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Polish and Lithuanian local seaports as centers of the regional development

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LIST OF ABBREVIATIONS

DLGR	Darłowska Lokalna Grupa Rybacka (Darłowska Local Fishing Group)
DWT	Deadweight tonnage
EC	European Commission
ERDF	European Regional Development Fund
EU	European Union
LGD	Lokalna Grupa Działania (Local Action Group)
LQ	Location quotient
LSR	Lokalna Strategia Rozwoju (Local Development Strategy)
MAG	Morska Agencja Gdynia
MIR	Morski Instytut Rybacki (National Marine Fisheries Research Institute)
NM	Nautical Mile
NNW	North North West
PAN	Państwowa Akademia Nauk (Polish Academy of Sciences)
PLGR	Północnokaszubska Lokalna Grupa Rybacka
PPiUR	Przedsiębiorstwo Połowów i Usług Rybackich
PPPiH	Przedsiębiorstwo Połowów, Przetwórstwa i Handlu
SAR	Search and Rescue
SGR	Słowińska Grupa Rybacka
SPM	Single Point Mooring
SRLGD	Strategia Rozwoju Lokalnej Grupy Działania
SSE	South South East
TEN-T	TransEuropean Transpot Network
ZPM	Zarząd Portu Morskiego (Seaport authority)

INTRODUCTION

Seaports of primary importance for the development of the national economy are always treated as the most important and privileged in the maritime policy of the state,, especially when it comes to financing port investments. Countries like Poland and Lithuania should focus not only on these major ports, but also need to link the development of maritime economy with the entire coast and take the full advantage of their coastal location. Local ports are key in this respect. The standard and scope of services offered by these ports determines whether the use of the entire seashore will be limited to guesthouses and the beach, or will it be more comprehensive. The current European Union policy on integrated coastal area management requires a comprehensive approach to all aspects of the opportunities offered by coastal location for local communities on the entire coastline.

This report presents the factors determining the development of ports that are not essential for the national economy. The problems of development of those local ports have also been included in the wider spatial context, covering not only their near land (local and regional), but also maritime foreland, as the projected intensification of sea space use for various economic purposes should also result in new development impulses for small ports.

The conducted research allowed to identify barriers of the local ports development, among which the most serious ones are:

- Economic barrier manifested in the lack of funds for financing port investments and other developmental goals,
- Legal and organizational barrier expressed in numerous restrictions imposed on local ports, which significantly hinder the development of port operations,
- Lack of efficient mechanisms of cooperation between interested entities or those that should be interested in the development of local ports.

Based on the conducted analysis, the possibilities of activating local ports were developed and presented in this report. One of the results of the research is the statement that the basic aim of the local market economic recovery plan is to link the development of economic activity with the intensive and extensive use of existing or modernized port infrastructure. The type of activity that will include the broadest possible range of services based on port infrastructure is of key importance. In this way, economies of scale, which in the case of local ports are very difficult to obtain, will be replaced by the benefits of the scope. Local ports, due to their impact on the local and regional economy, should be treated as centers of economic development, i.e. centers that can indirectly and significantly affect the national economy and therefore their importance could not be diminished, especially in strategic national documents and laws regulating seaports activities.

Use of the opportunities offered by the port requires the implementation of many investments in the field of port infrastructure, infrastructure providing access to ports and ICT infrastructure that creates an efficiently functioning integrated information system unified for all ports of the South Baltic Region. In order for these investments to give the desired synergy effects, the national authorities should create a clear vision of the development of the coastal belt and set directions for economic and functional-spatial development, which will allow to integrate international, national

and local social and economic interests. Formulating detailed proposals of actions that would allow to overcome, or at least reduce developmental barriers, requires in-depth research. It seems particularly important to undertake research on the place of local ports in the regional policies and on the creation of regular maritime connections along the coast of the countries of the South Baltic, using the international waterway E60, which will undoubtedly have a positive effect on the activation of ports and regions in which they are located. It should also be borne in mind that the reduction of capital and thus infrastructure barriers will not be possible without full use of the possibilities offered by public-private partnership.

1. ANALYSIS OF THE CURRENT STATE OF LOCAL PORTS AND THEIR INFLUENCE ON THE REGIONAL ECONOMY

1.1. The current state of local ports

On the Polish coast, including Szczecin Lagoon and the Vistula Lagoon, there are 26 small seaports and over 40 marinas.[1] Taking into account their geographical location, they can be divided into:

- ports and harbors located on the seashore (12 ports and over 20 marinas),
- ports and harbors situated on the shores of the internal sea waters - the Vistula Lagoon and the Szczecin Lagoon as well as waterways with the status of internal sea waters (14 ports and several marinas).

The first group includes such ports as: Hel, Jastarnia, Puck, Władysławowo, Łeba, Ustka, Darłowo, Kołobrzeg, Mrzeżyno, Dziwnów, Międzyzdroje.

The second group contains of ports located within Vistula Lagoon region, such as Elbląg, Krynica Morska, Tolkmicko, Frombork and ports of Szczecinski-Kamienski Lagoon: Kamień Pomorski, Wolin, Lubin, Stepnica, Trzebież, Nowe Warpno and Police. In this study, the local ports from the first group have been analyzed, with the greatest impact on the region's surroundings and development. These ports are: Kołobrzeg, Darłowo, Ustka, Władysławowo, Jastarnia and Hel. The location of these ports is shown in the figure below.

[1] Acts of three Polish Martime Offices: zarządzenie nr 3 Dyrektora UM w Szczecinie from 22.10.1997 r., zarządzenie nr 1 Dyrektora UM w Słupsku from 23.09.1997, zarządzenie nr 12 Dyrektora Urzędu Morskiego w Gdyni from 18.09.1997.

Fig. 1. Location of six Polish ports analyzed in the study.

Source: Own elaboration based on OpenStreetMap

There are three local ports in Lithuania with significant importance and impact on the regional economy, mainly in the field of tourism and local fisheries: Šventoji-Būtingė (Baltic Sea), Nida (Curonian Lagoon) and Minija (Curonian Lagoon).

There are plans to create one more local port in Karkle (on the coast of the Baltic Sea, between the seaport of Klaipeda and the seaside resort of Palanga). However, these plans are temporarily halted due to the controversy surrounding the approval of EU structural funds for this project to be developed as a public-private partnership. The Palanga pier could also be used to create a marina, just like the piers of the Curonian Lagoon, located in Juodkrante and Dreverna. Unfortunately, all plans for the development of local ports in these areas are hindered by hydrodynamics and the model of drifting of sediments in the Baltic Sea near the coast and the north of the Curonian Lagoon, as well as by the lack of EU funds allocated for this purpose.

Currently in the coastal region of Lithuania there are five marinas adapted to service yachts and motor boats (three on the coast of the Baltic Sea and two on the Curonian Lagoon): Klaipeda (Klaipeda city center), Smiltynė (Klaipeda Strait), Šventoji (continental coast), Nida (Curonian Lagoon) and Minija (the Delta of the Nemunas River).

Fig. 2. Location of Lithuanian ports analyzed in the study.

Source: Own elaboration based on OpenStreetMap

Due to the fact that the Klaipeda marina and Smiltynė marina are located near the port of Klaipeda, which is the largest seaport along the eastern part of the Baltic Sea coast, these two marinas are excluded from further analysis of local ports in Lithuania. The main features and facilities of the other three marinas are given in Table 1.

Tab. 1. Characteristics and facilities of the ports in Šventoji (Baltic Sea), Nida and Minija (both – Curonian Lagoon)

Services	Šventoji*	Nida	Minija
24-hour safety and security services		✓	✓
Fuel (on request)			
Supply of electricity and fresh water		✓	✓
Inclined ramp		✓	✓
Collection of sewage and solid waste		✓	✓
Sanitary infrastructure		✓	✓
Small repairs on request			✓
Gastronomic facilities in the area		✓	✓
Boats renting		✓	✓
Sailing schools		✓	

** The marina in Šventoji is temporarily closed down due to sedimentary disaster, which occurred immediately after its reconstruction in 2011.*

Location has a significant impact on the development of ports, as it determines their position and at the same time the possibility of access from the sea and land, which is related to the size of the hinterland. The position in the coastal regions is also important for the development of ports. Each region has its own development strategy and may in a different way see the role of small ports in the development of the region, which also involves the use of financial resources.

Small ports of the Polish coast are of local importance and this is due to the characteristics of those ports presented in the report. The method of port management is very important in the process of their development. It is estimated that the ports that are in the hands of local governments, or are privately owned are developing and investing in the most effective way.

Establishment of municipal management of the port causes that the municipality has an impact on the use of port areas, it can decide to carry out renovations and modernization works, and can also apply for co-financing from EU funds. Maritime offices maintain small ports and marinas in a satisfactory technical condition, but they do not further develop them as the maritime administration receives money from the state budget intended only for the maintenance of access infrastructure to ports. Ports dependent on the city authorities such as Kołobrzeg, Darłowo and Ustka obtained EU funds for various types of investments improving their operations and port access such as investments in roads, places, wharfs, breakwaters, facilities for fishermen and construction of tourist infrastructure in ports. More and more municipalities see the benefits of taking over ports.

Looking at long experience of ports Kołobrzeg and Darłowo, it can be assessed that the process of taking over ports by municipalities is time-consuming and complicated. There are no facilities in the vicinity of ports, which generates problems with cargo reloading. Several issues are also connected with land ownership e.g. taking over areas previously owned by state agencies, moreover many port lands were sold to private entities after bankruptcy of companies. An additional problem is the degradation of port infrastructure, especially the quays and the uncertain fate of Polish fisheries.

In principle, all coastal regions and local ports acknowledge the fact that the most important development opportunity for them lays in a favorable location in the communication belt along the coast and natural values, their considerable investment and tourist attractiveness. They also see their chance in the Polish membership in the European Union enabling the benefits of interregional and international cooperation as well as an additional source of financing for development initiatives. The main threat to local ports and maritime economy may be the downturn in the country and the region and the shortage of investments that could generate jobs, which in turn causes the outflow of population to large agglomerations and industrial centers far from the coastline.

In local ports, the task of financing many areas of municipal port operations is falling on local governments and it is their responsibility to manage coastal zones. This results in significant financial restrictions for the implementation of local port strategies. Ambitious development and investment plans first of all face a financial barrier (small amount of municipal funds, huge dependence on the

state budget). The implementation of the most urgent investments ensuring improvement of accessibility to the port from the sea side, land side (road and rail transport) and necessary repairs will improve the conditions of port functioning and, above all, will increase the attractiveness and economic and social potential of the region.

Due to their local character, small ports must function as a system of complementary elements so that they can efficiently and effectively use development opportunities. A solution for the network integration of small seaports could be the launch of cabotage along the coast with short stops in subsequent ports, using the international waterway E60[2].

Methods of managing local ports

Local ports and marinas are, by definition, components of the local infrastructure that provide opportunities to take advantage of the opportunities offered by their coastal location. That is why their functions are adapted to the common forms of the sea use such as:

1. Providing access to a given section of the shore from the sea for cargo and passengers,
2. Handling of coastal and maritime fishing using nearby fishery,
3. Service of sport boats and various types of activities in the field of tourism and sea recreation,
4. Providing conditions for the implementation of manufacturing activities related to the above-mentioned functions, e.g. storage and processing of fish, construction and repairs of small marine units, mainly fishing and sports.
5. Support for wind farms and other offshore technologies .

Local ports and harbors are also the base for the services performing the conventional duties of the coastal state, i.e. saving life at sea and removing of marine environment contamination. In some cases, they also have the status of sea border crossings with all of these legal consequences. The catalog of functions that can potentially be used by small ports means that despite their spatial size, or property value, they can be quite complex internal economic bodies with a large network of internal and external links. Their infrastructural and superstructural components may also have a significant degree of diversity. Therefore, the functioning and rational development of small ports requires proper management and equally proper financing methods. The correct relationship between the port and the commune within which it is located is crucial in this matter.

The subjective structure of the management and financing of seaports in Poland was established by *the Act on Sea Ports and Harbours* from 1996 and does not deviate in general from solutions adopted in continental ports of European Union countries. The managing entity of the local port is the authority appointed by the municipality in the case of communalization of the port or territorially competent director of the maritime administration, if the local government did not apply for communalization (Article 23, paragraph 1 and Article 25 of the Act). When determining the functions of the managing entity, it was assumed that the managing entities could not conduct any other business activity (Article 7):

- management of land and harbor infrastructure,

[2] For a detailed description of the international E60 waterway, see Chapter 3 on cross-border cooperation.

- providing services related to the use of port infrastructure,
- ensuring the collection and disposal of waste and cargo residues from ships.

The scope of management also includes performing tasks related to developing development strategies, creating material foundations for operation and development and constructing tools for regulating port operations. In the scope of management, the principles of the port's operation and formulated directions of its development are developed. Proper implementation of these tasks determines the importance of the port for the region and the port city and its competitive position in relation to other ports.

The maintenance in local ports of the state board managed by the directors of maritime offices, should be considered only temporary and unfavorable for the development of the port in the long term. This is due to the nature of the operation of maritime offices, which is regulated by *the Act Polish sea areas and maritime administration*. (their tasks are set out in Article 42 of this Act). In addition, the Act on Sea Ports and Harbours states that the construction, modernization and maintenance of infrastructure providing access to ports are financed from the state budget, in the amount specified in the Budget Act (Article 10 (1)).

As a consequence of these limitations, the governmental administrative body, in this case the maritime office, can only stop the decapitalization of port assets and ensure supervision of port operations security. However, there are no means to actively manage it. In addition, governmental administrative bodies, without legal personality, could not collect funds from the capital market and take loans without the separate authorization. This results in a lack of flexibility in operations, which is particularly important in the highly competitive market of port services.

Therefore, in practice, local governments and municipalities, using the opportunity provided by the Act, decide to create a separate body managing the port. In this respect, the Act grants municipalities full legal rights to decide on the legal and organizational form of the managing entity.

Currently, there are two forms of organization of local ports management in Europe:

- ports managed directly by the administration (management) of the city,
- ports managed by the separate port authority.

Direct management by the city management means that specialists in various port board functions will be employed in the individual units/departments of the municipal office. Their activities will be coordinated by one of the city board members. It is a relatively cheap solution due to "integration" of the port management function into existing organizational units and the possibility of using the technical means of a municipal office. Theoretically, it can also ensure fulfillment of the criterion of harmonious cooperation of the port with the city. However, there is a real danger of minimizing port problems and focusing on the current city issues instead. Employees dealing with port issues will also have a dual subordination - the head of their department and the member of the city board responsible for the port. This situation usually causes the port-city relationship to be complicated. It is also doubtful to meet the criteria of having the necessary freedom of action. In the conditions of the Polish port and the city, which must only learn to cooperate, this option could not be considered

as optimal, despite the low operating costs. Therefore, the management of the municipal port should be separated from the municipal administration.

An additional proof in this regard is the provision of the Act on sea ports and harbors stating that:

- port management is a public activity (Article 6 (2)),
- the port's management has its own sources of revenue, which can be used only for statutory purposes, i.e. the implementation of the functions provided in the Act.

In the Polish case, compliance with the above statutory requirements will be very difficult without the creation of a separate port management. Polish legislation allows the municipality to create economic units in the form of a budgetary establishment, or a sole-shareholder company. The choice among these possibilities is therefore the final stage of determining the variant of the formula of the municipal port's managing entity.

Mechanisms for financing local ports

A separate tool for the development of the local port remains the issue of appropriate mechanisms for financing port activity. Directions of spending financial resources can be considered on two levels. In a broader aspect, this concerns the financing of all tasks necessary for the proper functioning of ports. In a narrower sense, it can be limited to financing the functions of port managing authorities. On the other hand, these Polish laws on ports and harbors are defined as (paragraph 7):

1. Port and harbor infrastructure management,
2. Forecasting, programming and planning of port development,
3. Construction, extension, maintenance and modernization of port infrastructure,
4. Acquiring land for port development,
5. Provision of services related to the use of port infrastructure,
6. Ensuring reception and disposal of waste and cargo residues from ships.

Port managing entities shall not finance the infrastructure providing access to the port through which the Act is understood to mean fairways leading to a port or marina and located within the boundaries of a port or marina, including facilities, objects and institutions related to their activities. These facilities are financed from the state budget within the limits provided in the current budget. On the other hand, the responsibility for the construction, extension, modernization and maintenance of infrastructure facilities providing access to the port from the land side, such as roads, railways and waterways etc. rests with entities other than managing ports. This is a typical solution used in European ports and can be treated as one of the forms of public aid for ports. This solution should be considered as the most helpful.

Barriers of development

The most important limitations of the possibility of local ports development include, first of all, the **economic barrier** visible in the lack of funds for financing investments and other developmental goals.

The existing statutory solution that provides entities managing local ports and sea harbors (or directly municipalities) with the possibility of acquiring certain properties, at the same time imposing

certain obligations on those entities requiring significant expenditures, does not create any effective mechanism ensuring the real and regular income. The existing solution does not also guarantee effective acquisition of funds required for the construction, modernization and maintenance of infrastructure providing access to ports and harbors. The burden of constructing, maintaining and modernizing port infrastructure imposed on entities managing these ports and marinas is, in practice. impossible without the state aid.

Regardless of the management model, ports and marinas have very limited possibilities of obtaining funds to cover high investment costs. Tasks and goals included in local port development strategies require the owner to be included in the implementation process. The ports themselves can meet current needs and strategic goals, but they are not able to generate funds to cover even the most urgent needs.

The development of small ports is also affected by the system of tax burdens for entities managing ports and marinas. It depends on their right of ownership, or perpetual usufruct of properties, as well as buildings and structures located within areas of ports and marinas. However, due to the existing actual ownership relations, in many specific cases, these burdens do not constitute a development barrier for existing local ports and marinas within their present area. Cases of development needs limitations for those ports and marinas are becoming more and more frequent due to the problems connected with taking over further properties.

Direct support of entities which could partly implement development strategies by separated port authorities is still limited Nevertheless, port management can create favorable conditions for economic development, attracting investors, acquiring aid funds from the European Union, as well as activate entrepreneurship of port users.

The port infrastructure is the basic element determining the current service capabilities of small ports and marinas and their development potential. Based on the state and development plans of the infrastructure, most development activities of ports are being planned. In general, local ports in Poland have fairly good infrastructure conditions for conducting their basic operations, however, the condition of infrastructure both from the land and the water sides requires urgent improvement. This applies, inter alia, to the condition and density of road connections, as well as railway connections, which until now only allow access to only a few local ports.

The activities of local port authorities and municipalities should focus on seeking funding for improving post accessibility. The activities of municipalities, that do not take into account the proper development of transport infrastructure, will not bring the desired effects, and will additionally limit the possibilities of dynamic development not only for ports, but also for other elements of the economy. With neglected transport infrastructure and difficult access to expressways and transport networks of national and European scope, tendencies of economic marginalization of regions with neglected transport infrastructure are intensifying.

Investments in the development of ports are usually capital-intensive, they are also characterized by a long period of return. Neither maritime offices, nor municipalities have large financial resources. The situation does not seem to change in the near future.

Port managing entities do not finance the infrastructure providing access to the port, through which the Act means port routes leading to a port or marina and located within the boundaries of the port or marina, along with related facilities and hinterland. These facilities are financed from the state budget within the limits provided in the budget act. By virtue of other regulations, entities other than port managing authorities have the responsibility for the construction, extension, modernization and maintenance of infrastructure facilities providing access to the port from the land side, such as roads, railway lines, waterways. This is the situation typical for European ports and can be treated as one of the forms of public aid for ports.

Location barriers arise both from the geographical location of ports and the specificity of the Polish and Lithuanian coasts. The Baltic Sea has a peripheral location in relation to the main shipping routes which limits the development of seaports including some of the local ports. In addition, the cold climate means that passenger traffic and sailing are seasonal and can be practiced from the late Spring to early Autumn.

In the case of Polish and Lithuanian harbors and marinas, the situation is also negatively affected by not too diversified coastline, which does not encourage the development of cabotage, as is the case in Sweden, Finland or Denmark. In addition, in the case of many local ports and marinas located on the open sea, we are dealing with silting of the port entrance. This situation limits the usable depth of the fairways and causes significant dredging costs. The accessibility from the land side is even worse.

The economic environment of local ports does not positively affect their development. They adjoin agricultural areas and the small local industry does not generate needs in the field of maritime transport. This is accompanied by a decrease in catches, and hence a decrease in the number of cutters and fishing boats based in small ports and harbors.

The life rate in Poland and Lithuania is still far from the level of the "old" EU countries. This has a significant impact on the development of yachting and maritime tourism, although in the recent years there has been a strong increase in the number of sailing and motor yachts.

Undoubtedly, an obstacle for the development of Polish ports, also the local ones, resulting largely from the lack of conception and inconsistency of state policy, is the fact that in the management of port managing entities there is an average of 22.5% of areas lying within the administrative port areas. A significant part of them has passed into the hands of private bodies, including natural persons, who often have nothing to do with port operations. It was possible under the Act on privatization of state-owned enterprises, and before the *Act on Sea Ports and Harbours* entered into the force[3]. Unclear and inconsistent state policy in relation to local ports caused that only in the between 1997-2002, on **86 decisions** of the Minister of the Treasury concerning the transfer of the rights of perpetual usufruct of land real estate to private entities (mainly companies, but also natural persons), **83 of those decisions were positive** , of which 21 concerned land located within areas of ports of fundamental importance for the national economy.[4]

[3] Act on Sea Ports and Harbours from 20 December, 1996. Consolidated text
[4] Data of Kołobrzeg Port Authority

The Act on sea ports and Harbours introduced procedures restricting the possibility of transferring ownership of areas lying within the port boundaries. Unfortunately, there are numerous cases, also after 1996, of transferring such areas to entities unrelated to port activities, both in accordance with the provisions of the Act, as well as their omission.

Generally, it could be assumed that the basic legislative Act, which is the **Act on Sea ports and Harbours** regulating the essential legal, organizational and financial issues concerning ports and marinas, does not constitute a significant barrier to their development and does not differ significantly from the solutions applied in the European Union. However, it does not mean that it is flawless solution, especially in relation to local ports and marinas.

First, the Act doctrinally limits the freedom of economic activities of the port managing authorities , in accordance with article 7 of the Act.

Art. 7.1. - The subject of the managing entity's business includes, in particular:

1. Properties and harbor infrastructure management,
2. Forecasting, programming and planning of port development,
3. Construction, extension, maintenance and modernization of port infrastructure,
4. Acquisition of real estates for the development of the port,
5. Provision of services related to the use of port infrastructure,
6. Ensuring access to port reception facilities for ship-generated waste for recovery or disposal.

Art. 7.2. The subject of the enterprise of the managing entity may not be conducting any activity other than the ones referred in paragraph 1, points 1, 5 and 6.

It is unnecessary to limit the freedom of economic activities in the case of the port managing authorities. It reduces the possibilities of looking for additional revenue sources and, as a consequence, the amount of funds for development and modernization.

It is unnecessary to limit the freedom of economic activity of the port managing authorities. It reduces the possibilities of searching for additional sources of revenues and, as a consequence, the amount of funds for development and modernization.

An additional activity of the managing authority could not apply (except of certain situations) to the exploitation areas, which means that the managing entity should not be the owner, or shareholder of companies providing services in the port (transshipment, storage, etc.). The managing entity must also ensure freedom and equal access to the provision of services in the port area. However, there is no reason for the managing entity for not participating in the other forms of economic activities, also in areas not closely related to the sea (e.g. hotel industry), under condition that the obtained profits are entirely devoted to the further development and investments, and comply with the EU directives.

It is worth noting that in EU countries, ports carry out various economic activities and they enter into various financial links, sometimes very distant from their basic functions (for example, the Rotterdam port management is a shareholder of the airport).

Another flawed organizational and legal solution included in the Act on Sea ports and Harbours, concerning only local ports and marinas, is the division of duties resulting from the subject of port's

activities into duties of the director of the relevant maritime office and duties of municipality (in the case of not appointing any specific port managing authority).

Article 25 of the Act states:

1. In the event of not establishing any entity managing a port, or a sea harbor in the mode of art. 23 (1) tasks and rights of the managing entity which are specified in:

   1) Art. 7 par. 1 point 1 and 3 and art. 8 sec. 3, 4a and 4b – are being performed by the director of the relevant maritime office,

   2) Art. 7 paragraph 1 point 2 and points 4-6, art. 8, paragraph 2, points 2 and 4, and paragraph 3, 4a and 4b – are being performed by the municipality.

2. The proceeds from fees charged by the director of the relevant maritime office, or municipality referred to in paragraph 1 constitute, subject to art. 8 par. 4, become income of the state, or municipal budget, respectively,

This means that the director of the maritime office is responsible for: property management and port infrastructure as well as for maintenance, modernization and development of the infrastructure. The municipality, on the other hand, is responsible for: development, forecasting and planning, acquisitions of real estate for the port, provision of port services, access to waste collection facilities and waste disposal.

Opportunities and threats

The above presented elements allow to present general conclusions that can be included in two elements of the SWOT analysis for local ports, incl. opportunities and threats.

Each port has its own specificity, which results in its opportunities and threats. The following analysis is an attempt to compile those features that may be common to all ,or most of the local ports, and become subject to a certain generalization.

Opportunities:

1. Increasing awareness that local ports are the main factor in increasing the attractiveness of coastal communes, which favours the expansion of their offer and the extension of the tourist season.
2. An increase in the level of society's wealth, which increases the demand for sea tourism and yachting.
3. Gradual improvement of infrastructure on the coast.
4. The gradual experience gain by local stakeholders and the growing number of qualified personnel.
5. Progress in solving priority investment tasks of municipalities (sewage treatment, school education, etc.), which, by their very nature, were evaluated as more important than ports.
6. The development of tourism, sailing and passenger traffic as a result of the increase in the standard of living in Poland and the improvement of the port infrastructure.

7. Establishment of conditions for the development of other port functions.
8. The possibility of using EU regional development funds (ERDF) for the development of port infrastructure and access to ports from the sea and land.
9. Development of cluster initiatives.
10. A clear visibility of the major directions of port development in spatial development plans and development strategies of individual port municipalities.
11. Linking investments in road infrastructure and the tourist base of port municipalities with the development of ports.

Threats

1. Weakness of links between local markets with foreign ones via the sea; non-varied shape of the coast,
2. A short planning horizon, determined by the electoral calendar, at all levels of government.
3. Lack of cohesion of the authorities' activities influencing the development of local ports, both on governmental and municipal level.
4. Spatial conflicts resulting from divergent interests in the coastal zone.
5. Ecological fundamentalism, often combined with corruption.
6. Capital limitations
7. Poorly developed port hinterland (mainly agricultural areas, low level of industrial development).
8. Lack of the ideas of some port authorities for the use of ports as important elements of the sustainable regional development (port centers).
9. Too slow rate of parameters improvement in case of port access infrastructure (land side).

