EIR Feature

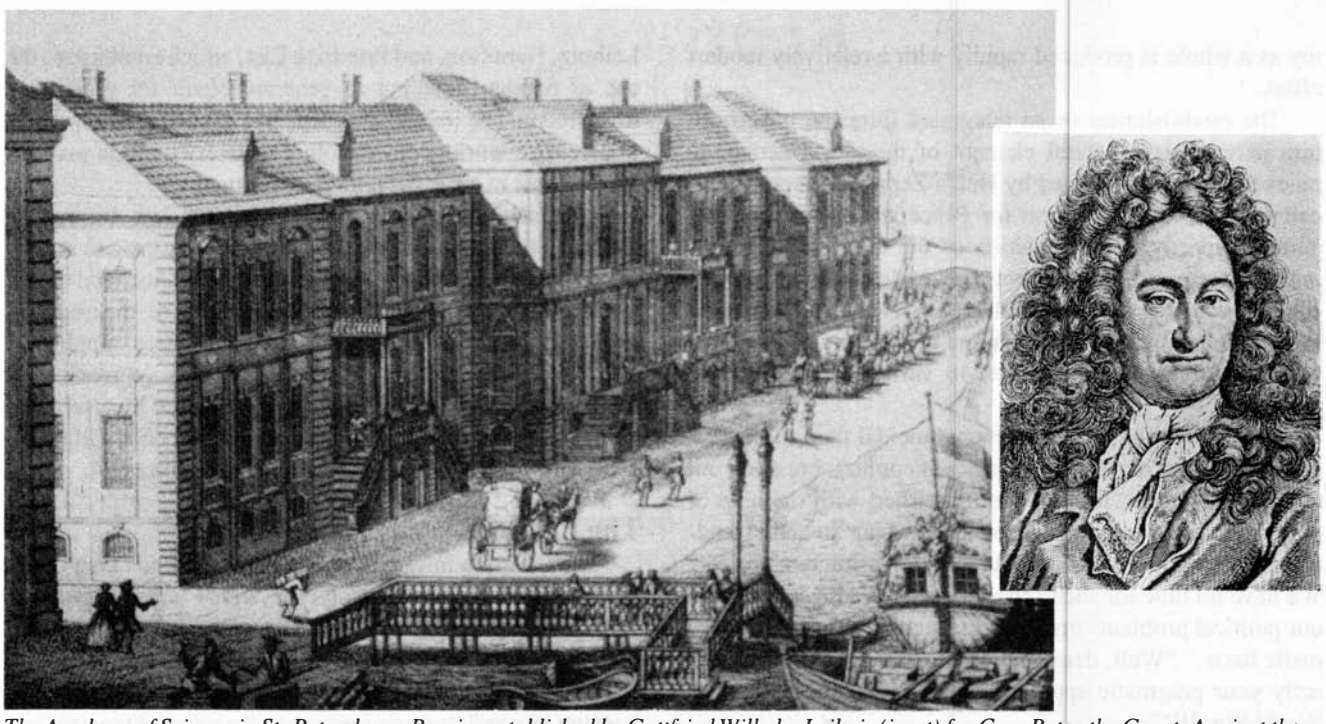
Eurasian alliance for infrastructure: key to world peace

by Jonathan Tennenbaum

The collapse of the Soviet empire in the East, and of the Anglo-American financial empire in the West has created a unique historical opportunity, to replace the rotten structures inherited from Versailles, Bretton Woods, and Yalta, by a community of interest among sovereign nations committed to rapid economic development.

This article is devoted to what will become a centerpiece of that community of interest. It describes the construction of an integrated Eurasian infrastructure network stretching from the Atlantic to the Pacific, and utilizing the most modern technologies for high-speed transport, power production and distribution, water systems, and communication. This network will provide the physical basis for a rapidly improving existence for more than 3.5 billion people now living on the Eurasian land mass, including the peoples of the former Soviet Union, China, India, and the other developing nations of South and Southeast Asia. The network will also reach through the Middle East and over the planned Gibraltar bridge/tunnel into Africa (see *EIR*, July 26, 1992, "Spain-Morocco Tunnel: A Project to Connect the Pillars of Hercules") where it will connect to a future pan-African infrastructure network whose construction should proceed in parallel fashion. By this means, three-fourths of the world population will be connected efficiently into the two leading centers of high-technology capital goods production: Europe's industrial powerhouse centered on the Paris-Berlin-Vienna "Productive Triangle," and Japan.

