

# Trends and Prospects Regarding the Commencement of Economic Activity in some ports in Selected Urban Centres along the E- 70 Waterway in the Lubuskie District

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This article deals with issues describing the conditions and chances of starting port activity in selected urban centres on the Polish section of the international E-70 waterway. In addition to the overall economic characteristics of the Lubuskie district, the economic conditions and an analysis of the communication network of road and rail transport of selected urban centres were thoroughly examined. Based on the analysis presented, the possibility of starting port activity in Drezdenko and Kostrzyn on Oder were examined. In the final part of the article, the concept of revitalizing the shipping operations of the Polish section of the waterway E-70 was presented.

**Keywords:** inland shipping, transport policy.

## 1. GENERAL CHARACTERISTICS OF THE LUBUSKIE AREA

The Lubuskie region, which contains urban centres such as Gorzow Wielkopolski, Zielona Góra and Zary, belongs to the less industrialized regions of the country, contributing 2.4% of Polish GDP. Its most important industries are timber, electronic agriculture and food processing, followed by the chemical industry, pulp and paper, textile, construction, or electronics.

Foreign capital, invested primarily in the timber, agriculture, food processing and electronic industries is of great importance for the economy of Lubuskie. In terms of capital invested in the region, the largest share is German investment, followed by Italian, Danish, Dutch, Swedish, Austrian, Greek, Turkish, Croatian and American investment.

Its convenient geographical location makes the region attractive for the inflow of foreign capital. It is situated near the border with Germany, at the crossroads of important North-South routes, (on the route of Central European Transport Corridor) and the East - West (Route E30), with the potential for inland waterway and air transport infrastructure development (Zielona Gora/Babimost airport) [2].

The region has a number of special investment areas located within the Kostrzyn - Slubice SEZ (Kostrzyn on the Oder, Slubice, Rzepin, Sulęcín, Miedzyszczec, Gorzow Wielkopolski, Friedeberg, Gubin, Lubusko Czerwieski, Zielona Góra, Nowa Sol, Odra Bytom) and Wałbrzych SEZ (Szprotawa). The creation of Lubuskie Technology Park is in the planning phase.

Currently, the region has a negligible share in the Polish market for warehouse space- most of the existing establishments, implemented primarily for the needs of specific clients, are located in SEZ areas.

However, due to its favourable location, the province is seen as a potentially convenient destination for modern distribution and storage centres. Currently, the construction of the Oder Kostrzyn Logistics Centre ICT Poland is in progress [3]. One of the main arteries running through the area of Lubuskie is the international waterway E-70, connecting Western Europe with the Kaliningrad region, and beyond the water system of the Niemen.

## 2. CHARACTERISTICS OF KOSTRZYN ON ODER AND DREZDENKO (ECONOMIC CONDITIONS, THE ANALYSIS OF THE COMMUNICATION NETWORK OF ROAD AND RAIL TRANSPORT)

### *Kostrzyn on Oder*

Kostrzyn on Oder is the municipality, located in the north-western part of Lubuskie, in Gorzów

County. The area of the Kostrzyn on Oder municipality is 46.14 km<sup>2</sup>.

With average forest cover throughout Poland reaching 28.9%, the rate for Gorzow County is 44.0%, while for the Kostrzyn on Oder municipality it is 43.33%. Farmland area covers 43% of the county, and 23.76% of the Kostrzyn on Oder municipality[10]. As of 31.12.2008, in the area of the Kostrzyn on Oder municipality, there were 2,065 registered businesses. Their ownership and legal structures are presented in tables 1 and 2.

