
Infrastructure

The German federal transportation masterplan: too little, too late

by Alexander Hartmann

When the Berlin Wall came down in 1989, physical economist Lyndon H. LaRouche stressed the importance of the development of infrastructure for the survival of the new democracies of eastern Europe. He developed the "Productive Triangle" proposal for intense infrastructure investment within the area encompassed by Paris, Berlin, and Vienna as a locomotive to pull the world economy out of the depression.

Most of this triangle is situated in the Federal Republic of Germany. Any improvement of the infrastructure in this central area would improve the economic situation in most of Europe, and, conversely, lack of improvement affects the economy negatively. *EIR* has stressed that time is of the essence. But bureaucrats work rather *gründlich* (thoroughly, but not necessarily correctly) than fast, and German bureaucrats are infamous for that. This summer, they finally completed a new masterplan for the development of the transport infrastructure of Germany adapted to the new conditions after reunification.

It took the German bureaucracy three years to come up with this masterplan, the "German Federal Traffic Masterplan of 1992" (BWVP '92), and another year to get it, embodied in three bills, passed by the Bundestag.

But now, four years after the Wall came down, the situation has changed dramatically, both politically and economically. Many industries, which otherwise could have been saved if an aggressive effort to build the infrastructure listed in the transportation masterplan had been undertaken, have been destroyed by an insane policy called "shock therapy," democracy in Russia has been brought to a bloody end, and the forced devaluation of labor in eastern European countries has created conditions of economic depression, which have largely wiped out the tax revenue base that the government needs to finance such projects. If the current policy prevails, most of the projects listed in the masterplan will be cancelled.

The bills include the fourth amendment to the highway construction bill, a railroad construction bill, and a simplified planning bill to cut short some of the labyrinth of legal procedures which must be followed to get construction started.

With these bills, the legal basis for construction of federal highways, railroads, waterways, and other transport infrastructure has been established.

The BWVP '92 includes projects to develop transportation infrastructure worth DM 493 billion (\$308.1 billion), about four times as much as BWVP 185 (\$78.8 billion).

For the first time, investments in rail infrastructure will be larger than those for federal road construction. DM 194.9 billion (\$121.8 billion, 39.5%) will be spent for railroads, DM 191.4 billion (38.8%) will go for highways, DM 28 billion (5.7%) for waterways, and DM 76.1 billion (15.4%) will be given to states to improve traffic conditions in the cities and towns, finance subway construction, etc.

Less than it appears

These figures may seem impressive, but upon closer inspection, the total is much less than it may appear. First of all, BVWP '92 covers a period of 20 years, twice as long as BVWP '85. The expenditures envisioned *per year* are therefore not four, but only two times as great as before. Second, since BVWP '92 includes projects in the additional states in eastern Germany, by which the area of the Federal Republic of Germany was increased by 43%, and its population by 29%, the annual increase of expenses adjusted for inflation (about 15% since 1985) per area is only about 20%, and about 33% per capita.

But to understand the whole picture, one must look at the structure of BVWP '92. DM 191.7 billion of the DM 493 billion had to be reserved for replacement, maintenance, and other expenses not related to the construction of new capacity. DM 58 billion of that is reserved for the new states to replace worn-out rail and road infrastructure. Of the DM 493 billion, only DM 222.6 billion (DM 11.1 billion annually) will go into construction of infrastructure which will *increase* traffic capacities beyond the status quo.

However, not even all of the DM 222.6 billion will be spent for projects newly approved. One-third, DM 74.2 billion, will be spent to finish work on projects already included

TABLE 1

BVWP '92 structure of investments

(billion deutschemarks)

	Rail	Road	Water	Total
Maintenance	86.6	91.8	13.3	191.7
Under construction	26.2	26.2	7.3	59.7
BVWP '85	—	13.5	1.0	14.5
VDE	30.0	23.5	4.0	57.5
Total holdover	142.8	155.0	25.6	323.5
New projects	52.1	36.4	2.4	90.9

in BVWP '85, some of which have not even been started. After the Berlin Wall came down, another DM 57.5 billion worth of infrastructure projects were appropriated as part of the "Close the Gaps" and "German Unity Transportation Projects" (VDE) programs in order to start integrating the traffic infrastructure of Germany as quickly as possible.