The barriers to the development of local ports and harbors discussed above have a diverse character. Some of them can be described as objective, or immutable. A significant part can be changed by easier or more complex legislative actions. Others still require time and patience.

Certainly, at the end, the vast majority of local ports and harbors will be managed by local governments in various ways, but it takes time to create proper conditions which could support municipalities in taking up this task.

1.1.1. Ports of Puck Bay (Hel, Jastarnia, Władysławowo)

Local ports located in the area of the Puck Bay include such ports as: Port of Hel, Port Jastarnia and Port Władysławowo. They are located in the area of North Kashubian Local Fishing Group (PLGR)'s operation (PLGR). PLGR operates in the area covering all communes of the Puck county, i.e. the cities of Hel, Jastarnia, Puck, Władysławowo, municipal-rural commune of Kosakowo, Krokowa, Puck and one municipality from the Wejherowo district - the rural municipality of Wejherowo. This area covers a total of 766 km², which is over 4% of the Pomeranian region. It is located in the northern part of the Pomeranian Voivodeship, and its area is the northernmost point of Poland.

The PLGR area is strongly influenced by the dynamically developing Tricity Metropolitan Area, which, extended over a length of 60 km, concentrates the production activities directly and indirectly related to the sea, sea transport and specialized services related to tourism and fishing, as well as other supra-regional services.

Spatial and ownership structure of port areas[5]

- Port of Hel
  The managing authority of the port of Hel is the Port Authority Zarząd Portu Morskiego HEL KOGA Spółka z o. and vessel traffic is managed by harbour administration subordinate to the Captain of the Port of Hel. The port area is about 14.5 ha. The State Treasury has the largest share in the ownership structure. These properties are put into perpetual usufruct to various entities – for the most part, to KOGA Spółka. z oo with headquarters in Hel, which has an area of about 62% of the land area of the port. The remaining part of the land is put into perpetual usufruct for such entities as: Chłodnie Helskie Sp. z o . o . , WTI Sp.j. , KOGA -MARIS Sp. z o. o
- Port Jastarnia
  The seaport in Jastarnia is the base for the fishing fleet and recreational shipping. The port is managed by the Maritime Office in Gdynia, and the marina and repair facilities are managed by municipal port authority of Jastarnia (the budgetary unit of the municipality).
  The vessel traffic is managed by the harbor administration subordinate to the Captain of the Port of Hel. The port area covers 31.5437 ha, of which more than 50% belongs to the State Treasury. As much as 38.91% of the share in the port property belongs to the municipality, while the remaining areas are Pomorskie Voivodeship and private entities. The structure of the management differs significantly from the ownership structure: the area of almost 16 ha is in use or management of the Maritime Office in Gdynia, which also owns part of the property belonging to the Pomeranian Voivodeship. A part of the real estate owned by the municipality (over 3.6 ha) is in use by the Main Board of National Defence League.
- Port Władysławowo
  The port's owner is the District Office in Puck, and vessels traffic is managed by harbor administration, subordinate to the Harbour Master's Office in Władysławowo. The port in Władysławowo is managed by "Szkuner" sp. z o. o. with headquarter in Władysławowo. It performs port operation functions and manages the port in Władysławowo, and also provides shipbuilding services consisting of the repair of cutters and smaller vessels.

Transport and communication[6]

Accessibility from the land side determines the number and quality of main roads and access both by road and rail to the places of unloading, as well as the quantity and quality of internal roads, maneuvering areas and the number of parking spaces. Road projects implemented in recent years: the A1 motorway (in connection with the existing Tri-City bypass) and the S6 expressway have improved the accessibility of the area. However, it is not as effective in the Summer season, due to

[5] Strategy of Puck Region between 2016-2025, North Kashubian Local Fishing Group , April 2016
[6] Strategy of Puck Region between 2016-2025, North Kashubian Local Fishing Group , April 2016

the increased traffic of tourists going to the peninsula. The following roads are located in the district and its surroundings:[7]

- national No. 6 State Border (PL-DE): Kołbaskowo - Szczecin - Goleniów - Koszalin - Słupsk - Reda – Gdynia - Gdańsk - Łęgowo,
- provincial no. 216 (Reda - Władysławowo - Hel),
- district (with hard surface - 190.4 km, other- 13.8 km),
- municipal (with a hard surface - 206,1 km, other - 89.3 km).

1.1.2. Port of Ustka[8]

The port is located at the mouth of the Słupia River, it is a key element of the transshipment (fishing) and transport infrastructure for passenger transport. The entrance to the port from the sea is limited by two concrete breakwaters with a length of about 320 m, located in the direction of NNW[9], which are the natural estuary of the Słupia River. The inner port extends along this river towards the SSE[10] at the length of approximately 1100 m, to the railway bridge, which limits its further extension.

About 42% of the port area is owned by the Maritime Office. Another significant owner of the port areas is Euro- Industry Sp. z oo, which, having at its disposal shipyard areas and a plot of land built with a former elevator building (owned by El-Port Sp. z o. o.), covers approximately 21% of the total land surface of the port. PPPiH company Korab SA[11] holds a land lease for another 19% of the port area. The Port of Ustka is located in the area of the Słowińska Grupa Rybacka (SGR – Słowińska Fishing Group). Słowińska Grupa Rybacka covers the north-western part of the Pomeranian Voivodship. This region, due to its central location on the Baltic Sea and specific environmental values, plays an important role in shaping natural and economic processes, including those related to maritime affairs and the fishing sector. It consists of six municipalities. The LGD area is located 130 km from Gdańsk and 220 km from Szczecin. The northern boundary is the coastline of the Baltic Sea.

Infrastructure in port of Ustka requires modernization and improvement. There is a lack of cooled component surfaces, ice generators, facilities for storing fishing equipment and toilets. In addition, the ports are not adapted to receive large vessels, which limits the development of fishing, foreign trade, tourism and recreation.

Moreover, in the recent years, mainly thanks to funds from the European Regional Development Fund (ERDF), the state of the western port in Ustka has been improved. In 2015 investment works were completed with a value of 16 055 887 PLN including the construction of the basin and new access roads. Equipment for cleaning, inspection boats, monitoring and lighting was also purchased.

In 2018 the port was granted EU co-financing in the amount of 190 million PLN. This amount will be used for a thorough reconstruction of the port. The plans assume the construction of a new west

[7] Data for 2014
[8] Based on data of Port of Ustka and Local Development Strategy 2014-2020 by Słowińska Grupa Rybacka, 2016.
[9] NNW – North north west
[10] SSE – South south east
[11] PPPiH – Przedsiębiorstwo Połowów, Przetwórstwa i Handlu (Fishing and fish processing company)

breakwater with a length of 800 meters. The facility will be built almost 300 meters west of the current west breakwater. The new breakwater will also be built on the eastern side of the port at the site of the existing building.

There will also be a new loading berth with a length of 230 meters, a spur with a length of 85 meters and a mooring wharf with a length of 250 meters connecting the new breakwater with the old one. Under the expansion of the port, which is to end in 2023, units of up to 200 meters will be able to enter the port. [12] This is to make the Ustka port the dominant fishing and commercial port on the central coast.

1.1.3. Port of Darłowo[13]

Sea Port Darłowo is a commercial and fishing port located at the mouth of the Wieprza River. It is a port covering almost a three-kilometer stretch of Wieprza, entering here into the sea. It lies about 25 NM[14] west of the Ustka port and 33 NM east of the port of Kołobrzeg. It is an open port of the Baltic Sea.

The Darłowo port is listed as a sea border crossing with unlimited personal and freight traffic. To a limited extent it performs all typical economic functions consisting of:

- reloading goods in domestic and foreign trade,
- purchase, storage, processing and sale of sea fish,
- performing repairs, maintenance of hulls and marine engines,
- provision of services for vessels staging with full service support at scheduled stops,
- receiving and providing services for sport and recreational boats.

Between 2008 and 2018 the volume of transshipments in the Darłowo port showed fluctuations, with clearly noticeable strong growing tendency. The smallest transshipment turnover was recorded in 2008, i.e. 3.0 thousand tonnes. Then, transshipments in the port began to grow rapidly, reaching in 2012 the amount of 157.2 thousand tonnes, which was nearly a sixty increase compared to the base year. In the next two years, they dropped slightly, then rise sharply in 2015 to 344.0 thousand tonnes, reaching the highest value in the period considered. Reloadings in 2016 and 2017 were smaller, however they fluctuated around 100,000 tonnes.

Tab. 2. The size and dynamics of trade cargo handling at the Darłowo seaport between 2008-2017

Specification	Years									
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Thousand tonnes	3,0	23,8	44,0	71,3	177,2	107,0	113,1	344,0	90,8	107,4
Dynamics (2008=100)	100,0	793,3	1466,7	2376,7	5906,7	3566,7	3777,0	11466,7	3026,6	3580,0

Source: Zieziula J., *Identyfikacja czynników determinujących wielkość obrotów przeładunkowych w małych portach morskich na przykładzie Portu Darłowo,* University of Szczecin and Main Statistical Office data.

[12] „Głos Pomorza" gp24.pl webpage – access on 16.05.2019r.
[13] Based on: Zieziula J., *Identyfikacja czynników determinujących wielkość obrotów przeładunkowych w małych portach morskich na przykładzie Portu Darłowo,* University of Szczecin and Port of Darłowo Development Strategy from 2007.
[14] Nautical Mile

Between 2010-2018, 1.305 million tons of goods were handled at the port of Darłowo. Imported cargo amounted to 866.6 thousand tonnes, i.e. 66.4% of total transshipments. On the other hand, exports amounted to 438.3 thousand tonnes, which accounted for less than 34% of the total turnover. The generic structure of transshipments was not diversified. Construction aggregates dominated in the reloading turnover. The aforementioned group of cargo showed significant fluctuations. In 2008-2009 no reloading of aggregates and stones was carried out at all. Then, reloading in 2010-2012 increased, then decreased in the next two years. In 2015, the port handled a record number of aggregates on 272.2 thousand tonnes level.

A significant increase in the volume of transshipments that took place in the Darłowo port after 2008 resulted from many reasons. One of the most important was the start of transhipment operations by port operators. Before the year 2009, the commercial operation of the port was of an ad hoc nature. For the time of reloading of cargo, reloading companies leased port areas from the Port Maritime Authority (ZPM). After the contract was completed, they ceased operations. Transhipments in the port were irregular and with temporal presence of port operators. The situation began to change since 2009, when the first port operator - Morska Agencja Gdynia Sp. z o. o. started its ongoing operations in the area of transhipment, storage and transport. It was a breakthrough moment, since the transhipments in the port began to systematically grow.

The second port operator Agro Trade Sp. z o. o. started his operations in 2013. It specialized mainly in the calcium and fertilizers cargo, which were then supplied to local farmers. Thanks to the port operator, the trans-shipment of these cargo groups stabilized at a fairly high level.

The third port operator, as mentioned before, was AgroPort, a family-owned local enterprise associated with the agricultural sector. The company commenced operations in 2013. It provided transhipment and transport services With AgroPort's establishment, the increase in transhipment of agricultural goods and timber could be visible, despite the decline in the overall cargo turnover which took place in 2013-2014. The port operator acted in both stabilizing the transhipment market and preventing a deeper decline in port turnover. AgroPort company and Lech-Pol, associated with its operations, in 2015 significantly contributed to the largest transhipments in the history of the port. This was mainly due to the reloading of aggregates at the level of about 200 thousand tonnes[15].

The next factor influencing the volume of trans-shipment turnover was the economic activity of entities operating at the port hinterland. The most important group of cargo - aggregates was used for road and sea investments. The intensity of their implementation was characterized by high volatility. Hence, the turnover of the discussed group of cargoes showed the largest fluctuations. The ending road investments, largely financed from EU funds from the financial perspective 2007-2013, have reduced the demand for building materials. Therefore, in the years 2013-2014 there was a visible regression of transshipments of aggregates. However, the great investment of the Maritime Office in Słupsk, i.e. the protection of sea coasts from Jarosławiec to Rowy, contributed to a significant increase in transshipments in the port in 2015.

[15] Zieziula, J., & Nowaczyk, P. (2017). Identyfikacja czynników determinujących działalność przeładunkową w małych portach morskich na przykładzie portu Darłowo. Problemy Transportu i Logistyki, (1 (37)), 335-346

The factor affecting the volume of transshipments in the Darłowo port was enhanced infrastructure, enabling access to the port from the land side. In 2012-2015, a number of road projects were implemented to facilitate access to the port. In 2012, a modernized section of the regional road from Koszalin to Darłowo was put into use, and in 2014 a new bridge over the Wieprza river was built, connecting two parts of the port. In 2015, a beltway was built to allow access to the commercial port, bypassing the city. The aforementioned investments, apart from relieving road traffic in the city center (in the case of the beltway), were aimed at increasing the road capacity for cargo transported by road transport and shortening the time of travel to the port. Thus, they have contributed to reducing the cost of transporting cargo.

Despite the large investment needs, the infrastructure of the commercial part of the port has not been renewed. The reason for the slower modernization and construction of new quays was high investment costs. Entities responsible for their maintenance - ZPM Darłowo and the municipal commune were not able to generate funds for investments amounting to several dozen million PLN. Unfortunately, funds for the modernization of the reloading infrastructure of small seaports were not provided for by EU. In addition, commercial units could not use the renewed quays for fishing activities, although they were not fully used by fishermen. This was not partly allowed by the technical parameters of the infrastructure, but above all, the conditions under which EU funds were obtained. The current transshipment potential of the Darłowo port is not fully used. After the implementation of a number of investments, the transshipment turnover could increase to 1 million tonnes, or even exceed it.

Port operators have made a significant contribution to the commercial development of the port of Darłowo. In the future, they will continue to be a strong link in the reloading activity. AgroPort has in its plan the exploitation of raw materials used as building materials from the waters of the Baltic Sea. In turn, the purchase of port areas currently leased by Agro Trade would certainly have an impact on the increase in the amount of lime and artificial fertilizers, i.e. goods on the market, which the company specializes in.

1.1.4. Port of Kołobrzeg

The port areas are located on both banks of the Parsęta river: on the right side there is a passenger harbor including the Passenger and Pilot Quays and the Commercial Port where transshipment takes place at the following wharfs: Węglowy, Zbożowy, Słupski and Koszaliński. On the Solna Island there is a Yacht Port, which includes waterfronts: Szkutnicze, Pirs, Turystyczne, Jachtowe, Manewrowe, Szkolne, Żeglarskie and Basen Łodziowy. On the left bank of the river, there is a fishing port and a war port.

Commercial Port is located at Portowa steet, and the company owns wharfs with a total length of 668 m. The size of commercial units that can be served by the Port of Kołobrzeg is 100 meters long and a draft of up to 4.7 meters. The total area of storage areas is approx. 50,000 m^2, warehouse area approx. 5 thousand m^2, office space approx. 2 thousand $m^2$and the capacity of two grain elevators, approx. 6,000 tonnes. The commercial port has full infrastructure, i.e. high-voltage power grids, water intake points, lighting and railway sidings. Within the port, headquarters of Customs Office, National Border Sanitary Inspector and Border Guard are located. The commercial port is an

important element of the transport system on transport routes leading between northern and southern Europe, and geographical conditions and infrastructural potential have created a solid foundation for prospering for many branches of the economy.

Solna Marina is located at Warzelnicza Street and is annually visited by over a thousand yachts from around the world. Also, the number of residents constantly remains at the maximum level. The marina has full infrastructure for yachts, each site has its own water and electricity connections, and the yacht service operates in the hall located in the marina. Guests have access to bathrooms in the marina, to laundry room with a drying room and many green areas, all protected and monitored. In the club building, the company has commercial premises, office premises, an area for catering and a conference room. The marina houses the historic Reduta Morast, in which a tavern is run in the Summer season and concerts are being organized. The Solna Island, where the marina is located, is a place that in the Summer is filled with sailors from around the world as well as tourists visiting Kołobrzeg. Marina is growing every year, new investments are being made to increase the number of parking spaces and improve the infrastructure.

Fishing Port is located on Szyprów Street with places for fishing boats and recreational fishing boats. Kołobrzeg Sea Port Authority.Sp. z o. o. also supervises areas for storage, commercial and office purposes. There are permanent commercial premises, restaurant rooms with catering facilities, office space with a conference room, social-office rooms, warehouses and open space. Over 200 entrepreneurs from various branches of the economy operate on managed real estate. Within the premises of the Fishing Port there are e.g. generally available car parks for passenger cars and trucks, transshipment, maneuvering and storage squares, which can be used to set up a warehouse or workshops. The infrastructure of the port includes a stationary crane for lifting vessels, energy-saving lighting, high power supply with its own energy source and a monitoring system.

Passenger Port is located at Towarowa Street in one of the most attractive tourist places in Kołobrzeg. Kołobrzeg Sea Port Authority.Sp. z o. o. has approximately 100 m^2 of office space here, approx. 5 000 m^2 of space for commercial and catering services and 210 m^2 of wharf. The passenger port permanently moors and supports cruises of 6 passenger ships, including one on the international route Kołobrzeg - Bornholm. Annually these vessels serve a total of approx. 250 thousand passengers. The company also supervises a breakwater constituting a generally accessible walking route for tourists. It is the furthest outcropping lookout overlooking the sea in Kołobrzeg and is used by over half a million people annually. In the part of the passenger port there is a local market where entrepreneurs offer their products. An undoubted advantage of this area is the location in the heart of the port district in the immediate vicinity of the lighthouse, beach, restaurants and shopping outlets. There are many business entities operating all year round and many shows, festivals and events take place in the summer season.

Administrative borders of the Port of Kołobrzeg cover 58.52 ha and connect with urban and SPA areas. Kołobrzeg Sea Port Authority.Sp. z o. o. administers port areas with an area of over 19 ha and quays with a total length of 2,164.25 m. Other areas included in the administrative borders of the Port of Kołobrzeg are in the administration of the Maritime Office, Treasury, Ministry of National Defense, Maritime Rescue Station, Maritime University of Szczecin, Maszoperia Kołobrzeska,

Municipality of Kołobrzeg, The Polish Scouting and Guiding Association, Super Fish and natural persons.

Kołobrzeg is part of the Fisheries Local Action Group "Morze and Parsęta" and is the central village covered by the Local Development Strategy (LDS) [16]. Due to location of the large fishing port in the city, as well as function of the tourist and health resort, there are factories in Kołobrzeg that employ residents from neighboring municipalities. Kolobrzeg is therefore the local economic center activating the whole area.

The fishing sector is well developed in the LDS area. It ranks among the national leaders in terms of the most important indicators, such as the number of employees in the sector, landings, the number of registered entrepreneurs, fishing vessels or the number of processing plants. This high performance is mainly due to the activity of the Port of Kołobrzeg[17]

The size of the cargo handling is primarily determined by the port in Kołobrzeg. It is one of the ports authorized to carry out handling of pelagic fish intended for non-consumption purposes. The port of Kołobrzeg has a 99.8% share in the volume of fish landings carried out in the area by SRLGD "Morze i Parsęta".[18]

1.1.5. Port of Sventoji-Butinge (Baltic Sea)

Šventoji-Būtingė are seaports located in the northern part of the Lithuanian coast, next to the border with Latvia. Despite the fact that Sventoji and Butinge are located in the neighborhood, Šventoji as a seaside resort and Būtingė as a terminal for oil and oil products, have a completely different history, current functions and future perspectives.

In 1679, Jan III Sobieski, King of the Polish-Lithuanian Commonwealth granted Scottish merchants the privilege to build a port for large merchant ships at the mouth of the Šventoji River. However, the catastrophic model of long sediment drift has ruined all hopes for the development of Šventoji port. In 1938, President Antanas Smetona from Lithuania granted Šventoji the function of a resort. Today Šventoji (population of 1.5 thousand) belongs to the Palanga municipality. It runs the aforementioned marina at the mouth of the Šventoji River, which was taken out of operation immediately after its reconstruction and inauguration in June 2011 as a result of the settlement disaster. Currently, it is navigable only for small fishing boats, meeting the needs of several retired fishermen.

The Būtingė oil terminal is an oil terminal located directly to the north of Šventoji , near Būtingė , a mile south of the border with Latvia. It is owned by ORLEN Lietuva , a subsidiary of PKN ORLEN, which is one of the major Polish oil refineries and gasoline sellers. The Municipality of Būtingė (founded in

[16] Lokalna Strategia Rozwoju, Stowarzyszenie Rybacka Lokalna Grupa Działania „Morz i Parsęta", Kołobrzeg 2015. Local Development Strategy covers municipality of Kołobrzeg, Gościno, Ustronie Morskie, Rymań, Siemyśl.

[17] Nowaczyk, P. (2016). Próba określenia znaczenia portu morskiego w Kołobrzegu dla lokalnego rynku pracy. Studia Ekonomiczne, 286, 107-119.

[18] Lokalna Strategia Rozwoju, Stowarzyszenie Rybacka Lokalna Grupa Działania „Morz i Parsęta", Kołobrzeg 2015. Local Development Strategy covers municipality of Kołobrzeg, Gościno, Ustronie Morskie, Rymań, Siemyśl.

1507) is located on the former Ford on the River Šventoji which for centuries was the border between Kurland and Lithuania.

The entire Būtingė oil terminal complex consists of an oil pipeline that connects the facility to the Mažeikiai Refinery inland, terminal equipment on land and reservoirs in Būtingė, an offshore pipeline and a single combat mooring which is located 7 km from the shore. The Būtingė oil terminal has been in operation since July 1999. The facilities can hold up to 14 million tons of oil for export, and imported oil in the range of 6 to 8 million tons. The current volumes of crude oil transport at the Būtingė oil terminal are shown in Table 7.

Tab. 1. Oil handling at the Būtingė oil terminal

Port	Harbor size (thousand tonnes)		Annual change in %	Annual change in tho.ton.
	2015	2016		
Būtingė oil terminal	8678,7	9315,6	7,3	637,0

Source: Port of Klaipeda Authority

During the construction of the facility, an environmental monitoring program was implemented, including studies of marine waters and groundwater. With the commencement of terminal operations, an extensive environmental monitoring program was launched. This includes IT leak detection system. Since 2015, the marine environment monitoring program of the Būtingė oil terminal has been carried out by the The Marine Research Institute of Klaipėda University using the research vessel Mintis , specially built for this purpose in 2014.

1.1.6. Port of Nida (Curonian Lagoon)

The marina in Nida (or the port of Nida) is a marina for sailors and fishing boats in Nida, the largest settlement and administrative center of the coastal resort of Neringa. It is located on the side of the Curonian Lagoon, mainly used by yachts, motor boats and fast ferries connecting Nida and Klaipeda. There are 10 small fishing vessels at the port, which are used for fishing on the Curonian Lagoon. In 1991, a second pier was added to create a separate dock for recreational boats. Since 1999, the marina has been granted the status of an international inland port, which was aimed at facilitating cross-border navigation on the Curonian Lagoon between Lithuania and the Russian Federation. Thanks to customs offices and immigration offices, the marina in Nida can accept international visitors.

Currently, the marina has two basins surrounded by piers for mooring - one for fishing vessels, the other for recreational boats. The recreational port has a width of 25 m and a depth of 3 m. The depth of the basins for fishing boats is from 2.8 to 3 m, but in some places it drops to 1 m. The marina can hold a total of 40 to 60 yachts. In 2015, the port in Nida was visited by 1750 ships, but only 5% of the yachts were under the foreign flag.

The total annual number of ships decreased in 2016 to approx. 400 due to works related to dredging and modernization works in the marina in the Summer season. Meanwhile, the number of passengers arriving at the port by fast ferries from Klaipeda increased from 14,000 in 2015 to 15,500 in 2016. Each year, the Nida marina serves as the main node of two important international sailing

events: Regatta of the Curonian Lagoon (each August from 1954) .) and Autumn Regattas (end of September - beginning of October).

1.1.7. Port of Minija (Curonian Lagoon)

The delta of the Nemunas River is one of the most unique landscapes of the east coast of the Baltic Sea due to its environmental value as well as its natural and cultural heritage. The village of Minija is located in the youngest part of the Nemunas delta. It is actually located in the delta of the Minija river, which in historical times merged with the Nemunas' delegation. It is a unique place of Lithuania (often called the "Lithuanian Venice"), because it is located on both banks of the Minija River and the river serves as a village street, and any communication in the village takes place by boat. The history of the village is the result of traditional interactions between local residents and the environmental conditions of their residence in connection with the agreed efforts of the state to recover and transform the margins of the Curonian Lagoon in the years 1700-1980.

After the collapse of the Soviet Union with centrally planned agriculture, fishing and aquaculture, only one farm with a license for commercial fishing. remained in the village of Minija. Several households also dealt with trade in agriculture and provision of services for recreational boats. The economic activity of other permanent households has decreased to growing and poaching. However, in recent decades the situation has changed dramatically due to access to Lithuania by the EU. Despite the fact that only about 50 permanent residents live there, over 10 inhabitants currently provide services in the field of tourism, fishing and recreation.

The village of Minija has better conditions for water tourism and waterways than any other village in the Nemun delta . The waterway from Nida to Minija via the Curonian Lagoon and the River Armata has a safe depth of up to 2.8 meters. In addition, there are no power lines and bridges over the water along the entire fairway from Nida to Minija via the Atmata river. This makes the mouth of the Minija river suitable for relatively large yachts. The village boasts a very special heritage and an "exotic" place for tourists. The traditional planning structure of the village and some buildings remain intact from the Soviet reconstruction. The Minija river is free of ice since the beginning of Spring, making it more attractive for recreational fishing and early sailing as compared to other small ports of the Curonian Lagoon.

Conclusions

There are 26 small seaports and over 40 marinas on the Polish coast. Kołobrzeg, Darłowo, Ustka, Władysławowo, Jastarnia and Hel have the greatest potential and the biggest impact on the port surroundings. There are 3 local ports on the Lithuanian coast, which are important for regional economies, and these are the Sventoji-Butinge, Nida and Minija. The report only described local ports of significant importance for regional development, i.e. those mentioned above.

Local ports should become development centers in their region with a strong economic impact. Achieving such an effect requires, above all, support from the local, regional, and central administration as well as from the European Union. Small ports and their strategies should be included in all documents constituting studies at the regional and national level.

Local ports and marinas must have a chance to take advantage of the seaside location. They fulfill many key functions for the region, which are, among others, providing access to a given section of the shore from the sea for cargoes and passengers, handling coastal and sea fishing, operating sport boats and various activities in the field of marine tourism and recreation or providing conditions for implementation manufacturing activity related to the above-mentioned functions.