Table 1. Businesses recorded in Gorzow County and Kostrzyn on Oder municipality in the REGON register according to ownership and legal status.

description			Gorzów district (rural)	Municipality of Kostrzyn on Oder
total			6044	2065
sector	public		139	41
	private		5905	2024
legal form	commercial companies	total	399	172
		including the ones with foreign capital	204	104
	partnerships		289	106
	cooperatives		18	6
	foundations, associations and community organizations		138	28
	self-employed individuals		4875	1589

source: Studies based on CSO data, 2009

Table 2. Businesses recorded in Gorzow County and Kostrzyn on Oder municipality in the REGON register according to business type (selected sections)

description			Gorzów district (rural)	Municipality Kostrzyn on Oder
total			6044	2065
including	agriculture, forestry and hunting		322	19
	industry	total	637	170
		including processing industry	622	168
	building industry		732	180
	trade and repairs		1930	823
	hotels and restaurants		226	105
	transport, storage and communications		418	104
	financial services		220	61
	real estate and business services		702	309

source: Studies based on CSO data, 2009

Kostrzyn Cellulose Factory, founded in 1956, (later Kostrzyn Paper, now Arctic Paper), has for many years exerted a strong influence on the economic profile of its municipality. In the period after the economic transformation, the opening of the road and rail border crossing (since 1992), and

Kostrzyn-Słubice Special Economic Zone - functioning since 1997 (the characteristics of businesses operating in the zone shown in Table 3) have had a significant impact on the area. Paper industry companies in Kostrzyn maintain a particularly strong position.

Table 3. Characteristics of selected industrial plants located in the Kostrzyn - Slubice SEZ

Name of the establishment	Characteristics of operation
ICT Poland, limited liability company	Paper industry company. ICT Group is a manufacturer of a wide range of products: toilet paper, kitchen towels, handkerchiefs and napkins. Italian investment.
Podravka Polska, limited liability company	Food industry company. Has a very wide range of products in its offer. It has produced meat dishes, processed food, food additives, as well as baby food, sweets, teas and soft drinks. In Poland, it is known as the largest specialist in the field of spices and food additives, mainly due to Vegeta. Croatian investment.
Teleskop, limited liability company.	The company operates in the metal products industry, dealing with welding and machining. Company products as components of large cranes. Belgian investment.
Bee Polska, limited liability company	The plant produces equipment for playgrounds, toys and games for children and structural components for restaurant chains such as McDonald's, Burger King and Quick. Its products are mainly exported to Western Europe. Belgian investment.
Agro-Bor Louisa, limited liability company	Food industry company. Sells mainly meat (wholesale and retail) and meat products. Dutch investment.
Wendre Poland, limited liability company	Textile industry company - production of quilts and pillows. Estonian investment.
TRANS, limited liability company	TRANS, limited liability company produces high-quality finishing profiles, including parquet laminate flooring, carpets, tiles and terracotta, made from aluminum, brass and plastic. Profile production system is based on the latest technology and many years of experience gained in this field. Polish investment.
Fabryka Ceramiki Budowlanej WEST, limited liability company	Construction company. Building Ceramics Factory 'WEST' specializes in the production of ceramic tiles and handmade ceramic accessories. Polish investment.
Novo Tech, limited liability company	The company produces and sells products based on polymer technology, as an attractive offer for the growing sectors of everyday products and car parts. The company has a diversified product portfolio and creates a consolidated technology platforms for all products. Indian investment.
PPHU Unipaco, JSC	Paper industry company. Production-Trade and Service UNIPACO has continued the tradition in the manufacture of flexible packaging materials since 1980s. Polish investment.
Arctic Paper Kostrzyn, JSC	The company is the largest manufacturer of offset paper in Poland and the second largest producer of graphic paper. Since 1993, the company has belonged to the Swedish group, Arctic Paper. The factory in Kostrzyn produces high-quality uncoated treeless paper. Its production takes place in a modern, safe working environment, in natural, environment friendly conditions. Swedish investment.
Robina, limited liability company	Production of technical articles made of plastic (plastic pipes, plastic containers, septic tanks, rainwater tanks, water tanks, polyethylene tanks). German investment.
Brinkhaus Polska, limited liability company	Founded in 1847, in Germany, began as a manufacturer of cotton sheets. Currently, an active, global leader in its industry, specializing in the presen-

