

Czesław Dyrzcz, Waclaw Morgaś, Józef Urbański  
Polish Naval Academy

## MARITIME NAVIGATION AFFAIRS OF THE EUROPEAN UNION

### ABSTRACT

In this paper, an attempt has been made to present the most important issues regarding the maritime navigation affairs in the European Union. The authors' main objective is to show the place and relations of maritime navigation to the basic maritime affairs and activities, especially maritime navigation activities and affairs. Authors have tried to show the main institutions and services of the European Union dealing with the maritime navigation affairs as well as characterize the activities of these Directorates-General of the EU whose activities are very closely connected with the maritime navigation affairs.

### INTRODUCTION

The most general definition of the maritime navigation is the following: 'maritime navigation is the process of safe, secure and efficient conduct the ships and craft at sea that realize their tasks'. These tasks, as a rule, have economic, political or social character. The main kinds of tasks that constitute over than 90% of all the navigational activities are the shipping industry tasks. These tasks comprise the following activities:

- transportation of goods and people at sea;
- sea tourism and similar activities;
- servicing the ships' traffic by ports and their facilities.

The main components of maritime navigation are the following:

- ships as means of maritime transport;
- maritime navigation environment;
- maritime navigation information;
- maritime navigation infrastructure;

- maritime navigation's procedures;
- maritime operational services;
- maritime research and development activities.

In this paper, there have been assumed that the main criteria of maritime activities that are considered as the maritime navigation activities are these activities that are immediately connected with the following features and characteristics of the maritime affairs:

- maritime and navigation safety;
- marine environment and its protection from pollution by ships;
- maritime security of shipping industry;
- economic efficiency of the shipping industry.

Global Satellite Navigation, Global Satellite Radiocommunications, Search and Rescue, and Maritime Monitoring systems.

The European Union's functions and tasks, i.e. the EU's activities, are performed and supervised by the EU's Directorates-General and Specialized Services. Now (2008), there is 41 EU's Directorates-General and Specialized Services managed by the 27 EU's commissioners. However, it should be mentioned that some Directorates-General report to two different Commissioners. However, there is not the rare situation that one Commissioner is responsible for some (2–3) Directorates-General.

The activities of the following Directorates-General are very closely connected with the maritime and maritime navigation affairs:

- Energy and Transport;
- Environment;
- Fisheries and Maritime Affairs;
- Informatics;
- Research;
- External Relations;
- External Trade;
- Communications, and some others.

Below, there are presented and discussed the maritime navigation tasks and activities only of four Directorates-General that are in the very high degree connected with the maritime navigation. They are the following Directorates-General:

- Fisheries and Maritime Affairs;
- Energy and Transport;
- Environment, and
- Research.

**MARITIME NAVIGATION ACTIVITIES AND AFFAIRS  
OF THE DIRECTORATE-GENERAL FOR FISHERIES  
AND MARITIME AFFAIRS**

The Directorate-General for Fisheries and Maritime Affairs (DG FISH) is responsible for the policy area of fisheries, the Law of Sea, and Maritime Affairs of the European Union. DG FISH reports to two Commissioners, i.e. Commissioner for Fisheries and Commissioner for Maritime Affairs. The subject of our further interest constitutes the activities and affairs of that part of DG FISH that is the subject of interest of the Commissioner for Maritime Affairs.

Europe is surrounded by seas and oceans. Therefore, the European Union needs an Integrated Maritime Policy to benefit from the full potential of our seas and oceans.

On 10 October 2007, the European Commission presented its vision for the 'Integrated Maritime Policy for European Union'. This vision's document — also called the 'Blue Book' — prepared by the Commissioner of the Maritime Affairs, was supplemented by the detailed 'Action Plan', and a report on the results of the broad 'stakeholders' consultation'.

It should be mentioned that the vision for the 'Integrated Maritime Policy for the European Union' has been already accepted by the European Council (European Summit) that took place on the 14 December 2007 in Brussels, i.e. one day after the signature of the Lisbon Treaty on 13 December 2007.

The vision of the 'Integrated Maritime Policy for the European Union' provides the realization of the following 10 projects of the particular importance:

- European Maritime Transport Space without barriers;
- European strategy for maritime research;
- national integrated maritime policies to be developed by the Member States;
- European Network for Maritime Surveillance;
- roadmap towards maritime spatial planning by the Member States;
- strategy to mitigate the effects of climate changes on coastal regions;
- reduction of CO<sub>2</sub> emission and pollution by shipping;
- elimination of the pirate fishing and destructive high seas bottom trawling;
- European Network of maritime clusters;
- review of the EU labor law exemption for the shipping and fishing sector.

Three of the above 10 projects are of very high importance for maritime navigation. These are the following projects:

- establishing the European Network for Maritime Surveillance;
- implementing the maritime spatial planning and the Integrated Coastal Zone Management (ICZM);
- establishing an European Observation and Data Network.