The core of the new Eurasian infrastructure network will be a system of three high-speed railroad trunk lines, consisting of an average of between two and six electrified tracks of the standard European gauge, and linking virtually all the major cities and industrial centers on the Eurasian land mass. The exact routes of these trunk lines will be the subject of detailed negotiations among the nations involved. Their general location, however, is largely determined by the economic geography of Eurasia, whose chief concentrations of population, industry, and agriculture have emerged in the course of thousands of years around the river



The Academy of Science in St. Petersburg, Russia, established by Gottfried Wilhelm Leibniz (inset) for Czar Peter the Great. Against the British concept of building transport infrastructure to take raw materials out *of their colonies, Leibniz defined infrastructure as the means to develop the sovereignty of nations, while intensifying economic relations among nations.*

systems and the great trading routes.

The trunk line routes themselves are therefore not at all new. In fact, there already exist railroad lines running most of the length of the corridors proposed here. Railroads being the most efficient means of land transport, nothing is more natural than for railroads to have been built along the same general routes which Eurasian trade flows have followed for thousands of years. Nevertheless, what should have become an integrated Eurasian network long ago is still broken up by several crucial missing links, and also by a multiplicity of different rail gauges which necessitate time-consuming transfer operations (see Figure 3 in accompanying article). Although railroad technology has existed for 150 years, there is still no through connection between Central Europe and India! The reason for this is plain enough for anyone who knows the history of British geopolitics.

It is therefore a bitter irony to observe the reaction of some people in eastern Europe, in the former Soviet Union, and in some parts of Asia, to our proposals. They look at the map of the Paris-Berlin-Vienna "Productive Triangle," first proposed by Lyndon LaRouche in 1990, and the great rail trunk lines connecting it with all of Asia, and they exclaim: "What? Are the Germans dreaming again of a new Reich? Are the Europeans trying to take away our newly won sovereignty?" We advise these people to consider, who taught them to think that way.

Yes, it is possible to exploit the existence—and its lack!—of infrastructure for "imperialist," "colonialist" purposes. The British, for example, excelled in such practices. But there is a directly opposite conception of infrastructure: the one developed on the European continent by such figures as Jean-Baptiste Colbert, Gottfried Leibniz, and the father of the continental railroad system, Friedrich List, which defines infrastructure as the means to develop *sovereign* national economies, while at the same time greatly intensifying the economic relations *among* sovereign nations. One has only to look at the history of continental Europe—the cradle of the modern sovereign nation-state and at the same time the single area in the world with the most highly integrated infrastructure—to grasp the powerful developmental principle hidden behind that apparent paradox.

Unfortunately, the British managed to smuggle their poisonous geopolitical doctrine into educational systems around the world, with the result that most of today's so-called decision-makers fail to understand the economic nation-building function of infrastructure.

It is a fact of extraordinary importance that between 800 and 900 million people—about one-quarter of the entire population of Eurasia and more than a half of its industrial labor force—live within 50 kilometers (km) of the three main railroad trunk lines we propose here. By "bundling" modern transport, energy, water, and other infrastructure within these corridors, and linking development in the corridors with long-overdue "Great Projects" for river control, irrigation, and power generation throughout the twin continent, a dramatic increase in the productivity of the Eurasian econo-

my as a whole is produced rapidly with a relatively modest effort.

The establishment of an integrated Eurasian infrastructure network is a central element of the world economic recovery program outlined by Helga Zepp-LaRouche in her call for a "World Coalition for Peace and Development." Without speedy implementation of the recovery measures outlined there, the plunge toward generalized war will accelerate—no matter how skillful the crisis management and no matter how many observers and negotiators and "peacekeeping" troops are dispatched to various corners of the globe.

Indeed, nothing could be more suicidal than to nourish the illusion that the flames of regional conflict, breaking out all over the world, might be extinguished with the help of purely "political solutions." Too many of our so-called leaders take the attitude: "A great Eurasian infrastructure project? We have no time for such schemes now. We must deal with our political problems first, and manage the crisis on a pragmatic basis." "Well, dear gentlemen," we answer, "it is exactly your pragmatic approach which is leading us toward World War III!"

