

## RAILROADS IN THE CENTRAL ASIAN COUNTRIES: PROBLEMS AND PROSPECTS

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The young states of Central Asia inherited a working and generally quite developed railroad network from the disintegrated Soviet Union. At the end of 1990, it consisted of 20,890 km of operational lines.<sup>1</sup> And although the railroad density was not very high, in Uzbekistan and Kazakhstan it was higher than the same index for Russia (7.8 and 5.3 km per 1,000 sq. km, respectively, and 5.1 in Russia).<sup>2</sup>

What is more, railroad transportation was relatively well equipped. For example, as early as 1931, diesel locomotives were regularly used on certain sections of the Central Asian railroad (for the first time in world practice), and in 1974, this route (the first in the Soviet Union) shifted over completely to diesel locomotive traction. In 1971, electrification began on the Tashkent mainline. By the beginning of the 1990s, the Alma-Ata railroad was characterized by the following indices: 2,967 km (with a total operational length of 4,595 km) were equipped with an automated block system and more than 900 km were semi-automated, diesel locomotives were used along almost the entire length, 749 km were electrified, and non-welded lines on reinforced concrete sleepers were installed on 1,044 km. Locomotive and carriage repair enterprises operated in the region.

The formation of the independent states in Central Asia turned a new page in the development of the region's railroads. Of course, the railroad network in each of these countries has its own special features and specific characteristics, but due to their common historical past, similar economic development, and close economic ties in recent decades relating to railroad functioning and development, today they are faced with resolving several problems that are not only very similar, but also identical for the entire region.

The first years of independence in the former Soviet republics were accompanied by such negative phenomena in their economic life as a breakdown in inter-economic ties, rise in inflation, drop in production, financial-credit instability, and deterioration in the population's standard of living. For example, in 1991-1994 in Kazakhstan, the GDP fell by 43% and in Tajikistan by 49%; during the same time industrial production in Kazakhstan dropped by 48%, and investments by 71%.<sup>3</sup> This could not help but affect the operation of the railroads, where the volume of freight shipments was on the constant decline. In 1995 (compared with 1991) this volume dropped by almost half in Kazakhstan and Uzbekistan, three-fold in Turkmenistan, and seven-fold in Kyrgyzstan and Tajikistan. And only during the second half of the 1990s was some improvement noted. But in most of the countries these results still lag far behind the indices of the Soviet period.

As for passenger traffic, the drop in the standard of living, as well as the political instability have led to a severe decline in the population's mobility. The indices have decreased, although not as dramatically as in freight shipments. Nor is a clear-cut temporal trend observed. This shows that the decrease in passenger traffic is primarily for internal and not regional reasons. For example, as a result of the 25% in-

<sup>1</sup> See: *Transport i sviaz' Rossiiskoi Federatsii 1992. Kratkiy statisticheskiy sbornik*, Moscow, 1992, p. 45.

<sup>2</sup> See: *Transport i sviaz' stran SNG*, Moscow, 1996, p. 13.

<sup>3</sup> See: *Kazakhstan: realii i perspektivy nezavisimogo razvitiia*, Moscow, 1995, p. 47.

crease in the cost of rail tickets in Tajikistan in 1998, the number of passengers traveling by rail dropped by almost half in 1999.

During the first years of their existence, the young independent states, faced with the severe drop in the volume of rail travel, did not have to worry about building new railways. This was particularly true since at the end of the 1980s, the region had rather high reserves of unused potential. Its total network density of freight traffic was approximately half of that throughout the Soviet Union as a whole.

The formation of the new independent states in Central Asia revealed another characteristic feature of its railroad network. It was orientated toward Russia and had absolutely no access to the railroads of other neighboring countries. This set them on a course toward diversifying political and economic relations, which also required them to establish transportation communication with the rest of the world, primarily with neighboring states. For example, at the end of the 1997 Kazakhstan entered about 60 bilateral and multilateral agreements on international transportation, and the republic made efforts to join international conventions and agreements in the transportation sphere. The same picture was also seen in other republics of the region. This made it possible to lay a contractual and legal foundation for the rapid development of their transportation relations in an extremely short time.