The above three projects are considered also as the ‘main tools of the maritime — policy making’, i.e. the main tools of realization of the whole ‘Integrated Maritime Policy for the European Union’.

In order to improve the economic efficiency of maritime transport in Europe and ensuring its long competitiveness, the European Commission will propose:

- a European Transport space without barrier, and
- a comprehensive maritime transport strategy for 2008–2018.

The two above tasks may be and should be realized by the DG FISH in close cooperation with the Directorate-General for Energy and Transport (DG TREN).

However, it should be mentioned and stressed that for establishing the European Network for Maritime Surveillance (ENMS), but more precisely, for transformation of the existing Vessel Traffic Monitoring and Information System (VTMIS) of the European Union into much more perfect ENMS — as well as for establishing the European Observation and Data Network — there are developed the global monitoring system, i.e. the Global Monitoring for Environment and Security (GMES) system.

The GMES represents the concerted efforts to bring the data and information providers together with the users, so they can better protect the maritime environment from pollution as well as ensure the higher level of maritime security of shipping industry and other activities, and objects.

GMES is now in its preliminary implementation phase (2004–2008). Three services of GMES have been selected for ‘fast track’ treatment dealing respectively with ‘Emergency Response’, ‘Land Monitoring’ and ‘Marine Services’. The first kind of services, i.e. ‘Emergency Response’ should enter into validation phase by 2009. The ‘Emergency Response Services’ will comprise:

- providing the geo-spatial information for regions of concern;
- assessments of events and impacts;
- ensuring the monitoring tools for the duration of crisis;
- delivery of tailored solutions and services.

It should be stressed that the GMES is being developed by the European Council and the European Space Agency (ESA). However, this Agency is not the institution of the European Union.

GMES will work not only in the interest of the DG FISH but also in the interest of the DG TREN, DG Environment, DG Information and some other.

## **MARITIME NAVIGATION ACTIVITIES AND AFFAIRS OF THE DIRECTORATES-GENERAL FOR ENERGY AND TRANSPORT**

The Directorate-General for Energy and Transport (DG TREN) has staff of over 1000 persons. DG TREN reports to two commissioners, i.e. Commissioner for Energy

and Commissioner for Transport. The subject of our interest constitute mainly the activities of that part of DG TREN that deals with transport issues, called further as 'TRANSPORT'.

It should be mentioned that the common policy of DG TREN has been expressed in Report 'European energy and transport: Trends to 2030 — Update 2005'. First time this report was published in 2003.

The policy main document of the 'Transport' constitutes the White Paper on 'European transport policy for 2010: Time to decide'.

The 'Transport' policies of the DG TREN constitute the policies regarding the following kinds of activities:

- Air transport;
- Road transport;
- Road safety;
- Rail transport;
- Maritime transport;
- Inland transport;
- Intermodal transport;
- Logistics;
- Clean urban transport;
- GALILEO;
- Transeuropean network;
- Safety investigation.

Our further interest concerns only the maritime components of the 'Transport' policies. Therefore, only the following policies are subject of our further interest:

- Maritime transport;
- Intermodal transport;
- GALILEO;
- Transeuropean network.

'Maritime transport' policy is expressed in the Brochure 'Maritime transport policy: improving the competitiveness, safety and security of European shipping'. The essence of this brochure expresses the following its chapters:

- Maritime transport: a vital sector;
- Efficient multimodal logistics in Europe;
- Improving Europe's commercial ports;
- Maritime security: protection;
- Maritime security: high standards across the EU.

There are three Agencies that very closely cooperate with the 'Transport' in maritime navigation issues; these are:

- European Maritime Safety Agency (EMSA);
- Trans European Transport Network (TEN-TEA);
- European GNSS Supervisory Authority (GSA).

The EMSA's main objective is to provide technical and scientific assistance to the European Commission and Member States in the proper development and implementation of EU legislation on maritime safety, pollution by ships and security on board ships. There are three main areas of EMSA interest; these are:

- Maritime Safety;
- Pollution Preparedness and Response;
- Environmental Protection.

EMSA deals with the following issues:

- Classification societies;
- Maritime security;
- Port reception facilities;
- Port State Control;
- Training of seafarers;
- Liability and compensation;
- Marine equipment;
- Ship Safety Standards;
- Accident investigation;
- EU Vessel Traffic Monitoring;
- Technical assistance;
- Vessel Oil Recovery Services;
- CleanSeaNet Satellite Service;
- CTG Maritime pollution;
- HNS Action Plan;
- Ship recycling;
- Air emissions.

