

# PROBLEMS OF THE Odra NAVIGATION IN THE 1930s AND DURING WORLD WAR II

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**ABSTRACT** The Odra navigation faced several problems, such as the state of waterways, competition between river carriers and the railway and, during the war, maximum use of its shipping capabilities. The waterways were improved by river regulation and building reservoirs. Competition was limited in the early 1930s by creating small shipowners' unions (who usually also worked as skippers on their own boats) and regulating freight rates. Nazi authorities regulated navigation by creating obligatory professional associations. During the war the maximum use of inland shipping was done through tight control of tonnage, transferring some freights from the railway to the river transport and freezing freight rates. However, obsolete fleet, decreasing crew numbers and low freight rates caused the share of the Odra navigation in overall transport to fall.

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## Introduction

For economic and political reasons state authorities appreciated the significance of inland navigation as supplementary and to the railway and, at the same time, as its counterbalance. The railway was owned by the state and private railways were of little importance. Inland navigation, on the other hand, was mostly in private hands – small owners of one or two ships and several large companies.

The aim of the article is to use the Odra navigation as an example how the state government intervened in and controlled inland navigation in general during peacetime and during the war. The article shows it by analysing archival sources, statistics, reports of institutions, as well as the subject literature.

## Waterways

The Weimar Constitution gave the Reich control over waterways. The main goal of the state was to support sea ports and frontier areas by building waterways and canals. Such was the aim of, for example, the Gliwice Canal opened in 1939 which replaced the old Kłodnicki Canal. It was supposed to be the first part of a canal connecting the Odra and Danube. Finishing, in 1938, the last part of the Midland Canal meant the creation of a waterway connecting the Rhein and Elbe, the Odra and the eastern part of the Reich (Schroiff, 1984, pp. 28–29, 173–174). The Canal allowed the coal from the west to gain advantage on the Berlin market. It was supposed to be compensated by finishing engineering and regulation works on the Odra (Grodek, 1948, p. 405). The conditions of navigation were improved after building water reservoirs in Otmuchów and Turawa in 1940/41 (Menzel, 1997, pp. 16–17). Although reservoir water supplies did not contribute to the increase of capacity use, there was an rise in the number of round journeys on the Wrocław–Berlin–Szczecin route (Menzel, 1997, p. 10). The central Odra was prepared for the barges of a capacity from 700–750 tons. By 1937, 66% of the central Odra waterway was rebuilt – from Wrocław-Rędzin to Lubusz (Menzel, 1997, p. 14). The Odra was linked with the waterways of the March by the Odra – Spree canal and the so-called Great Waterway between Szczecin and Berlin. The navigation time on this route was shortened by the Niederfinow boat lift, opened in 1934 (Grodek, 1948, pp. 398–399; Born, 1948, pp. 515–518). The Odra was connected with the Vistula via the Bydgoski Canal.

## The Odra Fleet

Between 1933 and 1939 the tonnage of self-propelled boats increased twofold. The introduction of self-propelled barges allowed small shipowners to become more independent of towing companies and to gain more freedom in their operations. The number of towboats increased as well. The tonnage of engineless boats increased only by several percent. Only 11% of the boats were built between 1918 and 1937 (Menzel, 1997, p. 14).

Unstable political and economic situation caused fluctuations in employment. From 1935/1936 crew shortages occurred in the Odra shipping and the difficulties were growing from 1938. The reason for that was low pay, abandoning the profession, and military service (Menzel, 1997, p. 14).

Boat ownership was scattered among many owners – small owners (often also skippers) possessing from one to three vessels. In 1938 they owned 83% of the Odra ships and 77% of the whole tonnage. Within this group there were 1821 engineless barges, 67 self-propelled barges and 173 towboats. Small shipowners got together to oppose the large ones. Between 1934/1935 and 1938, four shipowners went out of business but five new appeared leaving seven shipowners in operation (Menzel, 1997, p. 15). The largest of them was Schlesische Dampfer- Compagnie – Berliner Lloyd AG registered in Hamburg. That shipowner owned or co-owned two ports on the Odra in Wrocław, one in Furstenberg on the Odra-Spree canal and Havelberg on the Havel (Zawadka, 1999, pp. 136–137).

## Economic conditions for navigation

After the wartime decrease, the inland waterway shipments returned to their pre-war level and remained there. The share of the Odra region navigation decreased from 14.1% in 1913 to 9% in 1935 (Kunz, 1995, p. 49).

