

Critical infrastructure at sea and the energy security of the Republic of Poland

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Abstract: In this article, the author will present issues directly related to the security of critical infrastructure, which includes, inter alia, infrastructure ensuring energy security of our country. In view of the geopolitical events that we have witnessed recently, this is one of the key problems to be solved in the legislative and systemic spheres. The problem of legislative, competence and equipment shortages in securing the critical infrastructure of the Republic of Poland at sea has been repeatedly signaled, but very often it was met with some leniency, as no one assumed that a conflict that was so brutal and "classic" in its shape could occur. Russia's aggression against Ukraine has arisen. Critical infrastructure includes not only future offshore wind farms, but also, inter alia, ports, refineries, power plants, mining platforms, etc., the protection of which would require serious revision. In this publication, however, the author will focus primarily on issues related to offshore wind energy and possible investments related to the production of hydrogen in Polish maritime areas.

Key words: critical infrastructure, energy policy, maritime policy, maritime law

Introduction

The dynamics of development of offshore wind energy places it as one of the most dynamically developing energy technologies in Europe. The European Commission recognizes the advantages of offshore wind energy promoting its development and use in the Member States. European authorities are aware that the development of this sector may not only support Europe's achievement of its goals - the use of renewable energy and reduction of greenhouse gas emissions, but also be a factor stimulating economic growth, for example by increasing innovation or creating new jobs [Drożdż, Mróz 2017: 151-152].

The current work related to offshore wind energy in Polish maritime areas is in line with the policy of decarbonisation of electricity sources carried out by the Member States of the European Union, included, inter alia, in the Communication from the Commission to the European Parliament, the European Council, the Council, the Economic and Social Committee and Committee of the Regions of 11 December 2019, known as the "European Green Deal" (COM (2019) 640), as well as the National Security Strategy of the Republic of Poland. Well, in the document approved on May 12, 2020 by the President of the Republic of Poland, at the request of the Prime Minister, the document indicated that in order to ensure the energy security of the state, conditions should be created for the development of alternative energy sources, e.g. by:

- expanding and modernizing the generation capacity as well as electricity transmission and distribution networks in order to ensure continuity of supplies, including the prevention of unexpected interruptions in supplies. Development of dispersed sources of electricity in a sustainable manner, with the adaptation of the National Power System to the characteristics of the operation of these sources;

- with greater diversification of crude oil and natural gas supply sources. Expanding the existing natural gas import capacity (including increasing the receiving capacity of the LNG terminal in Świnoujście) and building new entry points to the Polish transmission system (construction of the Baltic Pipe gas pipeline, construction of the LNG terminal in Gdańsk Bay). Continuation of work on projects diversifying gas fuel supplies to the countries of the region, including the Three Seas Initiative. Continuation of works related to the expansion of the natural gas transmission and storage systems, including the completion of the construction of the North-South route, enabling the creation of the basis for the operation of a gas hub in Poland;
- continuing diplomatic, legal and administrative actions to stop the construction of transmission infrastructure increasing the dependence of the Central European region on gas supplies from the Russian Federation, strengthening the region's resilience to the risk of using gas supplies as an instrument of political pressure (SBNRP 2020).

The last point is especially important in the geopolitical situation that surrounds us.

However, it should be borne in mind that the construction of offshore wind farms is only one of the elements of a series of investments aimed at increasing the volume of energy produced from renewable sources in Poland. The issues directly related to the investment in OWF in Polish maritime areas are:

- expansion of the power grid in the northern part of Poland, necessary in the event of a reversal of energy supply and further distribution along the Polish coast;
- increasing the energy storage capacity;
- systemic replenishment of energy deficits in the event of unfavorable hydrometeorological conditions;
- developing international cooperation in the areas of acquiring the necessary technologies, exchanging experiences or connecting energy systems [Miętkiewicz 2019: 100 - 102].

Regulations concerning the location of renewable energy sources in sea areas

When starting to consider the legal status of facilities intended for the production of electricity or hydrogen, in Polish sea areas and what is hidden behind it, first of all, one should look at the provisions regulating the maritime area, in which the Republic of Poland is entitled to implement investments related to the construction of maritime wind farms and possible investments related to the production of hydrogen.

