PIRInfrastructure

Czechs and Slovaks plan link to European waterways

by Alexander Hartmann

After the division of former Czechoslovakia into the Czech and the Slovak republics, both countries have to find ways to improve their economies rapidly. One key project that could speed up this process is the construction of the Danube-Oder-Elbe waterway (DOE), that might later become part of a ship route connecting the Baltic and Adriatic seas. This waterway is part of the program for the economic reconstruction of Europe to fuel a global economic recovery proposed by American economist Lyndon H. LaRouche, the Paris-Berlin-Vienna "Productive Triangle." For ships, it will be the shortest route connecting Berlin and Vienna (see **Figure 1**).

In 1990 and 1991, engineers of Ecotrans Moravia, a company founded by the states and municipalities along the future canal, published a general plan for this waterway under the title: "The Danube-Oder-Elbe Waterway—Yes or No?" They want to start construction based on this plan in 1993, and to complete the four stages of the project within 25 years, thus providing for a rapid modernization of the Czech and the Slovak economies. The benefits of this waterway will be felt in most of central and eastern Europe.

Binding nations together

The idea of such a canal is nothing new. In the 17th century, Lothar Vogemont was the first to engineer a canal linking the Oder, Elbe, and Danube rivers. When, at the turn of the century, the Austro-Hungarian Empire had trouble with its divergent nationalities, these plans were picked up again. The idea was to build strong economic ties that would hold these nations together. The DOE was the northern branch of a waterway whose southern branch was to cross Slovenia, Croatia, and Hungary, thus connecting the Adriatic Sea and the Danube, and all the nations along the route.

Construction was actually begun in the vicinity of Vien-

na, but the First World War, the division of the Hapsburg Empire, and, later, the Second World War and the Iron Curtain prevented its completion. The communists ruling Czechoslovakia, especially those sitting in Moscow, were not interested in improving the ties of their satellites to western Europe. They were interested only in tying them closer to the Soviet Union, and since there was no short route for ships, they invested in railroads. Railroads also fit much better with the blitzkrieg strategy of the Soviet Red Army.

Another factor was that the Soviets did not allow foreign ships on their waterways, and, indeed, constructed their waterways in a way that prevented foreign ships from going on Russian rivers. By building huge dams, they transformed waterways into chains of giant artificial lakes, with waves too high for western riverboats. Thus, only 7.7% of all goods were transported by ship in the former Comecon, while in west-central Europe, ships carried 35% of all inland transport.

In the 1960s, the Czechoslovakian government had the plans for the DOE remodeled. Still, only a few parts of these plans were carried out, mainly where it was necessary to build dams to provide water for industry and agriculture anyway. Transport was ultimately to be possible, but it was not a priority. While the earlier plans envisioned a canal completely separate from the rivers, the communists intended to build a chain of locks and dams, avoiding construction of a separate canal wherever possible.

Ecotrans Moravia remodeled the plans all over again. Their idea is to use the sections of the river that are deep enough for water transport (either naturally or because of the improvements made by the communists), and to connect these sections by canals, shortcutting the environmentally valuable meanders of the Morava River. They have studied

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LATVIA SWEDEN RUSSIA Baltic North Sea LITHUANIA Sea RUSSIA BELARUS UNITED NETHERLANDS KINGDOM GERMANY POLAND BELGIUM UKRAINE NNA SLOVAKIA **PARIS AUSTRIA** ΗU **SWITZ** Ñ∎GARY SLOVENIA ROMANIA FRANCE **CROATIA** BOSNIA-HERCEGOVINA SERBIA Black ITALY IONTENEGRO BULGARIA Sea KOSOVA MACEDONIA ALBANIA SPAIN TURKEY Mediterranean Sea

FIGURE 1
How the Danube-Oder-Elbe waterway complements the European 'Productive Triangle'

The establishment of a water connection between the Danube at Vienna, to the Elbe and Oder rivers, is the precondition for high-volume inland shipping along the eastern leg of the Paris-Berlin-Vienna "Productive Triangle."

the experiences in constructing the Main-Danube Canal, the section of the Rhine-Main-Danube waterway (RMD) opened half a year ago in Germany.