	tation of the bedding and health products. Polish branch acts as a service. The owner provides the fabric, filling, and accessories needed to carry out the production.
Hanke Tissue, limited liability company	The paper industry company, founded on the basis of the assets of the former Kostrzyn paper mills, which specializes in manufacturing hygienic tissue paper, toilet paper, paper towels, tissues and napkins. Linked with the German company Hanke paper.
Olsa Poland, limited liability company.	Italian manufacturer of parts and accessories for motor vehicles, lighting equipment and electric lamps. Based on many years past experience of the Italian parent company, which has operated in the industry for over 60 years, the aim of the owner is to achieve a stable business position in the European market automotive lamps.
Algontec Polska, limited liability company.	Algontec Poland is the owner of a facility that produces plastic parts for the automotive industry, using technology, injection blow-out "Blow Moulding". The main customers of company products are direct car manufacturers, suppliers as well as other automakers, such as.: Faurecia, Opel, DAF Trucks and Kautex. Spanish investment.
Montaż, limited liability company.	The company with German capital, a manufacturer of high quality aluminum frames, picture frames, rail galleries, frame studs, clamping rails, photo frames, passe-partout, displays, stands, etc.
Montel, limited liability company.	Montel is a company with German- Belgian capital producing metal parts for cranes.
Taconic, limited liability company.	A company with a capital of American industry: abrasive products, plastic and rubber products. Investment in progress, its completion is scheduled by the end of December 2012

Source: Kostrzyńsko – Słubice SEZ and the various companies operating within it.

Most of the companies analyzed in Table 3 were established with foreign capital. Most of them also operate in foreign countries, mainly in Western Europe, including Germany, France, Italy.

For some companies, the necessary raw materials or components are imported from abroad. The dominant mode of transport, both in terms of supply and distribution of finished products, is road transport.

Kostrzyn lies on the Polish border with Germany. There is an intersection of two national roads and a regional road:

- The national road, No. 22- Grzechotki – Kostrzyn on Oder, part of the Berliner route, links Germany with the Kaliningrad region. In Gorzow Wielkopolski the road joins the national road S3, part of international E65, joining the motorway A1 (E75) at Swarozyn , which is currently being built.
- The national road 31: Słubice - Kostrzyn on Oder – Szczecin, 138 km long, is parallel to the Polish-German border, connects Szczecin with a border crossing in Słubice.
- Provincial road No 132 – Kostrzyn on Oder - Gorzow Wielkopolski (Table 4).
- Road B1 – Küstrin-Kietz – Berlin – Akwizgran (Aachen) reaches Kostrzyn from the German side.

Table 4. Provincial roads that pass through Kostrzyn

Road number	The course of the road
22	Grzechotki - Elbląg- Malbork- Starogard Gdański 222 -Czersk - Człuchów – Wałcz - Rusinowo – Dobiegniew - Strzelce Krajeńskie - Gorzów Wielkopolski-Podmiejska - Rudnica - Kostrzyn on Oder- Poland-Germany border line
31	Szczecin - Radziszewo - Gryfino - Chojna - Mieszkowice - Sarbinowo - Kostrzyn on Oder - Chyrzyno - Górzycza - Słubice
132	Kostrzyn on Oder - Dąbroszyn - Nowiny Wielkie - Gorzów Wlkp.

Source: own materials.

The following railway lines pass through Kostrzyn:

- railway line No 203 - linking Tczew with Küstrin Kietz.
- railway line No 273 - railway line connecting Wrocław with Szczecin via Wołów, Głogów, Nowa Sól, Zielona Góra, Rzepin, Kostrzyn on Oder and Gryfino. The railway has been adapted to freight traffic and electrified for almost the entire length of its double track (apart from the sections: Wrocław - Wrocław Muchobor, Jerzmanice Lubuskie - Drzeńsko, Szczecin Podjuchy - Szczecin Central Port), with some slower sections with speed limits of 30 km/h
- Line 410 connects Grzmiąca with Kostrzyn; a single track line, not electrified, carrying freight traffic on the section between Złocieniec and Mirosławiec. Passenger traffic was suspended in 1998.
- Line 273 is covered by the AGTC Agreement as line C-E 59. In 2009, the national public began rebuilding elements of flyovers and railway lines, as well as railway viaducts in the section Szczecin - Wrocław. The modernization of the

other elements of rail infrastructure is in the stage of preparation of project documentation.