First, Art. 22 sec. 1 of the Act on the sea areas of the Republic of Poland and the maritime administration indicates that the Republic of Poland has the exclusive right to erect, grant permits for the construction and use in the exclusive economic zone of artificial islands, all kinds of structures and devices intended for scientific research, exploration or exploitation of resources, as well as with regard to other projects in the field of economic research and exploitation of the exclusive economic zone, in particular the use of water, sea currents and wind for energy purposes. This is a positive premise that determines the location of offshore wind farms. Art. 23 sec. 1a, however, indicates a negative premise concerning the location of this type of investment. At his disposal, it talks about the prohibition of erecting and using offshore wind farms in internal sea waters and territorial sea (Journal of Laws of 2022, item 457). The provi-

sions of the Act on the sea areas of the Republic of Poland and maritime administration regarding the location of offshore wind farms are a consequence of the standards contained in the United Nations Convention on the Law of the Sea, drawn up in Montego Bay on December 10, 1982. Offshore wind farms say that the coastal state has the exclusive right in the exclusive economic zone to build and issue permits and regulations for the construction, operation and use of installations and structures intended for the economic study and operation of the zone, such as generating energy through the use of water, currents and winds (Journal of Laws of 2002, No. 59, item 543: article 33).

Another regulation that needs to be looked at is that contained in Art. 22 sec. 2 of the Act on the maritime areas of the Republic of Poland and maritime administration, stating at its disposal that devices intended for the economic exploitation of the exclusive economic zone in order to use water, sea currents and wind for energy purposes, are subject to Polish law. Analyzing this provision, and bearing in mind the provisions of the Montego Bay Convention, we come to the conclusion that Poland has exclusive jurisdiction over offshore wind farms in Polish sea areas, including the jurisdiction to issue laws and other legal provisions in customs, fiscal and sanitary matters. and immigration, as well as in security matters. However, it should be remembered that, according to the Convention on the Law of the Sea, such installations do not have the status of islands. They do not have their own territorial sea, and their presence does not affect the delimitation of the territorial sea or the exclusive economic zone of the Republic of Poland (Journal of Laws of 2002, No. 59, item 543: article 60 sec. 8). Around offshore wind farms, the competent director of the maritime office may, however, establish, in accordance with Art. 24 of the Act on maritime areas of the Republic of Poland and maritime administration, security zone. The width of this zone has been regulated in the cited provision, which is an implementation to the Polish legal system, of the provisions regarding the safety zone around, inter alia, offshore wind farms included in the Montego Bay Convention. According to these standards, the width of the safety zone around the set of offshore windmills that make up the wind farm is 500 m from each point of their outer edge. The prerequisite is that the distance between the individual windmills included in the offshore wind farm does not exceed 1000 m. According to the applicable standards, these distances, in the case of Polish offshore wind farms, will vary between 400 - 640 m. Taking these premises into account, the entire area inside the offshore wind farm and within 500 m from the outer edges of the extreme offshore wind turbines can be considered a safety zone. In this area, the director of the maritime office determines the conditions of movement in the safety zone, in particular, he may impose restrictions on shipping, fishing, practicing water or diving sports or underwater works (Act of 21 March 1991 on the maritime areas of the Republic of Poland and maritime administration, Journal of Laws of 2022, item 457: article 24).

The last of the documents to be described is undoubtedly the Inner Sea, Territorial Sea and Exclusive Economic Zone Spatial Development Plan on a scale of 1: 200,000.

- the growing number of spatial conflicts at sea related to the intensification of maritime navigation, the emergence of new forms of use, and opening up to new opportunities;
- the process of redefining ways to benefit from the sea: decline in some traditional maritime industries, emergence of new ways of using the sea;

- the growing scale of land-sea spatial interactions (underwater transmission infrastructure, changes in the coastal landscape by structures erected in sea areas) [Matczak, Pardus, Pankau 2019: 7-8]

In 2016, the Directors of Maritime Offices started developing one, coherent draft plan for the spatial development of Polish sea areas, in the part relating to the EEZ, the territorial sea and the internal sea waters (including the Gulf of Gdańsk). This plan aims to support sustainable development in maritime areas, including by indicating areas and determining the ways of co-existence of various forms of spatial development of sea areas in order to shape the spatial order of these areas. It should be remembered that the spatial development plan of Polish sea areas is the basis for issuing decisions in sea areas relating to the use and development of sea areas, and thus also investments related to offshore wind energy in Polish sea areas [Matczak, Pardus, Pankau 2019: 12-13].