The majority of transported goods were fuels, ores and crude iron. About 75–80% of loads leaving Koźle and Malczyce, particularly coal, went to Berlin (Menzel, 1997, p. 11). The dominance of this cargo caused a significant imbalance in carriages on the Silesia – Berlin route (Grodek, 1948, pp. 400–401). Altogether, the transport volume on the Odra amounted to 8.7 million tons in 1938, which was, however, less than in 1928 when almost 9 million tons were carried (Menzel, 1997, p. 14).

Freight rates depended on the supply and demand for tonnage, navigation conditions, canal charges and towing rates. Waterway carriers, contrary to the railways, were able to benefit from the better flexibility of freight agreements. The trade policy of the state, carried out by means of railway fees, was balanced by the inland shipping freight rates (*Denkschrift...*, 1930, p. 67).

After the war, the railways of German states were taken over by the Reich. From December, 1920, a unified domestic cargo rate was introduced which decreased with distance. It was competitive towards inland navigation, as its aim was to keep the high-value loads for the railway (*Denkschrift...*, 1930, p. 56).

The Odra carriers competed not only with the railway but also with one another. The most important shipments were the return upriver transports of iron ore and pyrites. A significant fall in freight rates occurred – from 4.5 RM before the war to 3 RM per ton from Szczecin to Upper Silesia. The fall occurred despite the increase in the cost of labour and lockage (Grodek, 1948, pp. 400–401).

The freight rates decreased significantly during the crisis of 1929–1933. Assuming that they were 100 in 1929, they dropped to 58.1% in 1932. Profits of small shipowners fell by 60–70% while larger shipowners had long-term agreements with production plants with fixed rates. In 1929 railway fares were introduced which harmed the navigation developed quickly in the times of stability (*Geschichte...*, 1961, pp. 404–405).

## State intervention

Excessive tonnage supply and the resulting fierce competition led small shipowners to the edge of bankruptcy. The Reich government thought it necessary to introduce regulations limiting competition. The regulation of 23 December 1931 allowed creating “small shipowners’ unions” on the March waterways and the Elbe. They got a power to establish minimum freight rates. In addition, a regulation of March 1932 set up “freight boards” in, among others, Berlin, Szczecin and Wrocław (Teubert, 1932, p. 865).

“The Act on Improving the Difficult Situation in Inland Navigation” of 1933 supplied legal basis for the actions already initiated. The Minister of Transport was authorized to equalize the load supply with shipping capacity supply. Those means depended on the conditions on particular waterways.

According to the act, every small shipowner (owning from 1 to 3 barges, a self-propelled boat or a towboat) had to belong to one of six unions, depending on their living place. One of them gathered the Odra shipowners. Special offices were set up which divided cargo and towboats among union members. Thus, they also took care of agreements with shipowners or shipowner groups concerning equal employment for their members. Skipper and shipowner unions were dissolved at the beginning of the war, because full employment was, at that time, ensured in inland navigation (Securius, Böning, 1943, pp. 11–13).

Because the abovementioned unions were able to enforce high freight rates, freight boards were established which were supposed to set minimum and maximum freight rates. Such boards included representatives of shipping, forwarders, loaders and navigation authorities. The boards operated in, among others, Berlin, Wrocław and Szczecin. They had a right to impose punishments for disregarding their regulations (*Geschichte...* 7, 1961, pp. 405–406). Apart from that, Hitler's government tried to stem the discontent of small shipowners by introducing regulations protecting shipowners from debt recovery, giving one-off subsidies for the maintenance of boats for the Elbe and March waterways, as well as forbidding the construction of new vessels (*Geschichte...* 8, 1961, p. 454).

The regulation on "the organic reconstruction of transport" from 1935 forced all employers and employees involved in inland shipping to belong to a professional association called *Reichsverkehrsgruppe Binnenschifffahrt*. The associations had its local branches and disobeying the orders of the group's head officer resulted in high monetary fines (Securius, Böning, 1943, p. 16; *Geschichte...* 8, 1961, p. 455).

Establishing the system of navigation management and supervision did not solve the problem of full fleet utilisation since one of its important elements was also an efficient operation of the railway. In 1938, for example, the management of goods wagons was poor. In Koźle barges waited for wagons with coal while in Szczecin there were too few barges. Constant intervention was, therefore, necessary (APG UWwD No. 2/613, 1938: 2).

Negative influence of the railway policy manifested itself not only through differential tariffs but also tariffs in relation to the Odra ports. In 1937, the situation deteriorated further as additional 5% burden on the railway rates contributed to the cost increase in railway transports to the Odra ports (APW AmW No. 43733, 1937).