Compare the map of our proposed Eurasian infrastructure network, with the locations of regional crises and hotspots (**Figure 1**). Doesn't it look as if someone wants to sabotage the consolidation of a continental economic system linking Europe and Japan with the great population centers of Asia? Indeed, that is exactly what the Bush administration, together with the British, is doing. They are consciously emulating Britain's geopolitical "Great Game" policy which gave us World War I and World War II. They are lighting fires in every corner of the world, attempting thereby to stop the process which is leading toward the final overthrow of the Anglo-American financial dictatorship consolidated at Versailles. When will nations finally realize that it doesn't work to run behind an arsonist and try to put out the fires one by one? The arsonist must be confronted directly, by an alliance of nations committed to a common programmatic perspective for establishing a just world economic order. It is the credible prospect of rapid economic improvement, based on the kinds of projects outlined here, which provides the key to "drying out" the explosive regional conflicts that would otherwise tear the continent apart.

The LaRouche contribution

The basis for the new community of interest has been laid by Lyndon LaRouche, the economist and opposition leader who is a political prisoner of the Bush administration. Over the last 20 years, LaRouche developed the theoretical principles and the political program for a new economic and monetary order to replace Versailles and Bretton Woods. This means putting an end to the disastrous "free trade" policies of Adam Smith, and returning to the tradition associated with Leibniz, Hamilton, and Friedrich List, which emphasizes the use of national banking to generate credit for productive investment. The immediate focus of LaRouche's program is to unleash a worldwide economic recovery through massive investments in basic economic infrastructure.

LaRouche based this program on his own discoveries concerning the functional relationship among growth in population potential, rates of technological advance, and development of basic economic infrastructure—as measured in such parameters as per capita and per hectare supplies of energy, water, and transport services. This approach, and the kind of data base involved, is exemplified by a series of comparative economic surveys appearing in *EIR* (May 29, 1992, "Infrastructure and Economic Development").

The Eurasian trunk line system

The Eurasian infrastructure network outlined here might be compared to the circulatory system, with its arteries, veins, and capillaries, which maintains the functioning of the body's tissues. This article will concentrate on the major railroad arteries, whose location and speedy construction is a matter of vital strategic interest to the whole Eurasian "organism." The reader should bear in mind, however, that the overall economic impact of improvements in the major arteries of transport, power, water, and communications depends on a healthy parallel development of dense networks of smaller "vessels and capillaries" reaching throughout the entire economic "tissue" of the nations involved.

The infrastructure arteries of Eurasia are defined chiefly by waterways and railways. On the one hand we have the corridors defined by the great rivers, such as the system of navigable rivers—above all the Seine and Rhône, Rhine, Elbe, Oder, and Vistula, the Dniepr and Volga, the Indus, Ganges, and Brahmaputra, the Mekong, the Yangtze, and Huang Ho—together with man-made canals, ports, and coastal shipping routes. The proposed improvements in the Eurasian water transport system will be dealt with in a separate location. These improvements are closely linked with "Great Projects" for flood control, irrigation other water systems. These include, among others, the following:

1) The "Oasis Plan" proposed by LaRouche for developing water supplies for the Middle East.

2) The Ganges-Brahmaputra Project in India and Bangladesh.

3) The Mekong River Project in Southeast Asia.

4) An updated version of Sun Yat-sen's program for a comprehensive reconstruction and expansion of China's water systems, including urgent flood control measures and a new canal system connecting the Huang Ho and Yangtze rivers (see *EIR*, Sept. 1, 1989, "The Sun Yat-sen Program and China's Development Today").

Here we focus on the second main component, the "artificial rivers" constituted by a proposed network of high-speed

railroad trunk lines, each averaging between two and six electrified tracks in each direction. Various power transmission lines, fiber optic and other modern communications lines, and pipelines for water, gas, and oil, etc., will be built up within the rail and major waterway corridors. The regions adjacent to the trunk lines (e.g., 50 km on each side) constitute "development corridors," areas in which modern agriculture and industry, and high population densities, can be supported with relatively the lowest real economic cost for supply of essential power, water, transport, and communication services.

As mentioned, the majority of the indicated routes already have rail lines of some sort. The proposal here is not simply to fill in missing links in existing lines—which in any case are generally unsuited to the higher speeds of modern rail transport. We propose to build additional, new facilities, using as much as possible existing rights of way, but utilizing state-of-the-art technology and the European normal gauge of 1,435 mm as the uniform gauge throughout. This permits a fleet of standardized, high-technology locomotives and rolling stock to be used throughout the system. Automated facilities will permit containerized freight to be quickly transferred between "through" lines of the Eurasian system, and the various national rail systems utilizing other gauges.