It should be noted that in addition to establishing cooperation on a bilateral or multilateral basis (for example, in 1996 Uzbekistan, Turkmenistan, Azerbaijan, and Georgia signed an agreement in Serakhs on coordinating railroad transportation and on cooperation in transit shipments), the Central Asian republics are trying to step up their participation in corresponding regional organizations. This is partially due to the fact that there were a lot of "dead ends" leading to the borders of neighboring countries in the railroad network of the former Soviet republics. What is more, during these years, specific projects were not only discussed, but also drawn up for joining them up to foreign mainlines.

A clear case in point is the construction of the transcontinental Asia-Europe railroad. "The second Eurasian transcontinental bridge," as it is often called in China, begins on the Pacific coast, at the port of Lianyungang, crosses the PRC latitudinally, joins up with Kazakhstan's railroad network at the Alashankou-Druzhba (Dostyk) border crossing, and continues on to Europe via the Russian and CIS railroads (the total length of the Lianyungang-Rotterdam route is 10,800 km, 4,100 km of which pass through Chinese territory).

In 1954, the Soviet Union and China signed an agreement on laying a mainline that would link these states via Xinjiang. The section in Soviet territory, from Aktogay to the Druzhba station on the Soviet-Chinese border, was extended in 1960. And as this agreement envisaged, the construction work in Chinese territory was carried out by the Chinese side (with technical assistance from the Soviet Union). In 1963, the branch was extended as far as Urumqi. But due to the deterioration in Soviet-Chinese relations, construction had to be stopped. China did not revive it until 1985. In 1990, the Chinese and Soviet sections of the mainline joined up, a year later, freight shipments began, and in 1992, regular passenger traffic opened up (at first once a week, and now twice a week) along the Urumqi-Alma-Ata route. At the end of 1992, this route was extended to Tashkent.<sup>4</sup>

Of particular significance for the entire region was construction of the Tedzhen-Serakhs-Mashhad branch, which joined the Central Asian railroad to Iran's rail network. Although this idea was discussed for several decades, and project documents were even drawn up, it did not become a reality until the 1990s. In May 1992, a ceremony was held to launch the construction project, and in May 1996 to mark the joining of the Turkmen and Iranian sections. In 1997, freight trains began moving along this branch route, which is 295 km in length (132 km of which pass through Turkmenistan territory). By the way, the governments of Uzbekistan, Kazakhstan, and Kirghizia participated in financing the construction along with Turkmenistan. The significance of this railroad lies in the fact that it not only expands the region's communication lines with Iran, but also opens up a relatively convenient alternative route to the world markets, through the Iranian ports in the Persian Gulf and Turkey, to the coasts of the Mediterranean and

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<sup>4</sup> For more detail on this and other transportation projects, see: I. Azovskiy, "Shelkoviy put nakanune XXI veka," *Tsentral'naia Azia i Kavkaz*, No. 2 (3), 1999; *Tsentral'noaziatskie respubliki v poiskakh transportnoi problemy*, Moscow, 1999.

Black Seas. Great hopes were also placed on transit shipments via this route from the APR countries to Europe and back. These hopes were also strengthened by the desire of the young republics to hook up their transportation networks to the project put forward in 1993 and supported in every way by the European Union on the Europe-Caucasus-Asia (TRACECA) transportation corridor.

But these hopes have not been justified so far. For example, between December 1992 and November 1994, only 1.8 million tons of cargo and 46,000 passengers passed through the control points on the Chinese-Iranian border, in 1995, 1.2 million tons, and in 1996, 2 million tons in the Chinese direction, 1.4 million tons of which came from Kazakhstan, 0.5 million tons from Uzbekistan, and 0.095 million tons from Russia. In the other direction, 0.195 million tons were shipped from China through the Druzhba station, 0.04 million tons of which went to Kazakhstan, 0.13 million tons to Uzbekistan, and the rest to Turkmenistan, Kyrgyzstan, Russia, and other countries. Container shipments amounted to 0.136 million tons, most of them from Korea to Uzbekistan.<sup>5</sup> Subsequently, according to the Chinese side, the volumes remained in general small, although a slight increase in trans-border shipments was noticed of 2 million tons in 1997, 2.4 million tons in 1998, and 3.5 million tons in 1999.<sup>6</sup>

The freight volumes shipped across the Turkmen-Iranian border remain small too. On the one hand, this is obviously caused by the fact that the Central Asian countries have overestimated not only their export potential, but also the capacity of the market in neighboring states.