International waterway

A remodeling of the plans was necessary also because modern ships need parameters better than those used 30 years ago. Now, ships of 2.8 meters (9.2 feet) draft will be able to use the waterway, which can later be increased to 3.5 meters (11.5 feet). Locks will have a length of 190 meters (207.8 yards) and a width of 12 meters (13.2 yards), which means

that the DOE will have all the parameters of a modern waterway, as does the RMD. Ships will be able to carry 2,500 tons and tows up to 3,950 tons (at 3.5 meters draft, about 5,000 tons). Some 144 containers stored in three layers can be transported by one ship; if the clearance of bridges is increased to 9.8 meters, there can be four layers of containers on the ship, i.e., 192 containers.

As you can see in **Table 1**, the canal is cutting existing routes even between Vienna and Rotterdam. The distance between Vienna and Szczecin will be cut by 54%. In addition, the DOE's highest level is 395 meters between the

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TABLE 1
The Danube-Oder-Elbe waterway cuts down on distance and travel times

	Distance	Percent of Rhine- Main- Danube	Locks	Locks compared to Rhine- Main- Danube
Rhine-Main-Danube			·	
Vienna-Rotterdam	1,662	100	65	0
Vienna-Bremen	1,784	100	86	0
Vienna-Hamburg	1,910	100	82	0
Vienna-Szczecin	2,132	100	89	0
Danube-Elbe				
Vienna-Rotterdam	1,631	98	53	-12
Vienna-Bremen	1,293	72	74	-12
Vienna-Hamburg	1,153	60	68	-14
Vienna-Szczecin	1,193	56	73	-16
Danube-Oder				
Vienna-Rotterdam	1,795	108	66	+1
Vienna-Bremen	1,457	81	85	-1
Vienna-Hamburg	1,317	69	79	-3
Vienna-Szczecin	989	46	69	-20

Danube and Elbe rivers, and 275 meters between the Danube and Oder rivers, compared to 406 meters on the RMD (see **Table 2**). Along the section connecting Prerov to the Elbe, there are two shiplifts of 100 meters and 109.5 meters. The highest lock will lift ships by 30 meters. That means not only that the total distance bridged by locks or shiplifts is smaller, but also that the average length of pools is bigger (about 17 kilometers compared to 10.7 kilometers on the Main-Danube Canal). In short, ships will save a lot of time compared to the routes used now.

But this will not affect the profitability of the RMD negatively, since the two waterways supplement each other. Like most of the cars and trucks using America's coast-to-coast highways, which enter the highway at one point and leave at another along the route, using only a section of the highway, this is true also for ships using canals. Canals serve those regions they cross. Since the DOE and the RMD will be connected to one another, they will link all regions adjacent to either canal. In many cases, it will be more economical to transport by ship than it is now.

The regions profiting most from the DOE will be the areas around Prague, Dresden, and Leipzig on the western branch, and Wroclaw and the industrial region of Upper Silesia on the eastern branch of the DOE. Berlin, Vienna, and Bratislava will be reached by both branches. These areas

TABLE 2
Specifications of Danube-Oder-Elbe waterway

Section	Distance (kilometers)	Difference in height (meters)	Highest level (meters)	No. of
Main-Danube	171	243	405	16
Morava	172	124	224	11
Morava-Oder	161.1	171	275	12
Morava-Elbe	149.8	349.2*	395	8*

This table compares the recently opened Main-Danube Canal with the sections of the Danube-Oder-Elbe branching from Prerov to the south along the Morava River, northeast toward the Oder River, and west toward the Elbe River. (* include two shiplifts of 100 meters and 109.5 meters.)