## Wartime regulations

When the war began, there was an effort to maximize the use of the existing means of transport, crews and loading facilities. The waterways management pledged to shorten lockage time and the Minister of Transport introduced new time norms for loading and unloading (APG UWwD 1939 No. 2/613: 3).

The limits on ship capacities were abolished and obligatory unions dissolved. They were no longer needed since the authorities exerted their influence through the aforementioned association. The government abolished also the pre-war limits on industry-serving navigation, as well as fare barriers which increased sharply past a given place on the Midland Canal and had been introduced to protect Silesian coal from the competition with western Germany on the Berlin market.

On 19th September 1939 a regulation was passed on "counteracting insufficiencies in transport". It took away some freights from the railways and transferred them to the waterways, for example iron ore from Szczecin to Upper Silesia and coal in the other direction. The railway had to facilitate the delivery of loads to the waterways. It also had to abolish exceptional fares thanks to which it competed with inland navigation. It was forbidden to supply goods wagons for cargo which could be carried by water. The coal for the railways was also supposed to be shipped by water if conditions allowed that. Apart from carrying pitprops and agricultural products, the general cargo also began to be forcefully directed onto the waterways. Regular general cargo lines were even established. It became prohibited to carry break bulk cargo or wagonloads between certain places situated on waterways (*Geschichte...* 9, 1961, pp. 524–525).

For the efficient management of navigation on Odra, Warta and Noteć special offices were established in 1940. They had their branches in Koźle-Port, Wrocław, Furstenberg, Kostrzyn and Szczecin. Their task was an appropriate division of boat tonnage. Those offices were supposed to collect information from large and small

shipowners about free tonnage and supply information about contracts and towing agreements. (APG UWwD 1940, No. 2/613: k. 109; Securius, Böning, 1943, pp. 14–16).

The regulation from October 1941 froze freight rates on the level from 1st September 1941 (Securius, Böning, 1943, p. 43). The tasks of freight boards were significantly enlarged. They set not only minimum and maximum rates but fees for all navigation services. They were also enabled to set unified rules of affreightment and towing in their area. The boards' decisions had to be unconditionally respected and they could impose fines on the disobedient. The freight commission in Wrocław had under its jurisdiction the Odra up to Kostrzyn, as well as the Warta and Noteć. The commission in Szczecin supervised the Odra from Kostrzyn downriver together with the Szczecin Lagoon (Securius, Böning, 1943, pp. 13–14).

During the war, efforts were made to speed up shipping. According to the Ministry of Transport regulation of 3<sup>rd</sup> December 1940 the time needed for loading, unloading and shipping was supposed to be maximally shortened. That length was to be determined by local "waterways offices" taking into account local conditions. The offices in Szczecin and Wrocław determined time length for loose cargo loaded with chutes or mechanically: up to 100 tons – 1 day, up to 200 tons – 2 days, 400 tons – 4 days etc. Loading and unloading was not supposed to be interrupted on Sundays and during public holidays (Securius, Böning, 1943, pp. 32–33).

In October 1941, due to insufficiencies of the railways in the area of the Berlin directorate, the loads which up till then had been expedited from the Berlin cargo station began to be sent with express river transports to major ports on the Odra and Warta. The exception was made for general cargo, express wagonloads, live animals, perishable goods and military and service loads. Similar regulations concerned other railway directorates where suitable waterways existed (*Geschichte...* 9, 1961, p. 526).

The efforts to increase freight on inland waterways were faced with the same obstacles as in the pre-war period. The freight rates were low. In September, 1939 their height was 63% of the 1928 level. In 1940 they were raised from 2.9 RM per ton to 3.75 per ton and in 1941 to 4.30 RM per ton which was still lower than the rates in 1928 – 4.60 RM per ton (APW RW No. 15845: 13).

In the view of the Odra freight commission chairman the freight rates were supposed to be stable in the economic and transport sense and ensure appropriate supply of tonnage both at the time and in the future. The condition was not fulfilled for the Odra and hence the tonnage problems. In September 1942 a company in Hamburg complained about the lack of barges connected with low navigation profitability. Coal recipients and cement plants were prepared for the waterway freight rate increase from 2.50 to 3 RM which would still be cheaper than sea transport through Szczecin which increased the price by about 4 RM per ton. Higher profitability of transport was supposed to speed up barge turnover (APW RW No.15845, 1943: 19).

