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## Economic Reconstruction of the Former U.S.S.R.

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# The transportation infrastructure needs of the republics in the East

by Jonathan Tennenbaum

*The following was prepared to serve as a guideline for the economic recovery of the new republics formed from the former Soviet Union. In the Sept. 13 issue of EIR, Dr. Jonathan Tennenbaum, director of the Fusion Energy Forum in Germany, discussed the general principles to effect an economic recovery in the East. In this article, he focuses on the need for road and rail infrastructure construction and modernization.*

We have already said why an uninterrupted improvement of basic infrastructure, including the appropriate transportation connections to Europe's "Productive Triangle"—a proposal by economist and statesman Lyndon LaRouche to build up infrastructure in an area between Paris, Vienna, and Berlin as the motor for a worldwide economic recovery—would represent in the republics of the former Soviet Union, the primary locomotive for all consequential economic reform. The grounds and reasons for this are all part of one package to be thought of as follows:

1) The increase of the productivity of the domestic economies of the republics, which essentially depends upon the coming into being of a strong agricultural and industrial Mittelstand—small and medium-sized high-technology and industrial firms—presupposes the guarantee of a broad availability of the necessary capital goods (not the least of which are simple tools, construction materials, and replacement parts).

A flow in the reverse direction, efficient delivery of products to regional and extra-regional markets, is also required. Both demand an infrastructure much more efficient than exists today in most of the regions of the former Soviet Union. Above all, what is needed is an improvement in the production and delivery of energy, water delivery and sanitation, transportation, and communications.

### **The infrastructure 'spark'**

2) The same holds true for providing the population with food and other consumer goods.

3) On the other hand, a massive buildup of infrastructure serves as an "ignition spark" for an economic upswing, in that an enduring demand for countless goods and services necessary for the process of this buildup will be created and produced by, among others, the businesses and industries of the newly arisen Mittelstand.

4) Moreover, this is the only realistic means for quickly absorbing the great mass of those unemployed and underemployed in the labor force, and avoiding an otherwise dangerous rate of unemployment. This must not be done by primitive, labor-intensive methods; rather, the buildup of infrastructure must occur at the highest possible technical level, through which those employed in the project might become qualified for future work (for example, in construction).

5) Infrastructure projects are ideal areas for investments by the state, as well as for foreign economic aid, credits, and investments. The products are project-specific; "hard," durable goods of immediate usefulness are produced. The improvement of infrastructure contributes substantially to guaranteeing present and future investments, and to raising the general productivity of the domestic economy.

6) The material that needs to be imported—machinery, construction materials, technically skilled labor, etc.—with most infrastructure projects takes up only a small part of the total investment. The lion's share is provided by the domestic labor force and domestic production.

Correspondingly, well-planned infrastructure projects are ideal targets for state credit creation along Hamiltonian methods (so-named after the first U.S. Treasury Secretary Alexander Hamilton).

According to this economic policy, the governments of the individual republics (with or without a central institution), in order to finance their share of the project, bring new bank notes into circulation; this credit creation has the effect of mobilizing idle labor power and idle productive capacity. In the current situation, the success of this process will depend in its turn upon the injection of modern capital goods

from western Europe, which will play a catalytic role in cranking up economic activity as a whole.

### **Greater security of investment**

7) The greatest part of investment, vis-à-vis basic infrastructure, can only be undertaken by governments. Yet private investment can play a very useful role. Although investment in infrastructure and related projects in general do not bring in such large rates of return as one is used to on the international capital markets—one cannot in general expect 12-15% rates of return for the financing of infrastructure—yet their security is incomparably greater. Given the exhausted condition of the Anglo-American financial system today, there is awakened interest in such projects. It is possible that a precondition for the incurring of long-term obligations on the order of billions of dollars for concrete infrastructure projects in the various republics, were that these projects should be underwritten and supported by Western governments. Under such conditions, there might even result a flow of money out of the speculative markets in the direction of “hard” infrastructural investments.

8) Bringing the former Soviet Union back into economic health can only be achieved through an intensive reciprocal exchange with Europe, and above all with the Paris-Berlin-Vienna Productive Triangle. This is not only a matter of the massive transfer of high-cost capital goods which are primarily produced in the Triangle, but also a question of tying the republics of the former Soviet Union as tightly as possible to the economic dynamic and the technological, scientific, and cultural development of the Triangle. Of decisive significance for that will be the extension of the transportation network of the Productive Triangle to the regions of the former Soviet Union.

