ELEN TWRDY, Ph.D.

E-mail: elen.twrdy@fpp.uni-lj.si
University of Ljubljana
Faculty of Maritime Studies and Transport
Pot pomorščakov 4, SI-6320 Portorož, Slovenia
ANDREJ ANDROJNA, M.A.
E-mail: androjna@yahoo.com
Ulica Pod cerkvijo 6, SI-6103 Koper, Slovenia
MARKO PAVLIHA, Ph.D.
E-mail: marko.pavliha@fpp.uni-lj.si
University of Ljubljana
Faculty of Maritime Studies and Transport
Pot pomorščakov 4, SI-6320 Portorož, Slovenia

Safety and Security of Traffic Review

Submitted: Mar. 11, 2014 Approved: Nov. 11, 2014

PROPOSED MODEL OF COAST GUARD ENHANCING MARITIME SECURITY AND SAFETY IN THE REPUBLIC OF SLOVENIA

ABSTRACT

In the modern world, the sea is one of the most important resources for the economy and welfare of the country that has access to it and so is the sense of security. Meeting today's security challenges requires a wide spectrum of civil and military instruments. It calls for regular coordination, consultation and interaction among all actors involved, and it requires a national multifunctional Structure.

The paper presents the search for new systematic forms to ensure adequate maritime security and safety at sea. Based on the research on successfully organized similar foreign institutions in relation to the national security institutions in the maritime domain the Coast Guard model of the Republic of Slovenia has been designed. The model could significantly improve the level of efficiency and consistency of national authorities in the area of control, security and safety of the territorial sea and rationalize expenditures. Implementing the proposed model and placing it in the national security and defence system, is a challenge and also a need.

KEY WORDS

coordination of Services at Sea; the Coast Guard; marine security; rationalization; re-engineering;

1. INTRODUCTION

The globalization of the world economy and the rapidly developing market have been making ever increasing demands for the movement of raw materials, intermediate goods and final products. Conse-

quently, the maritime transport has been increasing. For the European economy the sea is one of the most important resources and in terms of volume 90% of the freight exchanges of Europe with the rest of the world is done by sea. Shipping represents one of the Europe's largest export industries, providing deep sea transport services between Europe and the rest of the world. In terms of added value, traditional maritime sectors represent a share of 1.09% in the total GDP of the EU 27 and Norway [1]. The volume of export and import goods is expected to increase during the coming decades and the importance of shipping will therefore grow. Contemporary maritime piracy presents a significant threat to global shipping industry, with annual costs estimated at up to US\$7bn [2].

Therefore, the sea as a natural and legal entity is wide open to impacts of interactions in all aspects of life, and so is the sense of security [3]. The maritime domain and, in particular, the maritime security environment is of paramount importance to global economy. The volume of shipping is expected to increase during the coming decades and its importance will grow, as well [3]. As the way of living for the modern industrialized world remains largely dependent on an uninterrupted supply of commercial goods and energy, this results in a critical vulnerability [4]. The 21st century promises to present a plethora of various security challenges, which will come from state and non-state players and develop in an increasingly complex environment, where interdependence and unintended consequences are immutable characteristics restricting our freedom of action [5]. Meeting the today's security challenges requires a wide spectrum of civil and military instruments. The rapidly changing strategic environment influenced by globalization and characterized by an unprecedented element of interconnectivity and interdependability calls for regular coordination, consultation and interaction among all actors involved, and it requires all states to build multifunctional Structures [6].

According to Papa the importance of maritime transport security is determined by the high vulnerability of this mode of transport to terrorist attacks, given the extremely diversified routes and the enormous volume and wide range of shipped goods, whose origin, description and ownership are not always perfectly traceable. In addition, any interruption of the maritime transport chain due to international hostile actions may greatly affect the global economy [7].

The article presents the Coast Guard model of the Republic of Slovenia. According to the definition the Coast Guard has the primary federal responsibility for ensuring safety on the waterways, including responsibility for setting forth and enforcing safety regulations. This responsibility requires the gathering of accident and other safety-related data that are used to identify safety problems and assess the costs and benefits of alternative regulations to address them. In addition, the agency must monitor the safety performance of the waterways to deploy its own resources most effectively [8].