### *Drezdenko*

Drezdenko municipality is located in the northern part of Strzelce-Drezdenko district, occupying 32.04% of its surface. Drezdenko, which is the administrative seat of the commune, is one of the towns within the district. The commune consists of 26 villages. The area of the Drezdenko commune is 400 km<sup>2</sup>. Aforestation in the Strzelce - Drezdenko district is 49.6%, and 64.9% in the Drezdenko commune [3]. More than twice the municipal forest cover in relation to the average rate for the country, and the activity of several sawmills operating within it, confirm the importance of the timber sector for the local economy. Agriculture has only minor importance for the local economy, and especially for the municipality. Farmland covers 39% of the Strzelce - Drezdenko region and 25% of the Drezdenko commune [3, 10]. In 31.12.2008 in Drezdenko and its municipality, there were 1606 registered businesses. Their ownership and legal structures are presented in tables 5 and 6.

Table 5. Businesses recorded in Strzelce-Drezdenko district and Drezdenko town as well as Drezdenko commune in the REGON register according to ownership and selected legal status, 2008

description		Strzelce – Drezdenko District	Drezdenko commune	Drezdenko town	
total		4138	1606	1063	
sector	public	136	35	26	
	private	4002	1571	1037	
Legal form	commercial companies	total	203	45	
		including the ones with foreign capital	89	16	
	partnerships		157	58	42
	cooperatives		23	8	7
	foundations, associations and community organizations		115	31	21
	self-employed individuals		3327	1401	923

source: Studies based on CSO data, 2009

The timber, metal and paper industries (there are three paper mills in town) have got a particularly strong influence on the economic

profile of the town. The largest industrial businesses in Drezdenko are:

- KAPPA Drezdenko, limited liability company,
- VICTAULIC Pin Drezdenko (table 7).

Table 6. Businesses recorded in Strzelce-Drezdenko district and Drezdenko town as well as Drezdenko commune in the REGON register according to the kind of business (selected sections), 2008

description		Strzelce – Drezdenko dis- trict	Drezdenko community	Drezdenko town	
total		4138	1606	1063	
including	agriculture, forestry and hunting	362	143	41	
	industry	total	397	133	83
		including processing industry	390	130	81
	building industry	426	145	98	
	trade and repairs	1368	635	422	
	hotels and restaurants	121	55	41	
	transport, storage and communications	214	74	49	
	financial services	119	46	38	
	real estate and business services	537	163	128	