The backbone of the system consists of three basic trunk lines "A," "B," and "C" (routes described below) running mainly east and west across the Eurasian land mass. The total geographical length of these basic routes is approximately 60,000 km. The area of the corresponding development corridors is 6 million square kilometers, or about 11% of the total land area of Eurasia. But within those corridors live nearly 25% of the population and an estimated more than 70% of the urban population. The mean population density within these development corridors is approximately 150 inhabitants per square kilometer, or 15,000 inhabitants per kilometer of the trunk line.

Some 60 cities of 1 million or more inhabitants are located directly on the main trunk lines. These constitute the majority of major cities on the entire land mass. Over 200 million people live in major urban centers (>200,000 inhabitants) serviced by these lines.

The main trunk line routes, as traced from the central European area of the "Productive Triangle," are projected as follows:

Line A: ("Transcontinental") Paris-Berlin-Moscow-Osaka/Beijing: This line runs along the northern leg of the "Productive Triangle" from Paris through the industrial region of Lille-Charleroi-Brussels, through the Ruhr region in Germany, to Berlin, and continues from there to Poznan, Warsaw, Minsk, and Moscow. From Moscow the trunk line runs over Gorky and Kazan to the industrial region around Ekaterinburg (formerly Sverdlovsk) and Chelyabinsk in the Urals, and then follows essentially the route of the present Trans-Siberian railway to Omsk, Novosibirsk, Krasnoyarsk, Irkutsk, Ulan Ude, Chita, and Khabarovsk, where it connects to a second branch going to Vladivostok and via Manchuria to Beijing. From Khabarovsk, the Transcontinental runs northward along the Amur River, over new bridge-tunnel connections to the island of Sakhalin, down the length of that island and across to Hokkaido. Hokkaido is already being connected to the main Japanese island of Honshu, and thereby to Tokyo, by the longest tunnel in the world (54 km); from Tokyo finally to the industrial and science center of Osaka.

The second branch of the Transcontinental, which separates from the branch running to Tokyo and Osaka at Khabarovsk, runs along the existing Trans-Siberian Railroad route from Khabarovsk to Vladivostok, and from there inland into Manchuria, to the industrial metropolis Harbin, and via Changchun to the major industrial region of Chengjiang-Fushun, Benxi and Anshan, and from Anshan to Beijing, where it meets the Sino-Indo-European Line coming up from India and Southeast Asia.

Line B: ("Sino-Indo-European") Frankfurt-New Delhi/Frankfurt-Beijing: This branched trunk line runs from the Rhine-Main-Neckar industrial belt in Germany over Dresden into the Silesian industrial region (Katowice-Krakow) to Lviv, Kiev, the high-technology center Kharkov, and the Donbass mining and steel region in Ukraine; and then via Rostov on the Don into the Caucasus. The main Transcaucasian route runs along the eastern coast of the Black Sea through Sochi and Sukhumi in Georgia, and then into the Georgian capital Tbilisi; from Tbilisi the line proceeds via the Armenian capital Yerevan to Tabriz and Teheran in Iran and via Mashhad to the Afghan city of Herat. A smaller alternate route runs from Rostov via Stavropol to Makhachkala on the western bank of the Caspian Sea, from there to Baku and back to Tbilisi rejoining the main route. From Herat the trunk line splits into two lines, one running through central Asia into China and the other southward to India and Southeast Asia, and back northward through Vietnam into China, meeting the first line again at Jinan. These two routes will run approximately as follows:

B1) "New Silk Route": This line restores one of the great trade corridors in history, a meeting-point of European, Chinese, Arab, and Indian cultures, and one Britain's targets in its "Great Game." For various reasons we choose the northward route into Xinjiang via Alma Ata and Urumqi, rather than a path through the infamous Taklamakan Desert. This "New Silk Route" runs from Herat to Samarkand, the historic birthplace of Ibn Sina, to the cities of Tashkent and Alma Ata in Kazakhstan, and then through Xinjiang via Urumqi to Yumen, Lanzhou, and Xian, to Zhengzhou and Jinan on the Huang Ho river, where it meets the South Asia Line coming up from southern China.