Legal status of offshore wind farms

Taking into account the above-mentioned provisions, it is obvious that the Republic of Poland will enjoy immunity from jurisdiction in relation to offshore wind farms, and the provisions in force in the area of these installations will be the provisions of Polish law. Art. 24 of the Act on maritime areas of the Republic of Poland and maritime administration speaks of the optional entitlement of the director of a maritime office to establish offshore wind farms in Polish maritime areas, but there is a real need to issue an ordinance in the future, establishing zones with restricted navigation rights and other activities around offshore wind farms related to the economic or recreational use of these sea areas.

The argument supporting this position is the fact that, first of all, pursuant to Art. 3 point 2 of the Act on Crisis Management of April 26, 2007, the offshore wind farms will belong to the critical infrastructure as equipment and installations included in the electricity supply system. Such services, in accordance with the above-mentioned legal act, are recognized as crucial for the security of the state and its citizens and used to ensure the efficient functioning of public administration bodies, as well as institutions and entrepreneurs (Journal U. of 2022, item 261, as amended). Secondly, we currently have, in the Polish legal system, nine binding orders of the director of the Maritime Office in Gdynia, establishing safety zones, including:

- in Polish sea areas, along the entire route of the offshore gas pipeline, the "B-8" field - Władysławowo to ensure proper protection of this installation [ORDER No. 9 OF THE DIRECTOR OF THE MARITIME OFFICE IN GDYNIA of November 8, 2017 on the establishment of a security zone for the deposit gas pipeline " B-8 "- Władysławowo];
- in the waters of the Gulf of Gdańsk along the DN 1600 deep-water pipeline and the sea end of the pipeline [ORDER No. 1 OF THE DIRECTOR OF THE MARITIME OFFICE IN GDYNIA of 27 February 2017 on the establishment of a safety zone around the equipment of the deep-water pipeline DN 1600 and the sea end of the pipeline];
- in the Polish economic zone around the "LOTOS PETROBALTIC" drilling platform located at point B-8 at the position $\varphi = 55^{\circ} 24'01''$ N and $\lambda = 018^{\circ} 43'19''$ E [ORDINANCE No. 14 of the DIRECTOR OF THE MARITIME OFFICE IN GDYNIA of 5 October 2015 on the establishment of safety zones around the "LOTOS PETROBALTIC" drilling platform and around the CALM buoy based on the B-8 field],

thus objects belonging to the critical infrastructure.

Ensuring the security of critical infrastructure

The consequences of including offshore wind farms in Polish sea areas in the critical infrastructure of the State are of a dual nature. Firstly, according to the Act on Crisis Management, the owner and independent and dependent owners are obliged to ensure adequate protection of the critical infrastructure systems. It is carried out in particular through the preparation and implementation, according to the anticipated threats, plans for the protection of critical infrastructure and the maintenance of own backup systems ensuring security and maintaining the functioning of this infrastructure, until it is fully restored (Journal of Laws of 2022, item 261, as amended: article 6 sec. 5).

Offshore wind farms, as critical infrastructure, should be included in:

- the National Critical Infrastructure Protection Program adopted by the Council of Ministers, the aim of which is to create conditions for improving the security of this infrastructure;
- issued under Art. 6 of the Act of 5 July 2018 on the national cybersecurity system (Journal of Laws of 2020, item 1369, as amended), Regulation of the Council of Ministers on the list of key services and thresholds of significance of the disruptive effect of an incident for the provision of services key.

Additionally, it should be taken into account whether, pursuant to § 2 point 23 and 24 of the Regulation of the Council of Ministers of June 24, 2003 on facilities of particular importance for state security and defense and their special protection (Journal of Laws No. 116, item 1090, as amended), investments related to offshore wind energy and possible production of hydrogen should not be subject to special protection, as objects of particular importance for the security and defense of the state. This would be of key importance at the time of a threat to state security and in time of war. Well, under paragraph. 1 of Decision No. 443 / MON of the Minister of National Defense, the Armed Forces of the Republic of Poland in conditions of a threat to state security and during war, take part in special protection of category I facilities recognized by the Council of Ministers as particularly important for state security and defense (Journal of Laws of the Ministry of National Defense of 2013, item 396).