source: Studies based on CSO data, 2009

Table 7 Characteristics of selected industrial plants located in Drezdenko

Name of the establishment	Characteristics of its operations
KAPPA Drezdenko, limited liability company	<p>Smurfit Kappa Poland is a part of the international group Smurfit Kappa Group - a leading packaging supplier in Europe. Smurfit Kappa Group is a European leader in the production of solid cardboard, corrugated cardboard and graphics cardboard as well as cardboard packaging.</p> <p>The group has got a strong position in several other segments of the paper and packaging market. Production figures of over 304 million square metres of corrugated cardboard per year gives Smurfit Kappa Group a dominant position on the Polish market.</p> <p>In Poland, Smurfit Kappa Group is represented by five factories placed in Pruszcz Gdański, Drezdenko, Warszawa, Konin or Pruszków. The branch in Drezdenko employs 175 people. The main produce is cardboard - wave B, C, BC, BE with a maximum width of ribbon -2410 mm (white, grey). Production capacity and processing of cardboard is 75 million square metres per year. Assortment - classic, die-cut and large-size packages, P84 trays. Type of printing - flexographic printing up to four colours.</p> <p>The main supply foreign markets are Germany, Netherlands and Slovakia.</p> <p>The main export markets are Germany, Hungary.</p>
VICTAULIC POLSKA, limited liability company.	<p>Victaulic is the world leader in solutions for mechanical joints for pipes with grooved and smooth ends. It is also a leading manufacturer of products and equipment for the HVAC / PHA, piping, fire control and other specialized pipe solutions in building constructions.</p> <p>Some other Victaulic's solutions are used in mining, oil fields, OEMs and the chemical, paper, food, automotive, textile, metallurgy and energy industries.</p> <p>The company also offers products for joining steel or iron pipes, HDPE, PVC, as well as aluminum, stainless steel or made of other materials. Victaulic has manufacturing and distribution centres in foreign countries such as the USA, Canada, Belgium, Poland and China.</p> <p>The factory in Drezdenko is a producer of ductile iron castings, GGG 40, 40.3, 50, 60; raw, painted, or galvanized - casting weight 0, 10 kg - 20 kg, dimensions of the masses -380 mm x 500 mm x 250 mm.</p> <p>Victaulic co-operates with foreign partners in both- the supply of raw materials, and selling finished products.</p>
Holding - Zremb Gorzów JSC, Meprozet branch in Drezdenko	<p>„MEPROZET – DREZDENKO” branch specializes in manufacturing of equipment for breeding farms and light steel structures.</p> <p>The company also provides appliances, tools, or locksmith and welding works.</p> <p>„MEPROZET-DREZDENKO” branch produces and supplies equipment to equip pig farms such as farrowing pens, nutritional-sleeping pens, metal troughs, group pig pens, posts and fence fittings.</p> <p>It also produces and supplies equipment for cattle farms including: bonding and barrier benches; ladder feed; closed, open and oblique sleeping compartments; permanent and portable nutritional-sleeping boxes and metal grates for cattle. An offer also includes clips and clamps used for mounting equipment on commercial farms. „MEPROZET-DREZDENKO” branch is also a producer of garden designs, lightweight steel constructions and equipment for other domestic animals breeding farms.</p> <p>MEPROZET-Drezdenko offers its clients a comprehensive range of farm buildings and warehouses, from the design to equipping stages. The main supply markets are national markets.</p> <p>Germany and Finland are the most important markets for finished products.</p>

Source: own materials based on the information given by the company analyzed.

The dominant mode of transport used in the analyzed plants, both to supply or export finished products, is road transport. Drezdenko is a place where provincial roads (160, 174, 181, 158, 164),

link to national roads, passing at both in the meridional (3, 11), as well as parallel ways. They are single carriageway roads with two lanes.

Table 8. Provincial roads that pass through Drezdenko

Road number	The course of the road
160	Suchań - Piasecznik - Choszczno - Drezdenko - Międzychód - Gorzyń - Lewice - Miedzichowo
174	Nowe Drezdenko - Kosin - Stare Bielice - Nowe Bielice - Krzyż - Lubcz Mały - Wieleń Północny - Nowe Dwory - Gajewo - Kuźnica Czarnkowska – /provincial Road no 178/
181	Drezdenko - Wieleń - Czarnków
158	Gorzów Wielkopolski - Santok - Drezdenko
164	Podlesiec - Zagórze - Drezdenko /provincial road no 160/

Source: own materials

Drezdenko is a station on a railway line no 203 between Tczew - Kietz Küstrin, and operates passenger and freight traffic. The line runs through New Drezdenko station (two platforms). The line is managed by PLK JSC. The carriers using the line are: PKP Regional Services, Intercity (fast trains), and PKP Cargo (cargo). The line 430- Stare Bielice- Skwierzyna (now closed) ran through Drezdenko. In the past, railway infrastructure reached the land surrounding the river. Currently, this infrastructure is not used any more (paper factory), or has been devastated (sawmill). Further development of the transport system of Strzelce - Drezdenko district will be connected with [6]:

- modernization and construction of roads,
- construction of bypasses,
- development of railway infrastructure,
- creating facilities for the Noteć river to perform communication functions.