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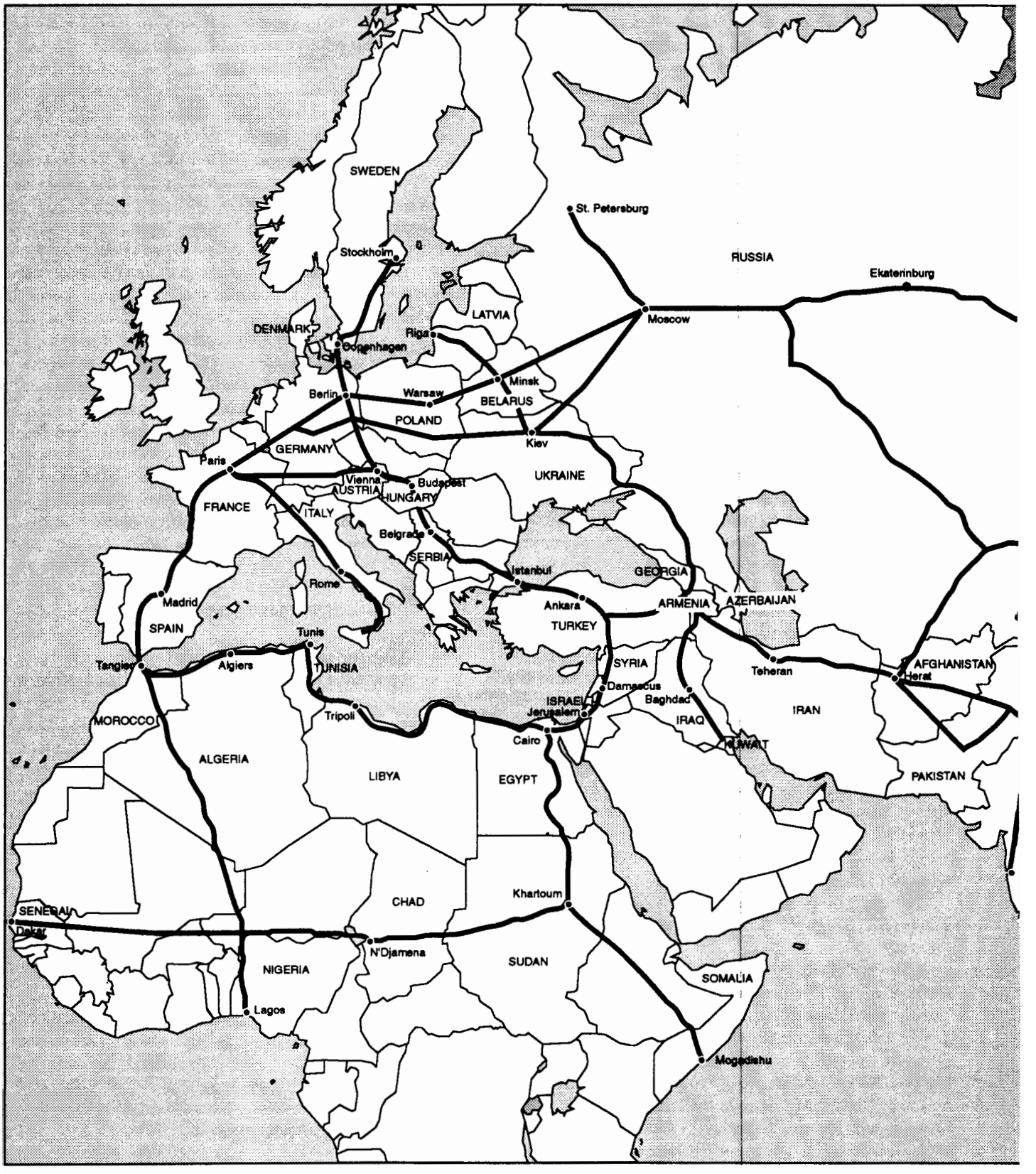
Figure 5

The Eurasian rail system: locomotive for development and peace




MONGOLIA
Khabarovsk
Vladivostok
Beijing
JAPAN
CHINA
Osaka
Tokyo
New Delhi
BANGLADESH
Dakka
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BURMA
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VIETNAM
Bombay
THAILAND
Bangkok
Rangoon
MALAYSIA
Kuala Lumpur
SINGAPORE
Jakarta
INDONESIA