Trans European Transport Network Executive Agency (TEN-TEA) has been created by the Commission's Decision of 26 October 2006. Once operational, the Agency will manage the Community funds available for the promotion of the Trans European Transport Network in close cooperation with Directorate-General Energy and Transport of the European Union. Trans European Transport Network comprises:

- roads;
- rail;

- inland ports and inland waterways;
- airports;
- sea ports category A.

The part 'Transport' of DG TREN realizes also two research programmes; these are:

- Energy and Transport Research Activities;
- Marco Polo.

Programme 'Energy and Transport Research Activities' constitutes the component part of the 'EU's Seventh Framework Programme for Research and Technological Development' (FP7), running from 2007 to 2013.

The interesting from maritime navigation point of view constitutes the component programme of the whole, above mentioned programme, i.e. the programme 'Transport' (including aeronautics).

The central objective of the transport research under FP7 is to develop 'safer', 'greener', 'smarter' pan-European transport system that will benefit all citizens, respect the environment, and increase the competitiveness of European industries in the global market.

This research programme will support also the European Global Navigation System:

- GALILEO and EGNOS;
- navigation and timing services;
- efficient use of satellite navigation.

The MARCO POLO II Programme (2007–2013) includes new actions such as motorways of the sea and traffic avoidance measures.

It should be mentioned that the 'Transport' activities of DG TREN are being assisted by the 'European Space Policy'. This policy is the result of the cooperation agreement of the European Commission and the European Space Agency (ESA). However, this Agency as was already mentioned, is not the institution of the European Union. The European Space Policy provides the realization of the following programmes:

- GALILEO;
- Global Monitoring for Environment and Security (GMES);
- International Space Station (ISS);
- Satellite communications;

The part TRANSPORT of DG TREN very closely cooperates with the IMO's Maritime Safety Committee (MSC).

## **MARITIME NAVIGATION ACTIVITIES AND AFFAIRS OF THE DIRECTORATE-GENERAL FOR ENVIRONMENT**

The mission of Directorate-General for Environment is: protecting, preserving and improving the environment for present and future generations and promoting sustainable development.

The main role of the European Commission's Environment Directorate-General is to initiate and define new environmental legislation and to ensure that agreed measures are put into practice in the EU Member States. This legislation regards the whole environment that main components constitute: soil, nature (and biodiversity), water and air. The mentioned legislation concerns the following issues:

- sustainable development;
- waste;
- noise;
- air pollution;
- water;
- nature and biodiversity;
- soil protection;
- civil protection;
- climate change.

Maritime navigation affairs are very closely connected with the following subjects:

- water;
- maritime environment;
- marine environment protection.

Water protection and management concerns the following issues:

- marine pollution;
- strategy for the marine environment;
- accidental marine pollution;
- compensation fund for the pollution damage;
- ships sourced pollution and the introduction of criminal action;
- prohibition of 'organotin' compounds on ships;
- bunkers convention;
- regional conventions such as Helsinki Convention on the Protection of the Baltic Sea;
- maritime security and other items.



The main components of the marine environment are the following:

- oceans;
- seas;
- bays;
- estuaries;
- coastal areas and
- airspace above them, including littorals.

The biggest threats to the health of the marine environment constitute:

- habitat destruction and alteration;
- overfishing;
- pollution from sewage and chemicals;
- increasing eutrophic action;
- changes of hydrology and sediments flow;
- Global climate change.

The protection of the marine environment is the responsibility of everyone. The basic marine-protection measures constitute the following:

- reporting ship sourced pollution;
- places of refuge;
- national maritime emergency response.

Each year DG Environment prepares and issues very comprehensive ‘Annual Management Plan’.

The activities of DG Environment is supported by the European Environment Agency (EEA). It is the agency of European Union devoted to establishing and monitoring network for the monitoring of the European environment. It is managed by the Management Board composed of representatives of the governments of the Member States, European Commission representative, and two scientists appointed by European Parliament. EEA is headquarter in Copenhagen, Denmark. Agency cooperatives with two European Topic Centers; these are:

- European Topic Centre on Land Use and Spatial Information (ETC — LUST) from Autonomous University of Barcelona;
- European Topic Centre on Air and Climate Change (ETC/ACC).

Each year EEA issues the ‘Technical report’. The last one (of 2007) was the report on ‘Climate change: the coast on inaction and the cost of adoption’.

It should be stressed that the Directorate-General for Environment very closely cooperates, among others, with the IMO’s Marine Environment Protection Committee (MEPC).

## **MARITIME NAVIGATION ACTIVITIES AND AFFAIRS OF THE DIRECTORATE-GENERAL FOR RESEARCH**

The mission of the Directorate-General for Research can be summarized as follows:

- to develop the European Union's policy in the field of research and technological development, and thereby contribute to the international competitiveness of European industry;
- to coordinate European research activities with those carried out at the level of member States;
- to support the Union's policies in other fields such as environment, health, energy, regional development, etc.;
- to promote a better understanding of the role of science in modern societies and stimulate a public debate about research – related issues of European level.