It is necessary to consider the essential infrastructural needs in the context of the “extended triangle”—its spiral arms to the east.

We first concentrate on transportation infrastructure, specifically upon the European part of the former Soviet Union. We do not intend to give here a comprehensive catalogue of measures to be taken, but only some of the most important projects. The general modernization of the entire Soviet railway network, we will deal with elsewhere.

### **1. The Black Sea area**

First in line of those affected are Ukraine, Georgia, Turkey, Bulgaria, and Romania, but indirectly also Moldova, Armenia, and Azerbaidzhan, and, by connecting the Volga to Rostov on the Don, also the Russian Federation. Next year, the Rhine-Main-Danube Canal will be opened. The infrastructural conditions for the rapid growth in the east-west internal shipping from the industrial centers on the Rhine through the regions adjacent to the Danube up to the harbors on the Black Sea must be still further improved, above all through modernizing and building of appropriate

installations for the transfer of goods from ship, to railroad, to truck.

As for railroad connections, the following are of primary importance:

a) The reactivation of the old “Orient Express” line: Paris-Vienna-Budapest-Istanbul, centered on transportation of goods to the Black Sea and further into the Near East (see below).

b) The reactivation of the old “Anatolian Express” line from Istanbul up to Erzerum and then over the Caucasus to Rostov and into the Ukrainian industrial region of Donbass.

c) Conversely, the extension of the “middle corridor” from Leipzig-Dresden through Wroclaw and Krakow to Lvov, and then to Kiev and also to Odessa; from Kiev to Kharkov, and then into the Donbass. The extension would then run through the Caucasus, on one side through Sochi and Sukhumi along the eastern border of the Black Sea, on the other side, through Baku to the Caspian Sea to Tbilisi and Yerevan. It is here a question of modernizing existing stretches of track, and especially building new track for high-speed transport of people and goods. The “middle corridor” of the European triangle runs outward from there in the direction of India (see below).

## **2. Ukraine**

Of all the republics, Ukraine has the best natural prerequisites for becoming a leading industrial nation. With about three times the area of Germany, and a population density relatively high for a former Soviet republic, with 51 million inhabitants, the development of Ukraine is closely connected to the improvement of infrastructure.

a) Apart from the just-described measures, the transportation connections to Czechoslovakia (through Kosice) and to Hungary, must be very substantially improved. For the further renovation of the Ukrainian railroad net, see below.

b) For the modernization of the agriculture in this former “breadbasket of Europe,” a massive improvement of highways beginning with the major transportation corridors is urgently necessary.

c) In the north-south direction, there must be created rapid transit connections, above all Odessa-Kiev-Minsk, Kiev-Moscow, and Odessa-Krivoi-Rog-Dniepropetrovsk-Zaporozhye-Kharkov-Moscow.

d) Improvement of inland shipping on the Dnieper, and modernization of the transshipment facilities.

## **3. Russian Federation**

The economic geography of Russia has the form of a fish with a long tail. The “tail” is essentially given by the path of the trans-Siberian railway from the Urals to the Pacific Coast. The “head” is the relatively dense area around Moscow with a connection to St. Petersburg (the former Leningrad). The backbone runs from Moscow to the Urals, and then along the trans-Siberian “tail.” More or less perpendicular to that, there

are the north-south axes connecting St. Petersburg-Moscow-Voronezh-Rostov, and the Volga to the Ural region.

A context of far-reaching intricacy of the Soviet economy brought about a heavy interdependence between the industrial centers in the west and the widely dispersed Ural and Kuzbass regions. The latter lie more than 3,000 kilometers removed from Moscow. The improvement of traffic along the "backbone" is indispensable, but fortunately seems to be a natural extension of the Paris-Berlin-Warsaw-Moscow axis. Hence, here we are dealing with a decisive historic project for "Eurasia" as a whole, an ultra-modern traffic corridor which reaches from the Atlantic to the Pacific. Of that, at least the stretch Paris-Moscow must be built for high-speed passenger transport. Also of high priority, are the elimination of the narrow pass at Brest-Litovsk, among other things, by building entirely new passes and expediting the transport of goods along the main axis, primarily consisting of trucks piggy-backed on trains.