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B2) "South Asia Line": This line runs southward around the mountains from Herat to Kandahar, and across the border to Quetta in Pakistan, and from there via Sukkur into Punjab, from Lahore to New Delhi, and then along the densely populated Ganges River valley down to Calcutta; continuing from Calcutta into Burma, Thailand, Cambodia, and Vietnam via Dakka-Chittagong-Rangoon-Bangkok-Ho Chi Minh City-Da Nang-Hanoi to Nanning in South China. From there to Guangzhou (Canton)/Hong Kong, then inland via Changsha to Wuhan, and eastward from Wuhan to Nanjing and Shanghai. From Nanjing the line runs northward via Xuzhou, Jinan and Tianjin to Beijing, where it meets the Transcontinental Line coming down through Manchuria.

Who would be served by Eurasia rail network

Major cities and industrial regions within 50 kilometers of trunk lines "A, B, C," with approximate populations (data from mid-1980s). Asterisk signifies the population of a greater urban area.

City/Region	Population (in millions)
A. Transcontinental Line	
Paris region	10.3*
Lille	0.9
Brussels	0.9
Cologne	0.9
Essen region	7.6*
Bielefeld	0.3
Hanover	0.5
Braunschweig	0.2
Magdeburg	0.3
Berlin region	5.0*
Poznan	0.6
Lodz	0.8
Warsaw	2.1*
Minsk	1.6
Moscow	8.8*
Gorky	1.4
Kazan	1.1
Ichevsk	0.6
Ekaterinburg (Sverdlovsk)	1.3
Chelyabinsk	1.1
Omsk	1.1
Novosibirsk	1.4
Krasnoyarsk	0.9
Irkutsk	0.6
Khabarovsk	0.6
Sapporo	1.6
Tokyo region	25.4*
Nagoya	4.4
Osaka region	13.5*
B. Sino-Indo-European Line	
Frankfurt	0.6
Mannheim	0.3
Erfurt	0.2
Leipzig	0.6
Chemnitz	0.3
Dresden	0.5
Prague	1.2
Wroclaw	0.7
Katowice	0.4
Krakow	0.7
Lviv	0.8
Kiev	2.6
Kharkov	1.6
Donetsk	1.1
Zaporozhye	0.8
Rostov	1
Krasnodar	0.6
Tbilisi	1.2
Yerevan	1.2
Tabriz	0.8
Teheran	7.4*
Mashhad	1.1
Herat	0.3
Lahore	3.6*
New Delhi	6.2*
Kanpur	2.0*
Lucknow	1.0*
Calcutta	10.5*
Dakkar	3.5*
Chittagong	1.4
Rangoon	2.5
Bangkok	5.4*
Phnom Penh	0.7
Ho Chi Minh City	3.2*
Da Nang	0.5
Hanoi	2.7
Canton	7.1*
Hong Kong	5.6
Wuhan	3.6*
Nanjing	2.4*
Shanghai	7.2*
Zhengzhou	2.3
Tientsin	8.1*
Beijing	9.5*
Shenyang	5.3*
Harbin	2.5
Vladivostok	0.6
Tashkent	2.2
Alma Ata	1.1
C. Ecumenical Line	
Metz-Nancy region	1.5*
Strasbourg	0.4*
Karlsruhe	0.4*
Stuttgart	0.5*
Munich	1.2
Linz	0.2
Vienna	1.5*
Bratislava	0.4
Budapest	2.3
Belgrade	1.6*
Sofia	1.1
Istanbul	8.5*
Ankara	2.8*
Mosul	0.6
Baghdad	3.8*
Basra	0.6
Damascus	1.3
Amman	0.8
Jerusalem	0.5
Cairo	8.8*

Line C: ("Ecumenical") Paris-Vienna/Rome-Istanbul-Yerevan/Baghdad/Jerusalem-Cairo: This line revives the famous "Orient Express" as well as the "Baghdad Railroad" project which London once declared to be a *casus belli* against the British Empire. The line runs along the southern leg of the Productive Triangle, from Paris via the industrial region of Alsace-Lorraine and Strasbourg to Karlsruhe, Stuttgart, Munich, Salzburg, Linz, and Vienna. From Vienna then southward to Budapest, Hungary, and via Novi Sad, to Belgrade. There it joins with a second, southern European "feeder" line coming from Zagreb; this line runs from Paris to Lyon and into the Lombardy industrial region via Turin-Milan-Verona, with connection in Milan to the main line from Rome, and from Verona via Trieste to Ljubljana and Zagreb. From Belgrade the "Ecumenical" runs via Nis, Sofia, and Plovdiv to Istanbul and Ankara. The continuation runs from Ankara to Kaysen, splitting there into:

C1: Kaysen-Adana-Aleppo-Damascus-Amman-Jerusalem-Cairo.