One of the instruments used for implementation of this policy is the multiannual Framework Programmes for Research and Technological Development (FP RTD). Now, there is being realized the Seventh Framework Programme for research and technological development (FP7). It is the European main instrument for funding research in Europe. FP7, which applies to the years 2007–2013, is the natural successor of the Sixth Framework Programme (FP6), and as the result of years of consultation with scientific community, research and policy making institutions, and other interested parties. Since their launch in 1984, the Framework Programmes have played a lead role in multidisciplinary research and cooperation activities in the Europe and beyond. FP7 continues that task, and is both larger and more comprehensive than earlier Framework Programmes. Running from 2007 to 2013, the programme has a budget of 53.2 billion euros over its seven-year lifespan, the largest funding allocation yet for such programmes.

In carrying out the various tasks the Directorate-General for Research works closely with other Commission's department such as Joint Research Centre (JRC), Directorates-General for Information Society, for Energy and Transport, for Environment, and others.

It should be mentioned that within the Sixth Framework Programme (FP6) there was and is still being realized the research project 'MarNIS' on 'Maritime Navigation Information Services'.

Participation in the Seventh Framework Programme is open to a wide range of organizations and individuals, Universities, research centers, multinational corporations, small to medium — sized enterprises (SMEs), even individuals from everywhere in the world. All have opportunity to participate in FP7.

Beginning and participating in the research project, also on maritime navigation research projects, provides the following procedure:

1. Having an idea or vision for research project.
2. Consulting the rules for FP7 research.
3. Finding the other EU partners or partners from abroad who share your vision and with which you can cooperate.
4. Submitting your application to the European Commission according to the Call for Proposals deadlines and dedicated work programme.
5. European Commission guarantees proper evaluation of the submission by 3–7 independent evaluators, who are experts in the field.
6. The Commission will notify you of the valuation result. If they are positive, contract negotiation will begin.
7. Contract signature and start of the project.

If there are any questions regarding FP7 the CORDIS service can be and should be consulted. CORDIS is the Community Research and Development Information Service. It is an information resource dedicated to European research and development activities. CORDIS is the official information service for publication of calls for proposals regarding the Seventh Framework Programme for Research and Technological Development (FP7). CORDIS is part of the office for the Official Publications of the European Publication Office, the publishing house of the European Union. CORDIS offers access to a wide range of information on EU research.

The Directorate-General for Research very closely cooperates with the Joint Research Centre (JRC).

The Joint Research Centre (JRC) is the research based policy support organization and integral part of the European Commission.

The mission of the JRC is to provide customer — driven scientific and technical support for the conception, development, implementation and monitoring of the EU policies. As the service of the European Commission, the JRC functions as a reference centre of science and technology for the Union. Close to the policy — making process, it serves the common interest of the Member States while being independent of special interest, whether private or national.

The JRC has seven scientific institutes, located in the five different sites in Belgium, Germany, Italy, the Netherlands and Spain, with the wide range of laboratories and unique research facilities. JRC activities form three pillars:

- food, chemical products and health;
- environment and sustainability;
- nuclear safety and security.

It should be also mentioned that Directorate-General of JRC and Directorate-General for Research report to the one and the same Commissioner.

## CONCLUSIONS

The main objective of the authors of this paper was to present the maritime navigation's affairs of the European Union. Not very long ago there existed only two levels of maritime safety and security management, i.e. the international and national levels. However, for some years (since 2002) the European Union's level of maritime navigation affairs' management is being increased permanently and is becoming more and more important. Hence the subject of this paper, i.e. an attempt to present and discuss the maritime navigation affairs of the European Union. Authors belief is that their objective has been achieved in the considerable degree.

## REFERENCES

This paper has been written basing on the Internet's data and information regarding the navigational activities of the European Commission. In especially high degree there have been used the data and information related to the following Directorates-General:

- Fisheries and Maritime Affairs;
- Energy and Transport;
- Environment, and
- Research.

## STRESZCZENIE

W artykule podjęto próbę przedstawienia najbardziej istotnych zagadnień dotyczących stanu i rozwoju nawigacji morskiej w Unii Europejskiej. Oprócz międzynarodowego i narodowego poziomu zarządzania bezpieczeństwem morskim oraz ochroną żeglugi od kilku już lat (2002 r.) regionalny poziom zarządzania, tj. poziom Unii Europejskiej, staje się coraz bardziej istotny. Autorzy starali się przedstawić te instytucje Komisji Unii Europejskiej, a zwłaszcza te Dyrekcje Generalne Komisji Unii Europejskiej, których działalność w bardzo dużym stopniu związana jest ze stanem i rozwojem nawigacji morskiej.

Recenzent capt. dr Van Gooswilligen