According to the National Critical Infrastructure Protection Program, the minister responsible for state assets, the minister responsible for energy and the minister responsible for the management of mineral deposits are responsible for the energy supply system, energy raw materials and fuels. Actions taken in the area of this responsibility include, inter alia, assessing the risk of possible system disruptions and periodic analyzes of their protection, cooperation with other authorities that, under the Acts, have authority over a given fragment of the system, supporting the organization of exercises and system training to improve the efficiency of system protection in terms of organizational, technical and formal - legal (NPOIK 2015: 17 – 21), as well as agreeing system protection plans, which results from § 4 sec. 1 point 2 of the Regulation of the Council of Ministers of 30 April 2010 on critical infrastructure protection plans. This implementing act specifies in detail the method of creating, updating and the structure of critical infrastructure protection plans prepared by owners and holders of self-contained and dependent facilities, installations or devices of critical infrastructure and the conditions and procedure for recognizing compliance with the obligation to have a plan that meets the requirements of the critical infrastructure protection plan. At the same time, the scope of the ministers' responsibility

for individual systems of critical infrastructure is taken into account in the activities of their subordinate or subordinate bodies (Journal of Laws No. 83, item 542) .

Threats to critical infrastructure

Another legal act, through the prism of which it is necessary to look at offshore wind energy and installations used to generate hydrogen as elements of the state's critical infrastructure, is the Anti-Terrorist Activities Act of 10 June 2016. issues related to securing critical infrastructure in the context of preparation for taking control over terrorist events.

Firstly, in the event of a threat of a terrorist event or in the event of such an event, the Prime Minister, after consulting the minister competent for internal affairs and the Head of the Internal Security Agency, may introduce one of the four alert levels:

- first alert stage (ALFA stage);
- second alert stage (BRAVO stage);
- third alert stage (CHARLIE stage);
- fourth alert level (DELTA level) (Journal of Laws of 2021, item 2234, as amended: article 15).

Pursuant to the provisions of this Act, in the event of ordering at least the second level of emergency, i.e. a situation of an increased and predictable threat of a terrorist event, without an identified specific target of the attack, the Police is obliged to check the security of critical infrastructure facilities, and in relation to selected of them, taking into account the type of threat, enables the Head of the Internal Security Agency, in agreement with the minister competent for internal affairs, to issue the Police with a recommendation to protect them in particular (Journal of Laws of 2021, item 2234, as amended: article 12). In the Regulation of the Prime Minister on the scope of projects carried out in individual alert levels and alert levels of CRP of July 25, 2016, which is an executive act to this act, issued on the basis of the statutory delegation contained in Art. 16 sec. 5 of the Act on anti-terrorist activities, we find a provision authorizing the Police Commander in Chief, the Border Guard Commander in Chief or the Commander-in-Chief of the Military Police to introduce the obligation to wear long weapons and bulletproof vests by uniformed officers or soldiers directly carrying out tasks related to securing places and facilities that may potentially become become the target of a terrorist event, in the case of introducing at least the second level of alarm (Journal of Laws, item 1101, as amended).

In the Strategic Concept of Maritime Security for the Republic of Poland published in 2017, the authors of this study indicated that the main threats related to the Baltic region in particular include:

- militarization of the Baltic region, related mainly to the development of Russian military potential, especially anti-access capabilities (Anti Access / Area Denial, A2 / AD) in the Kaliningrad Oblast, which leads to an increase in the importance of the armed forces as an instrument used in international relations in the region ;
- Russia's monopoly position in the area of energy supplies - some countries are too heavily dependent on imports of energy resources from the Russian Federation, as well as on the Russian transport infrastructure;
- potential small-scale local conflict (incidents without and with the use of weapons; hybrid or asymmetric war; connectivity wars), including the so-called geoeconomic battlefield;

- unregulated demarcation of the exclusive economic zones of the Baltic states and restrictions on access to certain types of straits used for international navigation;
- forcing coastal and maritime investments by a state or a group of states that limit the economic undertakings of other states in the region [Brysiewicz, Gwizdała, Makowski 2017: 11-12].