Specific activities performed in this area will be linked to: the improved transport accessibility and improvement of Drezdenko connections with the major cities of the province - Gorzow Wielkopolski and Zielona Gora, the implementation of initiatives to raise the technical level of road infrastructure, the creation of conditions for high-quality transport services, the implementation of initiatives for greater use of rail and waterway on Noteć, and the transportation of passengers and freight.

### 3. REVITALIZATION OF THE POLISH SECTION OF THE WATERWAY E-70

The Polish section of the international E-70 waterway has generally got navigable parameters of class II only, (on certain passages Ib), whereas the requirements for international routes is a minimum class IV navigability. Such a situation results in the practical disappearance of transport activity of the Polish section of E-70. The section is in most parts impossible to use, with difficult access from the river bank. This process is particularly advanced in the case of the Noteć riverbed overgrowing, and the degradation of agricultural land in the vicinity of the waterway. Most establishments in the vicinity of the E-70, using this mode of transport in the past, have decided not to use it for shipping purposes.

The activation of E-70 waterway began with the initiative taken initially by the six, and then four Polish regions, ie, Pomorskie, Kujawsko - Pomorskie, Wielkopolskie and Lubuskie, ( at first also Zachodniopomorskie and Warmińsko - Mazurskie). Activities began on 5 August 2006, in Kały Rybackie, with the signing the Declaration on Development Cooperation concerning international waterway E-70 on the Polish territory. Marshals of six provinces located along the waterway E-70 signed the agreement. Consequently, on 30 June 2007, in Krynica Morska, the marshals signed another document - the Memorandum of Signatories Declaration on the Development of International Waterway E-70 on Polish territory, confirming their will to continue cooperation in the economic revival of the mentioned waterway. The

third phase started on 26 July 2008, in Kadyny, at the meeting of representatives of the provinces located along the international waterway E-70, where a Letter of Intent was signed on the preliminary principles of cooperation in developing a project to adapt the Polish section of the international E70 waterway to parameters II of technical grade, and to initiate a pre-feasibility study program. Pomorskie district became the project coordinator due to its being the most experienced at realizing such projects. The geographical range covered the following waterways: the Odra, the Warta, the Noteć, the Bydgoszcz Canal, the Wisla, the Nogat, the Szkarpa and Zalew Wiślany. The main goal for the initiators was the activation of tourism based on the waterway. An equally important goal is to activate cargo shipping in the Polish section of the E-70, which is consistent with the priorities of EU transport policy promoting greater use of inland waterway as a cargo transport route. The estimated cost of revitalization activities is set at 10 billion euro. The first stage of the project, in 2009, was the development of the program strategy, spatial conception program, and the forecast of project's impact on the environment, defined in the spatial - planning concept. During the preparation of the papers, working meetings were held with representatives of the provinces - principals and other stakeholders. Spot checks and an analysis of documents of strategic importance were also conducted. Bearing in mind the transnational character of the E-70, the initiators plan to apply for EU funding to support the implementation of this type of infrastructure investments.

Transport development strategy until 2020 (with the prospect of up to 2030) rather sceptically refers to an activation of the transport function of various Polish waterways except the Odra waterway [7].

As it was outlined in this document before: "For many years to come the Odra will remain the only waterway in Poland used as an important transportation channel." Transportation on the other waterways (including E70) has been used locally. In the "Strategy" document a new model of waterways management (due to the failure of the current model) was suggested for the first time in Poland. The future model of the inland water transport will consider the possibility of transmitting the management and operation of

certain sections of roads (e.g. in the form of contracts) to interested local governments and businesses. At the same time, however, the future transfer of the management and operation of inland waterways to interested individuals should mainly include roads with relatively low technical parameters and of a local importance [7]. That means that the plan will not concern the international waterway E70. A realistic activation of the transport function (even in the use of intermodal transport) is evaluated more optimistically, ( at least the part of the port facilities located in the course of E70), by the authors of the paper titled "Program for development of infrastructure of inland waterway transport in Poland" [5].