We have to give credit to the bureaucrats that they approved the most important projects in advance. But that leaves only DM 90.9 billion, about 20% of the total volume for new projects beyond existing plans, which is DM 4.5 billion (less than \$3 billion) annually (see Table 1).

2,200 kilometers of new high-speed lines

Table 2 lists new rail projects with a financial volume of more than DM 1 billion each. These investments will add 2,200 kilometers (km) of high-speed rail lines to the existing 1,000 km high-speed rail grid, where trains can run at speeds of 200-300 kmh (120-180 mph). In total, 46 different lines will be upgraded or built totally new.

The second important aim is to increase the capacity of the rail grid by improving tracks and traffic control systems of the rail junctions in the urban population centers in eastern Germany. In the greater Berlin area alone, DM 10 billion will be invested. Another DM 6.7 billion is reserved for rail freight terminals and centers for multimodal freight transport. A new integrated computer system, CIR-ELKE (computer integrated railroading), which will coordinate train schedules to use existing tracks more efficiently, is estimated will increase capacities on the main lines by up to 30%.

Highway improvements

According to BVWP '92, DM 11.6 billion will be spent annually for construction, maintenance, and operation of federal first class (for example, the Autobahn) and second class highways. Close to DM 5 billion of this will be used to enlarge capacity, widening old highways or building new ones. The grid of first class highways will grow from

TABLE 2

Railroad investment projects over DM 1 billion

Project	Billion DM
1) Holdover projects (BVWP '85, plus VDE, plus LSP)	
ABS/NBS Frankfurt-Basel	5.527
NBS Koeln-Frankfurt/Wiesbaden	5.705
ABS/NBS Stuttgart-Augsburg	4.610
ABS/NBS Nuernberg-Muenchen	2.991
ABS Muenchen-Muehdorf-Freilassing	1.106
ABS Hamburg-Buechen-Berlin	3.934
ABS Helmstedt-Berlin	1.755
ABS Bebra-Erfurt	1.620
ABS Hochstadt-Camburg	1.154
ABS Uelzen-Stendal	1.345
ABS/NBS Hannover-Berlin	4.165
ABS/NBS Nuernberg-Erfurt	7.195
ABS/NBS Erfurt-Halle/leipzig	4.765
ABS Leipzig-Dresden	2.675
2) New BVWP '92 projects	
ABS/NBS Hanau-Erfurt	8.495
ABS Loehne-Wolfsburg	1.450
ABS (Dutch border)-Oberhausen	1.060
ABS/NBS Hanau-lphofen	1.495
ABS/NBS Hamburg/Bremen-Hannover	2.500
Masterplan rail freight terminals	2.685
Multimodal freight traffic	4.085
Cir-Elke	2.570
Rail junctions L/HAL,DD,MD,EF,HRO	3.185
Rail junctions Berlin	10.000
Set-aside for cross-border projects	8.000

ABS=improvements of existing lines
NBS=new high-speed rail connections

10,850 km to 13,300 km.

Most of the new highways will be built in the eastern part of Germany, and a major part of these projects were already decided upon after the Berlin Wall came down, as part of the VDE. Of the new highways in western Germany, most will be short connections increasing the density of the existing grid, except for one major highway in northern Germany connecting Bremen, Hamburg, and Lübeck.

The other item on the agenda concerning primary highways is adding third or fourth lanes for each direction on highways connecting major urban centers. Of 13,300 km of first class highways, 3,700 km will have more than two lanes in each direction.

Much money will also be spent to improve secondary highways, adding approximately 6,160 km to the highway grid. In many cases, road bypasses will be built to route

traffic around towns and cities, to protect inhabitants from noise and pollution.