How much of a current and new dimension are these sources of threats gaining, which also have a direct impact on the critical infrastructure facilities at sea, in the light of the currently ongoing military attack by the Russian Federation on Ukraine. Therefore, it will not be revealing that due to the purpose of offshore wind energy combined with the extended response time of relevant services responsible for state security, which is influenced by the location of offshore wind farms in Polish sea areas, these investments may become of the Polish energy sector as a target of acts of a terrorist nature.

Polish Naval Forces in Polish sea areas

The professional nomenclature called the components of the Polish Naval Forces are directly related to ensuring safety in the maritime areas of our country:

- The Polish Navy, which is intended to pursue the interests of the state in maritime areas, defend the territory of Poland, and participate in the joint defense of NATO countries as well as strengthening the allied deterrence system;
- Sea special operations units, whose task in the marine environment is, inter alia, sea area control including shipping control, protection of sea communication corridors etc;
- Border Guard - a police formation that, through its Maritime Branch, carries out, inter alia, supervision over the exploitation of Polish sea areas and compliance by ships with applicable regulations and the prosecution of infringers, protection of the marine environment and cooperation with other services and national administration in sea areas;
- Local maritime administration bodies, the functions of which are performed by two directors of the Maritime Offices in Szczecin and Gdynia. These authorities have been equipped with competences to, inter alia, conducting controls and inspections as well as imposing sanctions in the form of administrative fines and fines for violating legal provisions, which belong to the competence of these authorities;
- Chief Inspector of Sea Fisheries, as the central body of government administration. His main tasks include supervising compliance with the provisions on sea fishing and the organization of the fish market, and imposing fines for violating these provisions;
- Maritime Search and Rescue Service (SAR), whose tasks include searching and rescuing every person in danger at sea and combating oil and chemical threats and pollution of the marine environment;
- The Customs and Tax Service, which is a uniformed service, separated within the National Tax Administration, subordinate to the Minister of Finance. Its main tasks, in the maritime environment, are the detection of tax and fiscal crimes in areas subject to Polish jurisdiction and in sea ports, and the prosecution of their perpetrators;
- Water Police (a unit of the Police Preventive Service), which in the maritime environment performs tasks related to the protection of the safety of people and property and to

maintaining public safety and order in waters intended for general use (in the territorial sea and internal waters).

The authorities presented above, which are part of the Polish Navy, are an important element of the national security system and the defense of the state's interests at every level [Brysiewicz, Gwizdała, Makowski 2017: 21-25].

As can be seen in the diagram of the organs that make up the Polish Naval Force component, there is one rather disturbing feature. Well, significant fragmentation of the authorities responsible for ensuring safety in Polish maritime areas. It is from this fragmentation and sometimes overlapping competences that sometimes very important problems arise, as well as competency disputes between individual representatives of the maritime administration. The result of such a multitude of organs seems to be, *inter alia*, operation of maritime administration bodies on various, incompatible systems, whether it is the supervision and imaging of Polish sea areas or the exchange of information between individual institutions.

The author, based on his own professional experience, noticed that the real problem seems to be the lack of detailed procedures defining the principles of joint action and cooperation in situations that require it, and of a single center coordinating such joint activities of individual components of the Polish Naval Forces. This could lead to two extreme situations, both very dangerous from the point of view of maritime safety. The first is a situation where, when the competences of two different authorities overlap, with the simultaneous lack of procedures regulating the principles of cooperation, causing no response from the authorities and, colloquially speaking, "waiting" for which authority will take over action in a given situation. The second fact, equally dangerous, may lead, especially in the reporting periods of individual institutions, in which various types of statistics are prepared, that it may lead to a situation where one event will start servicing several institutions, precisely in order to demonstrate activity in a given area. Such a situation is also very undesirable, firstly for economic reasons, and secondly, such a state involves excessive naval forces in one event.

The second result, resulting, *inter alia*, from out of the multitude of organs, there is a lack of modern vessels in the individual components of the Polish Law Enforcement Naval Forces component, especially those with 24-hour autonomy and bravery allowing for real performance of tasks in difficult weather conditions. Both Polish Navy and Border Guard units are age units in really negligible numbers. The Water Police Station in Gdańsk, as well as units subordinate to the Customs and Tax Offices, have at their disposal small vessels, unsuitable for longer operations on the high seas, especially in difficult hydro-meteorological conditions. The units subordinate to the Chief Sea Fisheries Inspectorate do not have any vessels in their equipment, therefore they are usually inspected in the port.