Since it is quite impossible to copy a Coast Guard model for individual country purposes, the best practices research on similarly organized foreign institutions in relation to the national security in the maritime domain was conducted. Based on such analysis the model of a unified interdisciplinary service in the field of control, security and safety of the territorial sea of the Republic of Slovenia is designed. Its usability is reflected through skills of connecting and increasing efficiency of individual state bodies in the field of protection and control of sea areas of the Republic of Slovenia. It includes a balanced development of capabilities, an effective economic management and rational use of staff and financial sources. We are aware of the fact that a complete and complex approach towards changes that are realizable and financially suitable is needed.

2. MARITIME ACTIVITIES IN SLOVENIA

The Slovenian coast and sea aquatorium (Figure 1) are relatively small but on the other side sufficient enough not to be placed among almost fifty countries without national access to the sea. Slovenia is a maritime country and as such subject to provision of maritime security. It needs proper maritime capabilities in

order to provide safety and security at sea and on the coast. The question that appears here is – what are the real maritime ambitions of the Republic of Slovenia in the fields of defence and security and how they should be most rationally provided, taking into account the most modern geostrategic guidelines and limitation of the sources. Modern geostrategic guidelines are obvious: world seas, maritime routes and general maritime security are more and more important in the context of final globalization of trade flows, modern piracy, illegal migrations and related health and epidemiological risks, organized crime, climate changes and ecology [9].

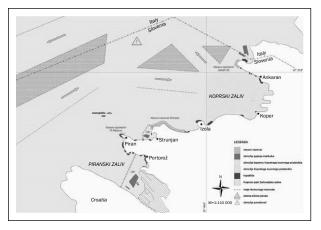


Figure 1 - The Slovenian coast and sea aquatorium Source: www.hidrografija.si, 2014

"The Republic of Slovenia possesses a substantial amount of personnel, technical, infrastructure and financial sources but cannot be connected and intertwined into a really convincing and economic capability to ensure maritime security. It would be very irresponsible and irrational to pursue partition of services ensuring security at sea and on the coast" [9].

In 2006 (2012) the so-called Coordination of Services at Sea was established to effectively and efficiently implement the common tasks that are associated with the sea and to insure information sharing at inter-ministerial level in the pursuit of national maritime security [10-11]. Coordination of Services at Sea (Figure 2) integrates all Slovenian national resources related to maritime safety and is carried out at two levels: at higher level, which is the Coordination of Services at Sea and at the operational level, which is the Operational Maritime Coordination.

The analyses show that due to a variety of interests this initiative did not succeed in a way that was expected. The existing subjects that ensure security and safety of the Slovenian sea have shown that the capabilities and resources available are limited for conducting operations within one state body or service. Merger or sharing of available capabilities would fundamentally raise efficiency and ability to respond to potential threats of modern times and at the same

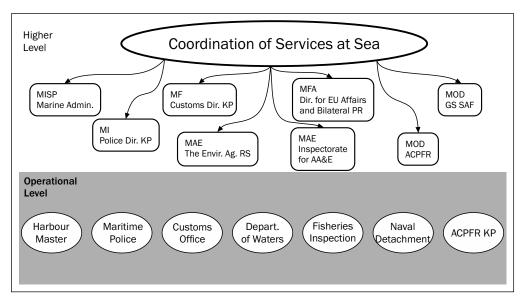


Figure 2 - Coordination of Services at Sea

time provide the appropriate level of protecting the fields of interest of the Republic of Slovenia at sea. Actual economic situation and reduction of expenditure for capabilities development at the national level as well as in the international environment lead us to optimum use of sources available. In the field of defence of the EU one of the possible innovative solutions for optimum and efficient cooperation in the development of military capabilities is a project of Pooling&Sharing which is in NATO supplemented by the concept of the so-called Smart Defence (http://www.nato.int/cps/ en/natolive/78125.htm). The main purpose of the project is to reach appropriate capabilities, whereas the realization of the projects can be achieved by association with countries that have similar goals within NATO, the EU or regional initiatives. In our case we can talk about pooling and sharing of capabilities at the national level (in the context of Coordination of Services at Sea) which can be used to achieve increased functional or operational efficiency as well as cost effectiveness (equitable distribution of financial burdens). On one side the model stimulates synergy of pooling and sharing, whereas on the other side it prevents a parallel, independent establishment of comparable capabilities. A key precondition to enforce such a model is strong political will and readiness of all actors involved to take part in the process.