On the other hand, an analysis of the data at the Alashankou-Druzhba control point makes it possible to draw the conclusion that the percentage of goods coming from China and other APR countries, all the more so from Europe, is very low in the total amount of freight that crosses the border. This all proves that the route has still not become a bridge between Asia and Europe. After all, the appearance of new routes in no way means that foreign shippers will automatically recognize them and immediately begin using them. Specialists and the region's leaders understand this and are undertaking measures to bring their railroads into harmony with international standards and make them competitive.

For example, China is doing a great deal of railroad repair. As a result, it has become 90% double-track, and the length of its electrified sections has increased, which makes it possible to increase the train speed (now it takes 48 hours to get from Beijing to Urumqi, instead of 72). Kazakhstan has installed new equipment at the Druzhba station and is carrying out repairs of the lines between the Druzhba and Aktogay stations. It has also modernized an important section of the trans-Asian mainline, the Almaty-Astana line. In Uzbekistan, the main focus was on technical refurbishing of the railways, in particular their electrification. These and other examples show that the leadership of these countries is not giving up on the idea of an international Asia-Europe railroad corridor passing through Central Asia.

There are several more projects called upon to connect the region's railroad network with international transportation communication lines and gradually turn Central Asia into a recognized conveyer of transit freight. In particular, Kyrgyzstan and Uzbekistan have long been making frequent statements about their intention to build a railroad in the direction of China, which supported this idea. But these plans were obstructed by a disagreement between the partners on the route of the future mainline. Uzbekistan insisted on the Andizhan-Osh-Kashgar route, motivating this by the fact that it is shorter (by 70-80 km) than the "northern" alternative (Dzhalal-Abad-Torugart-Kashgar) proposed by Kyrgyzstan. After working for several years, the trilateral commission reached a final agreement in 2001 and adopted Kyrgyzstan's alternative. In this way, the railroad will pass through some of its unassimilated territory, where there are deposits of gold, coal, and other minerals, which will promote the economic development of these areas.

What is more, Kyrgyzstan is planning to build a Balykchi-Kochkorka-Kara-Keche-Dzhalal-Abad branch, which will link the country's north and south and make it unnecessary to use the railroads of neighboring countries for domestic shipments. Bishkek is interested in this route because it will turn the country's network into an active link of the Trans-Asian Mainline. Since this route is 1,200 km shorter than the old one, which passes through the Druzhba station and Kazakhstan, the initiators are counting on it competing with the Trans-Siberian Railroad. China is also showing great interest in it, which is com-

<sup>5</sup> See: *Kazakhstanskaia pravda*, 13 May, 1996; *Panorama*, 27 March, 1998, *Biulleten OSZhD*, No. 32, 1997, p. 10.

<sup>6</sup> See: *Biulleten OSZhD*, No. 2, 2000, p. 7.

pleting construction of a branch from Kashgar to the border. What is more, it also agreed to participate in construction work in Kyrgyzstan (on a 256-km-long section). In addition, this route will pass through difficult high-mountainous terrain, and Chinese builders have great experience in this kind of work.<sup>7</sup> Beijing's attitude toward the project is defined by China's desire to reinforce its foothold in the region. And this desire is also behind the PRC's plans in the current five-year plan (2000-2005) to build yet one more branch, which will join the XUAR and Kazakhstan (Inin-Khorgos-Almaty).

The Turkmenistan leaders have also stated their intention on more than one occasion to turn the country into an international transportation junction. In addition to expanding the capacities of the railroad crossing in Serakhs, a governmental program is envisaging the construction of another two lines to the border with Iran, the Kazandzhik-Kyzyl-Artek line (220 km) and a route which will pass along the eastern coast of the Caspian, Eraliev (connected by rail with Astrakhan)-Bekdash-Turkmenbashi-Kazandzhik, and continue on to Iran. The latter will make it possible to join up the network of Russia, Kazakhstan, Turkmenistan, and Iran, and form the shortest routes from Western Europe, Scandinavia, and the European part of Russia. This route is 760 km shorter than the route through Beineu-Chardzhou-Serakhs and will cut back freight delivery times to Iran by at least two days. The presidents of Iran, Kazakhstan, and Turkmenistan signed the first document on construction of this route in 1996. Russia has now joined the negotiations, and a project called "North-South" is beginning to take specific shape. Turkmenistan will bear the main responsibility for implementing it. According to some reports in the local press, it has already begun working on specific sections. Nevertheless, Ashkhabad is trying to draw Japanese capital into this construction.

