

- there exists almost the certainty to assume that such global calamities as terrorism and climate change's effects will be growing permanently and will constitute the main dangers and threats that must be prevented, avoided and mitigated by the maritime safety, security and defense functions;
- the maritime security activities and measures will in higher and higher degree constitute the essence not only maritime security function but also maritime safety and maritime defense functions;
- the permanently growing dangers and threats, being the effects of the expected natural and global calamities will and must result in the situation that the crisis/calamities response readiness and its efficiency will constitute the main component not only of the maritime security function but also the maritime safety and maritime defense functions.

CONCLUSIONS

In this paper, the main issues of the functions of maritime safety, security and defense of today and tomorrow have been presented. The authors tried to show the main issues constituting the subject and contents of these functions not only today but also in the nearest future. They tried also to show the state of realization of these functions both in the European Union and in the USA. There has been also undertaken the efforts to present the most probably changes' reasons that could influence the realization of these functions and could modify the substance and main tasks of the discussed functions.

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