The development of local ports is limited by many barriers. The main one is the economic barrier that is evident in the lack of funds for financing investments and other developmental goals. The development of small ports is also not conducive, especially in Poland, to the system of tax burdens for entities managing ports and harbors, depending on their ownership or use of real estates, buildings and structures located within ports and marinas.

Other barriers include location barriers. The Baltic Sea has a peripheral location in relation to the main shipping routes, which limits the development of seaports, including some of the local ports. In addition, the climate causes that passenger transport is seasonal. In addition, the discussed local ports are surrounded by agricultural areas, which is also not conducive to development. This is accompanied by a decrease in catches, and hence a decrease in the number of cutters and fishing boats based in small ports.

In Poland, the development of local ports is also not supported by the maritime policy of the state, which instead mainly focuses on ports of primary importance for the country's economy, such as Gdańsk, Gdynia and Szczecin-Świnoujście.

1.2. Potential of local port infrastructure and their functions

In the recent years, there have been some symptoms of the recovery of small ports. Thanks to the EU funds, for which local self-governments are more and more confident, as well as the involvement of their own funds, the small port's sailing infrastructure is expanding and improving. This should gradually lead to the idea of launching regular navigation along the E60 route.

1.2.1. Ports of Puck Bay (Hel, Jastarnia, Władysławowo)

It is an important group of ports and marinas. This region is particularly important for tourism activities (sailing, water sports, cycling, etc.), and the ports are also the places where the fishing fleet is located. The geographic location of the ports and related accessibility problems from the land side are particularly crucial in this case.

In addition, it can be pointed out that, put together, these ports have similar potential in terms of the length of wharves and areas, as a single national seaport of primary importance. An important aspect of port infrastructure analysis, apart from the quantitative aspect, is also its quality understood as parameters and equipment appearing there (usable quality), as well as the current technical condition of the structure (technical quality).

Tab. 3. Basic parameters of the port infrastructure of selected ports and marinas of the Puck Bay

No.	Port	Harbor length of the wharf (m)	Land area of the port (ha)	Water surface of the port (ha)	Depth (m)
1	Władysławowo	2371,5	75,559	11,4374	4,0-6,0
2	Hel	1934	8,9625	9,5524	4,0-7,0

3	Jastarnia	658,1	28,116	10,71	3,8-5,0

Source: Puck Region Development Strategy 2016-2025, Stowarzyszenie Północno kaszubska Lokalna Gruba Rybacka, April 2016

Another of the discussed elements is access to the infrastructure from the sea to ports and marinas. The basic elements and devices included in this infrastructure are: approach tracks, fixed breakwaters and floating navigation signs. Relevant maritime offices are responsible for maintaining the access infrastructure parameters.

Tab. 4. Infrastructure providing access to selected small ports and marinas of the Puck Bay.

No.	Port	Approach track			Breakwaters (m)	Permanent navigation signs (pcs)	Floating navigation signs (pcs)
		length	width	depth			
1	Władysławowo	700	60	7	829,8	5	2
2	Hel	370	60	7	795	2	1
3	Jastarnia	980	50	5	172	6	7

Source: Puck Region Development Strategy 2016-2025, Stowarzyszenie Północno kaszubska Lokalna Gruba Rybacka, April 2016

Port of Hel

The primal fishing port with the possibility of servicing small commercial vessels in recent years has significantly reduced its fishing activity and turned into a seasonal passenger port. During the renovation, a new pier was built and in 2006, a tourist information point, located in the portwas opened, which thanks to its unusual building's structure became the characteristic point of the city.

A part of the processing facilities in the central part of the port is owned by the fish processing company "Koga - Maris". In the center of the port there is also the fish market and the refrigeration activity is carried out by the company Chłodnie Helskie.

Within the administrative boundaries of the port there is also an area used by the city on which the sealarium and gastronomic facilities were built. As a result of these activities, the port lost the possibility of using freight rail transport and is connected to the hinterland only by land. Most areas of the port outside the waterfront have been privatized. In areas previously used for storing or processing fish, investments related to tourism and housing are currently being planned.[19].

Hel can be reached by voivodeship road no 16 Reda–Władysławowo–Hel which in Reda is connected with national road Gdańsk– Szczecin (no 6). It is the only road connecting Hel with the rest of the country, and because of the tourist attractiveness of the peninsula, the congestion is an crucial problem in the season. The railway connection is a single-track route from Reda to Hel, connected in Reda with the electrified line of the Rapid Urban Railway connection Gdańsk-Wejherowo. On the Reda- Hel route there are several trains (rail buses) per day.

The port entrance is situated from the Bay of Puck and protected by two external breakwaters: West, 615 m long and South, 180 m long. The port consists of three basins (Inner, Yacht and Outer) and may take units with a draft of up to 5.5 m (depth in the port is 4 to 8 m).

[19] Port of Hel development plans. Zarząd Portu Morskiego Hel KOGA Sp. z o.o. (10.03.2009)

The harbor has 3 quays with three basic functions[20:].

- unloading, with a length of 240m
- equipment, with a length of 146m,
- renovation works, with a length of 128 m.

and 3 piers for mooring from both sides: Rybackie, 100 m long, Kaszubski, 92 m long and Wewnętrzny, 135 m long.

The main part of the port is the Inner Basin, where fishing boats and cutters moor at the waterfront renovated in 2004. The Yacht Basin is separated from the fishing part by the Fisherman's Pier and protected from waving with a new pier built from the south. In the Yacht Basin there are 35 parking spaces for sports units at floating piers. On the other side of the jetty, in the Outer Basin, larger units can be moored due to significant waving. passenger ships and larger cutters. Passenger ships, mainly water trams, moor by the western breakwater.

In the port there are electricity and water consumption points, a tank for receiving oily waters, a crane with a lifting capacity of up to 5 tons for lifting vessels and a video monitoring system. In addition, in the port there is a marina with sanitary facilities for yachts, Border Guard facility, Harbour Administration and Sea Fisheries Inspectorate.

[20] http://www.porthel.home.pl/onas.html

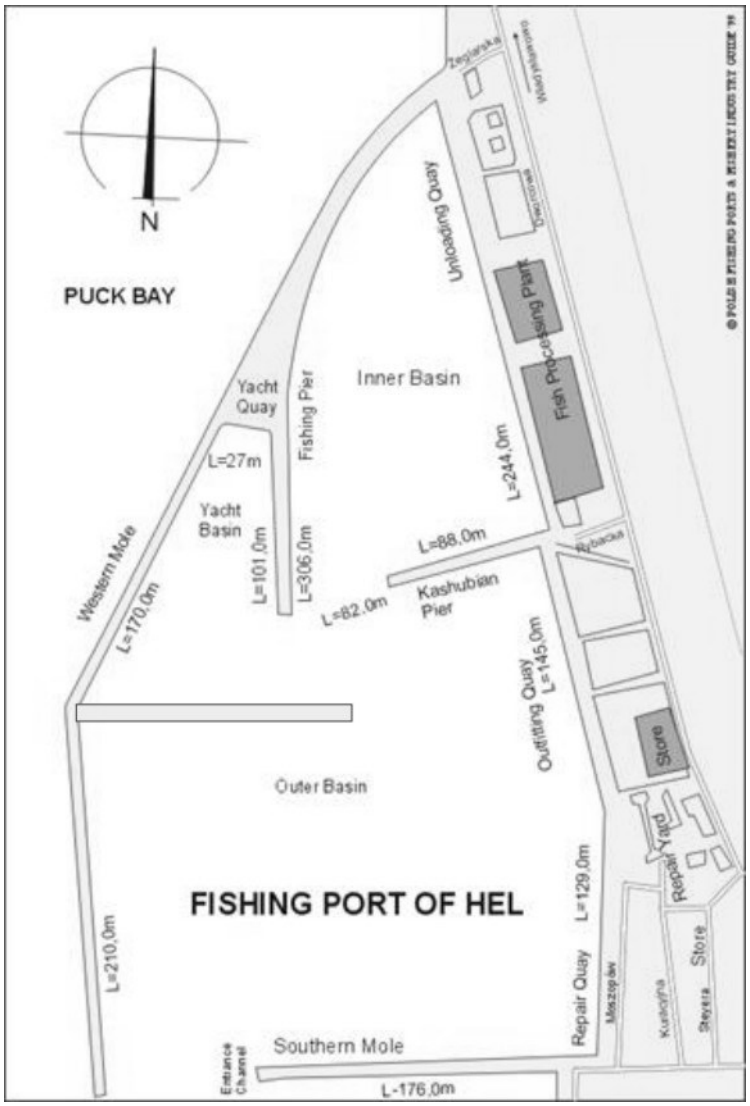

Fig. 3. Port of Hel
Source: www.maritime.com.pl/port

Port of Jastarnia[21]

The seaport in Jastarnia fulfils the following functions: fishing, passenger, tourist and sailing training. The port has been modernized and has a 130 m floating pier for fishing vessels, a self-propelled gantry (so-called travelift 65 t.) with piers for the gantry and a ramp with a ramp and a crane with a capacity of 6.3 t. There are also three buildings: administration-social building, workshop building and waste collection building. In addition, there are stands for renovation and wintering of vessels, washing the hulls, reception of oily waters and sewage from cutters, parking and internal roads. The Nabodnie and Łodziowe quays and mooring jetty are modernized. The port basin itself is separated from the Puck Bay with two breakwaters: West (200 m long) and East (80 m long). The depth of the

[21] Puck Region Development Strategy 2016-2025, Stowarzyszenie Północno kaszubska Lokalna Gruba Rybacka, April 2016

port basin is 2.0 to 5 m. The eastern harbor wharf, used by tourist and fishing units, is 310 m long while west (fishing) is 300 m. In the harbor basin, apart from the floating pier there are floating mooring jetties for yachts along with social and renovation facilities. Access from the water side to the port in Jastarnia takes place at an approach track (980 m) with a depth of 5 m. Due to the bay location of the track and the relatively stable water level, there is no problem with maintaining the fairway parameters to the port.

The voivodeship road (No. 216) in the relation Reda-Władysławowo- Hel runs to the port of Jastarnia, just like on Hel. The railway connection is a single-track route from Reda- Hel, connected in Reda with the electrified line of Szybka Koleje Miejskiej Gdańsk- Wejherowo.

Fig. 4. Port of Jastarnia
Source: OpenStreetMap

Port of Władysławowo

The port consists of two basins - an entrance basin and a larger sheltered internal basin. It was built as a fishing port and is mainly adapted to serving fishing boats. It also performs transport and transhipment functions of goods other than fish. It can accept small commercial units and acts as border crossing. It has storage yards and a self-propelled crane with a lifting capacity of 18 tons. It allows the use of diving and tow services. On the eastern side of the port (within its borders) there is

gas Energobaltic Heat and Power Plant. However, the port's potential in this respect are not yet fully utilized.

Since 1994, the port has been open to tourists who can go on a cruise on a fishing boat or on various types of units from fast motorboats to Viking boats. The port has become a place especially frequented by anglers who catch fish from the decks of fifteen units specializing in sea fishing. Thanks to the modernization carried out, it has a wharf adapted to service yachts and passenger units.

The fishing base and the place of mooring fishing boats are located at piers 1, 2, 3 and occupy a part of the passenger jetty and the landing berth. The Unloading Quay is used for unloading fish directly on trucks as well as for processing.

The place of the yacht's berth is the yacht wharf in the western part of the port. In the vicinity there is a slipway for yachts with a length of up to 12 m. On the northern quayside, cruise units moor in the summer season.

Two provincial roads lead to Władysławowo:

- the coastal route between Sławoszyno – Karwia – Jastrzębia Góra-Władysławowo (No. 215),
- route from Reda-Władysławowo-Hel (no. 216), which in Reda connects with the national road Gdańsk – Szczecin (No. 6).

The port is protected by two breakwaters: eastern 340 m long and northern 620 m long. They form two basins: Entrance and much larger Inner. The main and internal entrances have a width of around 60 m. Permissible immersion of entrances may not exceed 4 m. The depth of 5 m on the approach track is artificially maintained and changes after each storm, and the depths in the port range from 4 to 6 m. Port requires continuous dredging work.

The Inner Pier has the task of separating the inner part of the port and protecting it from waving. In the eastern part of the basin, the Passenger Ship is separated from the passenger pier.

In the years 1986-1996 the port was thoroughly renovated and modernized. It has a 340 m long transhipment wharf where commercial vessels up to 70 m long and 4 m immersion can be served. The fishing port in Władysławowo has a safety certificate issued by the Maritime Office in Gdynia, which means that it meets the requirements of the Solas Convention and the ISPS Code.

The port has the following quays and piers:

- Postojowe Wschodnie wharf 185 m
- Stoczniowe wharf 105 m
- Repair platform 52 m
- Slip platform 106,5 m
- Pasażerskie pier 135 m
- Wyładunkowe wharf 340 m
- Paliwowe wharf 120 m
- Jachtowe wharf 90 m
- Duńskie pier 185 m
- Robocze wharf 61 m
- Postojowe Połnocne wharf 150 + 250 m
- jetty 1 - 101 m
- jetty 2 - 101 m
- jetty 3 - 86 m

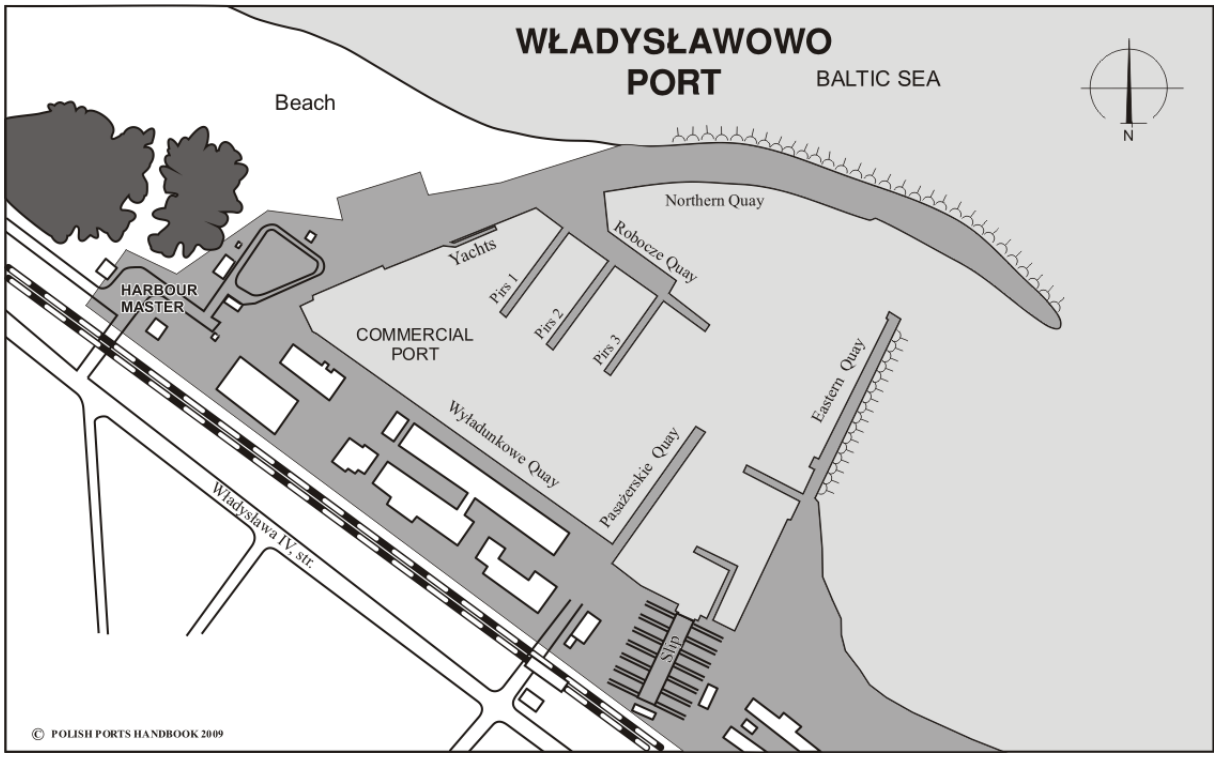

Fig. 5. Port of Władysławowo
Source: Polish Ports handbook, www.maritime.com.pl

The repair shipyard carries out repairs and overhauls of cutters and other smaller vessels. It uses the shipyard wharf and slipways. There is also lift for units up to 30 m long and a load capacity of up to 220 tons.

The port in Władysławowo has also tourist and recreational functions. In 2002, the first stage of the construction of the marina was put into operation: floating piers and sanitary facilities for sailors. The whole creates a small yacht port for 20 units.

1.2.2. Port of Ustka

Ustka occupies a leading position in the country in terms of the number of fishing vessels (including cutters) for which the Ustka seaport is home. The Ustka port is also high in the list of fish unloading sizes. In the case of the Ustka seaport, the port's authority carries out activities related to the preparation of a technical concept for the construction of a railway siding communicating existing railway infrastructure in the Ustka port with the new western breakwater of the designed by the Maritime Office in Słupsk. The investment plan planned by the Seaport Authority in Ustka, in consultation with the Ustka City Office, involves the design and construction of a road and rail system. It should be pointed out that for Ustka Port, the most important infrastructure components conditioning access from the land: high-quality railway lines 202 and 405, as well as road DK21.[22]

[22] Seaports development programme until 2020 (with 2030 perspective), Ministry of Maritime Economy and Inland Navigation, Warsaw 2018

This port has significant potential resulting from service of the Słupsk agglomeration. Ensuring good access from the land side to the above ports should be treated as one of the key conditions for their proper functioning and further development. On the other hand, these are important links of the country's transport system, for which integration with the entire transport network must be ensured.
The port of Ustka is the boundary limited by a circular line with a radius of 1.5 NM, derived from the position of the entrance (red) lighthouse of the eastern breakwater. The entrance width is 40.5 m and the depth is 6.0 m. Periodically, the depth may be lower as a result of sanding. Outportt consists of two breakwaters with the following lengths: east - 303 m and west - 420 m. The entrance from the outport to the port channel has a width of 28 m and a depth of 5.5 m.
The port is able to accommodate vessels with a draft of up to 4.5 m. Due to the necessity of vessels rotating in the port channel, the length of the ship may not exceed 58 m and width 11.5 m. This width should be considered as the maximum for Ustka, however, it is necessary to note that it does not meet the conditions of safe entry in the bad weather conditions. It is possible to enter the port of ships with a larger width, but only in good weather conditions. Permissible length of the ship results from the length of available mooring places and the possibility of manoeuvring the ship in the port, and to some extent also from the width of the port entrance. According to these assumptions, the maximum width of the ship should not exceed 8.2 m due to the entry to the port and 9.3 m (and 11.2 m maximum) due to the width of the entrance from the riverboat to the outport.

The storage facilities at the Władysławowskie Quay have a total of 3,000 square meters. The wharf is located in the immediate vicinity of the national road No. 21 Słupsk - Ustka, which connects to the national road S6 - Szczecin - ricity and the road to 11 Słupsk-Poznań. There is a railway siding (railway station Ustka) 500 meters away.
In the Ustka seaport there are designated port quays where recreational and sports units can moor:

1. Słupskie Wharf, 120 meters long (east side Port Boulevard),
2. Kołobrzeskie Wharf with a length of 100 meters (east side Port Boulevard),
3. Władysławowo Wharf 150 meters (west side of the port),
4. The Sopockie wharf 90 meters (west side of the port - yacht marina).

The Port of Ustka is the only one port without any typical marina, or yacht marina. Recreational and sport boats are mooring at publicly accessible quays in two parts of the port. In the eastern part, in the Coal Basin, residential boats are parked. There are about 20 parking spaces. In the western part, at the Kołobrzeskie Quay- vessels visiting the port are parked There are about 15 parking spaces. Their number does not satisfy the growing interest of sailors in the port[23].

Tab. 5. Quays in Port of Ustka

Quay	Lenght(m)	Quay	Lenght(m)
Eastern riverbank (5-6 m depth **)**		**Western riverbank** (5-6 m depth **)**	
Pilotowe	155,5	Karwińskie	166
Kołobrzeskie (przystań żeglugi pasażerskiej)	310,5	Rozewskie	215

[23] Nowaczyk, P. (2016). Znaczenie działalności rekreacyjno-sportowej w małych portach morskich w Polsce dla społeczno-gospodarczego rozwoju gmin nadmorskich. Rozprawy Naukowe Akademii Wychowania Fizycznego we Wrocławiu, (51), 37-43.

Słupskie	176,5	**Basen Budowlany**	
Lęborskie	199	Władysławowskie	186
Jachtowe	56,6	Darłowskie	163
Pirs Stoczniowy	87	**Basen Węglowy**	
Swarzewskie	78	Łebskie	55
Oksywskie	120	Elbląskie	111
		Puckie	56,2
		Sopockie	98,6
		Helskie	156
		Ostroga Helska	100

Source: Own elaboration based on data from the Port of Ustka

There are 4 basins in the harbor. From the south, the port is closed by 2 bridges (rail and road) that pass over the Osadowy Basin. On the east bank of Słupia there is a Winter Basin equipped with a slip for units up to 24 m in length. On the west bank of the river there is a short Budowlany swimming basin and the Węglowy basin, which is separated from the river currents by the pier (the Darłowski, Łebskie and Elbląskie wharfs).

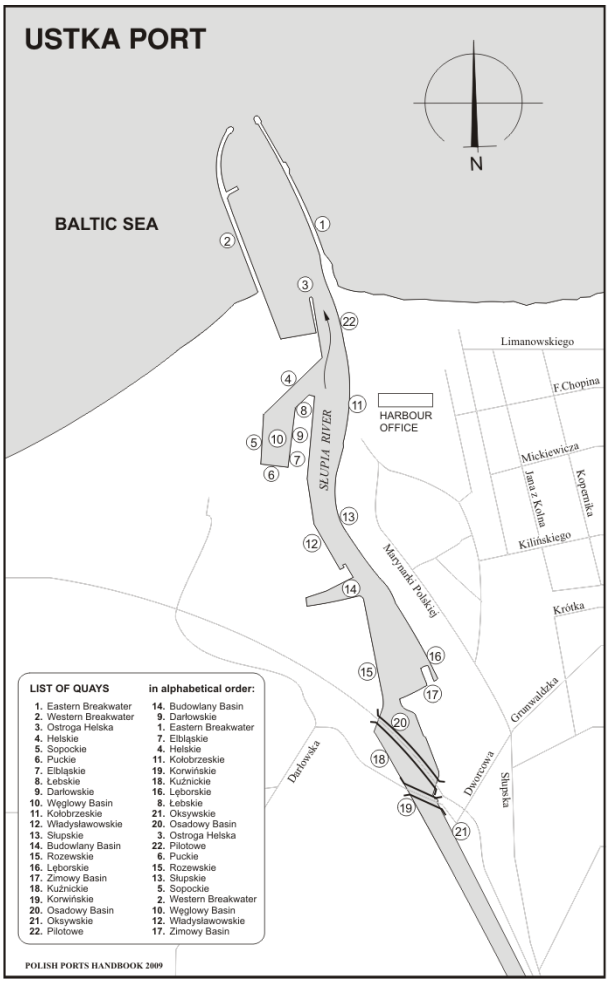

Fig. 6. Port of Ustka

Source: Polish Ports handbook, www.maritime.com.pl

In the depths of the port, on two sides of the canal near the bridges and on the grounds of the former Ustka Shipyard, two new shipyards are now operating: Stocznia Ustka SA, which produces small units of various purposes, e.g. rescue, patrol and working boats, as well as recreational vessels and carries out repairs and service, as well as Alu Stocznia Ustka, which mainly produces hulls for foreign customers.

Port of Darłowo

The size of area within the administrative borders of the Darłowo Port is 113,6 ha. The port's authority is the administrator of the area of 27.5 ha, i.e. about 24% of the total surface of the Port Darłowo (perpetual usufruct of real estate with a total area of 12 ha, ownership of the property with an area of 0.16 ha, lease of 15.1 ha from the Municipality of Darłowo) .[24] Darłowo Se Port Authority Zarząd Portu Sp. z o.o. operates 21 quays with a total length of 3596 m.

In September 2009, a universal transhipment terminal was opened on the premises of the former Kuter enterprise, which have been owned by the Gdynia Maritime Agency for several years. The company bought wharfs, storage yards and buildings from local authorities and led to the launching of reloading activities. The terminal consists of 150 m of the renovated Władysławowo wharf, adapted to serve ships with a length of 85 m, draft 4.2 m and a capacity of 2,200 tons, two warehouses (general cargo and bulk cargo), as well as storage yards.

The city of Darłowo joined the "West Pomeranian Sailing Route" in 2006. After the initial concept phase, a marina construction project was developed, which provides for the construction of a new sailing basin for about 50 yachts, located in Darłówko West at a distance of over 1.5 km from the port heads (after the mouth of the Grabowa River to Wieprza). In the basin there will be mooring jetties, and the nautical basin will be adjacent to: a petrol station and a crane station for lifting and launching yachts. All yachts will have access to electricity, water and slip. The project envisages the construction of a club building, sanitary facilities, roads, lighting, sewerage, storage shed, oil collection point, car park, etc. Such location of the marine marina will almost eliminate undulations and give the opportunity to slip, launch and store yachts in winter, as well as offer services renovation works at a nearby repair yard.

Darłowo has a connection with Koszalin by the regional route of Koszalin-Darłowo-Ustka, which connects to the national road No. 6 of the Gdańsk-Szczecin route. The seaside part, Darłówko, is connected by the voivodship route from Sławno to Daryłówko, which in Sławno connects to the national road No. 6.

Darłowo also has a railway connection with Sławno - a non-electrified monorail line. The connection was closed for several years, and since 2005 the line has been re-opened and offers 5 connections a day. Sławno is located on the electrified route Gdynia-Szczecin.

The entrance to the port is protected by two over 400 m breakwaters (eastern - 415 m long and 21.5 m high, west - 464.6 m long and 20 m long and Western Ostradze 60.1 m). In the heads, the entrance

[24] *Port Darłowo Development Strategy*. Darłowo 2007, http://www.port.darlowo.pl/pl/?div=strategia

is 38 meters wide and 7 meters deep, in the avant-garde the depth is about 6 m, while the port channel has a depth of 4- 5 m and 23 m wide. Entering the port is difficult in bad weather conditions. The port consists of two parts connected by a port channel with a length of 2.5 km and a navigable depth of 5.5 m.

In the Darłowo port, there is a lack of quays with a typical plate construction, used in ports with larger depths of the bottom. The total length of all quays in the port along with breakwaters is 5307 running metres.