Another project in the southern direction, in which Ashkhabad is very interested, is the Turkmenistan (Kushka)-Afghanistan-Pakistan route. This is the shortest route from Central Asia to South Asia. But this route has a serious competitor, Uzbekistan, which would like this railroad to pass through Termez. However the situation in Afghanistan is still not conducive to carrying out such projects (although Afghanistan itself is very interested in them). What is more, Ashkhabad is giving all kinds of support to expanding communication in the western direction too, primarily it is in favor of the TRACECA project, which envisages creating integrated Central Asia-Southern Caucasus-Europe transportation corridor. Turkmenistan is also exerting efforts to improve the operation of the Turkmenbashi-Baku ferry, which will make it possible to ensure continuous running of the railroads along both shores of the Caspian Sea. China's support of this route will give Ashkhabad hopes of transit freight from the PRC, as well as from other Asian countries, traveling along its railroads. According to the Turkmen side, if this corridor can be joined up with the future North-South route, it will make both projects even more attractive.

But in order for the current and planned transit routes to arouse the interest of foreign shippers, the governments of the Central Asian states will have to establish closer and more efficient cooperation in customs and tariff policy. Speaking at a meeting of the heads of state and government of the OEC member states (Ashkhabad, May 1997), Kazakhstan President Nursultan Nazarbaev called for concentrating on a solution to the main problems of transportation construction in the region. Among them he named "drawing up a legislative base for a mutually consented tariff policy, without which use of the current and planned transportation routes could lose its economic significance."<sup>8</sup>

This question was discussed more than once, more than one decision was made on it, and numerous declarations and other documents were signed. But the absence of a common approach to the problem and the desire to be guided by national interests alone have a negative effect on the development of international transportation in the region. For example, in 1996, the trans-Caucasian corridor went into operation (Central Asia-Caucasus-Europe). Azerbaijan, Georgia, Turkmenistan, and Uzbekistan signed an agreement on coordinating the activity of railroad transportation and an agreement on cooperation in regulating transit shipments. What is more, a legal foundation was created for regulating travel along this route, in particular, all the sides were granted the right to a 50% discount during the transit of freight. As

<sup>7</sup> For example, a third of the total length (899 km) of the Nanning-Kunming railroad that went into operation in 1998 was tunnels, viaducts and bridges.

<sup>8</sup> *Rossia i musul'manskiy mir*, No. 10, 1997, p. 73.

early as 1998, Uzbekistan exported more than 90,000 tons of cotton along this route. But in 1999, these shipments dropped by half. Tashkent began negotiations with Astana on transit through Kazakhstan. The reason is that Turkmenistan set up a very complicated visa system and established high transit tariffs (it did not adhere to the agreement on the 50% discount on transit and levied 20% VAT on freight from Uzbekistan). All of this, in combination with the 20% VAT levied by Azerbaijan, hiked up the cost of Uzbek goods by one quarter.<sup>9</sup>

Another example is Kazakhstan-Iranian trade. Sheet metal and grain are among Kazakhstan's main export commodities. But the high rail tariffs set by Uzbekistan and Turkmenistan made these commodities uncompetitive on the Iranian market, so Astana has to use other ways to export its goods.<sup>10</sup>

The following fact is also worth noting. At the beginning of 2001, an assembly of the heads of transportation departments and customs services of Belarus, Germany, Kazakhstan, China, Poland, and Russia was held in Almaty. Most of the participants noted that China was creating a serious obstacle to the active use of the Eurasian corridor by not observing the international transportation and transit convention. It is guided exclusively by its own laws.<sup>11</sup>

In recent years, another problem inherited from the past has become common for most countries of the region. In czarist Russia, as well as in Soviet times, many factors were taken into account when choosing the route for a new railroad (political, economic, military, the terrain, and so on), but as a rule no heed was paid to the local administrative borders. The situation dramatically changed when these borders became state borders, as a result of which one of the Turkmenistan's main routes has been broken up since several of its sections pass through Uzbekistan territory. This is causing great inconvenience, that is why the prospective railroad development program envisages straightening out this route by building separate sections in Turkmenistan.