The study presents scenarios of intermodal freight transport (in this case, the containers), using inland- water transport in two periods: up to the year 2027 and up to the year 2047.

The port in Kostrzyn on Oder is among the locations for intermodal terminals one of the first term investments. The terminal located at the port could play the role of so-called "dry port" for goods transported in containers from a deep-water container terminal situated at the external port of Swinoujscie (according to the managers of Szczecin and Swinoujscie ports the terminal will be located in the area of the present overland part of the eastern breakwater in Swinoujscie). Containerized cargo shipped by barges would continue to be distributed mainly by road transport, for example, in the direction of the absorbent Poznan market. Intermodal terminal in Kostrzyn could also be used by entities located in the Kostrzyn - Slubice Special Economic Zone, but to a lesser extent. Unfortunately, the possibility of opening an intermodal terminal in Drezdenko was evaluated negatively (which does not exclude this place from activating the transport function handling non-containerized freight).

#### 4. JUSTIFICATION FOR THE ACTIVATION OF PORTS IN KOSTRZYN ON ODER AND DREZDENKO

From the perspective of the conduct of inland water routes, the emphasis should be put on the particularly advantageous position of Kostrzyn on Oder. In the town there is the junction of routes E-30 and E-70.



Water – inland transport experts in Poland agree that compared to Gliwice and Kędzierzyn - Koźle port in Kostrzyn has the greatest prospects for growth and opportunity for the inclusion, (in the light of European trends) into logistics systems [8]. The activation of port function in Drezdenko, where the existing port infrastructure has undergone a significant depreciation, will be a much more difficult task.

If the waterway E-70 gets adapted to the transport needs, both Kostrzyn on Oder and Drezdenko will have the potential to link it to the following:

- supply and sales markets in the Polish section of the E-70 route;
- foreign supply and sales markets (Western Europe, Russia);
- major east coast Polish seaports, and with markets overseas linked to them.

The studies confirm the potential for development of inland waterway freight services in Kostrzyn on Oder and Drezdenko. In the case of adapting the route E-70 to the parameters of the navigation class II, the conditions for use on the river transport route will be created in Kostrzyn, and it could be used to export:

- pulp and paper products,
- steel structures,
- bulky items,
- building material
- or to import, for example:
- coal,
- machinery / equipment,
- bulky materials.

For Drezdenko, upgrading the E-70 waterway will result in using river transport to export:

- pulp and paper products (cardboard packaging),
- sawmill wood, sawmill chips,
- iron / steel structures,
- bulky items,
- or to import freight such as:
- coal used both by businesses and private customers,
- scrap.

After the implementation of the fourth class navigability, and the introduction of linear

connections in the transport of general cargo river service, there will be a possibility of transportation of finished products of major manufacturers located in Kostrzyn on Oder, (including cluster and paper products companies, companies in the textile and food sectors, automotive accessories manufacturers and primarily using Kostrzyn as a so-called "dry port" for goods transported by barges from the deep-water container terminal which will be built in Świnoujście in the near future.

As noted by K. Woś, numerous attempts to modify intrastate waterways system and its external linkages, in most cases, "did not go" beyond the stage of studies and projects [9]. The coming years of current and future financial EU perspective will show whether conditions for the development of transport function of E70 waterway will be created, as well as a possibility to use intermodal transport. The European Union transport policy promotes such an activation, example of which could be found in the recent White Book of the European Commission where the attention was drawn to a development of appropriate framework to optimize the internal market for inland waterway transport and the elimination of obstacles, which will allow greater use of such transport [1].

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