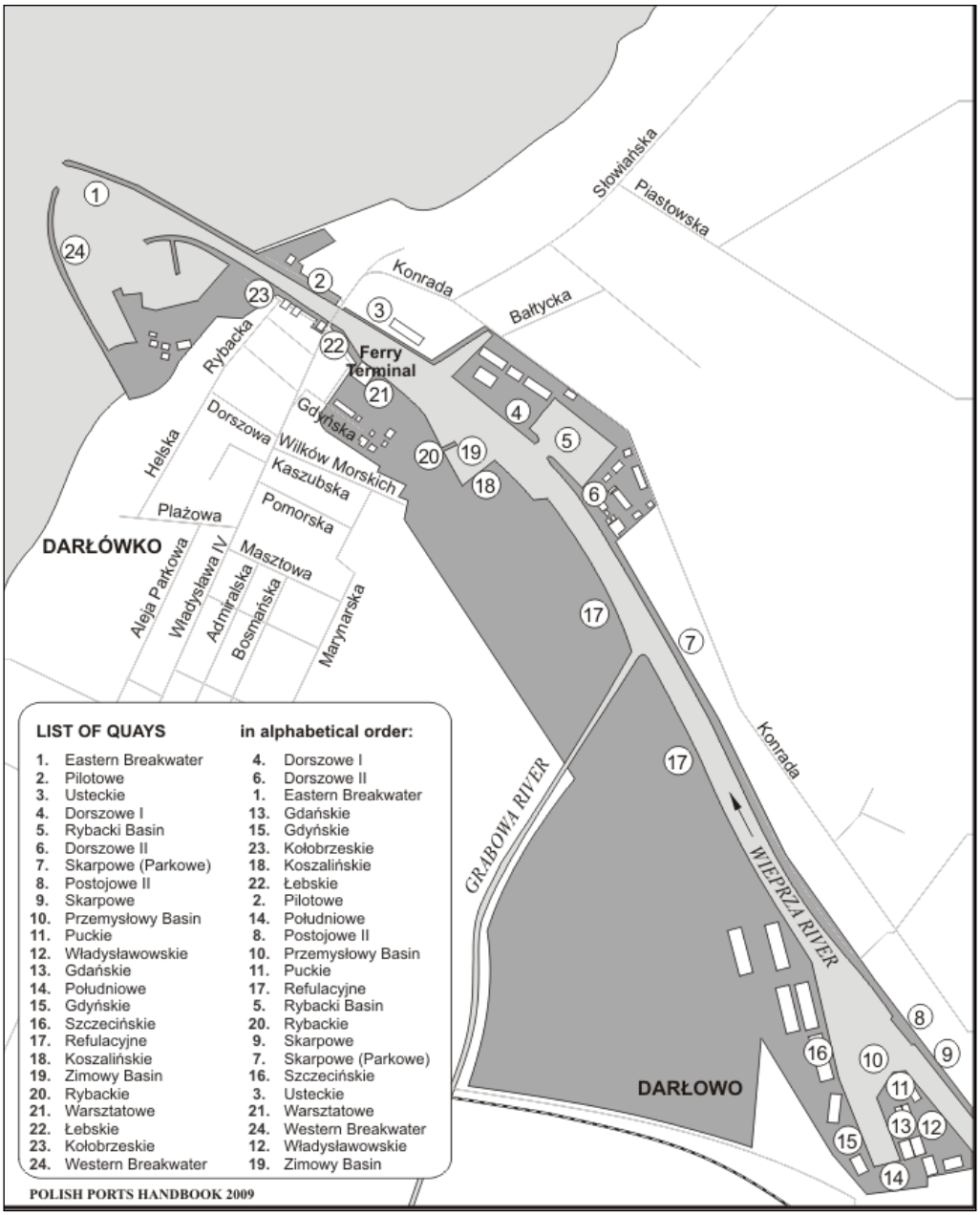

Fig. 1. Port of Darłowo
Source: Polish Ports Handbook, www.maritime.com.pl

The following technical infrastructure is located within the port[25]:

- port with a radius of 1 Mm, a place for parking and waiting for ships to enter the port;
- approach track from the sea to the breakwaters heads, direction 1160, length 926 m, width at the bottom 60 m and depth 8 m; entry to the port, 38 m wide and 7 m deep, formed by two breakwaters: eastern, 436 m long, and west, 484 m long;
- outerport, a water reservoir with an area of 4.7 ha and a depth of 6 m with the possibility of rotation of a ship with a length of 120 m; fairway (from the mouth of the Wieprza River to

[25] Port Darłowo Development Strategy , Darłowo, 2007, port.darlowo.pl, access on 07.01.2019

the turntable), total length 2420 m, width 23 m in the axis of the fairway and a depth of 5.5 m;

- ship's turntable (branching of the canal and the entrance to the Industrial Basin), with ship rotation diameter of 110 m, with a depth of 5.5 m;
- steering wheel of 143.5 m long ships, for navigational improvement of ships entering the port channel, and partial damping of waves in the port;
- permanent navigation signs together with the power supply system;
- lamp and lighting devices of all hydrotechnical facilities in the port;
- port quays with the following structure and lengths:
  - the Pilot Wharf with a length of 189 m and the cap structure constituting the housing of the right bank of the Wieprz River,
  - The Usteckie Wharf, 211 m long, with a hoop construction,
  - Wopowskie Wharf, 83 m long, with a hoop construction,
  - the Doroszowe I quay with a length of 240 m and a plate-type construction,
  - Equipment wharf with a length of 147 m and the cap structure constituting the casing of the Fisherman's Basin,
  - 100-meter long parking quay, which is the housing of the Fisherman's Basin,
  - the West Bank Quay I with a length of 79 m and a pontoon structure constituting the enclosure of the Fisherman's Basin,
  - Doriszowe II wharf with a length of 297 m and plate construction,
  - Skarpowe Wharf with a length of 297 m
  - the Władysławowo Wharf, 265 m long and with the cap design,
  - the Puckie Wharf with a length of 92 m and the cap design
  - the Gdańsk wharf of 190 m length and the apron construction,
  - the South Wharf with a length of 45 m and pontoon structure,
  - Gdynia wharf with a length of 194 m and pontoon construction,
  - the Szczecin Wharf with a length of 179 m and a pontoon structure,

The total size of the area located within the administrative boundaries of the Darłowo Maritime Port is 113.6565 ha. The Seaport Darłowo Authority Sp. z o.o. administers on the area of 27.4808 ha, which accounts for 24.18% of the total area of the Darłowo Sea Port. The company is a perpetual usufructuary of the real estate with a total area of 12,1808 ha and the owner of the property with a total area of 0.157 ha. The remaining 15.1429 ha. The company leases from the City of Darłowo. In the area of the port of Darłowo, the company PZZ "Stoisław" runs its business with grain warehouses with a total area of 28,800.00 m2. At the office building of the "KTL" transshipment company and pilot station there is a square with a total storage area of 15,000.00 m2. The Darłowo Maritime Port also has a Passenger Check-in Terminal, built in accordance with EU standards[26].

Among the biggest enterprises that operate in the Port Darłowo Area, there should be mentioned[27]:

[26] Port Darłowo Development Strategy , Darłowo, 2007.
[27] idem

1. "M & W" Shipyard deals with renovation and renovation of vessels (vessels, fishing boats),
2. "Baltic Net" Ltd. deals in the repair and production of fishing nets,
3. "Barkas" deals with the renovation and renovation of fishing boats,
4. Sorting of fish A. Owczarek Sp. jawna and Z. Owczarek Sp. overtake deals with the purchase of fish,
5. "SOLO-MAR" deals in the production of ice,
6. "PIRS" deals with fish processing,
7. PZZ "Stoisław" deals in storing vegetable seeds,
8. "Furel" deals in the storage and export of pellets,
9. "Saled", coal handling.

The Yacht Charter business is run by the port. The M & W Darłowo shipyard is involved in the repair and maintenance of nautical equipment. The port offers services related to underwater work on yachts and scuba diving trips.

Tab. 6. Quays in Port of Darłowo

Quay	Lenght(m)	Quay	Quay
Eastern riverbank		**Western riverbank**	
Pilotowe	189	Władysławowskie	265
Usteckie	211	Puckie	92
Wopowskie	83	Gdańskie	190
Dorszowe I	240	**Basen Przemysłowy**	
Basen Rybacki		– Południowe	45
– Wyposażeniowe	147 m	– Gdyńskie	194
– Postojowe I	100	– Szczecińskie	179
– Zachodnie I	79	Refulacyjne	1092
Dorszowe II	297	Koszalińskie	55
Skarpowe (Parkowe),	297	**Basen Zimowy**	
Postojowe II	604	– Pomost	51
Skarpowe	298	– Rybackie	141
		Warsztatowe	135
		Łebskie	129
		Kołobrzeskie	207

Source: Own elaboration based on data from the Port of Darłowo

The banks of the channel (Skarpowe and Refulacyjne quays) on the section between Darłówek and Darłowo are not exploited. Maintaining channel depth requires dredging.

The port quays constituting the second part of the port, used as a commercial port, are located along the Wieprza River, approximately 2.3 km from the port entrance, in the immediate vicinity of the city of Darłowo. The port turntable is located at the intersection of the Industrial and River basin.

The River Basin was built from the quays of the river closed by a permanent bridge connecting the industrial part of the city with the center. It is mainly used for parking purposes.

The transshipment of the Industrial basin is carried out on transshipment of goods in international trade. The quays are equipped with mobile cranes and a conveyor belt. By the Przemysłowy basin there are grain elevators made by “PZZ Stoisław” and grain warehouses with a capacity of around 29

thousand. tone. In the vicinity of elevators, there are warehouses, dryers, car scales, petrol station and storage yards. There are railway sidings along the basin, which are in poor technical condition.

Port of Kołobrzeg

The port in Kołobrzeg consists of a war and fishing port located on the left side of the river, a commercial and passenger port lying on the right bank and a yacht port located on the northern shore of the island of Solna. Both banks of the Parsęta are connected by 3 road and 1 rail bridges that cross the Salt Island. The route of the railway line separates port areas from housing. Port areas occupy over 47 ha and are owned by numerous entities, which is a serious problem for proper development.

Due to the width of the entrance to the port and depth, the port can accept ships with a length of up to 85 m and a draft of 4.7 m. The reconstruction has been designed for several years to allow access to the port to 95 m long units. Eastern breakwater, acting as a municipal pier the walker has to maintain this function after the extension.

In the port area, on the west side, there is a small shipyard "Parsęta". The yard has its own quay, workshops and production hall, where it builds units up to 25 m in length.

The fishing base is equipped with refrigerators, freezers, ice factory, unloading hall and renovation workshops. In recent years, the Sectoral Operational Program "Fisheries and fish processing 2004-2006" financed the expansion and modernization of the fishing port located on the west bank of the Parsęta. In the first stage, the parking quay, port infrastructure, water supply network, sanitary and rainwater sewage system were reconstructed and the power grid was built. In the second stage, facilities for the first sale of fish as well as social and storage facilities were created.

At the same time, work began on the development of the marina and the improvement of tourist infrastructure on the Parsęta waterfront and near the lighthouse financed from the European Regional Development Fund. The year-round passenger harbor is located at the Pilot wharf on the east bank of the river, which after reconstruction is a tourist's visiting card. The Yacht Port located on Solna Island will be modernized as part of the West Pomeranian Sailing Route project. In place of the current 50 places there will be three swimming basins with parking spaces for 160 yachts. A club building with sanitary facilities, a shop with sailing equipment and a restaurant as well as hangars and floating piers will be built.

In August 2009, the Port of Kołobrzeg Authority bought the area of the commercial port from Polish Baltic Shipping (PŻB) and became the owner of the commercial port [28].

The Port Authority, which belongs to the city, has bought port areas from PŻB, i.e. 11 hectares of quays, squares, and office and warehouse buildings. The new owner has taken over from the previous tenants who guarantee a steady income. The Port's Management Board is planning to achieve cargo handling of 400,000. tons per year.

The port is about 150 km from Szczecin and about 45 km from Koszalin and has road connections between: Kołobrzeg - Koszalin - Poznań (single-carriageway national road), Karlino - Kołobrzeg

[28] http://www.zpm.portkolobrzeg.pl/index.php?strona=1

(provincial road), Drawsko Pomorskie - Kołobrzeg (provincial road) leading to national road No. 6 (Gdańsk - Szczecin) and the connection Międzyzdroje - Dziwnów - Trzebiatów - Kołobrzeg (provincial road).Railway connections with Koszalin, Białogard and Gryficami take place on one track.

The entrance to the port is protected by two breakwaters: East and West. It is dangerous, especially in strong western winds. For this reason, it was rebuilt in 2000, which aims to increase security and allow for the possibility of calling larger vessels into the port. The existing breakwaters were partially dismantled and extended, and carried out in a different way.

The basin of the port is the port channel being the enclosed riverbed of the Parsęta River and 3 small basins on the left bank. The wharfs are located on both sides of the port channel. There are two turntables in the channel - 95 m in diameter at the entrance to the Repair Basin and 140 m in diameter at the Helskie waterfront. The shallows occurring in the port are caused by settling of debris carried by the river. For this reason, regular dredging is required.

The port of Kołobrzeg can accommodate vessels not exceeding 85 m in length and 4.7 m in draft. Depending on the length of vessels and hydro-meteorological conditions, ships may perform rotation maneuvers at the elevator (turntable diameter 95 m) or in ducts (turntable diameter 140 m).

The total area of storage areas in the Commercial Port in Kołobrzeg is approx. 50,000 sq m, warehouse area approx. 5,000 sq m, office space approx. 2 thousand sq m. The infrastructure enabling the service of units with a total load capacity of up to 3000 DWT includes the following devices and structures: railway sidings, mobile cranes 5 - 10 tons, two turntables for vessels, general cargo with a usable area of 4,901 m², grain elevators with a capacity of 5,905 tons , storage yards with an area of 20,650 m², storage yards with an unpaved area of 17,146 m². The proper functioning of the Fisherman's Port, as well as the Yacht Port, is ensured by six port basins, a marina, a repair yard, an ice factory and fish processing plants with a capacity of 230 tons / day. The infrastructure of the port includes wharfs with a total length of 4 500 m: Bosmańskie, Pilotowe, Zbożowe, Słupskie, Przy zjazdach, Szkutnicze, Pirs, Turystyczne, Jachtowe, Manewrowe, Szkolne, Basen Łodziowy, Promowe, Żeglarskie, Remontowe-harcerskie, Pomost Rybacki, Skarpowe, Postojowe, Barkowskie, Basen Rybacki, Północne, Wschodnie, Południowe, Zachodnie, Kamienne, Złomowe, Techniczne, Warsztatowe, Remontowe, Stoczniowe, Bunkrowe, Zachodnie żelbetowe, Basen Sportowy, Wydmowe.

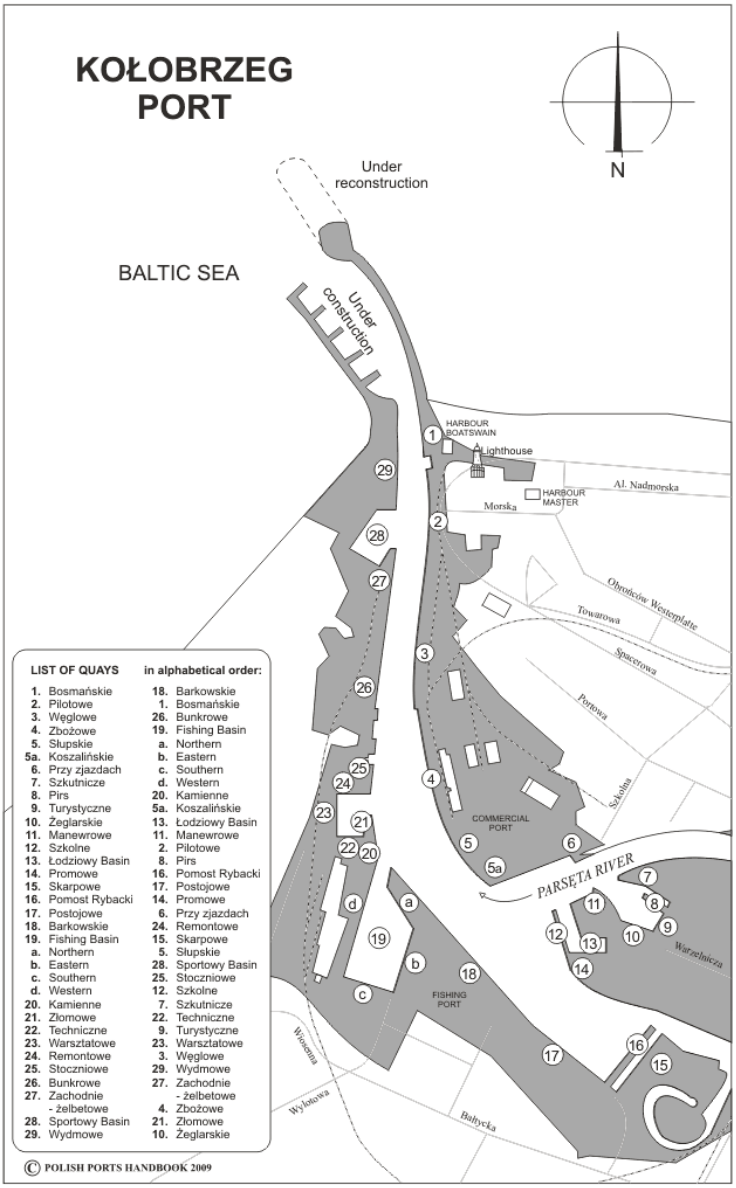

Fig. 7. Port of Kołobrzeg
Source: Polish Ports Handbook, www.maritime.com.pl

Tab. 7. Quays in Port of Kołobrzeg

Quay	Lenght(m)	Quay	Lenght(m)
Eastern riverbank of Parsęta (5,5 m depth **)**		**Western riverbank**	
Bosmańskie	24	Promowe – Skarpowe	140
Pilotowe	146	Pomost Rybacki	121
Węglowe	251	Skarpowe	142
Zbożowe	200	Postojowe	215
Słupskie	125	Barkowskie (Helskie)	344
Koszalińskie	142	**Basen Rybacki** (90mx180 m)	
Przy zjazdach	67	– Północne	82
Wyspa Solna – basen Jachtowy -gł. 2,5 m		– Wschodnie	115
– Szkutnicze	101	– Południowe	95

– Pirs	49	– Zachodnie	228
– Turystyczne	62	Kamienne	52
– Żeglarskie	55		
– Manewrowe	104	**Basen Budowlany** (Remontowy) (75mx55m)	
Wyspa Solna		– Złomowe	43
– Szkolne	87	– Techniczne	53
– basen Łodziowy	225 –gł. 1,5 m	– Warsztatowe	75
– Promowe	220 - gł. 5 m	– Remontowe	66
–	–	Stoczniowe	148
–	–	Bunkrowe	80
–	–	Zachodnie żelbetowe	170
–	–	Basen Sportowy	207
–	–	Wydmowe - w budowie	

Source: Own elaboration based on data of Port of Kołobrzeg

1.2.3. Port of Sventoji-Butinge (Baltic Sea)

Both in the Soviet era and after Lithuania regained its independence in 1990, several renovation plans for the Šventoji port were created. Construction options were included both in the former location and in other locations, mainly to the north of the current location. After the construction of the Būtingė oil terminal began in 1992, Achemos Grupė, which is the main transshipment company for liquid and bulk goods, considered the possibility of building a new industrial port in Šventoji. In 1996, the Port Authority in Klaipeda announced preliminary plans for the modernization of the port of Šventoji. It proposed restoring the fishing port in Šventoji, adapting it to coastal fishing, recreation and sea tourism, as well as to plan a new port in Būtingė.

In 2004, the Government of the Republic of Lithuania established a seaport in Šventoji, approved the regulations for the port and allocated national territorial waters and neighboring plots for the development of a seaport. Port management has been transferred to the Klaipėda Sea Port Authority. In 2010, a feasibility study was developed for the development of Šventoji port by Alatec, an engineering, consulting and architectural company from Spain, with the financial support of the Ministry of Industry, Trade and Tourism in Spain. Five potential options for the reconstruction of the Šventoji port have been suggested. Option 2B was chosen as optimal (Figure 10). According to variant 2B, the breakwaters would have a length of around 400 meters. The safe depth in the internal basin should be 4 meters and 6 meters in the outdoor basin. The first stage of the project involves the construction of a southern breakwater and the development of objects on land.

Fig. 8. Suggested development plan of Port of Šventoji
Source: Klaipeda Seaport Authority

1.2.4. Port Nida (Curonian Lagoon)

The main hope for further utilization of the potential of the Nida port infrastructure is related to the further development of a fast ferry connection between Klaipeda and Nida, as well as between the Nemunas delta and Nida. In the summer season there is a small ferry that flows north of the Curonian Lagoon between Dreverna and Juodkrantą on weekends and on public holidays. Spending a weekend on the lagoon, an attractive option for cyclists and other tourists may be a two-day water journey from the north-eastern shore of the Curonian Lagoon to Nida and further to the Nemunas delta in two days.

For many decades from Kaunas to Nida there was a connection of a hydroplane by the Nemunas and the Curonian Lagoon, and further to Klaipeda, but due to the high costs of fuel and maintenance, this connection turned out to be unbalanced in financial terms despite all possible fiscal incentives and tax deductions. After the collapse of the Soviet Union with a centrally planned and highly subsidized inland waterway system, this connection was never fully reactivated. The problem is deepened by the lack of modern hydrofoils, which are too expensive to launch seasonal inland transport in the catchment area of the Nemunas and the Curonian Lagoon.

Another function of the port of Nida is the service of small recreational boats, satisfying the needs of holiday-makers staying in Nida for short boat trips or trips around Nida, then on the Curonian Lagoon and in the delta of the Nemunas River. Depending on the ship's draft, it can flow both to the marina in Minija and further to the river Atmata (the northern branch of the Nemunas) to Rusnė and Šilutė. The season of sailing yachts and recreational boats using the marina in Nida, which is their main

center, largely coincides with the holiday season on the Curonian Spit, in this non-seasonal period and lasts from the beginning of May to the end of September. Nevertheless, there are several hundreds of recreational fishermen who use the port of Nida to overwinter their boats. There are also some very specific providers of passenger transport services who use Nida equipment as a meeting place in winter for their caravans to transport numerous ice fishing enthusiasts.

1.2.5. Port of Minija (Curonian Lagoon)

The Minija harbor, which is located on the right, i.e. the West Bank of the Minija River, is well protected from the prevailing western winds. It was opened in 2004 and offers almost a full set of services for guests arriving by boat: electric waterworks for moored yachts and motor boats, laundry, kitchen, two showers, two bathrooms and a sauna. It also provides safe disposal of sewage and solid waste from yachts and boats. It can accommodate a total of 25 small and medium yachts. There is also a small ship repair yard and a tourist information centre. The marina is 4.5 m wide, the slippers are 1:10 and the crane has a lifting capacity of 10 tons.

From 1 March 2017, the Minija marina is fully reserved for the entire navigation season. Owners of 25 sailing yachts from all over Lithuania have already signed agreements with the Kintai Sailing Club, the owner of the marina, permanently mooring their boats during the sailing season. Therefore, the potential of the marina's infrastructure is now fully utilized. During the conversion of agricultural land for recreational purposes south of the village of Minija, both banks of the river, especially on the right bank adjacent to the marina, are expected to build new berths for boats and other port facilities in the field of water tourism. However, it is difficult to achieve the expansion, bearing in mind the numerous restrictions related to the protection of the protected area, because the whole village and its surroundings are in the protection zone of the Nemunas Delta Regional Park.

Conclusions

Polish local ports have many functions. They are of great importance for tourist activity, in particular the ports of the Puck Bay, i.e. Hel, Jastarnia and Władysławowo. They are also the place where the fishing fleet is stationed. The geographic location of the ports and related accessibility problems from the land side are particularly important in this case. The basic element determining the current service capabilities of small ports and their development potential is port infrastructure.

The basic elements and devices included in the infrastructure of local ports are: approach tracks, fixed breakwaters and floating navigation signs. The responsible naval offices are responsible for maintaining the relevant access infrastructure parameters.

Local ports, due to the natural and tourist values of the areas where they are located, mainly serve as a tourist destination. Local ports, such as, for example, Władysławowo, also serve as a base and repair of fishing boats and developed fish processing facilities and serve as a harbor of refuge.

The port of Kołobrzeg seems to be the most functional port of great importance for the region's economy. It performs basic economic functions, i.e. fishing, reloading, tourism and industrial. In its history, it was most strongly associated with the handling of fisheries and transshipment. From 1976, the port became the seat of a ferry shipowner - Polish Baltic Shipping. The function of the spa, which was reactivated in 1960, influenced the increase in the importance of passenger transport and the

use of breakwaters and port quays as attractive walking routes. The port in Kołobrzeg consists of a war and fishing port located on the left side of the river, a commercial and passenger port lying on the right bank and a yacht port located on the northern shore of the island of Solna.

Lithuanian local ports are mainly associated with tourist function, while Sventoji-Butinge port does not currently have any function. It is only a place where several small flat-bottomed local fishermen are stationed. This port is managed by the Klaipėda Port Authority. At the moment, the state of the port infrastructure completely prevents port operations and even passenger tourism could not develop in it. In addition, it is necessary to build breakwaters and deepen the fairway, in order to be able to use the functions of the port in any way.

The Nida port is a port located on the Curonian Spit and is a typical tourist port. The port is maintained mainly from regular ferry connections to Klaipeda and the Niemen delta. The harbor also functions as a marina for yachts stationed in the port for the time of visiting the region. The Port of Minija, like Nida, has a tourist function. Both ports are located in naturally protected areas. This creates a great tourist potential, but also constitutes a huge limitation in the development of the basic functions of the port due to numerous natural constraints.

A serious problem of ports, in addition to infrastructure gaps, are access roads to ports. While the national and provincial roads along the coast are in good condition, the quality of access roads directly to most ports is insufficient. Both in terms of surface condition and bandwidth. Often congestion on roads prevents the use of road transport, in particular during the summer season.

The problem of Polish local ports is also the development of housing functions in the port areas. This often leads to the limitation of functions important for the development of the port, such as the reloading function, in connection with noise or dusting in the case of bulk cargo.

1.3. The economic impact of local ports on the surrounding regions

The location of small ports is closely related to the development of economic functions of the immediate environment. The functioning of the port, in addition to certain financial effects, also has a fairly wide economic impact on the immediate surroundings. The main, though hard to measure, economic benefits include, among others, the possibility of reducing unemployment, economic activation of the region or an increase in tax revenues.