Faced with these challenges, we have established a single national and security subject that would be responsible and capable of standing up to various threats and problems of modern times. By integration and sharing of available and existing capabilities we provide activities at sea with an acceptable, selective and restrictive policy in a new integrated body – so-called soft approach. In hard approach, mentioned also by Podbregar [12], the solution is in re-engineering, a complete and radical change of all previously list-

ed subjects of national and security systems towards bigger connection of all of them and their efficiency. Being prepared to think about complete and radical changes is without doubt an elementary basis for a fresh start and the first steps. It is vital to establish a common, single subject of national security which is under the unified command capable of providing the present tasks of the existing bodies ensuring security of the Slovenian sea.

3. COAST GUARD FUNCTIONS IN SELECTED COUNTRIES – THE NORWEGIAN EXAMPLE

Europe's boundaries are primarily maritime ones. The EU has 28 member states of which 22 have a coastline with their own competence in the maritime environment. The EU has strategic maritime interests that need to be safeguarded and protected. Within the maritime areas surrounding the European continent there are many military and civilian organisations of several nations that have attracted the attention in our research. We have studied the organization, methods of management and types of powers of individual coast guards of EU and non-EU member states bound by regional provision of maritime security in the Adriatic Sea, the Royal Norwegian Coast Guard and the Irish Coast Guard. During the research the problem was to find a common denominator for all data collections and their classifications. Some information cannot be compared at all because of differences in the field of responsibility or operative management, whereas on the other side some individual pieces of data are insufficient or inaccessible to the general public (financial reference of management, staff completion, etc.). Furthermore, some information, irrespective of the size of the aquatorium of the Republic of Slovenia, cannot be applied to the level desired or adjusted to our needs.

In the research special attention was given to the Royal Norwegian Coast Guard because of its exceptionally convenient model of the organization which served as the basis for the creation of a model of newly born coast guards (such as Albania and Croatia) used. An interesting fact about the Norwegian Coast Guard is that it is placed under military supervision, whereas its function is formally, legally and civilly defined. In exercising their duties the members of the coast guard possess the police powers, authorisation to control fishery and shipping in the territorial waters as well as the powers to intervene in all possible incidents in their territorial waters and wider. In exercising other tasks they are in the position of a supporting body. Its concept of operation is based on an integrated coordination structure where two joined rescue coordination centres have the ability to independently lead land, air and maritime rescue activities [13]. Such a concept is unique and allows efficient and rational implementation of activities.

In the light of operation centres rationalization and increase of their efficiency the Coast Guard of the Republic of Albania has established, following the Norwegian example, a modern Inter-Institutional Maritime Operations Centre (IMOC), which presents an operation basis of joint participation of all governmental institutions that are, in any manner, related to providing sovereignty of their maritime area. The centre works on the principle of functional division of responsibilities and allows civil tasks to be formally and legally implemented within IMOC under the supervision of a relevant ministry member.

The Norwegian model was used by the Republic of Croatia in the formation of its coast guard. Our attention was given to those factors that led to the formation of the Croatian coast guard, its normative regularity and time line set for reaching the final operative capabilities. In 2008 Croatia adopted a framework Coast Guard Act [14] with the definition that its competent state bodies should within six months of the date on which the decision takes effect completely harmonize laws and other regulations related to supervision and protection of their rights and interests. The Republic of Croatia has adopted a number of normative acts for its coast guard operation. Though, in the last six years the two key documents which would effectively allow legal ground for effective operation and interest protection of the Republic of Croatia at sea have not been adopted [15]. These are the Rules on internal regime of coast guard and the Rules on manner of cooperation and exchange of coast guard information and other competent organs.

The Irish Coast Guard is of particular interest because of its unique model of volunteer integration. Taking into account the small size of our maritime area and its cover by the entities that provide maritime security, the latter model which is adjusted to operations in extremely large area of responsibility (900,000 km²) would be unsuitable for the Republic of Slovenia needs.

In providing maritime security, protection and operations the Italian Coast Guard has military, police, maritime as well as other powers. In all national ports the highest coast guard officer has two functions at once: he is the leader of the local branch and has the function of the Harbour master. Such a role of the coast guard commander would suit the national (SVN) needs.

Figure 3 shows material sources of foreign coast guards and the Montenegrin Navy compared to all the existing bodies that provide security of the Slovenian sea (Coordination of Services at Sea).