Does such a state of affairs translate into investments related to offshore wind farms or installations for the production of hydrogen in Polish sea areas? According to the author of this publication, it is very fundamental. As already mentioned in the first part of this article, after including offshore wind farms into the Polish power grid, they will become a critical infrastructure. Therefore, it will become necessary to designate, first of all, in the construction phase, zones that are dangerous to shipping and fishing, including water areas where works related to the construction and connection processes of offshore wind farms will be carried out. Of course, a number of exceptions will be necessary, allowing navigation in this area, e.g. units performing activities and services related to the operation of offshore wind energy infrastructure, Navy

ships, Border Guard vessels or maritime administration, as well as conducting activities to save lives or combat threats or pollution at sea.

If the ship enters the designated safety zone, the captain may face an administrative tort joke. 56 point 9 of the Act on the maritime areas of the Republic of Poland and maritime administration. The sanction for this offense is a fine up to the amount not exceeding twenty times the average monthly salary in the national economy for the previous year, announced by the President of the Central Statistical Office. It is imposed by way of an administrative decision by the director of the maritime office. The structure and the imperative nature of this provision do not allow the authority competent to impose the above fine to refrain from issuing a decision imposing a financial penalty for an administrative tort committed. Therefore, it is enough to find a violation of the security zone for the fine to be imposed on the person committing the above-mentioned offense. The only thing that remains for the decision of the office director is the amount of the fine, which takes into account the scope of the breach, the repeatability of the breach or the financial benefit obtained for the breach. Moreover, such a decision is immediately enforceable.

Well, this finding, identification and detection of a specific individual as the perpetrator of this violation can be very problematic in practice. At this point, it is necessary to return in our considerations to the incompatibility of the surveillance systems and the visualization of Polish sea areas, the lack of cooperation procedures and, for example, the coordination center for these activities, and the shortages in the equipment of individual components of the Polish Naval Forces. Let us analyze a very common and simple situation where such a vessel enters the no-navigation zone. Ideally, the ship has the Automatic Identification System (AIS) turned on and the relevant authorities that detected the incident, using simple tools available in supported IT systems, are able to prove the violation. But what if such a unit does not have the AIS system enabled or is simply not equipped with it in accordance with applicable regulations. At that time, the organs of the Polish Naval Forces component had only radar imaging, which allows them to observe that an object has entered the designated security zone. In such a situation, they are left with an attempt to establish contact with such a unit by radio in order to recognize it, or an attempt to establish contact with nearby units in order to establish the details of the vessel violating the safety zone around offshore wind farms. If such actions do not bring the expected result, the only solution is to send subordinate vessels or aircraft to this area in order to identify the unit responsible for the violation of the regulations. This is, of course, associated with an extended response time, and hence the risk of not finding the culprit, as well as with a significant financial burden for a given organizational unit, incurred in connection with the operation of a subordinate vessel or aircraft. The matter becomes more complicated when the violation of the safety zone around offshore wind farms in Polish sea areas results in damage or rendering unusable elements or the entire offshore wind farm. We are already dealing here with a criminal tort, so the perpetrator commits a crime stipulated in the penal code. In the doctrine, a failure is defined as a condition in which an element has been deprived of any functional features, preventing or impeding its functioning in a line or network. Making unusable, on the other hand, consists in subjecting a component of the entire line or network to such an action which does not affect its physical substance, but causes that this element no longer fulfills its function. Thus, rendering unusable will be, for example, demagnetization or irradiation of the components of an offshore wind farm, leading to disruption of its proper operation [Lach 2020: 1210].

Such actions meet the criteria of an act specified in Art. 254a cumulatively with Art. 288 and art. 294 § 1 of the Penal Code and is subject to the penalty of deprivation of liberty for a period from one to ten years (Penal Code).

So, as you can see from this very simple situation, which is not a rare event in Polish maritime areas, the infrastructure related to offshore wind farms and hydrogen production will become extremely sensitive and particularly exposed to all kinds of sabotage attempts, or even attempts to check the effectiveness of the system security of the Republic of Poland.