The impact of the port on the economy in the micro- and macroeconomic sphere is complex and multidirectional. It is associated with various types of economic activities, including fishing, transport, tourism, trade or industry. The operation and development of ports depends to a large extent on the demand for services generated by these ports. Taking into account particular port activity areas, many growth factors can be indicated. The most important areas of impact and the corresponding spatial extent include aspects such as:

- dynamics of demographic changes on a national and regional scale,
- prospects for the growth of gross domestic product and value added in the region and in the country,
- changes in the volume of industrial production at the national and regional level,

- level and trends of consumption in the country and region,
- the level and trends of foreign trade development and the share of sea transport in its service.

On the scale of the whole Polish coast, there is a great diversity between the communes where the ports and marinas are located. In the coastal areas there are numerous economic entities with different profiles and sizes. The spatial diversity of the number of economic entities is also relatively large, but their number decreases as the distance from larger agglomerations increases. In economic activity in coastal communes the largest share is market services, which include, among others, transport and warehouse management, as well as activities related to accommodation and gastronomy. An important area of activity is also industrial processing or fishing related activities. In port villages, most companies deal with hotel services and run catering activities. Trade and repairs, company and real estate services, industry, construction and transport are also important activities. The predominance of the tourist function is clearly visible.

The main problem in the coastal areas is the large dispersion of entities and their small scale of operations. This creates a problem with the concentration of economic potential necessary to stimulate, among others, such functions of small ports as commercial and transport activities, but it does not limit the development of tourism-related functions. Urban centres that provide facilities for small seaports also do not constitute sources of demand and supply to stimulate the development of various functions of small ports. Coastal areas, due to their potential, could be a source of economic growth and sustainable development of small ports and their surroundings, while they are areas of the largest structural unemployment. The current EU regional policy is hoping to improve the situation of small ports. Its primary goal is to strengthen economic and social cohesion.

The conditions and prospects for the development of small ports are closely dependent on such factors as the level, pace and directions of economic and social development of the country and the region, the development of local and regional transport infrastructure as well as the European Union policy in the maritime sector. Financial resources obtained by some coastal cities and local ports create a chance to increase their competitiveness and even change the existing functions of small ports. Actions to increase the attractiveness and use of the economic potential of cities and maritime communes are particularly important in view of the high unemployment rate for many years in coastal voivodeships compared to other regions of the country. It is particularly high among people under 25 years of age. The situation is exacerbated by the low rate of creation of new jobs, especially outside large urban centres.

Within the framework of the sustainable development strategy, the role of centres for economic activation of coastal regions falls to small seaports. The state's regional and transport policy must be coordinated in order to avoid diverging priorities, which would lead to the dispersion of financial resources from both structural and national funds.

Of particular importance among the factors determining the socio-economic development of cities and communes has existing and envisaged road infrastructure. Public transport is connected with the city's transport system, which should contribute to the development of areas through which transport routes run. The communication system and its efficiency largely determine the possibilities

of economic growth and create favourable conditions for the development of entrepreneurship. Entrepreneurship is one of the most important factors of socio-economic development and increase in competitiveness of coastal regions (other regions as well). Therefore, effective support for entrepreneurship should be an integral element of municipal and regional authorities. A positive example of this activity is the Kołobrzeg city support program for entrepreneurship, which assumes direct support through specific activities supporting local companies and indirect - through the implementation of a number of infrastructure investments that improve the functioning of the city.

The upward trend in the entrepreneurship rate is clearly visible, but nevertheless the absorption of funds from external financing sources is still too low. This makes it difficult to fully exploit the potential of many entrepreneurs in small ports and inhibits the growth of innovation, especially in small and medium-sized enterprises. In this situation, it is particularly important to support economic activity directed primarily to entrepreneurs already operating on the local market as well as to entrepreneurs starting their business activity. Activities in this area concern improvement of administrative services for entrepreneurs, improvement of access to information, training and advisory services, consulting related to running a business, creating cooperative ties between local entrepreneurs, facilitating access to external sources of financing business operations, transfer of technological innovations to enterprises. The implementation of operational programs is a favourable factor for entrepreneurship, which takes place in close cooperation with many partners.

Other external factors that may affect the financial and economic situation of the commune and thus also the port located in it, are the local social needs and economic conditions of the region. Above all, an important external factor with a huge impact on the commune's finances is the overall economic situation of the country.

The location relative to the back office and the foreground is an important factor in the implementation of the local port's transport function and economic activation. The meaning of a local port in the transport chain can be most generally expressed by the amount of overloaded load mass. In the case of large universal ports, the search for directions of service diversification led to the emergence of a distribution function, which is a synthesis of the transport and commercial functions and resulted in the creation of import logistics centres. At the basis of the development of the distribution function there is a need to improve the distribution of goods and services moved between production and consumption. In this context, in the era of increasing congestion in road transport and the tendency to implement modern logistic solutions and the concept of transferring cargo from roads to the sea, local ports have a potential opportunity for development as ports supporting large port centres. Therefore, local ports should activate the traditional transport function. Naturally, it is necessary to create an appropriate infrastructure system.

Another function of the port that influences the economic development of its surroundings is the industrial function. The ports are convenient places of industry locations. In general, the basic areas of industry located in seaports include:

- branches located in the areas of the port whose location is technologically enforced access to the reservoir, including the construction and renovation of ships, fish processing, etc.,
- cargo related industries - increasing the value of the primary product.

In Lithuania, mooring fees and port entry fees set by the Lithuanian Ministry of Communications a few years ago are intended to generate money for maintenance of equipment at the Šventoji sea port - from 60 to 300 euro per vessel per month, depending on the size. However, just before the opening of the seaport, along with the criticism regarding the establishment of a toll, the Ministry charged almost half of the fees. However, this was not enough for Šventoji fishermen, who now have only 10 fishing vessels who will have to pay 60 euros in seaport charges per month. Immediately after the inauguration of the seaport in June 2011, only three yacht owners expressed their desire to be permanently anchored in the port of Šventoji. Since then, this number has not increased.

The capacity of the marina is planned for 500 recreational boats and yachts as well as 160 boats and yachts for storage in winter. If it is properly financed and developed, the Šventoji seaport can reach this level in five years, while the port operation on 200 ships is considered profitable. In terms of the range of all-season services, Šventoji will have to compete with Klaipeda. It is likely that there will be few services in the winter season, with the exception of boat storage areas.

However, given the expected relatively low tolls and mooring charges in connection with the creation of the infrastructure, this investment could be considered as a sunk cost. It seems that investments in the development of the seaport in Šventoji will never pay off, because the project of this scale is too large for a community like Šventoji. However, the implementation of the project has a significant impact on the local economy. It is expected that the seaport will contribute to the development of tourism in Šventoji, a settlement of 1500 inhabitants, which until now was most often visited by the inhabitants of Palanga, the most popular seaside resort in the Baltic States, currently including Šventoji. Therefore, we should not look at things only from a "profitable-unprofitable" perspective, as we should all remember the social, infrastructural and economic aspects of the entire Šventoji settlement and its further development as a seaside resort.

According to the planned development plans, three investment zones should be created and developed:

1. Within the boundaries of the port as a result of public-private partnership: water facilities: marina (slip, crane, gas station), fishing harbor and facilities for fish processing, yard of the shipyard's monuments, restaurant and shop,

2. Upstream of the estuary as a result of private investments: floating houses, heritage ships, extension of the docking station and permanent berths,

3. Delta of the Šventoji River and its neighboring areas (also resulting from private investments): a water theme park connected to the port by a river.

The administration of the city of Neringa and investors in tourist services in Nida are convinced that in Lithuania, the number of people owning yachts and recreational boats will continue to grow. From here, additional places in the Nida harbor will attract even more yachts. A one-day mooring of a small boat up to 7 meters long for the owner without a contract for storing boats in the Nida port costs 8 euros, and 12 euros for a larger boat, which has a length of 7 to 10 meters. The maximum mooring rate applies to floating restaurants: 120 euros per day. If the boat owner has a long-term mooring agreement with the Nida port, mooring a small boat up to 7 meters costs 105 euros per

month and 135 euros per month for a boat longer than 10 meters. Currently, over 40 yacht owners have long-term mooring agreements with the Nida port.

Another feature of the direct economic impact associated with the development of the Nida marina is the development of the Radisson SAS & Nida Marina hotel, next to the Nida port (Figure 11), meeting the needs of the wealthier clientele. The plans for the construction of a five-star hotel and amber spa and mineral therapy are being approved, replacing the warehouses of the former Nida fishing cooperative (rybkhoz). Three hotel buildings will be built on the quay in the next two years. In the main building there will be a conference center with three rooms, a restaurant and an open, outdoor amphitheater for festivities, parties and concerts. The arcade is designed between the main hotel building and the second one, leading from the center of the Nida resort to the Nida port. Arkada will be a commercial space for small entrepreneurs.

Fig. 9. Visualization of Radisson Blu & SPA Hotel in Nida Marina
Source: Kancas Studio

The biggest challenge for the development of Radisson SAS Hotel & SPA Nida Marina is that due to the restrictions imposed by UNESCO's world heritage, the spa and also the swimming basin must be placed underground. The maximum permissible height of the building is 10 meters in Nida, i.e. two floors with an attic. Therefore, you need to look for solutions that will help to satisfy all the hotel's needs within the permitted space and height limits. Parking spaces will also be placed underground. The underground areas will be located 3 meters below the water level of the lagoon. Above the ground, the hotel will contain 100 rooms. The external buildings will be modern, but in line with the style of traditional fishing villages and the German heritage of the cultural heritage of the Curonian Spit. The hotel will be open all year round.

As mentioned already, the Minija harbor can accommodate a total of 25 yachts. But due to the good water tourism infrastructure, recreational facilities and attractive nature and cultural heritage, the village of Minija is visited daily for recreational purposes during the summer tourist season, albeit on average by 1% to 3% of yachts under foreign flags. All boats are moored on two larger jetties floating on the right bank, or on the sea of Petrošiu on the left bank or on one of 32 mooring places on the wharves recently installed on both banks of the Minija River.

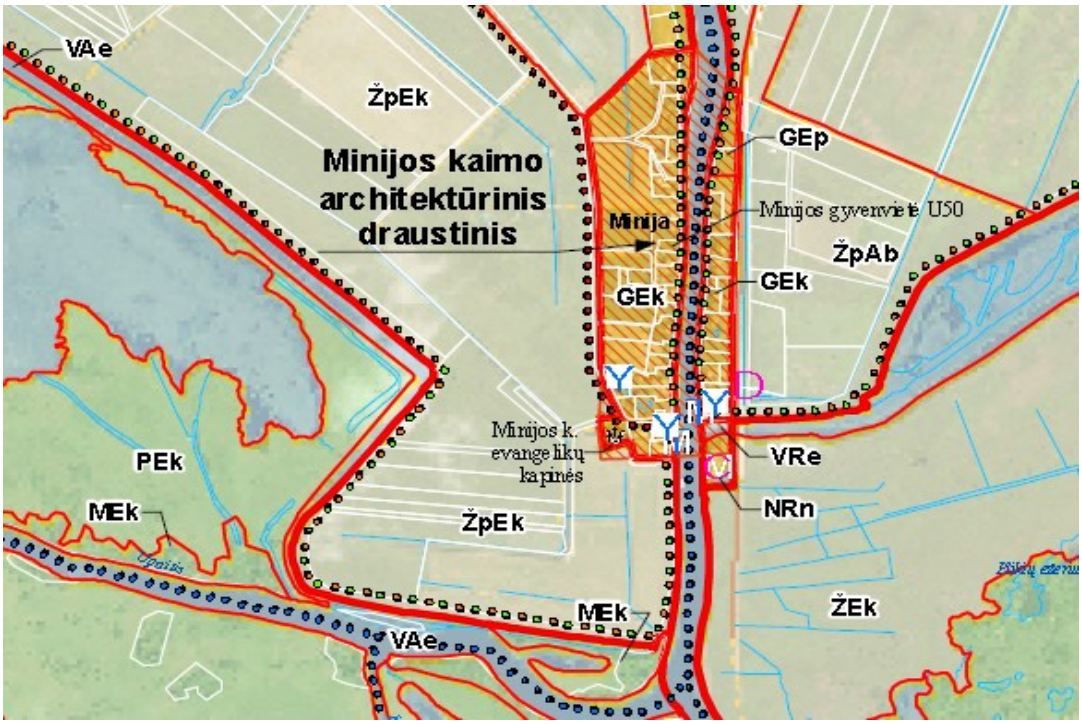

Fig. 10. Functional development of the village of Minija and the surrounding area.
Source: Administration of the Regional Park in the Nemunas Delta

The economic impact of water tourism on the surrounding region is enormous. Tourism now generates significantly more income from the local community than agriculture, which is still important in fertile floodplains. Due to the very specific geographical location of the village of Minija with the convergence of two river deltas, almost all of the 5000 visitors who visit Minija during the tourist season use the boat both for arrivals and excursions, or for rest, several hours for the day.

The economic impact of water tourism on the local economy is best illustrated by the cost of hiring floating piers as an intermediary. The floating pier on the left bank of the Minija River, owned by the municipality of Šilutė, was loaned out, as a result of a private tender, to a farmer whose tourist economy is next to and which owns three recreational boats. The leasing price for a 164 m long floating pier is 400 euros per month for a period of five years from 2016 to 2020. Meanwhile, a 44.86 m long floating pier on the right bank of the Minija River, which is next to Marina of Minija, has been leased to an external operator for the price of 1000 euro per month during the same period 2016-2020, also as a result of an unlimited tender.

Conclusions

The location of small ports is closely related to the development of economic functions of the immediate environment. The functioning of the port, in addition to certain financial effects, also has a fairly wide economic impact on the immediate surroundings. The main economic benefits include, among others, the possibility of reducing unemployment, economic activation of the region or an increase in tax revenues.

Within the framework of the sustainable development strategy, the role of centres for economic activation of coastal regions falls to small seaports. The state's regional and transport policy must be coordinated in order to avoid diverging priorities, which would lead to the dispersion of financial resources from both structural and national funds.

Local ports and marinas located on the Polish and Lithuanian coast have a real chance of access to EU funds. Thanks to these financial means, local ports gain a chance to increase their competitiveness and even change their current business profile. They can become important economic centres stimulating other sectors of economic activity. However, positive results depend to a large extent on goodwill and support from local, regional and central administration. Local ports can become real economic centres in their region with a strong economic impact. However, achieving such an effect requires good will and support from local, regional and central administration. Small ports and their strategies should be included in all development documents at the level of the municipality, district, voivodeship as well as at the central level. Emphasizing the important role of small ports at the national level will ensure effective access of managing entities and coastal self-governments to various sources of co-financing of their activities.

The most important areas of impacts of local ports and the corresponding spatial coverage include such aspects as the dynamics of demographic changes on the national and regional scale, perspectives of the growth of gross domestic product and value added in the region and in the country, changes in industrial production at the national and regional level, level and trends of consumption nationwide and region, level and trends in the development of foreign trade and the share of sea transport in its service.

1.4. Cooperation with local authorities

Poland

The existing relations of the Polish regional policy in the planning and operational and implementation spheres relating to the relationships between small ports and marinas and the local socio-economic environment are characterized by:

- analyzing the abovementioned relationships unidirectionally in the relation small harbor / marina → surroundings, with the widely accepted assumption of a large potential impact of the development of small port structures on the activation of adjacent areas,
- sectoral approach to issues related to the development of local ports, to a small extent taking into account spatial, environmental, communication, social and economic conditions of coastal areas and to a small extent coordinated with other sectoral and horizontal policies implemented by government administration (eg transport policy, spatial planning,

environmental protection), or by local government administration at the regional level (voivodeship development strategies, regional operational programs),

• low application applicability of the strategy for the development of small ports and harbors developed according to port → environment, in most cases highly formalized (at most referring to generally formulated visions and missions and objectives outlined in local development strategies) and justified (usually in the form of descriptive using the SWOT method) of port investments financed from public funds,

• low level of coordination of the activation of local ports and harbors in the development phase of the programs and in the implementation phase, both in the horizontal arrangement between local governments and in the vertical layout: local self-government (local development strategies) voivodeship self-government (voivodeship development strategies, operational programs) administration government (central sector and horizontal programs).

To a large extent these weaknesses in strategic programming and in the operational and implementation layer resulted from the regional policy pursued in Poland, based on maximizing the use of funds from European Union funds and their redistribution to regional centres.

The regional policy of Poland, adopted by the government in July 2010, creates fundamentally different conditions and possibilities for regional (territorial) development. The strategic objective of the new regional policy is to effectively use specific local potentials and resources to achieve in the regions of socio-economic development, employment growth and cohesion in the long-term horizon. This means that regional policy has been oriented towards the possible wide use of endogenous factors of regional development and focuses on local opportunities (resources, potentials) of territorial competitiveness growth and unblocking their growth processes.

The specific objectives of the new regional policy until 2020 are:

1. supporting the increase of regions' competition (competitiveness),

2. building territorial cohesion, including through, inter alia, increasing communication / transport accessibility within regions and between regions (cohesion),

3. increasing the efficiency of the regional policy management system and the effectiveness of public interventions, creating conditions for effective, effective and partner relations for territorially oriented development activities (efficiency).

The basic principles of the new policy include the coordination of actions between public entities at various levels at the stage of planning and implementation of regional development policy, with the increase of the importance of local governments in the regional development strategies developed by the voivodeship self-government. This is expressed, inter alia, by the adoption of the territory as the main area of influence of regional policy, and special emphasis is placed on the spatial, social and economic cohesion of the territory. In practice, it extends the possibilities of programming and implementation of development strategies developed by communes' associations based on resources deployed on common territory and internal development factors.

The new regional policy based on the local resource, which is a small port, creates better conditions for using their potential and greater opportunities for the activation of coastal regions. The key program and implementation issues of the use of ports and harbors for local development can be formulated as follows:

1. Development (modification) of local development strategies in socio-economic and environmental aspects, taking into account broadly understood cohesion (access to public services, transport / transport accessibility, labor mobility and their professional activation) and development (types of competing economic activities, creation of jobs, increase in employment) will result in the preparation of development programs for a given area adapted to local conditions. Coastal location of municipalities, coastal water resources, environmental and landscape values of areas, small port structures located in their area are local resources, the manner and scope of use will depend on the extent and to what extent this will contribute to the implementation of local development strategies. In relation to small ports or marinas, it will cause the reassessment of the current pragmatics in the scope of the possibility of their activation. They will be determined by the relationship with the following relationship: local neighborhood → small seaports and marinas. The ways and scope of use of small ports or marinas will result from the local development strategy implemented as part of the integrated territory development policy. In this context, mini-sector strategies for small ports lose their importance in programming their development, as this will be determined by the strategy adopted locally,
2. The proposed integrated approach to regional policy extends the scope of potential ways to use small seaports and harbors for the implementation of the environmental activation strategy by:
   a. business activities that are alternative to those considered so far,
   b. the natural environment as a factor directing their development,
   c. issues related to occupational activation of inhabitants and increase of local well-being. For example, it could be development in a public-private partnership (land lease, infrastructure) - private (construction and operation of facilities) port areas in the form of so-called waterfronts, ie attractive building sequences, architecturally adapted to the local conditions that group hotel and apartment facilities, complemented service at a coastal fishing port, sailing, passenger and tourist shipping;
3. The significance of broadly understood improvement of areas' cohesion, duly taken into account in the local development strategy and aimed at activation of small ports and marinas, will ensure that the implemented projects (including investment projects) will be verified in terms of their complementarity (for example, increased access to the port from the sea will require proper development of road and rail connections from the land side, preparation of the port's territory for the planned development of economic activities). In turn, the occurrence of seasonal or structural congestion on the local transport and communication network that decreases the transport accessibility of the region may result in the development of various forms (water trams, car and passenger connections, regular passenger transport) of passenger navigation between ports and marinas located in several municipalities or settlement centres ;

4. The extension of the subject of the impact of regional policy on the so-called territory not defined by the administrative boundaries of municipalities, but mainly by the spatial distribution of resources and the possibilities of their use, makes the projects developed in cooperation with several communes to exploit the potentials related to the marshy areas and small ports and marinas will become the rule, not the exception to date. When planning activities, it will be possible to use and achieve the effects of positive feedback, synergy, development of economic activities based on commonly used infrastructure, taking advantage of network effects beneficial for the development of municipalities resulting from small functions served by small ports or types of activities carried out in them economic development, increasing the competitiveness of areas as a result of progressive specialization based on the development of clusters created in ports and in their environment
5. Programs developed using regional policy using the potential of small port structures, whether through the creation of cluster organizations, promoting the emergence of network socio-economic relations, or based on investment projects in ports coordinated with investments in the environment, will be supported by public funds within regional operational programs from other national funds (e.g. environmental protection fund) and European Union funds (as part of the integrated strategy for the development of maritime economy) and sectorial national development strategies (e.g. transport, innovation, human resources development and social capital). Verification of projects, both from the point of view of the planned benefits for the region and the efficiency of expenditure financed from public funds should be based on a socio-economic analysis and estimation of the economic surplus that increases the well-being of local communities. The method that allows to estimate this kind of benefits and socio-economic efficiency of the project is a cost-benefit analysis, which should be widely used at the stage of making decisions on the implementation of a project financed from public funds.

Lithuania

Port Šventoji is currently administered by the Palanga local government as part of the interests of the city administration of Palanga, which administers the settlement of Šventoji. Within the city of Palanga, the Šventoji settlement has a degree of autonomy, as it consists of separate elders and local council councils. However, neither the community in Sventoji nor the municipality of Palanga have any influence on the operation of the Būtingė oil terminal.

Until now, cooperation between various stakeholders, including local authorities, is rather chaotic and there is a lack of cooperation. It is even considered that the settlement Šventoji as a community will be better outside the town of Palanga, as a separate mini-municipality, or as an eldership in the neighbouring municipality of the Kretinga region. The EU will not provide the necessary funds in the near future. The Maritime University in Klaipeda was by far the only institution, apart from the state treasury, able to invest any funds in the public infrastructure of the seaport Šventoji.

Nida Marina is a good example of public-private partnership in the field of management and development of services. It is a place where various interests of the city administration, administration of national parks, local fishermen's association and private investors operating in the port and its facilities converge. Nevertheless, as far as possible, potential conflicts between various

stakeholders are resolved in a favorable attitude, and decisions are taken relatively quickly and permanently. Despite the long-term spatial development plans and procedures for issuing building permits by the national park administration, all necessary detailed plans, as well as permits for the construction and extension of the Nida port and the neighboring area are currently approved by all public institutions. The administrative division of the Curonian Lagoon between the municipalities of Šilutė and Neringa was revised in 2012 to enable coherent administration and management of the Nida port and adjacent water area by one municipality of Neringa.

The leasing process of bridges in the village of Minija was launched in 2015 by the municipality of Šilutė and implemented by the municipal administration. However, the circumstances and results of the tender, as well as the earlier process of rebuilding river waters and development of the wharves, caused strong tensions between the commune and the local community, causing protests of the residents of the village of Minija.

Due to the fact that the external operator won the tender for renting the most lucrative part of the jetties floating on the right bank of the Minija River, he naturally insisted that the local boat owners pay him a mooring fee if they wanted to keep their boats moored on this part of the floating piers. Local boat owners who had previously lost the tender considered this demand a scam of urban bureaucrats. The Minija community issued a written protest in this case, claiming that the entire lease process of bridges to external operators, instead of granting special rights to the local community, runs counter to EU structural funding conditions.

The commune community of Minija is quite active, and its delegated members in the city council of Šilutė, which means that the whole process of renting the floating pier has been stopped. The legitimate municipal administration is correct, but the local community believes that it has a moral right to challenge the decision issued by the administration, which limits their right to use public facilities. The main argument of the community is that floating bridges were created with the support of the EU structural funds, so they are non-profit public facilities. The community agrees to maintain the reconstructed quays and bridges at their own expense in exchange for their free use.

Conclusions

The result of development in recent years is the takeover of all ports and marinas by local governments. The further development of local ports will depend on the extent to which local government authorities want to see in it the factor of improving the life of their community. On the other hand, the government should, considering the existing limitations, present and consult the program of intentions in its area of responsibility, i.e. mainly regarding the development of infrastructure providing access to local ports.

It is necessary to preserve the freedoms of municipalities in shaping the forms of port managing entities provided for in the Act on sea ports and havens, and to restore the statutory reduction of property tax. Receipts that can be obtained by these entities can cover only current expenses. All the more, interventions in the field of shaping should be abandoned. According to the rules of treatment of communal property, only the managing entity itself and its owner - the commune should determine the amount of fees and rents. The fact that it ensures the highest level of compliance with

the low cost principle is not without significance for the selection of communalization as the formula of the entity managing the local port.

The Nida port is a good example of public-private partnership. In the port there is a convergence of interests of the district administration, the administration of the national park and private entities, and cooperation works very well.

1.5. Impact on the local labour market

Sea ports, due to the complexity of their functions, have always been a great job market, especially the so-called simple work. However, along with technological changes within particular port functions, and especially the transport function, the importance of ports as a source of quantitative demand for labour decreases, similarly as in industry. However, the importance of skilled work increases. From the point of view of the port-region relationship, it is difficult not to notice the dependence between the possibilities of port development and the possibilities of acquiring qualified staff.

In this connection, the port-region relationship has been observed in recent years. It is not the port that is the development stimulus of the city, but the development of the port depends on the impulses flowing from its surroundings. This applies to both education and accessibility of the port from the back office, which was a traditional "contact" of the city and port, as well as a new problem - joint port-urban activities for the optimal use of urban and port space.

One of the examples of mutual developmental impulses of the port-city is the idea of a cluster. The seaport is the natural basis for industrial clusters and not only those that can be described as marine. The most predestined to become the basis of the cluster in the seaport are the so-called enterprises. the strict maritime industries, i.e. those that can exist only at the access to water, and thus mainly all kinds of shipyards, and in the case of regional airports, yachting yards and building / renovating small vessels and the fishing industry. All other types of industrial companies choose a port location solely on the basis of an economic account. However, the creation of a cluster may take place only after reaching a certain stage of development of a specific set of enterprises.

The attitude of the self-government of the commune - the port city - is of key importance for the development of strong ties between the local port and its surroundings. It is this entity that must assess the significance of the port and outline its perspectives. However, building an effective strategy for the development of a local port requires constant cooperation between various levels of public authorities.

Regardless of the size and importance of a given port, it is always an important component of the development potential in the scale of the commune, region, country, and as part of the local development potential, each local port should be subject to local government policy shaped at the commune level.

The activity of the majority of small ports in Poland is mainly associated with fishing and, to a limited extent, with support for tourism and recreation. Few of the small ports form modest, though multifunctional, economic and spatial structures of both local and regional importance, capable of

the activity typical for hubs of transport infrastructure. On the other hand, the development of local ports is a key priority of the European Commission's White Paper on Transport Policy.