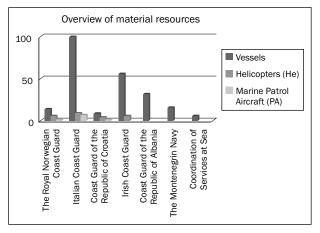


Figure 3 - Overview of material resources of related institutions and services

4. COAST GUARD AT THE ADRIATIC SEA

The exceptionally convenient model of the Royal Norwegian Coast Guard organization served as the basis for creation of a model newly born coast guards such as Albania and Croatia. On the example of factors analysis that had an impact on the formation of the Coast Guard of the Republic of Croatia [16] it could be concluded that they were similar to those factors in the Slovenian maritime area. These factors are: insufficient coordination of services at sea; ineffective planning and work projects at sea; mutual misunderstanding considering priorities; ineffective communication among individual services in cases such as: search and rescue at sea, sudden pollution at sea etc.; uninsured constant presence of services at sea or possibility of overlapping tasks in the same area; ineffective use of staff resources; ineffective use of technical resources (vessels and equipment); unstandardized equipment: inefficiency of information systems; piecemeal approach to purchase of vessels, including design and construction; enhanced costs of mainte-

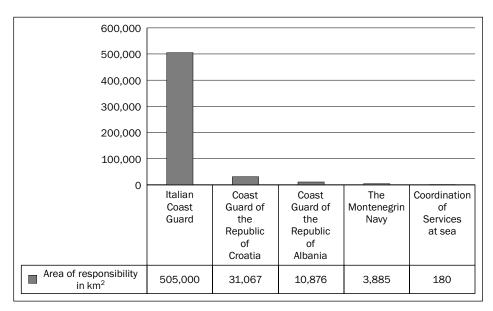


Figure 4 - Areas of responsibilities of related institutions and services

nance; systematic problems of education of personnel in exercising supervision at sea; non-systematic and non-coordinated use of financial resources, etc.

In Italy for example, the Italian Coast Guard has military, police, maritime as well as other powers in providing maritime security, protection and operations. In all national ports the highest coast guard officer has two functions at once: he is the leader of the local branch and has the function of the Harbour master. Such a role of the coast guard commander is very interesting for our situation and would suit all our needs.

4.1 The proposed model of organization of the Coast Guard of the Republic of Slovenia

Based on the analysis carried out it can be reliably claimed that the quantitative cast of all the existing subjects providing security of the Slovenian sea is oversized, as shown in *Figure 4*, considering the size of the area of responsibility.

The analysis also identified a sufficient number of existing vessels and adequate budget (Figure 5). In fact, the capabilities and resources available are limited for conducting operations within one state body or service, whereas their merger or sharing of available capabilities would fundamentally raise efficiency and ability to ensure adequate maritime security and safety at sea.

Threats at sea are more unpredictable and intensive than years ago, considering effects even long-lasting because they cause damage that cannot be remedied in years or decades. From the safety perspective it is important to develop such capabilities and organization at sea so that such threats would be detected in time, effectively dealt with, limited or removed. According to Roach it is necessary to enhance maritime

security, the principles of co-operation and flag state jurisdiction [17]. Today it is impossible to develop the capability for one type of threats only. It is vital to accede to the development of multifunctional forces that are capable of working within the concept of integrated approach to ensure security at sea in the whole spectrum. The times are coming of highly mastered, competent leaders and rescues of threats and crises without losing precious time for coordination [12]. It is essential to have troops available, organized in a flexible structure with clearly defined procedures, technologically equipped, and associated, with professionally trained personnel, capable of mutual cooperation at home and outside national boundaries [18].

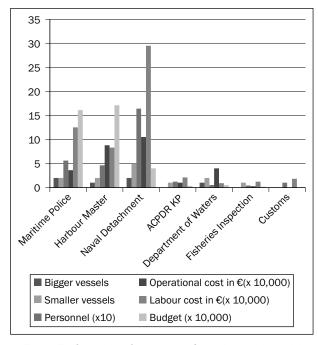


Figure 5 - Overview of personnel, financial and material resources of Coordination of Services at Sea