In order to prevent, in the near future, situations leading to the exposure of offshore wind farms to possible disruptions or destruction, a number of solutions should be introduced to protect this infrastructure.

Firstly, as an alternative solution to the increasingly newer and more costly various systems of supervision and visualization of Polish sea areas intended for individual authorities, a single system of supervision of sea areas under the jurisdiction of our country should be introduced. Such a system, common to all institutions that make up the chain of the maritime security system of the Republic of Poland, would, firstly, be more economically advantageous, and secondly, it would significantly improve the daily supervision over the security of Polish maritime areas. Of course, apart from the main system, a backup system should also be introduced, ensuring the continuity of supervision in the event of a failure or service work of the main system. The natural consequence of implementing such a system would be the establishment, at the beginning, of a center for coordinating the activities of individual components of the Polish Naval Forces, in the scope of which would be to direct appropriate forces and resources to events affecting the security of Polish maritime areas. The financing of such a center would have to be shared jointly and severally by government administration bodies, which are responsible for the activities of individual bodies forming the network, broadly understood, of maritime administration.

Secondly, the penalties for violating, by a vessel, the safety zone designated around the offshore wind farm, must be adequate to the costs, at least purely operational, incurred by the administrative authority in connection with sending the vessel or aircraft to a given area. These penalties would, of course, support the State Treasury, and thus the administrative body that incurred such costs. In addition, institutions directly interested in ensuring the safety of investments related to offshore wind energy should provide in their budgets for participation in at least part of the costs of operations related to ensuring the safety of this infrastructure, incurred by components of the Polish Maritime Force, directly involved in these operations. Only such solutions seem to be able to realistically ensure an efficient and quick reaction of the services to the violation of the zone and will certainly act as a deterrent against committing the violation of the law in question.

Thirdly, the areas of offshore wind farms, as objects of critical maritime infrastructure, should be under constant supervision of vessels, individual components of the Polish Maritime Force. Of course, when designating surveillance zones, a number of factors should be taken into account, e.g. hydro-meteorological conditions prevailing in a given region and period, and thus the appropriate selection of units, introducing rotation of such supervision by individual links in the chain forming the maritime safety system of the Republic of Poland. Here we come back to the legitimacy of establishing, for a good start, a coordination center of activities and the legitimacy of financing such activities by the government administration bodies concerned.

Consideration should also be given to the use of autonomous vessels in the near future in order to ensure the safety of offshore wind farms in Polish sea areas. However, such a solution will only be possible when the appropriate legal framework is created, both for the establishment of the statute of such an entity and its potential operator.

Summary

When analyzing the issues presented in this article, it should be very seriously emphasized that in the current legal status and the state of equipment of individual administrative bodies responsible for supervision and enforcement of regulations directly affecting the maritime safety of our country, offshore wind farms as elements of critical infrastructure in Polish maritime areas will become objects without proper protection of their safety. Of course, there are many voices that it is the role of the private sector to ensure the protection of the offshore wind farms in Polish maritime areas. This position seems to be a consequence of a misunderstanding of two completely separate concepts, i.e. current protection of the facility and reaction to the actual threat, directly related to the energy security of our country. It is necessary to urgently provide, through a series of legislative measures, appropriate tools to the authorities creating the security chain of Polish maritime areas, so that the provisions relating to the safety of the OWF are not just dead records, impossible moments to be implemented. At the beginning, the creation of a single system to supervise Polish maritime areas, the headquarters of which would be in the newly created center of coordination of activities, would be a good start and perhaps a spark for the creation of a single service in the future, gathering in the scope of its tasks the maritime administration of our country, so fragmented today. Only providing the relevant services responsible for state security with adequate system tools will guarantee the efficient and safe operation of these investments, which have an undoubted benefit for the diversification of our country's energy sources, which is a priority in the current geopolitical situation. In today's realities, it is not difficult to accept a scenario in which Polish critical infrastructure may become the object of a conventional or cyberattack by a hostile state. Unfortunately, we are currently not sufficiently prepared for such an attack.