The fishing industry is diverse, however, the fluctuations in its production in recent years appear in all types of activities related to it. Each area is also struggling with other problems, such as high maintenance costs, good environmental status, poorly developed port infrastructure or catch limits. This affects the condition of the fisheries sector, which more often tells related entrepreneurs to diversify their activities.

The coastal location of the Puck Land area and the unique environment and landscape values associated with it favour the development of tourism. The area of the Puck Land, as well as the entire Pomorskie Voivodeship, is considered one of the most attractive tourist regions in Poland. It is characterized by natural and cultural values, whose diversity and uniqueness on the national scale affect the high attractiveness of tourists visiting the region, but also for residents who positively assess their place of residence. The most popular form of tourism in the studied area is tourism, which results directly from the coastal location and landscape values of the region. For climate reasons, this type of tourism is limited almost exclusively to the summer season, and, to a large extent, depends on the current weather conditions. Active tourism, especially water tourism is also very popular. The region offers excellent conditions for sailing enthusiasts, but there is no common and integrated offer of the entire region for sailors. In this region there are excellent conditions for windsurfing. The surroundings of Rewa and Jastarnia, in turn, enjoy great popularity among kitesurf enthusiasts.

In the area of the Słowińska Fishing Group which includes the Ustka Port, 20 fish processing plants are under operation. Most of them have modern equipment and modernized or new infrastructure. MORPOL S.A., the largest fish processing plant in Europe and salmon in the world, has the largest share in production and employment. This area is also attractive for tourists because of its coastal location, richness of water reservoirs and abundance of fauna and flora. The Baltic coast is the most important tourist attraction, creating opportunities for recreational, water and walking tourism. Lakes and rivers also allow for canoeing and fishing. However, this potential is almost completely unused. Meanwhile, the area has great conditions for sailing, windsurfing and kitesurfing, which are used by individual amateurs coming here from all over Poland. A training company in the field of these sports operates on Gardno Lake, and there is a similar school in Słupsk. The situation is similar when it comes to diving - one entrepreneur provides this service. Sea fishing begins to flourish thanks to the diversification of shipowners' activities.

The health tourism is of major importance for the economic development of the SGR area, mainly Ustka Uzdrowisko, covering the City of Ustka and the commune part. Ustka and, therefore, also a seaport. Ustka as one of 45 places in the country (in the Pomeranian province of Sopot and Ustka) has the status of a health resort, which is an opportunity to extend the tourist season. The number of facilities providing accommodation services is above average, which reflects the tourist character of the region.

The type of business activity that is particularly important in the opinion of DLGR is tourist and tourism-related services. The natural potential is demonstrated by the fact that legally protected

areas occupy 17.1% of the area and there are more than 300 nature monuments on them. Tourism is one of the key potentials of the DLGR area due to the proximity of the Baltic Sea, attractive landscape, numerous lakes and tourist attractions. Data on the tourism services sector, however, indicate that the potential of the area is not fully used.

Every year, over 400,000 people visit the region of SRLGD "Sea and Parsęta", mainly due to the sea port in Kołobrzeg. This number, thanks to the stays in the spa, spreads out throughout the year, with the highest volume of tourist traffic falling into the holiday season. This has an impact on the seasonality of employment in the area. This number is an additional, potential clientele of local enterprises. Of course, the expenses of tourists in the largest part are intended for accommodation, gastronomy, entertainment and recreation. However, it should be remembered that tourists staying in the area covered by LDS usually spend here at least a week. Many of them use in this connection services related to everyday life (hairdresser, beautician, car mechanic, doctor, etc.). This is a circumstance that may be an additional opportunity for industries not related to tourism. Tourism generates a lot of jobs, both in accommodation, gastronomy, as well as recreation and entertainment facilities.

In Lithuania, the impact of the development of Šventoji sea port on the local labor market depends to a large extent on the pace of recovery and marketing success. In general, it is expected that 10 to 50 maritime and auxiliary jobs can be created in Šventoji in connection with the development of a seaport. When assessing the development prospects of a seaport, two scenarios can be distinguished: a) if the restoration of ports is relatively slow, this increase can be reduced to 5-10%; B) if the economic indicators of the port start to improve after reconstruction in 2020, and in the next five years it will continuously increase every year, this increase may range from 20 to 30%.
The largest demand for qualified and unqualified manpower associated with the development of Šventoji port is related to the need to service visitors to pleasure boats and ferries. According to statistics obtained from existing Lithuanian and Latvian ports, it can be predicted that the marina in Šventoji will be visited by 500-600 yachts and motor boats annually with foreigners, with over 70% of visitors. In the first year of operation of the reconstructed port (the first season), more than 200 foreign boats arriving from Germany, Poland, Latvia, Russia and Scandinavian countries (Finland, Sweden, Denmark) can be expected if the information about the new marina will successfully spread to target markets foreign.
Pending the successful development of marketing activities in Palanga resorts in the Nordic countries, we can expect at least 1-2 small ferries from these countries within the first 2-3 years of port operation, which would be particularly important for a qualified and unqualified workforce land. The significant increase in the workforce employed in the Šventoji port and the marina serving the maritime and auxiliary sectors can be facilitated by special events (eg international sailing race), daily management of the Šventoji port, as well as additional service areas in the field of recreation and non-formal education (eg club sailing, sailing school, etc.). As mentioned above, there is a constant demand for a qualified workforce related to the maintenance of the fleet of service vessels of various institutions, i.e. the Lithuanian Navy, Būtingė oil terminal, Environmental Protection Agency and

Border Guard. The influence of the Būtingė petroleum terminal on the local labour market is negligible because the staff is sufficient and lives mainly in Palanga or Klaipeda.
As mentioned earlier, there are currently 10 fishermen maintaining ships in the port of Nida. Due to the decline in commercial fisheries in the Curonian Lagoon, it is practically impossible for the number of fishermen to increase in Nida in the near future, although the number of berths specially designed for small-scale fishing boats could be increased to 40. On the other hand, the basin's capacity to increase Recreational boats can have an impact on the local labor market, taking into account new job opportunities in ports in direct and ancillary services. Despite numerous restrictions and regulations related to the national park and the status of World Heritage, the city of Neringa is the leading in Lithuania in terms of business conditions. Therefore, any modernization of equipment for water tourism and recreational sailing, in particular the opening of cross-border shipping to the Russian part of the Curonian Lagoon, can have a significant positive impact on the local labor market, especially in the summer season.
Due to the importance of water tourism and related services for the economy of the Minija village, in combination with rural tourism, fishing and nature tourism and the addition of small-scale auxiliary farming and fishing, there is no structural unemployment in Minija. On the contrary, it attracts seasonal workers from places like Kintai, the center of senior management and Šilutė, the center of the municipality. The seasonality of tourism in Minija is mitigated by the fact that most of the facilities, including the marina, are closed in low seasons, and the other few open can survive, satisfying the needs of several hundred ice fishing and bird watching enthusiasts who come to the Minija in Winter and Spring.

Most people in low seasons live off the earnings accumulated during the tourist season or leave the village. This is quite a typical situation in seasonal tourist settlements around the world. This is certainly not a permanent state of affairs, because it is vulnerable to a rapid collapse if the conditions for tourism exchange change. In contrast, for Minija, which is a remote village with very limited development opportunities, it can be perceived as an average state of equilibrium regarding the local labour market. Bearing in mind that Minija is a village of ethnographic and architectural heritage, where new investments and development plans must meet very stringent security requirements, there is almost no chance of the settlement going beyond the current borders and for the reconstruction of commercial fisheries with greater scale in the Curonian Lagoon by residents, whose number and economic prosperity are relatively stable, but their interests in fisheries are no longer.

Conclusions

Due to the complexity of their functions, seaports create large labour markets in their surroundings. The activity of the majority of small ports in Poland is mainly associated with fishing and with support for tourism and recreation. The analysed areas of local ports and their immediate surroundings create many employment opportunities, mainly in the above mentioned sectors, but not only. Local ports generate employment in fisheries, processing and preservation of fish and fishery products. Besides, they are attractive to tourists in themselves. Thanks to this, they increase the attractiveness of the region and are an impulse to create new jobs in the tourism industry.

The coastal location and associated landscape values favour the development of tourism. The most popular form of tourism in the studied area is tourism, which results directly from the coastal location. For climate reasons, this type of tourism is limited almost exclusively to the summer season, and, to a large extent, depends on the current weather conditions. Active tourism, especially water tourism is also very popular. Regions offer conditions for lovers of sailing, windsurfing and kitesurfing. Tourism generates a lot of jobs, both in accommodation, gastronomy, as well as recreation and entertainment facilities. In addition, tourists spending holidays in the vicinity of local ports use those services related to everyday life (hairdresser, beautician, car mechanic, doctor, etc.). This is a circumstance that may be an additional opportunity for industries not related to tourism.

2. ANALYSIS OF LOCAL PORTS AS REGIONAL DEVELOPMENT CENTERS

2.1. Development of the current potential and functions of local ports

The current potential of local ports can be a development impulse for the coastal communities. An important role in the activation of all economic functions of the port or marina is played by transport conditions related to the port's transport location in the local, regional and supra-regional context.

There are strong transport links between the sea ports and the hinterland, creating land and sea transport chains, directing cargo streams to specific transport routes and to specific ports. The well-developed and efficient transport system of the port is of decisive importance for its competitive position on the market in the era of globalization and the development of international transport.

From the point of view of the spatial criterion, one can mention the city-forming and region-forming function of local ports, by which the processes of the port's influence on the spatial shaping of the city and the region are understood. They reflect the dynamic side of the process of creating and expanding a port city or region.

Ports may influence the activation of the region's economy as a basis for diversified economic activity. An additional spatial function is the regional function of servicing the existing and already shaped economic region through the port, port industry and commercial apparatus as well as transport.

Local ports as economic and spatial structures, as well as hubs of transport infrastructure, also fulfil basic economic functions for the region:

- transport, related to cargo handling and transhipment as well as storage and storage of goods;
- industrial, associated with the performance of industrial activities on the port areas (repairs and construction of small vessels and repairs of fishing gear and its product).
- commercial, referring to the role and functions that the seaport fulfils in the process of goods distribution, eg sorting, repacking, execution of purchase and sale contracts, financial and legal services;

• support for the Baltic fishery, including handling, storage and processing of fish as well as support for cutters and fishing boats using the port,

• tourism and recreation, related to the service of international passenger traffic as well as passenger ships, passenger ships of coastal shipping, yachting, as well as various forms of water sports and recreation (fishing, diving, etc.).

Due to the change in the nature of the economy, the importance of the industrial function of the port is decreasing. It is estimated that in the future, the industrial function of ports will be based mainly on plants producing highly processed goods that do not have location restrictions. Their acquisition for ports will therefore be the subject of a competitive struggle, as will the acquisition of cargo as part of the transport function. The described phenomena will mainly concern large universal ports. Local ports will still be able to develop industrial functions, such as fishing and processing. While sea fishing in closed waters such as the Baltic Sea could not develop dynamically due to natural reasons, this does not mean a reduction in the fish processing industry. It's just that the proportion of imported fish will increase in their production, which can and should be delivered with water. Local fishing will remain a tourist attraction, giving fresh fish on the shore and the possibility of fishing at sea. In addition, local ports favour the location of small shipyards.

In addition to the development of typical transport and industrial functions, regional ports should see their opportunities in increasing tourism and in the development of short-sea shipping. The geographical location of small ports and marinas indicates that they can be an important link both in service and in stimulating the development of tourism and leisure in their area. They are located in regions with high natural values. The development of a qualified base for sea tourism, yachting and other water sports can be accomplished through better use of existing hydrotechnical port facilities, or their expansion, combined with the location of the technical support base, landed berths for yachts and social facilities at the back of the ports. These activities may result in employment growth, ordering and development of technical infrastructure as well as social and economic revival of port cities and communes.

The development potential for maritime tourism is created by both extremely attractive resources of the natural marine and coastal environment, as well as various resources of coastal towns of various rank and size, including the status of health resorts.
The coast is developing mainly traditional coastal tourism related to the so-called seaside recreational zone. Still unused tourist potential lies in a marine tourist that includes all activities related to leisure, getting to know and practicing various forms of specialized tourism with the use of devices allowing for movement both on the surface of the water and underwater. Maritime tourism mainly uses the advantages of marine space. A particularly valuable resource for this tourism is the network of ports together with their tourist infrastructure (ferry terminals, stands for cruise ships of different ranges, marinas, mooring piers, separated waters for water sports, etc.) and public infrastructure necessary for sea tourism. Components of maritime tourism are cruise and cruising, coastal yachting, sea fishing, windsurfing and kitesurfing, river and sea tourism, observation of marine mammals, underwater archaeology and diving.

Diversification of tourist offers and the activation of maritime tourism is the domain of the activities of coastal communal authorities. One can expect an increase in the activity of local governments in this area due to structural changes taking place in the coastal economy, mainly concerning fisheries, and the emergence of support for sea-related activities with EU funds. Some of this type of activities will be spatial (eg port reconstruction). Cooperation between maritime offices and seaside communes must broadly enter the sphere of spatial economy, in order to plan solutions for the balance of the coastal zone together, but also to pursue economic goals. However, one should expect accessibility from national and regional spatial policy.

In the case of coastal areas, accessibility from the sea and land is essential. For the development of tourism, all ports require both improved access to ports from the sea (eg Darłowo, Ustka), as well as improvement of access to coastal regions from the land side, i.e. from the interior of the country. Cabotage passenger navigation will also require the modernization of these elements. In small ports of the open sea there is a considerable length of the mooring line, but for fishing vessels. Passenger ships require different facilities and, above all, car and bus access. This will require reconstruction of the port and city space. There is also the problem of space integration, i.e. the right connections between parts of these ports located on both river banks.

Various large ports and most local ports are of great importance in servicing various types of passenger traffic. Among the latter, the ports have a significant position, for which the potential opportunities are developing water sports, sport fishing and active recreation on vessels.

A separate problem is the service of passenger traffic. This component of the demand for port services has two segments:

- service of sea ferry traffic,
- service of recreational and maritime sailing vessels.

Ferry traffic concerns especially closed water areas, such as the Baltic Sea, and is currently the only manifestation of passenger shipping of a communication nature, i.e. to ensure regular connections. In addition, ferry transport connects the transport of people with cargoes.

Passenger shipping of a tourist nature, as well as sea sailing are developing as the wealth of societies increases. The condition for acquiring this market for the port is the tourist attractiveness of the port itself as well as its immediate surroundings and transport accessibility.

At the current stage, the weakness of local ports may include the lack or insufficient number of permanent maritime connections, poor sanitary and accommodation facilities in the yacht ports, poorly developed promotion. The development of the tourist function of local ports also depends to a large extent on the improvement of their transport accessibility and the expansion of the technical base of water sports, recreation and training activities.

Of course, in the long run, the increase in the wealth of the society will result in the need to look for various forms of spending free time. We can clearly see the intensification of tourist activity in a significant number of coastal towns, and the possibility of sailing by ship will be an additional attraction of the stay. Therefore, it can be assumed that transports will develop where it is worth

coming for other attractions. This fact determines the importance of self-government activities, because they are responsible for promoting their towns and "attracting" tourists.

An important type of activity, which can increase the use of the seaside location of ports and marinas and their infrastructure, are services based on knowledge and modern technologies.

First of all, it concerns services related to the use of the Polish economic zone in the Baltic Sea, such as:

- maintenance and maintenance of wind farm installations at sea;
- support for research and exploration activities in the Polish economic zone;
- servicing of the fleet and devices obtaining offshore minerals (eg on the Słupsk Bank).
- convenient conditions for development in small ports and marinas are also found in the following activities:
- trainings related to raising qualifications and professional competences of people employed in the maritime economy, enabling to obtain certificates of professional competence, courses aimed at retraining professional groups,
- creation of simulation centres (virtual terminals, ship traffic management systems, port services) based on information technology for conducting research and training of port workers and floating crews,
- using existing transport and port infrastructure to organize training and training centers for specific professional groups (sea pilot training centers, tug boat crews, using the port's aquatorium) or testing security and port security systems and ships, exercises related to environmental protection, coordination of rescue operations and maritime rescue systems,
- performing services related to the recruitment and training of seafarers for work on ships and technical management of ships (employment agencies of seafarers involved in technical service of ships), as well as outsourcing of other services for ship operators, port and other entities related to maritime affairs.

Services based on knowledge and modern technologies show great interdependence in development (creation of one type of activity entails the development of subsequent services) and contribute to the activation of both ports, marinas and seaside locations around them.

The forms of activity and development of local ports described above are not universal. Depending on local conditions, in certain ports certain forms of activity have the possibility of development, in others not.

After the completion of the reconstruction project, Šventoji port will be able to accommodate more than 655 boats, including berths for 500 boats and yachts in port basins and around 160 onshore. There is also space for one small (up to 70 meters long) cruiser. Port Šventoji will form an internal port in the present estuary of the Šventoji River, and the outer area in the sea is surrounded by breakwaters. The internal seaport will also run a yacht club, a sailing school, two dry docks, repairs and maintenance of ships, restaurants and shops. Power supply, water supply and other services were provided to visitors arriving in yachts and boats.

Facilities for mooring business vessels of various institutions, i.e. the Lithuanian Navy, Būtingė oil terminal, Environmental Protection Agency and State Border Guard will also be created. A ship repair yard for small repairs of recreational and fishing vessels will also be built. In addition, there will be facilities for storing and maintaining recreational and sport boats nearby. The post of border control with the building and the pier of the ship's reception will be determined at the entrance to the internal dock. The second phase of the project will also include a fishing pier, a storage facility and fish processing equipment as well as stores that meet the needs of recreational sea fishing. In the inner port there will also be toilets, showers, laundries and a medical help station.

The total value of reconstruction works carried out in the port of Nida in 2016 - dredging aimed at ensuring a safe depth of navigation up to 3 meters and installation of wooden floats - cost 250,000 euro. The floating rooms are rented from the Port of Maritime Authority in Klaipeda and imported from the non-existent seaport Šventoji. They were installed in the recreational boat basin. Floating accommodation will remain in Nida until the reconstruction of the Šventoji port, ie At least by 2020, but most likely even longer. As a result of the reconstruction of the marina in 2017, the number of recreational boat moorings will increase from 60 to 120.

There are also plans to install a stationary petrol station in the port of Nida and a specially designed harbour master's building containing additional sanitary facilities (Fig.13). These last constructions will reach the natural limit of development potential of the Nida port, because for the port located in the national park, which is at the same time inscribed on the UNESCO World Heritage List, there is not much additional space for the expansion of the facilities. Also, the limited safe depth of the intersection of 2.8 to 3 meters in the tracks of the reservoir from Klaipeda to Nida sets limits for the availability of larger yachts from the Baltic Sea to the Nida marina.

The destroyed building of the passenger terminal in the coastal waters, currently located at the entrance to the port of Nida, will also be transformed in the near future. Despite the Soviet architecture (the building was designed and built in the 1970s), and its current state of destruction, however, has the status of heritage and could not be demolished, with the exception of the inactive navigation tower. Therefore, UAB Fatalitas, a private company that purchased the building a few years ago, is required to make the necessary efforts and invest significant funds not only to keep the building out of its original shape, but also to maintain its original function as a fast passenger terminal ferry and hydrofoil.

The company will consider adding additional facilities to the existing passenger terminal building, including a small boutique hotel with 10 to 20 upper rooms, a small waiting room for passengers, a café serving traditional Curonian food and drinks, a duty-free shop and a customs and customs clearance point for boats from abroad, mainly from the Russian side of the Curonian Lagoon (Figure 14). According to UAB Fatalitas, if the company manages to complete all the necessary planning procedures successfully, which is a Tantalizing task in Neringa, and to receive all necessary building permits in 2017, reconstruction work could start already this autumn, and a renovated building could open your doors for the Summer season 2018.

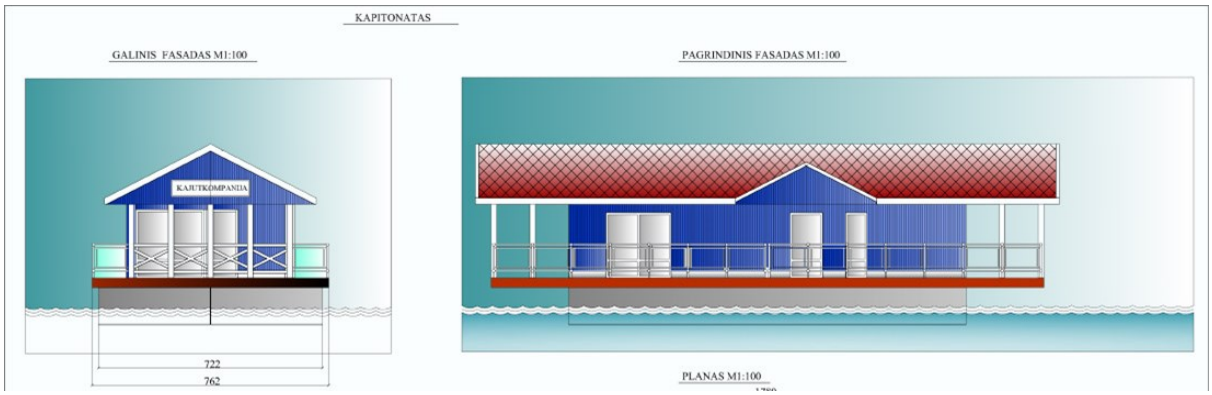

Fig. 11. Plans of the planned harbor master's building in the port of Nida.
Source: Neringa Agila Tourist Information and Culture Center

Fig. 12. Visualization of the Nida passenger terminal.
Source: Neringa Agila Tourist Information and Culture Center

Prospects for the development of the Minija marina are related to the improvement of its role as an important regional node in the Natura network and rural tourism of the Curonian Lagoon region, while protecting its very special and attractive natural values and cultural heritage. In 2008, the District Council of Šilutė issued a detailed spatial plan for the aforementioned modernization of river embankments, wharves and berths in the village of Minija. A detailed plan was prepared and approved in 2010. The aim of the plan was to develop Minija as a regional water tourism center. The total value of the project was 1.5 million euros. 85% of this amount was awarded as part of the action program to promote EU cohesion in 2007-2013 under the Regional Development Fund and the Lithuanian state budget.

The project implementation began in 2010 with the joint-stock company Šilutės Polderiai. After adjusting the project in 2013, this ended with a reduction in costs, but created fewer facilities. Major

investments in water tourism facilities have been allocated at the southern end of the village, which is more suitable for this purpose. The implementation of the measures provided for in the detailed plan of the village of Minija has created facilities for handling about 300 yachts and recreational boats at the same time.

Along both banks of the river, paths have been installed throughout the village, paths to access roads and stairs to wharves, as well as wharf lamps, electric cables, distribution boxes and side anchors for floating piers. However, after the project was revised in 2013, the assumption of 32 predicted floating piers (one for each farm) was canceled and the owners were left to install at their own expense. In the southern part of the village, where the Minija River is most actively used for navigation, there were three floating jetties for larger vessels installed as an integral part of the project: two on the right bank and one on the left bank.

Conclusions

It should be stressed that the traditional basic economic functions of seaports: transport, commercial and industrial can be reduced to two - distribution and industrial. Changes in the meaning and development factors of these functions are reflected in functions reflecting the influence of ports on the environment, i.e. labour market functions and city and region-forming functions.

Due to the change in the nature of the economy, the importance of the industrial function of the port is decreasing. It is estimated that in the future, the industrial function of ports will be based mainly on plants producing highly processed goods that do not have location restrictions. Their acquisition for ports will therefore be the subject of a competitive struggle, as will the acquisition of cargo as part of the transport function.

The geographical location of small ports and marinas indicates that they can be an important link both in service and in stimulating the development of tourism and leisure in their area. They are located in regions with high natural values. The development of the tourist function of local ports also depends to a large extent on the improvement of their transport accessibility and the expansion of the technical base of water sports, recreation and training activities.

An important type of activity that will increase the functionality of the local port and its use are services based on modern technologies, mainly service and maintenance of wind farms in the Baltic Sea. Such services will contribute to the activation of ports and their surroundings

2.2. Strengthening fisheries and mariculture

Baltic fisheries are experiencing difficulties related to the European Union introducing limits on sea fish fishing and periodic restrictions on fishing for certain fish species. However, there are opportunities to use fishery to activate ports and marinas, especially when combined with the development of a sports and tourism cluster. In addition, these regulations mean that a limited group of fishermen have greater opportunities to keep on fishing. This means that some ports may continue to act as centres for catching and processing fish.

It is worth to note that fishing restrictions do not apply to the 3-mile zone of coastal waters, and therefore virtually boat fishermen. Fishing in small boats and harbours can be a kind of tourist

attraction, as I have for a place in many small ports of Spain, Portugal, France or Finland. There is a sale of fresh fish straight from the boat, pre-processing and sale of culinary delights in numerous small gastronomy products. The development of sea fishing in Poland falls in the mid-90s of the last century. The popularization of this type of activity was influenced, on the one hand, by low fishing limits of cod, and on the other by the increasing standard of living of the society. The first attempts related to sport fishing were taken in Kołobrzeg at the end of the 80s, when the local Sea Fishing Club allocated two fishing boats for this purpose.

Mariculture is a type of aquaculture and consists in breeding and breeding marine organisms (fish, molluscs, crustaceans, seaweed, algae etc.) for consumption and economic purposes. The second type of aquaculture includes the cultivation of organisms in inland waters (ponds, rivers). Poland is one of the largest producers of freshwater fish, mainly carp and rainbow trout. In Central and Eastern Europe, it is the second, after Russia, center of freshwater aquaculture. The annual production of rainbow trout reaches 17 thousand. tonnes, and their commercial value is estimated at PLN 120 million. In turn, the production volume of carp breeding varies between 15-23,5 thousand. tonnes, while the commercial value of production is estimated at PLN 125 million annually. The dynamic development of freshwater aquaculture and the economic effects of this type of activity, leads to consideration of the possibility of mariculture development in the Polish zone of the Baltic Sea. The analysis of hydrographic and biological conditions prevailing in the area of the Polish part of the Baltic Sea indicates, unfortunately, very limited development possibilities for particular forms of mariculture.

This is influenced by the following conditions and factors:

- low salinity of sea waters, which in practice eliminates the possibility of effective breeding of crustaceans and molluscs for consumption (based on an experiment, requiring further research, the possibility of breeding one crustacean - signalling cancer) is considered,
- too deep (below 30 m) depths prevailing in most areas of the Polish Baltic Sea zone and too low water temperatures (rarely exceeding 20 degrees) are definitely not conducive to the development of the majority of known marine farming technologies.