Population centers with access to the Danube-Oder-Elbe waterway

Area	Population (in millions)		
Vienna/Bratislava	2		
Prague/Northern Bohemia	3		
Dresden/Leipzig/Saxony	3.5		
Berlin	4		
Wroclaw	1		
Upper Silesia	4		
Total	17.5		

have a combined population of more than 17 million, and include the most important industrial centers of Austria, Poland, and the Czech and the Slovak republics (see **Table 3**). Vienna, Prague, Dresden, Leipzig, and Berlin are included in the Productive Triangle, Upper Silesia and Wroclaw lie along one of the "spiral arms," as defined by LaRouche's proposal). As will be demonstrated, the DOE is more than just a waterway. The intention is to build a corridor of development.

Escape from the island

Currently, especially the Czech Republic is situated on a kind of island in respect to the European grid of waterways. The Elbe and Oder rivers reach into the Czech Republic, while the Danube River is the southern border of the Slovak Republic. The Elbe and Vltava rivers have been turned into modern waterways within the Czech Republic. But farther north, in Germany and Poland, neither the Elbe nor the Oder have been improved. On the Elbe River, ship transport is impossible often for two months or more every year, and

most of the time it is hampered by low waters.

As long as this situation remains unchanged, many goods from Bohemia have to be transported by other means. And as long as German authorities have more respect for self-proclaimed environmentalists than for the challenges of the future, and as long as short-term fiscal austerity has a higher priority than saving money by investing in increasing productivity, the situation will probably not change. The new German Federal Transport Route Plan, the general plan governing investments into traffic routes built under federal authority, does not foresee any improvements of the Elbe River at all for the time being.

Of all European rivers, only the Oder provides for shipping conditions worse than those on the Elbe River. The situation on the Oder River is so bad that there has been no regular shipping on this river across the Czech-Polish border for years. As long as the Polish government takes orders from the International Monetary Fund, there will be no investment in improving shipping conditions.

This means that for the time being, the Danube River will be the only part of the European grid of waterways accessible for Czech and Slovak goods with acceptable shipping conditions. Opponents of the DOE argue that the DOE does not make any sense with two deadends. Ecotrans Moravia defends the DOE as the only way to get out of their island position and to gain access to the European grid of waterways. By establishing a *fait accompli*, they will increase pressure on Poland and Germany to do their part to improve navigability of the Elbe and Oder rivers, which will then complete the DOE as envisioned by Ecotrans Moravia.

A corridor for development

The DOE will not only be a canal, but it also includes the construction of a railroad fitting modern standards (speeds of up to 100 miles per hour for freight trains and 150 mph for passenger trains). The wide curves needed by high-speed trains will be an advantage for ship transport, too. This railroad will follow the canal in a way that bridges and underpasses will cross both the canal and the railroad, which will save a lot of money and material. Even tunnels will be used both by ships and trains (see **Figure 2**).

It will not only mean saving money and material on construction. As detailed in the Productive Triangle proposal, benefits from different pieces of infrastructure will be more than additive if they are grouped into corridors of development. They will define an area with conditions much more favorable for industrial development. This will speed up the process of reconstruction.

The DOE includes construction of 30 industrial centers at harbors along the waterway (see **Figure 3**). These centers have been modeled after the industrial harbor at Nuremberg, Germany, that was built together with the Main-Danube Canal and opened in 1970. Today, 70 companies employ 3,700 workers on a 452.2-acre site at this harbor.

Some of these 30 centers are already under construction. They will provide jobs for 30,000 workers. That does not include the 5,600 workers needed to operate the canal. The construction of the canal will employ 7,400 workers, and companies providing steel, cement, or other materials for construction will have work for about 37,000 persons.

Another aspect that is not mentioned explicitly in the Ecotrans Moravia study, is the fact that the construction of the DOE can be used as an instrument to modernize these companies. One of the big problems of these companies is that the collapsing markets in eastern Europe provide no demand for their products. Therefore, they dump them cheap on the western markets, in a way that ruins western companies, but does not provide any capital for investment. A large part of the industrial capacities of eastern Europe is not utilized or has been shut down already.