Other projects

About 20% of the funding envisioned in BVWP '92 will be spent for waterways (DM 28 billion) and public transportation (DM 76 billion). By privatizing air control, the German Treasury has dropped any financial support for air traffic.

Most of the projects concerning water transport have been held over from BVWP '85. They include regulatory measures on the Rhine, Main, Weser, and Danube rivers. With rare exceptions, new projects included in BVWP '92 will be situated in eastern Germany. DM 4 billion will be spent to upgrade existing waterways connecting Hanover and Berlin, and two river ports in Berlin. Another DM 1.15 billion will improve the Oder-Havel Waterway connecting Berlin and the Baltic seaport Szczecin. The Elbe River, the heart of the waterways of eastern Germany, will be regulated, but not channelized, much to the dismay of those involved in river transport and of those trying to upgrade the economy in Saxony.

Speeding up construction

The DM 222.6 billion envisioned for investments include only those projects considered "urgently needed." If a project is included in the BVWP '92, the relevant authorities are instructed to start planning and preparation for these projects immediately. This does not mean that construction will begin soon, however. Construction will begin only after these plans have passed through a long queue of bureaucratic procedures, often prolonged by years of court battles launched by environmentalists and others. Some of the administrative and legal provisions have now been eliminated by the simplified planning bill.

This bill has been long overdue, and was drafted under former Transportation Minister Günther Krause. It will considerably reduce the time between the decision on a project and its realization, even if it eliminates only the worst aspects of the growing bureaucratic entanglements.

'Secondary' projects

Beyond the "urgently needed" projects included in the DM 222.6 billion allocation, BVWP '92 lists a number of projects that are "otherwise" needed, but are not on the immediate agenda. The authors of BVWP '92 estimated that such projects are "beyond the financial means for the next 20 years," and included them as backup options. Given current trends, there are only three scenarios that could lead to their construction before the year 2010:

a) other "urgently" needed projects cannot be completed, for example because of legal difficulties. In this case, the money allocated for those will be funneled to "other" options;

Return to national banking to finance infrastructure

Under the currently prevailing "free market" ideology, governments may not use central bank money at zero or low interest rates to develop infrastructure, even if these projects are urgently needed. Instead, central banks circulate money by lending it at a certain rate of interest to commercial banks. If governments need money for investments, they have to borrow from those banks, paying more interest (in Germany, an average 8% annually in recent years) than the banks pay to the central bank. Even if the Bundesbank has to give a large share of its profits to the government in taxes, this method of financing means a gift of at least 2% interest in income to commercial banks. Instead of infrastructure development, it is spent for interest on debt and unemployment. Thus, a spiral develops: fewer projects, more unemployment, more expenses, more loans, more interest payments, fewer projects.

For example, the Treasury spends DM 25 billion, taking a loan at 8% interest annually for 30 years. Every year it pays back DM 833 million. After 30 years, the DM 25 billion has been repaid, but with DM 30 billion having been paid out in interest. For BVWP '92, with close to DM 500 billion in projects, about DM 600 billion will be spent on interest payments. The gift of 2% to the banks adds DM 150 billion. Annually, about DM 16.5 billion will be paid back, and DM 27 billion in interest will be charged.

If the Bundesbank would issue annually DM 25 billion free of interest as credit to the federal government *exclusively to finance these projects*, taxes could be reduced by at least DM 340 per capita, or the money could be spent to finance many more great projects.

—Alexander Hartmann

b) private investors raise the money to build these projects. The BVWP '92 states this option explicitly for the Transrapid magnetic levitation (maglev) train;

c) another economic miracle generates the financial means to go beyond the DM 493 billion limit.