Due to the environmental conditions prevailing in the Baltic Sea, the possibilities of rearing marine organisms are limited to the following technologies:

- in closed circuits on land (capital-absorbing and land-intensive method),
- cage rearing in the open sea zone (limited use due to the adverse impact of breeding on the natural environment),
- grazing consisting in restocking of sea areas (lack of interest in private capital due to the fact that it is not possible to determine the relationship between the expenditure incurred and the results obtained).

In Lithuania, the commercial fishing fleet and the number of fishermen employed in sea fishing are falling each year (due to fishing quotas, low profitability, EU support for scrapping old boats, etc.). Currently, experts estimate that up to 20 small fishing boats can operate in the port of Šventoji. If

some of these boats are turned into recreational fishing, this small employment program can become permanent. Currently in Klaipeda there are up to 15 small recreational boats (up to 12 people), adapted to recreational needs and up to 20-30 smaller, offering recreational cod fishing services (mainly in Spring and Autumn, i.e. in shoulder seasons). It is possible that from 20 to 25% of these boats can be moved to the port of Šventoji and offer recreational sea fishing services from there.

There are no plans or development possibilities for aquaculture facilities near the port and the seaside town of Šventoji.

In 2014, a new building was built in the Nida port, adapted to the needs of local fishermen. It was completed for almost EUR 0.5 million, mainly financed from EU funds to support sustainable fisheries and aquaculture. The building consists of twelve shops and two major fish processing plants. The attic is adapted to drying and storing the network. Currently, the most important and very difficult task is to find the right approach to share the created facilities by all interested commercial fishermen companies in a fair manner. According to the Neringa municipal administration, the local fishermen's association connects 20 companies, but officially there are more than 30 commercial fisheries companies registered in Neringa.

This is only the first stage of a larger project aimed at restoring the function of the Nida port as a small fishing port, however the subsequent stages are unclear and will depend on the measures included in the fisheries development strategy developed by the Regional Fisheries Group (FLAG) consultants from Neringa. It should be remembered that all measures for the development of infrastructure in the municipality of Neringa, which is a national park and cultural heritage of UNESCO, must comply with special documents regulating spatial planning in the Lithuanian part of the Curonian Spit and approved by numerous public institutions with often conflicting interests. Therefore, the outline of plans for the future strengthening of fisheries in and around Nida is still very unclear and uncertain. As in the case of Šventoji, there are no plans or development opportunities for aquaculture facilities near the Nida port.

At the beginning of 2017, the Ministry of Agriculture of Lithuania approved the action program of the Local Fisheries Group Šilutė (FLAG) for 2017-2020. Implementation of the strategy will be granted 1.6 million euros from the Lithuanian Action Program in the aquaculture sector 2014-2020. Under this strategy, at least 19 local projects in the field of sustainable fisheries and aquaculture should be implemented, aimed at improving the region's economic growth, creating new jobs, etc. A number of priority measures are directly relevant to the development of the Minija village as a regional center for water tourism and fishing and could receive at least partial EU funding:

- Diversification of revenues and a new source of income. The amount of aid for a project is up to 20,000 euros, the intensity of support is up to 50%,
- Cooperation in the field of fisheries and aquaculture for local development. The aid amount for the project is up to EUR 100,000, the intensity of support is up to 80%,
- Improvement of infrastructure related to fisheries. The aid amount for the project is up to EUR 100,000, the intensity of support is up to 80%,

• Supporting, adapting and disseminating fishing traditions and heritage. The aid amount for the project is up to 30,000 euro, the support intensity is up to 80%.

To sum up the activity in the field of fisheries and mariculture, in local ports and marinas, it can focus on such forms as:

• organizing fishing trips and sea fishing for tourists,

• organization of local fish markets,

• creating attractive fishing open-air museums (fishing villages) for tourists, combined with didactic, exhibition, historical and cultural activities, as well as practical activities (demonstrations of smoking and preparing fish), tasting of Baltic fish,

• sale of fish from the cutter for individual recipients (tourists), as well as for local fish fryers and restaurants,

• supply of fishing equipment, fuel supplies, repairs and repairs of boats and cutters, stopping and mooring of vessels.

Conclusions

After the introduction of catch limits by the European Union, Baltic fishing is experiencing difficulties. However, there are possibilities to use it to activate ports. Some ports will continue to be able to act as fishing and processing centres. These restrictions apply to the 3-mile zone of coastal waters, and therefore virtually boat fishermen. Fishing in small ports can be a kind of tourist attraction. Sport and recreational sea fishing is one of the most dynamically developing activities related to maritime tourism. The season for fishing trips lasts almost a whole year.

To sum up, mariculture as an attractive type of diversification of economic activity encounters barriers to development in the Polish zone of the Baltic Sea. Instead, you should conduct research and carry out experiments that may change this unprofitable state of affairs in the future.

Such research and experiments are still carried out. In Sweden, the breeding of Baltic sea mussels for industrial purposes started in two places, for the production of biomass and meal, and the possibility of rearing algae for the same purpose is also being considered.

2.3. Improvement of accessibility of local ports from the land side

The basic condition for the implementation of any strategy for the development of coastal areas is the improvement of their transport accessibility through comprehensive modernization of transport infrastructure.

Coastal areas have the following advantages:

1. have, as for European conditions, a relatively clean environment,

2. for the next 20 years one can expect a particularly advantageous relationship between the qualifications of the employees and the costs of their work,

3. an aging Europe will seek the supply of recreation and treatment services (strengthening of the already occurring phenomenon).

Modernization of the transport network is a basic condition for the implementation of such defined objectives of the coastal area strategies, but not the only one. It is also necessary to adapt the supply network to energy and water, and to treat sewage to meet new needs, as well as to solve the problems of waste disposal. In other words: making a fundamental breakthrough in the state of technical infrastructure understood as a total of devices for the movement of: goods and persons, energy, water and information.

The quality and type of coastal transport routes and their course should be adapted to the assumed functional structure of local ports and the economy of coastal communes, taking into account their natural values.

The accessibility of local ports from the sea side is to be statutorily provided by the maritime administration, hence its scale and duration depends on the state budget. This creates the need to harmonize the intentions in ports with these possibilities. Therefore, it is necessary to specify the order of actions, both on the part of communes and port cities as well as the government. This should not mean, for example, "stiffening" of budget expenditures on the development of infrastructure providing access to ports, but the need for cooperation in long-term planning.

A common problem of the discussed Polish coastal areas is the weakness of land transport infrastructure, which determines access to them from the depths of the country and links between them. The country connects three coasts with the coast:

- eastern: covering national roads No. 7 and No. 1, A1 motorway and the railway line Gdynia-Malbork-Warsaw and Gdynia-Tczew-Bydgoszcz (the so-called coal main),
- central: national road No. 11 Poznań-Koszalin-Kołobrzeg,
- western: national road No. 3 and railway lines Szczecin-Poznań and Szczecin-Kostrzyń (the so-called Oder River).

Roads and railway lines comprising these axes are currently in various stages of modernization and it is expected that in the near future they will reach the established standards of expressways No. 7, 1, 11 and 3 and the "fast" railway line (160-200 km / h.)

The basic transport line connecting the coastal areas is:

- road route: road no. 22 from the eastern border of the Republic of Poland to road No. 7, road No. 7 from the Elbląg beltway to Rumia via the Tricity beltway and to road No. 6, road No. 6 from Rumia to Goleniów and road No. 3 Szczecin-Goleniów-Świnoujście,
- the railway line Elbląg-Gdańsk-Gdynia-Słupsk-Koszalin-Szczecin.

While the basic transport network connecting the coastal areas and their individual parts is in the process of modernization, which is already significantly advanced, the network integrating them internally leaves much to be desired, although the possibilities vary depending on which coast it concerns.

The key transport problem of land access to the Hel Peninsula is road No. 216 Rumia-Władysławowo-Hel. It should be borne in mind that due to environmental restrictions, a larger scale operation on the

section Władysławowo-Hel will not be possible. Fortunately, there is a railway line that should be maintained. Maintenance of the Gdynia-Hel railway line is necessary because after exhausting the possibility of increasing traffic by modernizing the road, we will inevitably get closer to the need for administrative restrictions on cars entering the peninsula.

From Władysławowo to Dziwnówka there is over 200-kilometer strip of the open Baltic coast. The economic and social area located between the seafront and more or less the national road No. 6 and the railway line Gdynia-Szczecin belongs to the least populated, and thus least urbanized and the least poor in Poland. Suffice it to say that there is only one city with more than 40,000 inhabitants on this stretch of coastline - Kołobrzeg and two with a population of 14 and 16 thousand - Ustka and Darłowo.

In total, it can be estimated that despite the disappearance of the Baltic fishing, the coastal location creates a better chance for this area than it did in the past. In order for this opportunity to be fully utilized, a definite modernization of the road network between the national road No. 6 and the coast and the maintenance and modernization of the existing railway lines are necessary. The quality of roads in the east-west relation, directly connecting the ports of the discussed area, is of particular importance, as:

- road No. 213 Puck-Słupsk with a branch road 214 to Łeba and 210 to Ustka; the latter will in the future become the axis of the settlement complex Słupsk-Ustka,
- road No. 203 Ustka-Darłowo-Koszalin,
- section of road No. 11 Koszalin-Kołobrzeg,
- road No. 102 Kołobrzeg-Trzebiatów-Dziwnówek-Międzyzdroje,
- road No. 103 Trzebiatów-Kamień Pomorski.

Modernization of these roads is necessary for the development of passenger shipping along the coast. The speed achieved by currently operated ships is small enough (usually not more than 10 knots), that cruises between ports can be attractive to tourists only when providing them with a faster means of transport, i.e. a bus. Anyway, even when using faster sea transport (sooner or later will happen), the possibility of using another means of transport on the way back will be valuable because:

- the weather can change,
- return by bus gives you the opportunity to learn about the areas lying outside the perimeter belt.

In the field of close sea transport, it will be necessary to modernize passenger tonnage for a faster and better travel environment. The stock's weakness indicates that the desired effect will be difficult to achieve without public aid. This help can come from three sources:

- European Union,
- the state budget,

• local governments.

The following solutions (including deadlines for their implementation) were presented in the draft National Program of Land Development (KPZK), which should lead to the desired parameters of the basic road and rail network connecting the coastal regions and subregions.

Solutions included in the KPZK project (May 2010):

Roads

Obtaining the standard of an express road:

• road number 6 (along the entire length) - by 2020,

Additionally:

• raising road No. 6 to 2030 to the rank of the motorway.

Railways

• route no. 202 Gdańsk-Szczecin as a fast railway (120-140 km / h) - by 2020

The solutions included in the KPZK project will only partially improve the transport accessibility of the problem areas, because it is necessary to modernize the road network between the national road No. 6 and the sea coast, as well as maintenance and modernization of the existing railway lines. This applies to both longitudinal and latitudinal roads, mostly with provincial roads.

Justification and clarification of these investment plans should be included in the planning documents at the provincial and local level. According to the draft of the CNSD, in the spatial development plans of voivodeships, problem areas will be designated, for which special measures should be dedicated to support the modernization of their transport network and support restructuring processes.

This corresponds to the new regional policy of Poland, according to which the development of regions or smaller structural units, defined - according to the KPZK project - in voivodeship plans as functional areas, should be based primarily on the use of local opportunities (potentials, resources), i.e. endogenous development factors .

In such conditions of regional policy, solutions for the activation of local ports should be sought. The improvement of the accessibility of coastal peripheries requires cooperation between all levels of public authority - from municipal councils to government and parliament. This cooperation should apply to all infrastructure investments, for which the government is mostly responsible - national roads, railway lines, infrastructure providing access to ports and transmission networks. Relevant tasks also lie with local government authorities, which are the subject of spatial planning - the basic tool for coordination of infrastructure development and the owner of some of its components, such as provincial and district roads or municipal ports.

In Lithuania, the situation with access from the land side looks different. After the construction of the highway from Vilnius to Palanga and modernization of the main road from Palanga to the border

with Latvia, all major access roads from the port to Šventoji are in excellent condition and currently do not need further improvement, Unless the Lithuanian government decides to restore the outdated railway line from Kretinga to Šventoji. Although such plans are considered from time to time, at the moment this significant investment is considered unfeasible.

According to the main plan of the Neringa municipality, approved in 2012, in order to reduce the burden of individual car traffic arriving at the Neringa resort in the summer season, there is no need to improve the accessibility of the Nida port by land from Klaipeda, but it is necessary to improve the water connection between Kłajpeda and Nida. and the delta of the Nemunas River. To this end, the Neringa municipality proposed to install a large, multi-purpose, long-term parking lot for passenger cars and motorcycles in the Nida port as the main hub for water transport linking the continent with the Neringa municipality.

Together with the multifunctional long-term parking lot, bus station and passenger terminal for water transport, the Nida port functions as an intermodal transport terminal, which will be centrally located near the main transport hubs and tourist attractions of the Nering resort. At the terminal you should pay for parking, rent a bicycle or buy a public transport ticket for a local bus or a fast ferry. Such intermodal transport terminal will be equipped with information stands, waiting or resting pavilions, public toilets.

To encourage the use of water transport, the need to improve the local accessibility of port-facilities translates into the need to provide regular water transport routes, enabling travel between the districts of the Neringa municipality and beyond. Expansion of the swimming basins in the Nida port will also facilitate the increase of recreational boat traffic between the Curonian Lagoon and the Nemunas delta, because people spending their holidays on the east coast of the Curonian Spit love to visit Nida by ship only to drink a cup of coffee or take a trip to the dunes.

The main plan of the municipality of Neringa proposed the creation of several regular hydrofoil lines, which consisted of municipal and state subsidies:

- Nida - Preila - Pervalka - Juodkrantė - Klaipėda
- Nida - Ventė - Minija - Šilutė
- Dreverna - Judkrantė - Nida
- Nida - Rybachy (Russia).

Due to the fact that the village of Minija stretches along both banks of the river, there are two access roads connecting both banks from the main road Kintai to Šilutė and are in different state. The access road of the left bank is in a more or less satisfactory condition, the access road to the right bank has very poor parameters.

The problem is that in the Soviet times, water treatment stations were installed, which drain water into the neighbouring floodplains in the summer season, which consumes a lot of energy and cease to exist from December 1 to April 1. Therefore, there is a need to raise a dike over the flood border. The road modernization project also includes sealing the gravel cover with bitumen. However, EU

support for sealing gravel roads in Lithuania ended in 2014, and now the Lithuanian state budget remains the only source of funding for this objective.

Projects for modernization of access roads to the left and right bank were included on the national list of local roads, to be updated in 2017. Meanwhile, Seimas from Lithuania took 82,4 million euro, which announced that it will spend on modernization and maintenance of gravel roads in the country in this year, as well as allocate money for other purposes, while projects improving the availability of Minija village and marina, surface roads from the back office, have been delayed.

Conclusions

The basic condition for the development of coastal areas is the improvement of their transport accessibility through comprehensive modernization of transport infrastructure. The road and rail road network is getting better and better every year. National roads and provincial roads along the Polish coast are not in bad condition, but they are definitely too weak parameters. Their throughput is no longer sufficient to handle cargo flows at the current level. The key road is the S6 expressway. Its modernization is currently in the tender phase on the section from Gdańsk to Koszalin, thus the entire section relevant to the ports discussed in this report. It is only from Koszalin that it is being implemented. Not only the S6 road requires immediate renovation, but also municipal roads connecting the port directly with the national road network.

The road network in Lithuania is in good condition and at the moment it does not require significant financial outlays and is sufficient to serve the ports of the Lithuanian coast. The ports are connected by a network of national roads and highways with good parameters and capacity, which in the case of modernization of local ports and increase of car traffic will not cause congestion and ensure effective drive.

2.4. Identification of necessary investments

Investment needs of local Polish coast ports discussed in this report have been developed on the basis of interviews with representatives of port management and analysis carried out by the Sea Fisheries Institute of the State Academy of Sciences Analysis in the report on infrastructure in fishing ports and marinas for further investment needs.

Access infrastructure for local ports.

The needs for the service of units are indirectly related to access to the port. Access from the water side was usually described as good, emphasizing the need to deepen the approach tracks. No such need was found only in Hel. In Władysławowo, there is a need to conduct cyclical works that open the approach tracks and port basins. In Ustka it is necessary to widen the radius of the turntable.

Access to the port is also affected by the condition of breakwaters. In the opinion of the managers of the ports and the fishermen themselves, the breakwaters in Jastarnia and Ustka require renovation.

Tab. 8. Local ports' needs for the modernization of access infrastructure from the water side.

Deepening the approach or water track	Modernization of breakwaters and spurs
Darłowo	Hel**
Jastarnia	Jastarnia

Kołobrzeg	Ustka
Ustka	
Władysławowo*	

* periodically
** equipment in mooring installations
Source: Based on report „Analiza stanu infrastruktury w portach rybackich i przystaniach pod kątem dalszych potrzeb inwestycyjnych", Morski Instytut Rybacki, Gdynia 2012.

Access to most of the ports and marinas from the mainland requires the construction, extension or renovation of access roads - local roads connecting the port with the main road and roads lead directly to the sweat from the local road running through the village.

The Port Authority in Darłowo indicates the need to build a city beltway, facilitating access to the port from the national road No. 37. In Ustka, part of the national road No. 21 runs through the port areas, thanks to which it was repaired with funds for port infrastructure. The remaining part of the national road No. 37 needs renovation. In Jastarnia, modernization should concern the neglected eastern part of the port, which was used as a nautical base and a mooring place for several fishing vessels.

The port in Ustka requires reconstruction of the port entrance. An investment is planned for the complete reconstruction of the west and east breakwater. The western breakwater is to be moved, depending on the chosen concept, by 50, 300 or even 600 meters. Thanks to this, many larger military and commercial units could moor in Ustka port. According to estimates, the investment is to be completed in 2018-2019. Currently, breakwaters are so exploited that experts say they are threatening with a construction disaster.

Infrastructure for servicing fishing vessels

The size and depth of port basins, the length of potential parking spaces (berths, jetties, piers), hoisting equipment (dolphins, briefs, gantries, ramps, davits) and ensuring the possibility of repair and maintenance of units and equipment affect the conditions of standstill of units in the port.

In Władysławowo, there is a need for overhauls as well as renovations of the surface. Also, it is necessary to renovate bridges equipped with quays, which would allow to increase the parking possibilities and increase the safety of their use. In this port it is also necessary to perform a major overhaul of the oldest building in which the network is located, due to the lack of proper infrastructure that would allow stretching the network for repair, drying and storage.

Shipyards only exist in the largest fishing ports and are usually privately owned. Fishermen from the ports in Ustka and Kołobrzeg point to the need to build a yard to service fishing vessels or to increase the existing capacity. The managing shipyard in Władysławowo, the "Szkuner" company reported the need for retrofitting shipbuilding workshops. The need for retrofitting repair workshops was also reported in Kołobrzeg and Ustka.

Infrastructure for the collection and treatment of oily waters and sanitary sewage from ships as well as collection and segregation of solid waste

Modernization of the installation for the reception of oily waters from ships is essential in Kołobrzeg (construction of the reception station) and Ustka (refurbishment of the reservoir). Darłowo indicated the need to purchase a unit adapted to receive oily waters directly from fishing vessels.

The need to install tanks for sanitary sewage coming from vessels has ports in Darłowo, Jastarnia and Władysławowo. In the Ustka port, the construction of a sanitary sewage discharge point is planned at the West Quay. In Władysławowo, it is required to purchase containers for solid waste.

Lithuania

According to calculations carried out by consultants, i.e. an engineering, consulting and architectural company "Alatec", which in 2010 carried out a feasibility study for the development of Šventoji port, the cost of restoring Šventoji port under Option 2B would amount to EUR 53 million.

According to the prepared requests for the project and taking into account existing data, it was asked that all construction phases were agreed by all public and private entities:

- 1st stage of construction - construction of breakwaters and dredging works,
- II stage of construction - construction of car parks,
- III stage of construction - construction of public facilities,
- IV stage of construction - reconstruction of the western wharf,
- 5th stage of construction - reconstruction of the eastern wharf,
- VI stage of construction - dredging works of port basins and construction of mooring equipment.

The resumption of implementation of the Šventoji port development plan will start with the construction of the southern breakwater. Its sophisticated configuration will help mitigate the negative impact of western winds and the resulting bottom sediment drift. However, due to additional preventive measures, the cost of completing the entire project increased to 70 million euros.

Meanwhile, the European Union is not considering the possibility of co-financing large-scale investments in the development of port facilities, because in the current version of the development plan, Šventoji does not belong to any European trans-regional transport corridor.

It is estimated that the investment in the development of the five-star Radisson Blu & SPA Nida Marina hotel will amount to approximately EUR 20 million. The implementation of the local development strategy for 2016-2020 in the Neringa region in the fisheries and aquaculture sector under Neringa FLAG costs EUR 556.684, while the investment in the reconstruction and development of the Nida port passenger terminal will be around EUR 10 million, although the exact investment is not yet clear and is awaiting a project to be approved by the administration of Neringa National Park and Kuršių Nerija National Park.

The cost of sealing one km of a gravel road with bitumen is about EUR 200,000 in Lithuania. Hence, the whole project of raising a dike on a 600-meter stretch and sealing a 5-kilometer gravel road with

bitumen would cost about 1.6 million euros. A further EUR 1 million is needed to repair the access road to the 5 km long left bank. The development of wharfs and bridges sailing south of the village with all necessary reinforcements of roads, construction and facilities of wharfs along both banks of the Minija River can amount to approx. 0.8 million EUR.

Fig. 13. Flooded road connecting the village of Minija (right bank) and the harbor
Source: 15min.lt

Conclusions

In Polish local ports, access from the water side is usually described as good. The need to deepen the approach tracks is underlined. In Ustka it is required to reconstruct the entrance to the port by completely rebuilding the breakwaters.

The ports indicate the need for surface repairs, bridges equipped with wharfs and buildings in which they are located. Renovations are also required for renovation. It is also necessary to modernize the installation for the reception of oily waters from ships or the purchase of a unit adapted to receive oily waters. The ports mainly point to the need to renovate quays, deepen waterways and port basins and to modernize access roads.

The ports in Lithuania are in a different situation. Mainly when it comes to the port in Sventoi. This port requires a general overhaul of each of the port infrastructure elements. As in Polish ports, there is a need to deepen the fairway and the approach fairway as well as the total reconstruction of breakwaters. The Nida and Minija ports are located in areas covered by strictly environmentally-friendly natural environment, so that major modernizations could not be carried out there, let alone increase the port. The Port of Nida plans to modernize the passenger terminal.

3. ANALYSIS OF CROSS-BORDER COOPERATION BETWEEN LOCAL PORTS

Taking into account the fact that both Poland and Lithuania are in the European Union, the principles and possibilities of cooperation between local sea ports of both countries should be created at the EU level. However, the EU solves the problems of the 300 largest European seaports, which are of the greatest economic importance for Europe. At the EU level, the issue of cross-border cooperation of local ports is not considered. Even issues of cross-border cooperation of key ports seem not to be the main problem in the European Commission's policy. Also at the national level, e.g. in Germany, cooperation between seaports has never been a priority in a port development program. Rather, you can call it competition, not cooperation.

Nevertheless, the European Union does not remain indifferent to the problem of local seaports and thanks to EU investment funds they have the opportunity to develop and modernize infrastructure, which should ultimately have a positive impact on cross-border cooperation.

When analyzing the possibilities of cross-border cooperation between Polish and Lithuanian local ports, the already existing good practices of business connections between ports should first be studied. However, it's hard for such examples. It could be based on the experience of cooperation between major European ports, although the functions of these ports and the ways of their management are impossible to translate, even on a smaller scale, into local ports. In addition, existing and well-functioning links between ports mainly occur between ports located in the close vicinity, the best example being cooperation between the ports of Malmo and Copenhagen.

The discussed local seaports in Poland and Lithuania are characterized by their location in poorly industrialized regions and with high natural values. These towns have a tourist character. Therefore, cooperation in the field of tourism and passenger transport between ports would be the most viable. In order for passenger transport to be operational, it would firstly have to streamline and harmonize procedures at border crossing points.

The problem of complicated and restrictive border procedures

In the past, the duty to permanently maintain border crossings rested with the minister responsible for transport and maritime economy in relation to maritime, rail and air crossings and the minister of the environment - in relation to river crossings and stopping points on border rivers. Road border crossings have been maintained for a long time by competent voivodes. At present, the responsibility for the permanent maintenance of all types of border crossings located in the province is borne by the voivode.

A well-functioning sea border crossing, as well as other types of transitions, must ensure effective border, customs, sanitary, veterinary, phytosanitary, chemical, radiometric control and the quality of agri-food products. The control activity is carried out by the appointed service: Border Guard, Customs Chamber, State Sanitary Inspection, Provincial Inspection of Plant Protection and Seed Production, Provincial Inspectorate of Agricultural and Food Products Quality.

What differs significantly the sea border crossing from other types of border crossings is their territorial range and the manner of conducting control. Road, air or rail border crossings have

limited, to a relatively small extent, territorial range, and the control of passengers and cargo takes place at designated locations. In the case of a maritime border crossing, its territorial range is roughly equivalent to the port's boundaries. Border and customs control, in the form similar to other types of transitions, takes place only at specialized passenger or ferry terminals. On the other hand, cargo ships, and in ports without a separated marina, also yachts, are moored at various quays of the port and proper control must be carried out there. It is worth noting that cargo ships often also carry tourists.

Road and railway crossings are located on the State Treasury grounds and are located in the permanent management of voivods. In the case of air travels, this is not the case. Airports are usually managed by commercial law companies and they own border crossing facilities in which control services operate. In the case of sea border crossings the situation is even more complicated. Areas within the territorial range of the border crossing and facilities in which the control services operate are owned or located on the board of various entities - commercial law companies, state enterprises, municipalities or maritime administration.

A separate problem, deterring from calls to Polish ports, is the stringent procedures and control provisions enforced by institutions supervising maritime border crossings. In addition to the aforementioned inspections: Border Guard, Customs Office, State Sanitary Inspection, Provincial Inspectorate of Plant Health and Seed Inspection or Provincial Inspectorate of Agricultural and Food Products Quality, managing the vessel must be able to inspect Port State Control inspectors, the Provincial Environmental Protection Inspector and sometimes even the National Labor Inspectorate. An additional difficulty that has been in force for several years is the need to comply with ISPS (International Ship and Port Facility Security Code).

All this makes the sea border crossing points much more restrictive than in the case of land crossings. The need for a simplification of regulations and control procedures applicable at sea border crossing points is underlined by the EU Blue Book on maritime policy.