C2: Kaysen-Sivas-Erzerum-Yerevan, connecting to the Sino-Indo-European line.

C3: Kaysen-Sivas-Malatya-Diyarbarkir-Mosul-Baghdad, with connections further to Basra and Kuwait.

Supplementary north-south lines

The following north-south routes are to be developed as complements to the Lines A, B, and C outlined above:

NS 1: Gdansk-Katowice-Ostrava-Bratislava-Vienna.

NS 2: Riga-Minsk-Kiev.

NS 3: St. Petersburg-Moscow-Kiev.

NS 4: Kasan-Kuybyshev-Orsk-Aralsk-Ksyl Orda-Tashkent.

NS 5: Irkutsk-Ulan Bator-Beijing.

NS 6: Chita-Harbin.

NS 7: Shenyang-Pyongyang-Seoul-Pusan.

NS 8: Zhangzhou-Wuhan.

NS 9: Lanzhou-Chengdu-Chongqing-Guiyang-Nanning.

NS 10: Bangkok-Pinang-Kuala Lumpur-Singapore-Palembang-Tanjungkarang-Jakarta, by way of new tunnels across the Straits of Malacca to Sumatra, and across the Sunda Straits from Sumatra to Java.

NS 11: A new north-south trunk line from New Delhi to South India, with connection to Bombay.

Too difficult? Too expensive? Not at all!

The construction of some 60,000 km of new railroad lines crisscrossing the Eurasian land mass is by no means as expensive and long-term a task as many might think. If the nations involved give the proper priority to the project, the entire trunk line system could be completed within three to five years. A modern track-laying machine, such as developed in Austria, can lay a kilometer of new track every day. The machine puts down the gravel and ties, lays in and welds the track in a continuous process. Only 200 such machines could lay the entire network with double tracks (one in each direction) throughout, in 20 months. The sites must simply be prepared beforehand by routine earth-moving operations. Thus, one has only to solve the logistical problems of streamlining the planning and acquisition of right-of-way, organizing a sufficient number of parallel work teams to complete the site preparation operations in time, and procuring materials.

In an appropriate division of labor, the 200 track-laying machines, a relatively high-technology item, and certain other sorts of specialized equipment and know-how, would be contributed by the advanced European economies and Japan. Labor for earth-moving and related operations is plentiful, to put it mildly. The requirements for steel and other construction materials can easily be met by existing industrial capacities, if we stop shutting them down.

Given the present financial situation and the great differences among the national economies involved in the project, it has little meaning to assign a monetary cost to the trunk line system. Suffice it to say that the system can easily be financed by Hamiltonian credit generation methods, as Lyndon LaRouche has demonstrated. More significant than nominal monetary cost is the required labor.

A reasonable order-of-magnitude estimate of the labor time required for all on-site work (including earth-moving, construction of auxiliary infrastructure, track-bed preparation, and track-laying) is 10 million man-years for the entire basic network of trunk lines A, B, and C. This assumes a relatively capital-intensive mode of construction, as indicated above. To put that figure into perspective: 10 million man-years corresponds to less than 7% of the yearly work-time of the industrial work forces in India and China, or less than the work-time expended yearly by 1% of Eurasia's aggregate labor force.

Lest anyone conclude that the project is no good, because it doesn't create *enough* employment, we should point out that the trunk routes discussed here represent only some of the main "arteries" of the future, modern Eurasian infrastructure. To these must be added the vast network of secondary lines (the smaller vessels and "capillaries" of the Eurasian organism), both in terms of rail and in terms of the necessary parallel development of highways and roads. To this, add the construction of power and water systems. But more important, consider the new jobs created in modern forms of industry, mining, and construction as a result of the overall economic growth which infrastructure development will generate and support within the infrastructure corridors and in the continent as a whole. That is a number which will be counted in the hundreds of millions.

Forthcoming articles will deal with energy, water, and communications facets of the new Eurasian infrastructure network.