The financial volume of the projects needed "otherwise" is more than DM 63 billion. Whether a project is considered to be "urgently" or just "otherwise" needed is determined by its cost-effectiveness. If the "profits" (including estimates for "environmental benefits" and the like) are estimated to be three or more times higher than the "losses" (again including

“environmental losses”), a project will usually be classified as “urgent.” If the benefits are less than that, but still greater than the “losses,” a project can be classified as “other.” That does not mean all beneficial projects have been included; there are many more of them, but for the time being, they have been put off. The BVWP '92 states that there are projects worth more than DM 100 billion that have just been left off the agenda. The DM 100 billion does not even include the Transrapid. In sum, there are many more beneficial projects, with a financial volume of at least DM 160 billion, that should be built as soon as possible, but the Treasury says, “Not within the next 20 years!”

Where is the Transrapid?

While the new German maglev transport system Transrapid is favorably mentioned in the BVWP '92, it is not included in the plan. The federal government stated:

“The decision to realize the project to build a high-speed maglev connection between Berlin and Hamburg or Berlin and Bonn will be prepared in a separate procedure. . . . Private or semi-private financial means have to be developed to fund construction and operation of the maglev train system. Private commitments have a special importance in this respect.”

In other words, Finance Minister Theodor Waigel wants to play poker with the industrial firms that have developed the Transrapid, to squeeze as much money out of them as he can.

If short-term poker games override long-term planning, many important aspects will be ignored, which will have a lasting negative impact on the cost-effectiveness of many of the programs. If a complete grid of Transrapid lines were to be built, a large part of the current volume of rail and air passengers would use maglev trains instead. Rail lines would then be freed up for freight transport, which would get many trucks off the highways. Obviously, benefits and losses would have to be calculated anew, and for many projects this might imply a new classification. Some “urgent” projects would be downgraded into the “other” category, some “other” projects might suddenly be of utmost urgency.

Consider the estimated increase of the traffic density in the coming period (Table 3). If the BVWP '92 is not amended considerably to provide additional capacities, matters will get worse. Already there is talk about the looming transportation gridlock where the lack of infrastructure brings everything to a screeching halt. We can manage this only if large portions of the rail and roadway traffic are shifted to more efficient traffic systems based on new technologies. If that is not done, traffic volume will increase faster than the transportation capacities.

One of these technologies is the maglev train system, which has been fully developed. Financial considerations have led to the postponement of this project. Obviously, such a system will work much more economically if it is built as a more or less complete network of rail lines. To allow the

TABLE 3

Increase of traffic (estimated)

	1988	2010	Increase (%)
Freight traffic (billion ton-km)			
Road	122	238	95.1
Rail	125	194	55.2
Ship	63	116	84.4
Passenger traffic (billion person-km)			
Individual	647	838	29.5
Long distance rail	66	88	33.3
Air	14	34	142.8
Commuting traffic	87	110	26.4

Transrapid to only exist in the niches left by the ICE conventional high-speed rail system, and reduce it to a “commercial” test run in the coming years at best, does not reflect reality. Passenger and goods traffic can only be separated efficiently if the net of maglev lines reaches the density of the current ICE net: about 12,000 km.

What is to be done?

Another area where capacities can be increased massively, is in waterways. If more emphasis were put on upgrading them, modern freight ships (2,500 tons) could operate year-round at full capacity. Most important in this respect is improving the Elbe River between Magdeburg and the Czech border, either by channelizing it with locks and dams, or by building a navigable canal parallel to the river.

Improving the rivers could have a similar effect as building a complete net of Transrapid lines. But only 5.7% of the financial means of BVWP '92 are used to improve waterways, even less than their share in BVWP '85. This, despite the fact that new states have been added, which are far behind western states in terms of ship transport: While about 23% of all freight transports are put on ships in western Germany, east German ship transport accounts for 3% of freight transport there.

The most important measure to amend traffic conditions is to change the financial mechanisms used to finance infrastructure development. Changing the laws governing the Bundesbank could mobilize huge financial reserves to pay for these projects. In addition to those projects approved this summer, we need a bill for the construction of a complete net of Transrapid lines, aiming at completing this project within the next 10 years. Road and rail projects can be followed up as forecasted, until the next BVWP is presented, since rail lines will be used for freight transport. Finally, a bill creating a net of full-ship waterways has to be added, to “round out” the BVWP '92.