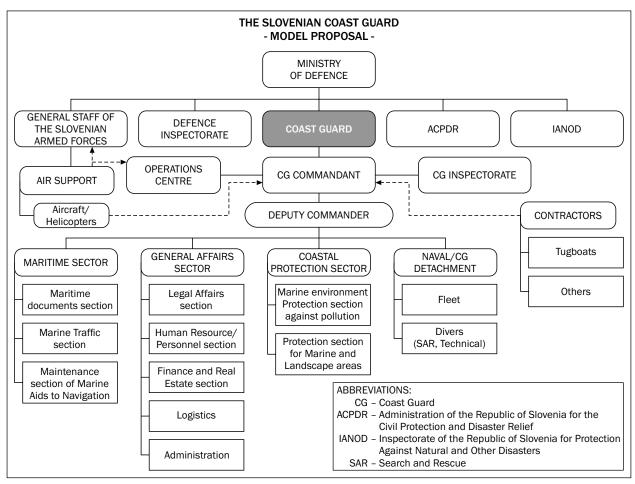


Figure 6 - Model proposal of the Slovenian coast guard organization

In the present unpredictable and changing safety environment, which demands more flexible and adjustable organization, such troops could be presented by the Coast Guard of the Republic of Slovenia (Figure 6). The model illustrated allows reduction of management levels, administration apparatus and consequently circulation of a larger number of workplaces dealing with operational tasks. The model of coast guard organization ensures definitions of processes used to delimit responsibilities and define tasks. With proper normative regime of the area a new organizational structure would provide effective mission performance and tasks of the coast guard, balanced development of its capabilities, more economical operations and rational use of staff and financial resources. Following the Norwegian example of the Coast Guard the model predicts management of the Slovenian coast guard under military supervision, whereas its function is formally, legally and civilly defined.

In such an organization the members of the coast guard possess police powers in exercising their tasks. The coast guard has all powers to control fishery and shipping in the territorial waters as well as to intervene in almost all possible incidents that can occur in the territorial waters and broader.

The proposed model of the Slovenian coast guard organization presents a single subject of national security which is capable of involving all the existing subjects of Coordination of Services at Sea and carrying out their tasks under unified command. Its most rational location would be within one of the state-forming ministries, the so-called Ministry of defence, because of:

- effective command and control structure (C2),
- existing maritime (integrated) surveillance system (maritime situational awareness),
- regulatory-normative framework,
- functional training and education system,
- effective chain of logistic supply, maintenance of material and technical means,
- existence of majority of resources necessary (personnel, vessels, infrastructure etc.).

The coast guard would become a body under the responsibility of the Ministry of Defence of the Republic of Slovenia. In compliance with the Coast Guard of the Republic of Slovenia Act the Coast Guard Inspectorate would exercise inspections in a way which is at present used by the existing inspectors of various Coordination of Services at Sea subjects, but with expanded powers. This would lead to better efficiency and clear

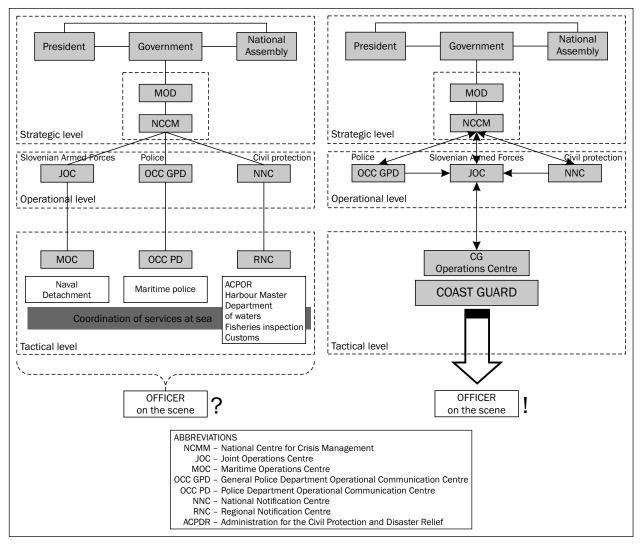


Figure 7 - Comparison of the existing crisis management procedures at sea with the new role of the proposed Coast guard operations centre of the Republic of Slovenia

classification of a holder of activity (The Coast Guard of the Republic of Slovenia) in case of interventions at sea – »Officer on the scene«, as seen in *Figure 7*.

The purchase of certain capabilities intended for establishing new organizational structures would be unsystematic and irrational in the early stages. With a view of rationalizing financial costs and use of personnel it would be logical to establish contractual arrangement of areas of work with contractors. This is especially important for those activities which demand use of special equipment, capabilities or infrastructure (for example tugboats, warehouses, moorings, technical divers etc.). If necessary in certain cases other activities of the coast guard and other state institutions and organizations (emergency medical service, firemen, various societies, volunteers etc.) can be activated or can join in.