It remains to be discussed whether or not a new stretch of track should be begun to Moscow, using standard gauge European track.

The main high-speed connections (magnetic levitation being the best) that come to mind are the ones between Berlin-Warsaw-Moscow and Moscow-St. Petersburg, (in addition to Moscow-Kiev).

What is true for the buildup and improvement of highways in Ukraine, is even more true for Russia. This is a giant task which cannot be carried out by foreign efforts. Obviously, within the armed forces, an engineering corps should be created which can be employed in such a gigantic infrastructural task.

#### 4. The Baltic republics

In the Baltics, connecting up to western Europe has a special priority. Already under discussion is a highway connecting Warsaw through Riga to Tallinn, with links to St. Petersburg and (by ferry) to Helsinki—the so-called "Via Baltica."

This should connect up—which is likewise under serious discussion—with another one to run from Hamburg over Szczecin to Gdansk and further eastward. In the other direction, there were the connections with the already begun "Trans-European North-South Highway," which will run from Gdansk through Lodz, Ostrava, and Bratislava to Budapest, Belgrade, Sofia, Istanbul, Ankara, and farther southward, with branches toward Milan, to Zagreb and Rijeka, to Sarajevo, to Ploce, and to Athens.

The construction of these highway connections should be linked to improvements of railway traffic. Interesting are the plans of the Polish railway for a "northward transversal" from Szczecin through Gdansk to the Baltic states. This connection can be integrated into the network of the Triangle, in that on the one hand it connects to the improved stretch of the Berlin-Szczecin, and on the other, will be extended to

St. Petersburg. This stretch as a whole will be primarily important for the transport of goods. Somewhat to the south of there, it is possible to build a rail connection for rapid passenger transport from Warsaw to St. Petersburg across the Baltic republics.

#### 5. Modernizing the Soviet railways

A German railway consulting firm has issued a comprehensive study on the collaboration required for reconstructing and modernizing the largest railway network in the world. Soviet railways move more than half of all rail freight in the entire world. In spite of their enormous capacity, the Soviet railways are not up to the tasks of today. Among other things, the following measures must be taken:

Modernization of the most important stretches with increased freight transport:

- Moscow-Perm-Sverdlovsk
- Kupiansk-Pensa- Kuibyshev-Chelyabinsk-Omsk-Novosibirsk-Irkutsk-Khabarovsk
- Zelinograd-Chu-Aryss-Tashkent-Samarkand
- Moscow-St. Petersburg
- Moscow-Kharkov-Rostov-Baku
- Delbazevo-Snamenka-Fastov-Lvov

The building of 5-9,000 kilometers of new railway. The building of 13-15,500 kilometers of secondary track. The electrification of 15-18,000 kilometers. The modernization of 300 freight and passenger yards. Modernization and expansion of 148 passenger railway stations. The construction of 170 new shops for the maintenance and repair of track-building machinery; 76 shops for the repair of track and engineering construction work; and 13 design and construction shops. Modernizing 192 shops for repair and maintenance of track; 24 general maintenance and trouble-shooting shops; and eight shops for rail-switch repair.

The creation of 40-45 regional, automated transport centers.

Outfitting of 22,500 kilometers of track with signal boxes and dispatch centers.

Modernizing the automatic switches and dispatch centers on 35,000 kilometers of track.

Equipping at least 80,000 switches with centrally controlled electric drive.

Modernizing the electric control of 35,000 switches.

Laying down 70,000 kilometers of cable for the switches.

Mechanizing at least 100 and automating at least 50 terminal yards.

Acquisition of 7,830 electric locomotives; 14,000 diesel locomotives for normal transportation; 5,000 diesel locomotives for shunting; 900,000 freight cars; 70,000 passenger cars; and 115,000 different kinds of computers.

This is an enormous market also for east German and eastern European enterprises which will be able to renew, under new, more favorable conditions, their economic relations with the republics of the former Soviet Union.