Bibliography

1. Communication from the Commission to the European Parliament, the European Council, the Council, the Economic and Social Committee and Committee of the Regions of 11 December 2019, known as the "European Green Deal", (COM (2019) 640).
2. SBNRP 2020 – Strategia Bezpieczeństwa Narodowego Rzeczypospolitej Polskiej, Warszawa 2020.
3. Ustawa z dnia 21 marca 1991 r. o obszarach morskich Rzeczypospolitej Polskiej i administracji morskiej (t.j. Dz. U. z 2022 r. poz. 457).
4. Konwencja Narodów Zjednoczonych o prawie morza, sporządzona w Montego Bay dnia 10 grudnia 1982 r. (Dz. U. z 2002 r. Nr 59, poz. 543).
5. Ustawa z dnia 26 kwietnia 2007 r. o zarządzaniu kryzysowym (t.j. Dz. U. z 2022 r. poz. 261 z późn. zm.).
6. Ustawa z dnia 5 lipca 2018 r. o krajowym systemie cyberbezpieczeństwa (t.j. Dz. U. z 2020 r. poz. 1369 z późn. zm.).

7. NPOIK - Narodowy Program Ochrony Infrastruktury Krytycznej, przyjęty Uchwałą nr 210/2015 Rady Ministrów z dnia 2 listopada 2015 r.
8. Rozporządzenie Rady Ministrów z dnia 11 września 2018 r. w sprawie wykazu usług kluczowych oraz progów istotności skutku zakłócającego incydentu dla świadczenia usług kluczowych (Dz. U. poz. 1806).
9. Rozporządzenie Rady Ministrów z dnia 24 czerwca 2003 r. w sprawie obiektów szczególnie ważnych dla bezpieczeństwa i obronności państwa oraz ich szczególnej ochrony (Dz. U. Nr 116, poz. 1090 z późn. zm.).
10. Decyzja Nr 443/MON Ministra Obrony Narodowej z dnia 24 grudnia 2013 r. w sprawie udziału Sił Zbrojnych Rzeczypospolitej Polskiej w szczególnej ochronie obiektów (Dz. Urz. MON z 2013 r. poz. 396).
11. Rozporządzenie Rady Ministrów z dnia 30 kwietnia 2010 r. w sprawie planów ochrony infrastruktury krytycznej (Dz. U. Nr 83, poz. 542).
12. Rozporządzenie Prezesa Rady Ministrów z dnia 25 lipca 2016 r. w sprawie zakresu przedsięwzięć wykonywanych w poszczególnych stopniach alarmowych i stopniach alarmowych CRP (Dz. U. poz. 1101 z późn. zm.).
13. Strategiczna Koncepcji Bezpieczeństwa Morskiego Rzeczypospolitej Polskiej, Brysiewicz J., Gwizdała D., Makowski A., Biuro Bezpieczeństwa Narodowego, Warszawa-Gdynia 2017.
14. Morska energetyka wiatrowa jako istotny potencjał rozwoju polskiej gospodarki morskiej, Drożdż W., Mróz-Malik O., [w:] Problemy Transportu i Logistyki 1/2017 (37), Wydawnictwo Naukowe Uniwersytetu Szczecińskiego, Szczecin 2017, s. 151-159.
15. Plan zagospodarowania przestrzennego morskich wód wewnętrznych, morza terytorialnego i wyłącznej strefy ekonomicznej w skali 1: 200 000, Matczak M., Pardus J., Pankau F., [w:] Biuletyn Komitetu Przestrzennego Zagospodarowania Kraju PAN Zeszyt 276, Polska Akademia Nauk, Komitet Przestrzennego Zagospodarowania Kraju, Warszawa 2019, s. 6-30.
16. Morskie farmy wiatrowe a bezpieczeństwo morskie państwa, Miętkiewicz R., [w:] Sprawy Międzynarodowe Tom 72 Nr 1 (2019): Jak uczyć o stosunkach międzynarodowych? Instytut Studiów Politycznych PAN, Warszawa 2020, s. 97-112.
17. Lach A. Rozdział XXXII. Przestępstwa przeciwko porządkowi publicznemu, [w:] Kodeks Karny – Komentarz, Konarska-Wrzosek V., Wolters Kluwer, Warszawa 2020.
18. Penal Code - Ustawa z dnia 6 czerwca 1997 r. Kodeks karny (t.j. Dz. U. z 2021 r. poz. 2345 z późn. zm.).

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