The proposed tasks of the Slovenian coast guard can be classified into five different but closely connected areas:

- national defence: protection of sovereignty, sovereign rights and jurisdiction of the Republic of Slovenia
- maritime security: suppression and prevention of terrorism, organized international crime and proliferation of weapons for mass destruction, oppression of piracy and other forms of non-peaceful use at sea,
- maritime traffic: control of maritime navigational routes and communications, control of maritime traffic,
- protection of natural resources: control and protection of sea environment, natural and cultural heritage, control of sea fishery, denial of sea pollution consequences,
- maritime safety: search and rescue (SAR), denial of sea accident consequences.

The new task of the coast guard (responsibility of Marine Sector/Maintenance Section of Marine Aids to Navigation as shown in *Figure* 6) will also be the place-

ment and maintenance of marine aids to navigation in the territorial waters of the Republic of Slovenia.

By establishing the proposed model the Slovenian Armed Forces would not have its own maritime component any more (except clearance divers and maritime medicine department), but in cases of emergency situations in the country or war the Coast Guard of the Republic of Slovenia would take over the role of navy.

4.2 The analysis of strengths and weaknesses (risks) of implementing the model of the Coast Guard of the Republic of Slovenia

On the basis of the analysis of the existing situation of all structured elements that provide maritime security and protection at sea [19], the SWOT analysis (analysis of strengths, weaknesses, opportunities and threats) was used to evaluate the proposed theoretical organizational model of the Coast Guard of the Republic of Slovenia.

Strenghts of the proposed theoretical organizational model of the Coast Guard of the Republic of Slovenia are: increase of navigational safety; Command and Control structure (C2); better control at sea, over legal order and more effective intervention in emergencies; guaranteed continuous operation or permanent presence at sea – 24/7; improved mutual communication and coordination; reduction of total expenditure – rationalization; planned use of common capabilities (pooling and sharing); standardization of equipment, means and vessels; economical use of vessels and infrastructure; increasing concern for the sea and inshore environment; experience and information exchange; motivated and qualified personnel and adaptability.

Opportunities of the proposed theoretical organizational model of the Coast Guard of the Republic of Slovenia are: effective human resources management; standardization of procedures and measures consistent with international demands; systematic regime of supporting infrastructure; effective material sources management: systematic and planned approach to development, fitting out and modernization of the service; promising transparency; association of knowledge and employees' capabilities allows more effective realization of mission and obligations towards implementation of national and international legislation; higher identity of operation and friendly service for inhabitants of the Republic of Slovenia; taking part in the complete maritime policy of waters management at the level of the EU; more permanent and effective development of the Slovenian sea and the coast.

Weaknesses of the proposed theoretical organizational model of the Coast Guard of the Republic of Slovenia are: normative regime; limited financial

sources; establishment of educational process for the coast guard members; limited professional and specialist competence (in the early stage), lack of powers as logical consequences; existing infrastructure; additional investments (mooring, infrastructure); mutual connectivity of information systems; diversity of equipment, means and vessels in the early stage and lack of awareness about positive effects of association into the common service.

Threats of the proposed theoretical organizational model of the Coast Guard of the Republic of Slovenia are: unwillingness of integrated subjects to accept organizational changes; political absence at the formation and development of the common service; loss of military maritime tradition; ineffectiveness at elicitation and elaboration of normative acts.

The analysis shows a number of strengths and opportunities that the implementation of the proposed organizational model of the Coast Guard of the Republic of Slovenia would bring, but we must be aware of the threats that could worsen the effectiveness of its operation.

4.3 Positive effects of the proposed model implementation

Among positive effects of integration of individual services at sea it is necessary to emphasize the more suitable and coordinated implementation of control at sea, provision of navigational safety and increasing concern for sea and inshore environment. It is necessary to clearly define the new lines of management and command as well as more efficient crisis management or implementation of intervention activities emergency situations at sea and in cases of environmental accidents.

In the new integrated structure it is possible to allow continuity of operation or 24-hour presence at sea by improved mutual communication and coordination, knowledge exchange and experience of motivated and competent staff, systematic and planned human and material resources management.

In connection with human resources the provision of sufficient competence of the coast guard members would be of great importance. Organization and implementation of additional education of members of the existing structures that could form the core of the common service are necessary in the early stage, whereas later on arrangement of qualitative education for all new members is essential.