## A railway system for all of Eurasia

It is important to think of the extension of the transportation network of the Productive Triangle in coherence with Eurasia as a whole. The revitalized "Orient Express" line (Paris-Istanbul) shall be extended in various directions:

- a) over Syria and Jordan to Aqaba;
- b) along the Mediterranean coast to Egypt and then along the south coast of the Mediterranean to the planned bridge over Gibraltar to Spain, with southern connections in the east, west, and central areas of Africa;
- c) over Ankara to Baghdad and Basrah ("the Baghdad line");
- d) over the "Anatolian Express" line to Erzerum (with connection to Yerevan, Tbilisi, and Baku) and then farther in Iran to Tabriz and Teheran. From there, there are two natural lines to India: the first further east from Teheran to northwest Afghanistan, then south around the mountains to Industral, Pakistan, and from there to Punjab. Secondly, from Teheran south to Kerman and Quetta directly to Pakistan, and along Industral to Punjab.

The modernization of the trans-Siberian railway also signifies the possibility of improved land connections to China. The "classic" route, still used, runs over the trans-Siberian to Ulan-Ude and then southeast through Mongolia to Beijing. A second connection goes from Chita over the Transiberian into Manchuria, and a third from Kazakhstan over Tashkent and Alma Ata to Kuqa and Urumqi in Xinjiang, and from there into the heart of China.

## Rail connection to Japan

Last, the possibility of a future land connection to Japan should not remain unmentioned. Within the context of a modernization of the trans-Siberian railway, according to German experts, a transport time of 9-11 days for goods from central Europe (Frankfurt, for example) to Vladivostok could be attained. From there, it is a relatively short stretch of sea to Japan.

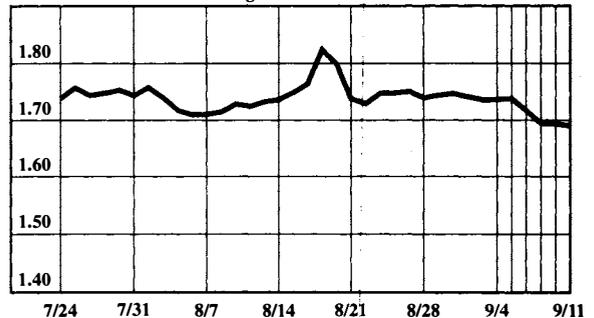
With that, the trans-Siberian should be in a very good competitive position relative to the long sea route from Europe. But the sea route might be completely avoided; namely, a tunnel of only a few kilometers could be built to connect the mainland to the island of Sakhalin, travel on the island to its southern tip, and from there go by a longer tunnel, about 50 kilometers long, to reach the Japanese island of Hokkaido. Hokkaido is already connected by a 54 kilometer tunnel to the main Japanese island of Honshu. The possibility of the transport of goods from Europe over the trans-Siberian to Japan is already being investigated by a Russian-Japanese joint venture.

Through these Eurasian connections, the Productive Triangle would on the one hand be connected to the economic giant of Japan, on the other hand, have direct access to the 800 million people in India and over one billion people in China.

## Currency Rates

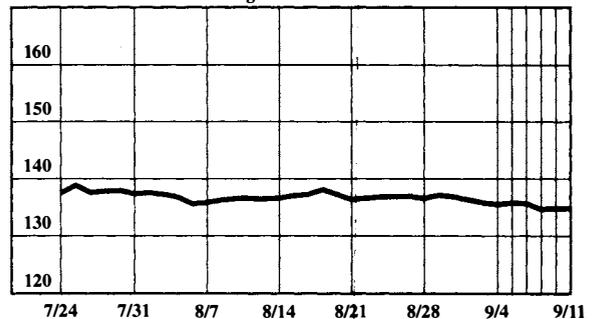
### The dollar in deutschemarks

New York late afternoon fixing



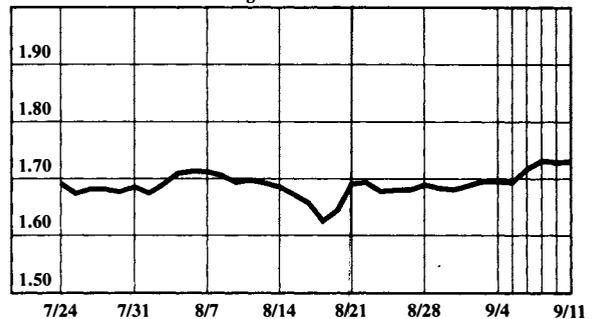
### The dollar in yen

New York late afternoon fixing



### The British pound in dollars

New York late afternoon fixing



### The dollar in Swiss francs

New York late afternoon fixing