Passenger transport

By simplifying and unifying border procedures, local ports would take a big step towards establishing regular passenger connections among other South Baltic local ports. However, in order for this to happen, ports must build infrastructure for handling passenger ferries, ie passenger terminal, parking berth, adequate social facilities for tourists, ticket sales point and create an integrated information system that would be uniform for all ports and which would provide tourists with all necessary information.

The infrastructure, however, is not enough. In order for regular passenger connections to be able to function, appropriate vessels should be provided and the costs of servicing such units should be financed. One local port, due to limited resources, will not be able to maintain such a connection. In order for it to exist, all ports between which the entity will move will need to finance part of the investment as part of the cooperation. Only then will such a combination be profitable and will have a chance to survive.

The Port of Kołobrzeg offers a year-round connection to the Danish city of Nexo located on Bornholm Island, approx. 100km away. The operator of this connection is Kolobrzeska Passenger Shipping, which for this purpose in 2005 purchased and thoroughly renovated a spacious passenger catamaran Jantar (in previous years the service was operated based on woodlot Dolphin I). The passenger port is located in one of the most attractive tourist destinations in Kołobrzeg. The port is permanently moored and supports cruises of 6 passenger ships. Each year, these vessels transport a total of approx. 250 thousand Passengers.

In Darlowo Port, a boat to Bornholm sailed regularly until 2010, after which, due to the unprofitability of such a line, the connection was closed for two years. Later, the city joined the INTERFACE PLUS project, thanks to which a passenger terminal was built in Darłowo, but again it ended with the suspension of cruises. Thanks to the courtesy of the President of the Port of Kołobrzeg, who made available to the ship Jantar, the sailing was to return. Once again, it ended in failure. The ship owned by Żegluga Kołobrzeska to transport tourists from Darłowo to Bornholm had to cover twice the long route: Kołobrzeg - Darłowo - Bornholm-Darłowo-Kołobrzeg (from Darłowo to Kołobrzeg the distance is the same as from Darłowo to Bornholm), at the same price for ticket.

In other local ports of the Polish coast, discussed in this report, international ferry cruises do not exist.

The E60 route

The International Waterway E60 is a coastal offshore road running from Gibraltar to the north along the coasts of Portugal, Spain, France, Belgium, the Netherlands, Germany, Poland, Lithuania, Latvia, Estonia, Russia to the Sankt-Peterburg-Volga-Baltic waterway, then via the Channel Baltic - Białomorski, then along the White Sea coast to Arkhangelsk.
The E60 route runs along 32 Polish municipalities and 4 Lithuanian regions. In Poland, these are the following municipalities: Świnoujście, Międzyzdroje, Wolin, Dziwnów, Rewal, Trzebiatów, Kołobrzeg (urban and rural), Ustronie Morskie, Będzino, Mielno, Darłowo (urban and rural), Postomino, Ustka (urban and rural), Smołdzino, Łeba, Choczewo, Krokowa, Władysławowo, Jastarnia, Hel, Puck (urban and rural), Kosakowo, Gdynia, Sopot, Gdańsk, Stegna, Sztutowo and Krynica Morska. In Lithuania, these are the regions of: Klaipeda, Nering, Palanga and Silute. Polish municipalities have a population of 1 054 415 and occupy an area of 376 914 ha. Lithuanian regions have 203 025 inhabitants and have an area equal to 332 200 ha. In total, the areas affected by the E60 waterway in 2017 inhabited 1 257 440 people and had an area of 709 114 ha. The exact data is presented in Table 15.

Tab. 9. Municipal data on the Polish and Lithuanian coast (2017)

Poland (2017)				
Region	**Powiat**	**Gmina**	**Population**	**Obszar, ha**
Westpomeranian	Świnoujście	Świnoujście	41 032	19 7 1323
	Kamieński	Międzyzdroje	6 528	11 438
		Wolin	12 220	32 746
		Dziwnów	4 003	3 762
	Gryficki	Rewal	3 869	4 065
		Trzebiatów	16 30365	1 025

	Kołobrzeski	Kołobrzeg	57 363	16 970
		Ustronie Morskie	3 658	5 698
	Koszaliński	Będzino	8 634	16 619
		Mielno	4 951	6 213
	Sławieński	Darłowo (miejska i wiejska)	21 911	28 966
		Postomino	6 960	22 686
Pomeranian	Słupski	Ustka (miejska i wiejska)	24 069	22 765
		Smołdzino	3 430	26 029
	Lęborski	Łeba	3 694	1 481
	Wejherowski	Choczewo	5 539	18 313
	Pucki	Krokowa	10 760	21 109
		Władysławowo	15 482	3 922
		Jastarnia	3 760	780
		Hel	3 373	2 172
		Puck	37 283	24 217
		Kosakowo	14 029	5 014
	Gdynia	Gdynia	246 306	13 514
	Sopot	Sopot	36 533	1 728
	Gdańsk	Gdańsk	464 254	26 196
	Nowodworski	Stegna	9 817	17 009
		Sztutowo	3 655	11 153
		Krynica Morska	1 302	11 601
		Total:	**1 054 415**	**376 914**

Lithuania (2017)			
Region	**Rejon**	**Ludność**	**Obszar, ha**
Klaipeda	Klaipeda	156 438	143 900
	Neringa	4 753	9 000
	Palanga	15 379	7 900
	Silute	26 455	171 400
	Łącznie:	**203 025**	**332 200**
	ŁĄCZNIE:	**1 257 440**	**709 114**

Source: Own elaboration based on GUS[29] - Bank danych lokalnych i Litewski Urząd Statystyczny

From the German - Polish border, along the Polish, Russian and Lithuanian coast to the Lithuanian - Latvian border, this route is about 610 km long. Within the catchment of this waterway are all local seaports of the Polish and Lithuanian coast discussed in this report, namely: Kołobrzeg, Darłowo, Ustka, Władysławowo, Jastarnia, Hel, Svientoi - Butinge and two ports located on the Curonian Spit, which the International Road The water E70 also connects to the E60 pathway. Of course, along the coast there are more tourist-attractive regions, such as the Vistula Spit, where also local ports are

[29] Main Statistical Offfice

located and they will also be able to benefit from the E60 navigation. The course of the E60 waterway is shown in Figure 17.

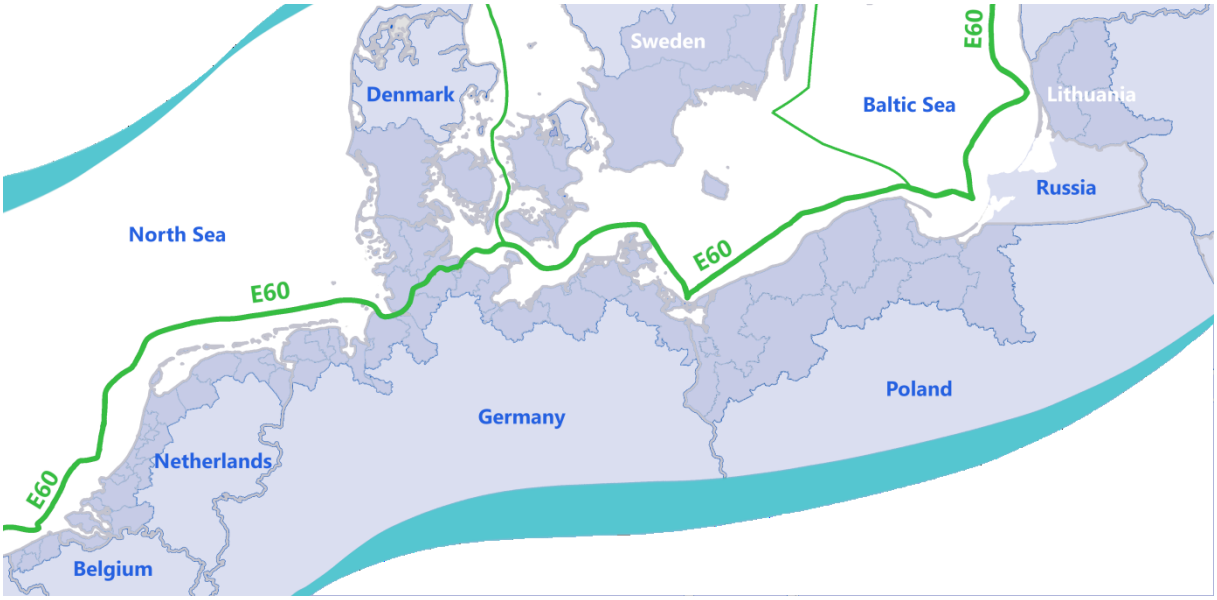

Fig. 14. IWW E60 along Baltic and North Sea
Source: Own elaboration based on *Inventory of Main Standards and Parameters of the E Waterway Network*, Economic Commission for Europe Inland Transport Committee United Nations, New York and Geneva 2012 and national spatial plans

This trail has enormous tourist potential and can become a very important link between local ports for Poland and Lithuania. All the ports in question are located in areas of high tourist value, therefore, the start of passenger tourism on this route would be undoubtedly very interesting and would attract many tourists.

Currently, regular ferry tourism along the E60 does not exist, due to the reasons already described in the report in the part concerning the current status of local ports. As mentioned above, regular lines in Poland connect only Kołobrzeg and Bornholm. Tourism between the local ports of Poland and Lithuania does not function due to legal and administrative restrictions, difficult border crossing procedures, military zones closed to traffic and marine areas of landscape parks. The E60 trail has a lot of tourist potential, but as you can see there are many barriers that prevent its use. While it is possible to overcome barriers on the Polish and Lithuanian side, although very difficult and time-consuming, there is a section along the coast of the Kaliningrad Oblast. In the territorial waters of this section there are both Russian military areas, which completely exclude any movement of tourist vessels, as well as the area of the Curonian Spit landscape park, which is also a significant impediment. Therefore, the E60 route in its current form will be able to function only in case of close cooperation with the Kaliningrad District and local ports on its coast.

In the past Lithuania has already cooperated with the Kaliningrad Oblast, as part of European projects, on maritime tourism between Klaipeda and Kaliningrad and the use of the tourist Curonian Spit. The experience of Lithuanian partners is valuable in this matter and would certainly also help in establishing cooperation in creating navigation on the E60 route.

Lithuania participated in numerous cross-border cooperation projects with the Russian Federation (Kaliningrad District), Poland and Latvia, implemented by institutions interested in the marina in Nida (mainly the Neringa municipality, Kuršių Nerija National Park, Neringa tourist and cultural information center) of Russia and the Baltic countries in the south in under the cross-border cooperation programs, Latvian-Lithuanian, Lithuanian-Russian and South Baltic, during the EU programming periods 2007-2013 and 2014-2020, such as:

- BayWatch - Development of the Unified Bay Watch system in the Baltic Sea Region (Latvia Lithuania - Belarus Program 2000-2006)
- BSB - Baltic Sea Wind (Regional Cooperation Program in the Baltic Sea Region 2000-2006)
- Three ports - Development of the cross-border area through the construction and modernization of ports (Lithuania-Poland-Russia program 2000-2006)
- Opening of the water tourism route on the Curonian Lagoon: Klaipeda - Kaliningrad (Rybachij) (Lithuania - Poland - Russia Program 2000-2006)
- Supporting, strengthening and promoting cross-border cooperation in the development of yacht tourism (Lithuania-Poland-Russia program 2000-2006)
- Development of cross-border infrastructure for water tourism between Russia and Lithuania in the Curonian Lagoon (Lithuania-Poland-Russia program 2000-2006)
- AGORA - Development of sustainable network development in the Baltic Sea region (regional cooperation program in the Baltic Sea region for 2000-2006)
- AGORA 2.0 - Hysterical tourism to increase the BSR identity (Regional Cooperation Program in the Baltic Sea Region 2007-2013)
- Enjoy South Baltic! - Development of sustainable tourism development in the South Baltic area (South Baltic cooperation program)

There were many cross-border cooperation projects with the Russian Federation (Kaliningrad District), Poland and Latvia, implemented by institutions interested in Marina Minija (mainly Municipal Administration in Šilutė and Kintai Sailing Club) with partners from Latvia, Russia and the South Baltic countries under the Baltic and Regional Baltic -Polish-Russian Cooperation Programs in the EU programming period 2000-2006, such as:

- SuPortNet - Sustainable spatial development with a network of ports for boat tourism (Regional Cooperation Program in the Baltic Sea Region 2000-2006)
- SuPortNet II - Sustainable spatial development with a network of ports for boat tourism (Regional Cooperation Program in the Baltic Sea Region 2000-2006)
- Development of water tourism on the Minija River (Lithuania-Poland-Russia Program 2000-2006)
- Expansion and marketing of small ports within the Nemunas delta (Lithuania-Poland-Russia Program 2000-2006)
- Study on the Development of Inland Waterways Systems (Lithuania-Poland-Russia Program 2000-2006)

There were many cross-border cooperation projects with partners from Latvia, Russia, Poland and Latvia implemented by the Russian Federation (Kaliningrad District), Poland and Latvia carried out by institutions interested in seaports in Šventoji (mainly the Port of Maritime State in Klaipeda, the town of Palanga, the Šventoji community and Šventoji Tourism Association) and the South-Baltic countries within the framework of the Latvian-Lithuanian, Lithuanian-Russian and South-Baltic Cross-Border Cooperation Program in the EU 2000-2006, 2007-2013 and 2014-2020 programming periods, such as:

- BayWatch - Development of the Unified Bay Watch system in the Baltic Sea Region (Latvia Lithuania - Belarus Program 2000-2006)
- Improvement of active tourism in the cross-border region (Latvia-Lithuania program, 2007-2013)
- safety at sea - transport and environment in the Baltic Sea region (regional cooperation program in the Baltic Sea region for the years 2007-2013)
- MARRIAGE - better management of the marina, consolidation of the port network and marketing of water tourism within the Southern Baltic (Regional Cooperation Program South Baltic 2007-2013)
- Southern Coast - Establishment of permanent cross-border management of boat destinations based on the MARRIAGE cooperation network (Regional Cooperation Program South Baltic 2014-2020)

Attempts to navigate the E60 route have never been undertaken before, or have been undertaken only on short sections, usually between two neighboring ports. Although there seems to be a significant cross-border importance of this connection, no solution to existing barriers has been found. In addition to marking and locating this waterway on the AGN map, it actually does not exist. Therefore, steps should be taken to thoroughly investigate the problem and create a shipping launch plan.

Conclusions

Poland and Lithuania, being member states of the European Union, the problem of cross-border cooperation between local ports should be solved at the EU level. However, EU policy is targeted at the 300 largest European seaports and they have priority in granting development funds. Local ports have a very difficult task, but they have the possibility to raise funds for development and modernization.

The local ports of the Polish and Lithuanian coasts are located in poorly industrialized regions with high natural and tourist values. Therefore, cross-border cooperation between them should be implemented on the basis of maritime tourism. However, to make this possible, many barriers have to be overcome. One of them is complicated and restrictive border procedures. The sea border crossing should provide adequate control, which must be both efficient, fast, well-functioning and friendly to tourists. The problem of Polish calls at ports is the restrictiveness of procedures and control regulations. This is an important issue because it can deter tourists from re-entering the port.

In order for Maritime tourism to function, there is a need for appropriate infrastructure and an integrated information system unified for all ports, providing tourists with information in a legible and easily accessible way. Thanks to EU funds, the state of infrastructure in local ports is getting better, although there is still much to do.

When the port is modernized and has a passenger terminal and other element of the necessary infrastructure, then the problem arises to establish cooperation with other ports and to ensure regular shipping lines, mainly with their financing.

When the local ports of the Polish and Lithuanian coasts are fully adapted to passenger traffic, the next step should be to navigate the international waterway E60, running along the coast and connecting all the ports discussed. This coastal route has great tourist potential and creates great opportunities for regional development.

FINAL CONCLUSIONS AND RECCOMENDATIONS

Local ports in Poland, despite unfavourable conditions, can be an important factor in the activation of communes and coastal regions. For the proper development of local airports and their surroundings, a number of tools and legal and organizational instruments necessary to develop effective solutions are necessary. The development of local ports should at the same time be an integral part of the voivodeship, district and municipal strategies.

Changes occurring in the structure of the national economy, including in the sectors related to the sea, make it necessary to change the destination of many port infrastructure facilities in local ports and to adapt them to new functions. In many cases, it is also necessary to modernize the infrastructure providing access to the port from the foreground (fairways, breakwaters, etc.) and from the back office (road and rail network).

Local ports and marinas are by definition components of local infrastructure that provide opportunities to take advantage of the opportunities offered by the coastal location. Hence, their functions are adapted to the forms of using the sea adopted by a given community. Basically, it should be mentioned here:

- providing access to a given shore section from the sea for cargo and passengers,
- handling of coastal and sea fishing using nearby fishing grounds,
- service of sport boats and various activities in the field of maritime tourism and recreation,
- providing conditions for the implementation of manufacturing activities related to the above-mentioned functions, such as:
    - storage and processing of fish,
    - construction and renovation of small marine units, mainly fishing and sports

In spite of generally unfavourable factors determining development and barriers, local ports undergo transformation and gradually adapt to changed legal and economic conditions. This process is not fast and diverse, mainly due to differences in the potential and determination of local authorities. In

each case, there is a certain range of development opportunities and forms of acceleration of activation.

The activation of small ports and marinas should be based on the following assumptions:

1. The development of economic activities should be connected with intensive and wide use of existing and / or expandable infrastructure comprising port / harbours and maximization of utility resulting from access to the sea and use of its resources.

2. The types of business that meet the above-mentioned conditions are the sector of traditional transport services (port services, freight transport), services related to tourism, Baltic fisheries and services based on knowledge and modern technologies.

3. Expenses incurred for the revitalization of seaports and marinas are relatively high, as they are associated with the deepening of basins, port canals and fairways to ports, modernization of breakwaters and wharves, construction of piers, shore protection, pier construction, view terraces on the sea, promenades, etc. In turn, the types of activity developed on the basis of existing / modernized infrastructure facilities are usually too small as to the size and production time of infrastructure use, so that entities (public, private) could obtain any economies of scale on this account, and in the local environment significant effects of positive feedback between the conducted activity and the increase of value added. The key from an economic point of view is therefore the development of activities, which will include the broadest possible range of services / production based on the available port / harbour infrastructure. In this way, the economies of scale (not available in most small seaports) will be replaced by the benefits of the scope. The provision of a wide range of activities or the development of several types of production will increase the use of capital-intensive infrastructure, which will reduce the costs of its production engagement, and customers (tourists, recipients of products / services) will receive a bundle of goods and services in a given town.

4. Activation of small ports and marinas under the scope of the economies of the scope has a chance to be successful, provided that:

- business development will be based on the idea of locally created clusters, i.e. complementary chains and complementary services and types of production performed by cooperating public and private entities (local government and state),

- local clusters will develop functional relationships with such centres in other cities to the widest extent possible, and thus obtain additional benefits arising as a result of running and developing activities in the network of economic connections (network economies).

In creating clusters, it is necessary to initiate local authorities and create a platform that facilitates the partners' agreement and sometimes the creation of a public-private enterprise.

The postulated activation of small ports and marinas finds their justification in theory and practice to stimulate the socio-economic development of small and large economic systems. All European Union programs, whether related to sectoral policy (transport policy), industry policy (maritime policy) or

horizontal policies (cohesion, sustainable development, competition, growth and employment) as well as regional development strategies developed by the European Union (Strategy for the development of the Baltic Sea Region) are built largely on the assumptions presented above, which will undoubtedly facilitate public entities implementing the local development strategies constructed in this way to access Community funds. It is also significant that previous attempts to develop local maritime communities in Poland based on other premises did not bring expected results in most cases.

Practical methods of activating local seaports / marinas / sea centres with the use of infrastructure, boil down to:

- development of maritime sports and tourist clusters and passenger navigation,
- development of fishing, recreational angling and mariculture,
- development of commodity production and traditional transport and reloading services,
- development of services related to knowledge and modern technologies.

Referring to the first of the above-mentioned issues and in view of the fact that Polish and Lithuanian local seaports discussed in this report are located in areas of high natural and tourist values, the development of sea tourism may be an important impulse for the development of ports and their surroundings. International waterway E60 along the coast has enormous tourist potential and can be a very important link between local ports both for Poland and Lithuania. The launch of passenger tourism on this route would undoubtedly be very interesting and might attract many tourists, thus helping to activate the regions. To this end, it is necessary to carry out detailed research in this area and to develop a plan of action to revive the local ports and their hinterland through the creation of regular passenger navigation along the coastal route E60.

LITERATURE

1. *Analiza stanu infrastruktury w portach rybackich i przystaniach pod kątem dalszych potrzeb inwestycyjnych,* Morski Instytut Rybacki, Gdynia 2012.
2. Bierndgarski H.: *Małe porty prą do przodu,* Polska Dziennik Bałtycki, Baltexpo 2009, 1 września 2009
3. Christowa Cz.: *Uwarunkowania funkcjonowania i rozwoju polskich portów morskich* W: *Funkcjonowanie i rozwój polskich portów morskich w świetle zapisów "Zielonej Księgi" polityki morskiej Unii Europejskiej,* VII Międzynarodowa Konferencja Naukowa "Porty Morskie 2007", Pod red. K., Chwesiuka, Prace Monograficzne Akdaemii Morskiej w Szczecinie, Szczecin 2007
4. Formy aktywizacji rozwoju średnich i małych portów morskich polskiego wybrzeża. Modele zarządzania małymi portami – rekomendacje dla Polski. Kancelaria Senatu Biuro Analiz i Dokumentacji, Dział Analiz i Opracować Tematycznych, Warszawa 2010.
5. *Formy aktywizacji rozwoju średnich i małych portów morskich polskiego wybrzeża,* Kancelaria Senatu Biuro Analiz i Dokumentacji, Listopad 2010
6. Grzelakowski A.S.: *Formy i kierunki aktywizacji rozwoju małych portów morskich w UE* W: *Dwa lata Polski morskiej w Unii Europejskiej,* XXII Sejmik Morski, Świnoujście-Ystad, Zeszyty Morskie 2007
7. *Inventory of Main Standards and Parameters of the E Waterway Network*, Economic Commission for Europe Inland Transport Committee United Nations, New York and Geneva 2012.
8. Kuszewski W., *Identyfikacja potencjalnych warunków determinujących rozwój portów lokalnych w aspekcie niebieskiego i zielonego wzrostu,* Gdańsk 2017.
9. Kuszewski W., *Przegląd prowadzonych badań nad niebieskim i zielonym rozwojem portów lokalnych,* Gdańsk 2017.
10. Lokalna Strategia Rozwoju na lata 2014-2020 Darłowskiej Lokalnej Grupy Rybackiej, Darłowska Lokalna Grupa Rybacka, Darłowo 2015.
11. Lokalna Strategia Rozwoju na lata 2014-2020, Północnokaszubska Lokalna Grupa Rybacka 2012.
12. Lokalna Strategia Rozwoju Obszarów Rybackich, Stowarzyszenie Lokalna Grupa Rybacka Pradolina Łeby, Gniewino 2013.
13. Lokalna Strategia Rozwoju Słowińskiej Grupy Rybackiej 2014-2020, Słowińska Grupa Rybacka 2016.
14. Luks K.: Polityka wobec portów lokalnych na pzykładzie Portu Elbląg, 2009
15. Miszczuk J.: Problemy małych i średnich portów morskich z punktu widzenia administracji państwowej, Szczecin.

16. Nowaczyk P.: Małe porty morskie w sratегiach rozwoju gmin nadmorskich. Przedsiębiorczość i Zarządzanie Wydawnictwo SAN, tom XVI, zeszyt 4, część I, s.57-72.
17. Plan rozwoju portu w Helu, Zarząd Portu Morskiego Koga 2009, http://www.porthel.home.pl/files/plan_rozwoju_portu_w_helu_2009.pdf [3 stycznia 2017].
18. Program rozwoju polskich portów morskich do roku 2020 (z perspektywą do 2030 roku), Ministerstwo Transportu, Budownictwa i Gospodarki Morskiej, Warszawa, Lipiec 2013r.
19. Rocznik Statystyczny Gospodarki Morskiej, Główny Urząd Statystyczny, Szczecin 2016.
20. Strategia Rozwoju Gminy Miejskiej Łeba na lata 2014-2025, Listopad 2014.
21. Strategia Rozwoju Portu Morskiego Darłowo, Zarząd Portu Morskiego Darłowo, Darłowo 2007
22. Strategia rozwoju portu morskiego Kołobrzeg, Zarząd Portu Morskiego Kołobrzeg 2010, http://www.zpm.portkolobrzeg.pl/303,strategia-rozwoju-portu [3 stycznia 2017].
23. Strategia Rozwoju Portu Morskiego Kołobrzeg, Zarząd Portu Morskiego Kołobrzeg Sp. z o.o., Kołobrzeg 2010
24. Strategia rozwoju portu morskiego w Ustce do roku 2021, Business Mobility International Sp. z o.o., Ustka 2007, www.christowaczeslawa.pl/.../2007-strategia-rozwoju-portu-morskiego-w-Ustce.pdf [3 stycznia 2017]
25. Strategia Rozwoju Ziemi Puckiej na lata 2016-2025, Stowarzyszenie Północnokaszubskie Lokalna Grupa Rybacka, kwiecień 2016.
26. Szczurek W. (2002), Działalność gospodarcza gmin w portach morskich, Fundacji Rozwoju Uniwersytetu Gdańskiego, Gdańsk.
27. Ustawa z 20 grudnia 1996 r. o portach i przystaniach, Dz.U.2002, nr 110, poz. 967, z późn.zm. Webpage: http://ustka24.info/przebudowa-wejscia-portu-ustka/, dostęp z dnia 15.02.2017
28. Webpage: http://www.portalmorski.pl/morze-inne/bezpieczeństwo-i-srodowisko/39735-szykuje-sie-gigantyczna-przebudowa-wejscia-do-portu-w-ustce, dostęp z dnia 15.02.2017
29. Webpage: http://www.portalmorski.pl/porty-morskie/port-kołobrzeg, dostęp z dnia 21.02.2017
30. Webpage: www.gp.pl/strefa-biznesu/wiadomosci/z-regionu-a-wladze-ustki-maja-koncepcje-nowego-portu-wizualizacja,10172840, dostęp z dnia 15.02.2017
31. Zarząd Portu Morskiego Darłowo (2007), Strategia rozwoju portu morskiego Darłowo - dokument, http://www.port.darlowo.pl/pl/?div=dokumenty [28 wrześnie 2014].
32. Zieziula J., *Identyfikacja czynników determinujących wielkość obrotów przeładunkowych w małych portach morskich na przykładzie Portu Darłowo,* Uniwersytet Szczeciński
33. Zieziula J., Nowaczyk P.: Identyfikacja czynników determinujących wielkość obrotów przeładunkowych w małych portach morskich na przykładzie Portu Darłowo, Szczecin.