The reduction of common costs of operation or rationalization can be achieved by coordinated use of budgetary resources, decrease of administrative work, planned pooling and sharing of common capacities available, their standardization, economical use of vessels and systematic regime of supporting infra-

structure, planned access to development, fitting out and modernization of services, etc.

The model of integrated structure is flexible and allows combining of knowledge and employees' capabilities. Furthermore, it provides successful realization of mission and responsibilities towards improvement of the national and international legislation. It ensures creative cooperation in the integrated maritime policy at the level of the EU and better recognition of operation as well as friendly services for the inhabitants of the Republic of Slovenia.

4.4 Weaknesses and risks, connected with the proposed model implementation

The risks that can worsen the success or establishment of the presented model operation are more or less political restraints towards pooling of subjects in the field of protection and control of the Republic of Slovenia maritime area. Others are the lack of awareness about positive effects of association in the common service, unpreparedness to accept organizational changes connected with formation of a new common service. By establishing the proposed model the Slovenian Armed Forces might not have their own maritime component (except part of clearance divers and maritime medicine department), but they can take the role of navy in case of emergency situations in the country or war.

In case of the proposed model implementation the biggest organizational problem would be caused by unpunctual adjustment of all acts and regulations that would be consequently bound by implementation of the framework The Coast Guard of the Republic of Slovenia Act and would allow the new common service to have a proper legal basis for its effective operational management and protection of national interests at sea.

An obstacle that can appear at a new service establishment can be the functioning of a suitable educational process of the coast guard members and the lack of authorizations granted for the coast guard members in order to provide activities at sea.

Weaknesses present at the proposed model implementation may be the problems at setting up the mutual complementarity of the existing information systems, limited resources for the common service operations and the establishment of proper infrastructure.

5. CONCLUSION

The main issues in this paper address the search for new systematic forms to ensure adequate maritime security and safety at sea and present the designed Coast Guard model of the Republic of Slovenia. The model could significantly improve the level of efficiency and consistency of national authorities in the area of control, security and safety of the territorial sea and rationalize the expenditures. The European Union demands from all of its member states a more holistic approach to marine management at all appropriate levels.

Given the fact of limited financial, personnel and material potentials and despite having only 47 km of coast, this calls for a national comprehensive and coordinated approach. At the same time it is necessary to overcome the narrow interests of individuals, groups or interagency rivalry, on a possible unification of entities into a common interdisciplinary service. A model pointed out also guidelines for developing consistent national maritime policy where flexibility (ability to adapt and adjust budgets and other resources) could be the key to success.

There are certain preconditions without which a common interdisciplinary service can be difficult or even impossible to achieve. Firstly, there must be a political will for unification of our entities into a common interdisciplinary service. Secondly, everyone has to accept being coordinated or coordinating with others. Finally, it must be understood that the shift to something resembling a common interdisciplinary service happens between the ears before it can happen in reality.

To summarize, the proposed model is beneficial. Once realized, it will have an impact on traditional competencies and therefore force us to considerably change our operational and procedural way of acting for which we need to be prepared well in advance. But this demands a complex and complete accession to changes that are realizable, indispensable and financially favourable. The proposed model is reality and it is only a matter of time before it is implemented.

Izr. prof. dr. ELEN TWRDY

E-mail: elen.twrdy@fpp.uni-lj.si Univerza v Ljubljani, Fakulteta za pomorstvo in promet