## Freights during wartime

In 1941 the freight operation on inland waterways connected with cargo transport in Germany increased generally by 20% in comparison to the previous year. This included a 68% rise in iron ore transport, 32% in building materials and 21% in timber. For coal, the rise amounted to 20% and it constituted almost a third of the waterway cargo. However, in 1942 there occurred for the first time a crisis in transport and difficulties in the deliveries of cargo for industry and individual consumers (*Geschichte...* 9, 1961, pp. 528–531).

Despite constant demand for vessels that had lasted for years and the improvements on the central Odra waterway, in 1939 the number of transshipments fell in Koźle, Wrocław, Malczyce and, to a lesser extent, in Głogów.

In the years 1938–1941 Koźle noted a fall of transshipments from 3.8 million tons to 3 million, Wrocław from 0.7 to 0.6 million, Malczyce from 0.7 to 0.4 million tons (Menzel, 1997, p. 17).

In the years 1939–1941 the inland navigation did not take over as much cargo transport as planned. The turnover of the Szczecin Port, in and out shipments by inland waterways and railways were 9.8 million tons in 1939, 8.8 million tons in 1940 and 10.7 million tons in 1941 (Włodarczyk, 1990, p. 25). The share of the inland navigation in this turnover decreased from 38% in 1939 to 29.6% in 1941. The railway was able to react faster to the demand for transport than the inland navigation. Moreover, there were not enough crews, especially skippers, due to conscription to Wehrmacht. There were also fewer upriver loads. For instance, in 1940 7.7 thousand boats came to Koźle, 5.1 thousand of which were empty. At the same time, in Malczyce, the share of the empty ones amounted to 33.2% (Menzel, 1997, p. 18).

At the beginning of 1943 the chairman of the Freight Department in Wrocław explained that the reasons for the worsening state of the Odra navigation were the falling freight rates, lack of funds for fleet replacements and low water levels. The problems had pre-war roots. A crisis regulation of 1932 introduced a ban on building new vessels, made the building of the new dependent on scrapping the old and imposed limits on boat capacities. This hampered the development of the Odra fleet. At that time the state was building new motorways, producing more and more cars and the railway invested in new rolling stock. Although the abovementioned regulation was abolished in 1938, quota were set on shipbuilding materials. Hence the average age of Odra vessels was 36 years. Moreover, the Odra shipyards were technically and organizationally obsolete (APW RW, No. 15845, 1943: 1, 2).

From the end of 1943 the potential of railway transport was decreasing. On the other hand, the demand for river transport grew. That increase meant that crew shortages and fleet wear became more acute. In September–October 1944 the Odra fleet consisted of 356 towboats, 51 of which had to undergo renovation, 153 engine barges, 14 of which needed renovation, 8 engineless tankers and 6 engine tankers – 2 for renovation (Menzel, 1997, pp. 18–20).

The turnover of all ports in Wrocław and Malczyce were still on the level of 1.4 tons in 1938 and then decreased systematically to 1.3 million tons in 1939, 1 million in 1940 and 616 thousand in 1943. From January to April 1944 the turnover was just 144 thousand tons. (APW WS PŚI No. 1607: 1, 7–8.) It must be noted that railway transport in the Wrocław directorate carried 29 million tons in 1940, 27.9 and 27.7 million tons in 1941 and 42 and increased to 30 million in 1943 (Scharf, 1981, p. 271.)

Due to the destruction of land transport facilities by air-raids, the waterway transport was in heavier use. The Upper Silesia coal mining increased in significance and in November of 1944 it constituted a half of all German coal extraction. In July 1944, 107 thousand tons of coal were sent from Koźle. 215–240 barges were used carrying on average 450–500 tons, which meant 7–8 barges a day. In September 1944, the coal transport from Koźle grew to 126 thousand tons and in November – 274 thousand (out of 400 thousand planned.) In the second decade of December 1944 the monthly plan was 133 thousand of which 92 thousand was achieved and in the third decade – 8 thousand tons (Menzel, 1997, pp. 19–20).

## Conclusions

During the economic depression of the first half of the 1930s the state decided to intervene and create separate unions of small and large shipowners which were supposed to ensure their full employment. The government established boards which set minimum and maximum freight rates. The aim was to prevent competition which

destroyed the owners of one or two boats. Inland navigation was supposed to counterbalance dominant position of the railways, especially in bulk cargo transport. Nazi authorities controlled the navigation by creating obligatory professional associations. After the war began, in order to use the waterway potential to the full and lighten the railway's load, a strict tonnage control was exercised. Some loads were being transferred from railways to waterways and freight rates were frozen. Obsolete equipment, falling crew numbers and low freight rates caused a fall in the volume and share of the Odra navigation in the whole of the German transport.

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