The same picture can be seen in Kazakhstan. In order to ship freight from Pavlodar to Semipalatinsk, for example, a detour had to be made through Russia. However, when the Konechnaia-Aksu branch was built in 2001 (184 km in length), a direct route opened between these cities, which shortened passenger and freight travel between North and East Kazakhstan by 600 km.

Kyrgyzstan is also in a difficult position. Now, in order to ship freight by rail from the capital to the south of the republic, it must travel through three states, which of course increases transportation costs. Therefore Bishkek made a decision to build a new route.

During recent years, essentially all the railroad workers in the region have been forced to pay special attention to the technical state of the lines and the rolling stock—the locomotives and carriages. According to the Institute of Strategic and Interregional Studies under the President of Uzbekistan, during the second half of 1990s approximately 40% of the country's railway bed and approximately 40% of the locomotive fleet were in need of restoration.<sup>12</sup> The situation in Kazakhstan is even worse. In February 2001, its railroad directors addressed the republic's parliament, stating that the lines are depreciated by 60%, and in terms of the carriages and locomotives "wear and tear is also very high."<sup>13</sup> According to the country's minister of transportation and communication, as early as 1999, the locomotive fleet was depreciated by 68%, the freight car fleet by 70%, and the passenger carriages by 73%.<sup>14</sup> As a result, in recent years, the number of carriages in disrepair has drastically increased, in May 2001, 28% were in this state, and approximately 10% of them could not be repaired at all.

Approximately the same situation is developing in other countries of the region. In Soviet times, material and technical support of Central Asia's railroads came from the Center. The breakdown in economic ties after declaring their independence placed these republics in different circumstances. All the factories for producing and repairing locomotives, carriages, railroad technology, rails, and sleepers end-

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<sup>9</sup> See: T. Abdullaeva, "Transport Infrastructure in Central Asia: Status and Prospects," *Central Asia and the Caucasus*, No. 3 (9), 2001, p. 149.

<sup>10</sup> See: *Panorama*, 10 March, 2000.

<sup>11</sup> See: *Ibid.*, 27 March, 2001.

<sup>12</sup> See: *Uzbekistan: obretienie novogo oblika*, Vol. 1, RISI, Moscow, 1998, p. 167.

<sup>13</sup> *Panorama*, 16 February, 2001.

<sup>14</sup> See: *Ibid.*, 19 November, 1999.

ed up in Russia and Ukraine. For example, industrial enterprises in Kazakhstan could meet only 4% of the railroads demands. The rest had to be procured abroad, which requires large amounts of money. Since rail transportation drastically fell off during the first years of independence, the country has a certain amount of surplus rolling stock and the problem of its aging was not so urgent. Although the countries of the region undertook measures to provide a repair base for their railroads, the task proved quite complicated, and not one of the republics has been able to fully carry it out. In recent years, with rail travel on the rise again and aging becoming increasingly obvious, the technical state of the railroads is also having a negative effect on travel safety.

These problems are acquiring particularly urgency in light of the desire of the region's countries to participate in international transportation projects. But during their ten years of independence, the length of the railroads in the Central Asian states has essentially remained unchanged. An exception are the Tedzhen-Serakhs (132 km) and Turkmenabat (former Chardzhou)-Kerki (215 km) sections built in Turkmenistan and the Aksu-Konechnaia (184 km) section in Kazakhstan.

The future development of the region's republics will depend largely on how the railroad transportation problems are solved. And although they have a lot in common in this area, each country has its own special characteristics. For example, in Kazakhstan great attention is currently being focused on reforming the railroad industry. The low development rates and unprofitability of the railroads are forcing the government to begin reforms which, according to the leadership, should not only resolve the current problems, but also ensure a flow of investments in the industry for its further development. Uzbekistan, which has begun reforms, preferred to use slightly different methods and rates for advancing them. Tajikistan has its own problems, almost half of the railroads are narrow gauge and not able to handle the growing transportation load. So when defining each country's priorities in the railroad industry, all the current problems must be taken into account and decisions made based on its financial potential.

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