Pot pomorščakov 4, SI-6320 Portorož, Slovenija

Mag. ANDREJ ANDROJNA

E-mail: androjna@yahoo.com

Ulica Pod cerkvijo 6, SI-6103 Koper, Slovenija

Prof. dr. MARKO PAVLIHA

E-mail: marko.pavliha@fpp.uni-lj.si

Univerza v Ljubljani,

Fakulteta za pomorstvo in promet

Pot pomorščakov 4, SI-6320 Portorož, Slovenija

POVZETEK

PREDLAGAN MODEL OBALNE STRAŽE IZBOLJŠUJE VARNOST IN ZAŠČITO POMORSKEGA PROMETA V REPUBLIKI SLOVENIJI

V sodobnem svetu predstavlja morje s svojo prostranostjo enega najpomembnejših virov gospodarske blaginje pomorskih držav. Zaradi svoje širine je odprto vplivom interakcij v vseh pogledih, tudi v varnostnem. Soočanje z današnjimi izzivi narekuje uporabo širokega spektra civilnih in vojaških zmogljivosti, izboljšano sodelovanje ter usklajevanje vseh vključenih subjektov in tudi izgradnjo enotnega subjekta nacionalne varnosti. Članek predstavlja iskanje novih sistemskih oblik zagotavljanja ustrezne zaščite in varnosti morja. Na sintezi študije uspešno organiziranih tujih sorodnih institucij in enakovredne sektorske preučitve nacionalnih varnostnih podsistemov je izdelan model Obalne straže Republike Slovenije, s katerim bi lahko dosegli bistveno višji nivo učinkovitosti in konsistentnosti državnih organov na področju varovanja, nadzora in zaščite teritorialnega morja, kakor tudi racionalizacijo porabe proračunskih sredstev. Ob tem pa ostaja izziv implementacija omenjenega modela ter njegova umestitev v nacionalno varnostno-obrambni sistem.

KLJUČNE BESEDE

operativna koordinacija služb na morju; obalna straža; racionalizacija; reinženiring;

REFERENCES

- [1] ECOTEC study, for DG Maritime Affairs, 2006.
- [2] Vaněk O, Jakob M, Hrstka O, Pěchouček M. Agent-based model of maritime traffic in piracy-affected waters. Transportation Research Part C: Emerging Technologies. 2013; 36:157-176.
- [3] **Twrdy E**. A model for the optimal service of Northern Adriatic ports with container ships. [dissertation]. Portorož, Slovenia: Faculty of Maritime Studies and Transport; 2003, p. 1-10.
- [4] Zuiderwijk R. The Commanders Respond Piracy. The international monetary crisis. Terrorism. Global Warming. US Naval Institute Proceedings, Annapolis, 2009; p. 27.
- [5] Band J. The Commanders Respond Piracy. The international monetary crisis. Terrorism. Global Warming. US Naval Institute Proceedings, Annapolis, 2009; p. 33.
- [6] La Rosa P. Dialogue & Cooperation for Maritime Surveillance. Proceedings of the 7th Regional Seapower Symposium for the Navies of the Mediterranean and Black Sea; 2008 Oct 14-17; Venice, Italy; 2008.

- [7] Papa P. US and EU strategies for maritime transport security: A comparative perspective. Transport Policy. 2013;26:75-85.
- [8] National Research Council. The Marine Transportation System and the Federal Role Committee for a Study of the Federal Role in the Marine Transportation System Measuring Performance, Targeting Improvement. Washington DC: The National Academies Press; 2004.
- [9] Kotnik I. More effective without fences Pooling and sharing of Maritime security and defence capabilities [in Slovenian]. Defence Magazine. 2011;(11):4-6.
- [10] Government of the Republic of Slovenia. Resolution on the establishment of the Coordination of services at sea [in Slovenian]. Official Gazette of the Republic of Slovenia. Ljubljana, Slovenia; 2006.
- [11] Government of the Republic of Slovenia. Regulation of the Coordination of services at sea [in Slovenian]. Official Gazette of the Republic of Slovenia, Ljubljana, Slovenia; 2012.
- [12] **Podbregar I.** Before reengineering the national security system opportunities for the Slovenian Armed Forces [in Slovenian]. The Bulletin of the Slovenian Armed Forces, No. 13/2. Ljubljana: General Staff of the Slovenian Armed Forces, 2011; p. 15-26.
- [13] The Royal Norwegian Ministry of Defence. The Norwegian Coast Guard. Act No. 42. Legal Office FAOLEX, Norway; 1997.
- [14] Ministry of Maritime Affairs, Transport and Infrastructure of the Republic of Croatia. Assessment and solution for surveillance and protection of the Adriatic Sea [in Croatian]; 2005.
- [15] The Government of the Republic of Croatia. Law on the Croatian Coast Guard [in Croatian]. Official Gazette of the Republic of Croatia, No. 109/07; 2007.
- [16] Jelovčić PA, Primorac Ž, Mandić N. Croatian coast guard – legal sources. Our Sea, International Journal of Maritime Science&Technology. 2012;59(5/6): 266-278.
- [17] **Roach JA**. *Initiatives to enhance maritime security at sea*. Marine Policy. 2004;28:41-66.
- [18] Žnidar I. Transformation challenges to safety and security at Slovenian sea. In: Contemporary Military Challenges No. 2/2012. Ljubljana: General Staff of the Slovenian Armed Forces, 2012; p. 77-90.
- [19] Piercy N, Gilles W. Making SWOT Analysis Work. Marketing Intelligence & Planning. 1989;7(5):5-7.