By employing these capacities at a fair price over a number of years, these companies get a chance to invest in modernizing their production. When the work is done, these companies will have reached a productivity enabling them to pay high wages, which in turn will help create an internal market, which is non-existent at the moment. At the end of the process, the Czech and Slovak republics will have a high standard of living, similar to the 1920s when Bohemia was as wealthy as Switzerland.

Financing the DOE

The study presented by Ecotrans Moravia discusses several schemes to finance the construction of the DOE. These range from financing the DOE through the responsible ministry (i.e., through taxes or government debt) or a state-run company as in the case of the RMD (see EIR, Oct. 3, 1992), a private company leasing the canal to the state, or a "free-market" solution through private capital, where the state would only participate through providing certain guarantees.

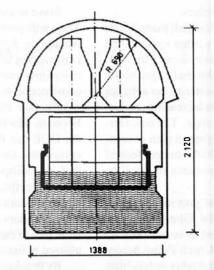
The authors of the study do not state any preferences from among these four possibilities, but they do point out that there is a difference between "adequate economic effectiveness" and "adequate profitability." In other words, not every way the nation benefits economically from the canal will show up on the balance sheet of the company or institution operating the canal. This includes savings on maintenance of other means of transport, improvement of the availability of water, protection of the environment, lower risk of accidents, creation of jobs, and so forth. The increased savings to shippers and profits of harbors and other companies benefitting from the canal will also not end up on the balance sheets.

These so-called secondary effects of the canal will be greater if the canal is not used to attempt to generate profits directly. Since private capital by its very nature demands interest payments, and these interest payments comprise most of the costs of great projects like the DOE, the DOE will be the more costly; and the more profit the

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FIGURE 2

Construction plan for a tunnel which can handle both barge and rail traffic



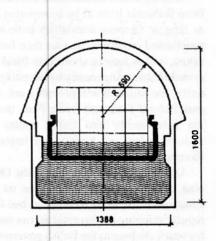
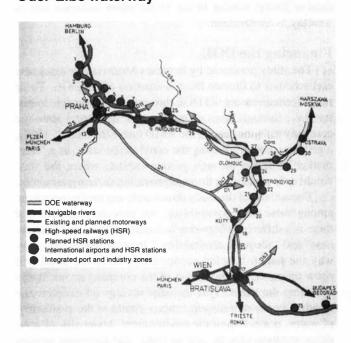


FIGURE3

Plans for industrial and infrastructure development in the area along the Danube-Oder-Elbe waterway



financing company will take.

For example, the interest accumulated during a delay in the construction of one section of the RMD alone was more than the physical costs of construction of that section. The same is true for the construction of many nuclear power plants all over the world that were delayed by environmentalists or international financial institutions. The construction of the DOE may be half as costly if it is built without private

capital, i.e., if the state or the company or the institution does not finance the canals' construction through any scheme that involves interest payments, either by the company or by the state.

A return to national banking

At present, it is unlikely that the Czech or Slovak republics, or any other governments, could finance the DOE through taxes. That means that there is only one way to finance the construction in such a way as to avoid interest payments: the return to methods of national banking in the tradition of the first U.S. secretary of the treasury, Alexander Hamilton. Simplified, this means that the national bank will circulate the money it prints by giving cheap or interest-free credits, possibly administered by a kind of bank for reconstruction or other banks, to the institution building the DOE or similar projects. That way, the project does not burden the taxpayer, and it does not generate an avalanche of debt on the company.

This possibility has not been discussed by the authors of the DOE, but they still calculate the savings through the project at 7.9% over a period of 40 years, i.e., 25 years of construction and 15 years of full operation of the canal, calculating only the difference between the expenses for construction and savings from reduced costs of transport. If other effects are included, like sales of electricity generated along the canal, environmental "profits," job safety, and reduced costs of maintenance for other means of transport, this rises to 22.2%.

The worsening economic situation of eastern Europe, which is at the point of political and even military conflicts, has to be addressed. Without projects like the DOE, this will be impossible. That is why the governments involved, especially after the "divorce" of the Czech and Slovak republics, put it high on their lists of priorities and, if possible, intend to speed up construction.