SECTOR ASSESSMENT (SUMMARY): RAILWAY

A. Structure and Management of the Railway Subsector

1. For landlocked Uzbekistan, the railway plays an important role in meeting the transportation demands of the economy. The railway provides economic, efficient, and environmentally friendlier transportation for goods and people that is also reliable and safe. Most of the large manufacturing and mining businesses; coal and other mines; enterprises of metallurgic, light, and chemical industries; agricultural areas; and major cities and commercial centers are served by the railway.

2. The railway network in Uzbekistan comprises a total of 4,593 route-kilometers (km) of lines under operation, of which 681 route-km is double line. More than 2,500 km are laid with continuous welded rails. The main heavy-traffic lines with a total length of 674 km are operated on alternating current (AC) electric traction; the remaining part is operated on diesel traction. About 1,800 km of lines are equipped with centralized traffic control and the remainder has automatic block control. There are 261 stations that serve all the provincial divisions in Uzbekistan. For maintenance of infrastructure facilities and rolling stock, there are 29 enterprises, including 17 track maintenance subdivisions; six subdivisions for track heavy maintenance; two forest plantation subdivisions; a rubble plant; a track workshop; rail-welding subsidiary and production enterprises that produces pre-stressed concrete sleepers; reinforced concrete pipes; and materials for bridge superstructures.

3. The railway is owned and operated by state joint-stock railway company Uzbekistan Temir Yullari (UTY), which was established in 1994. Under the 1999 Railway Law, the state retains the regulating functions relating to safety and tariffs; and UTY is responsible for the commercial, operational, business and financial activities, and activities for development and improvement of the railway transport system. The company’s activities were overseen by the council of UTY, chaired by the Prime Minister of Uzbekistan. The executive management of the company is the responsibility of the board of directors headed by the chairman of UTY.

4. Annually, the railway carried about 23.4 billion ton-km of goods, more than half of all kinds of land transport by volume, and 2.5 billion passenger-km of long-distance and suburban traffic, or 4.3% of the total volume of carried passengers. Because of Uzbekistan’s geographic location, neighboring countries are also UTY clients and are connected by UTY for transit across Uzbekistan’s territory.

5. To facilitate commercial operations and encourage private sector participation, structural changes have been made in UTY, requiring (i) the segregation of the facilities of social infrastructure (e.g., health and recreation facilities) and consumer goods producing enterprises from the structure of UTY by transfer of the management and ownership rights to private and state-owned enterprises; (ii) full privatization of logistics enterprises and construction businesses; (iii) separation and partial privatization of enterprises implementing passenger traffic, repair of passenger rolling stock, repair of freight rolling stock, and refrigerator and container carriage; (iv) tendering for the services and products supplied by auxiliary business; (v) the stimulation of new companies in the private sector and foreign investors to participate in this industry; and (vi) the creation of an independent railway authority for regulation of safety issues and issuance of licenses.

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1 Decree of the President of the Republic of Uzbekistan No. UP-982 dated 7 November 1994.
2 Other members of the Council include the deputy prime minister (deputy chairman), the first deputy chairman of the State Statistical Committee, the deputy minister of finance, the deputy minister of justice, the deputy minister of economy, the acting chairman of the “Goskomdemonopolizatsiya (De-monopolization, Support for Competition and Entrepreneurship),” the first deputy chairman of the State Tax Committee, and the head of “Uzgosjeldornadzor (State Railway Inspection).”
6. For normal operations, UTY has been restructured to six railway regions, i.e., Tashkent, Bukhara, Fergana, Piaroiiska, Karshi, and Khorezm. In addition, there are seven open joint-stock companies, four unitary enterprises, and 23 facilities of social infrastructure. This was done with a view to (i) ensure steady operation and safe transportation; (ii) increase the quality of provided services; (iii) provide further development of the railway network; (iv) attract foreign investments in order to modernize and improve rolling stock, railway equipment, power supply and communication systems; and (v) organize marketing research.

7. Tariffs for domestic freight are based on a rate structure established by the former Soviet Union in 1990. After its establishment in 1994, UTY increased tariffs in accordance with its charter. However, since 1997, domestic freight and passenger tariffs can be set only with the concurrence of the government. International freight tariffs are based on a transit tariff that is adjusted annually at meetings of the railway administrators of the Commonwealth of Independent States.

B. Rail Traffic Trends and Revenues

8. **Freight services.** In 2008, UTY carried about 78 million tons of freight and freight volume of 23.4 billion ton-km, which was more than half of total freight volume by all kinds of land transport. During 1999–2008, rail freight increased 5.8% per annum. However, from 2005–2008, freight growth was at a higher rate of 12.6%—transit traffic accounts for much of this. The average distance carried for rail freight has decreased in the last 5 years. The decline in economic activity in neighboring countries explains this reduction. Analysis of freight traffic by transport type shows that domestic traffic (with origin and destination within Uzbekistan) was more than 50% of total freight traffic in 2008. Transit traffic accounted for about 33% of total freight volume, followed by export traffic (about 9%) and import traffic (about 8%).

9. Whereas all types of domestic freight traffic have increased, the growth in transit traffic has been the most significant—about 13% per annum compared with only about 2% per annum for domestic freight traffic. The trends of revenues of all types of freight transportation are depicted in the Figure 1. After 1999, freight transportation shows a significant increase. The increase in freight traffic activity resulted from the growth of industrial and agricultural production in Uzbekistan. Additionally, restoration activities in Afghanistan are considered to be one of the growth factors of freight volume in Uzbekistan.

![Figure 1: Freight Transportation Revenues, 1999–2008](image)

Source: Uzbekistan Temir Yullari office data.

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4 Decree of the Cabinet of Ministers No. 366 dated 3 August 2004.
10. The railway tariff for domestic freight transportation provides for subsidy to cover losses from passenger services.\(^5\) Revenues from freight traffic have been buoyant in the past decade. In 2008, transit traffic, which accounted for about 33% of the total freight traffic, accounted for about 45% of the total freight revenues. The contribution of transit traffic to the total freight revenues increased considerably from 16% in 1999 to 45% in 2008, and this trend continues. Transit traffic is an important component of freight transportation, which should be exploited by UTY to the fullest extent. Freight volume is the main source of UTY’s revenues, contributing about 91% to the total revenues of UTY.

11. **Passenger services.** Annually, passenger volume by rail was about 2.5 billion passenger-km, or 4.3% of the total volume of carried passengers. The average distance travelled by passengers on rail has increased in the past 5 years, although in 2008 (174.8 km) it decreased in comparison with 2007 (182.5 km). In 2008, revenues from passenger services were SUM76.5 billion or about 8.7% of total revenues from operations.

12. Since independence in 1991 and until 2007, UTY’s domestic passenger operations were incurring losses because the cost of passenger operations exceeded the revenues from passenger services. However, after opening the Tashguzar–Kumkurgan New Railway Line in September 2007, both freight and passenger trains have been proceeding directly to Termez without going through the territory of Turkmenistan. This has reduced the operating cost of passenger services, increased passenger traffic, and obviated payments to Turkmenistan for the transit traffic. The result has been that, in 2008, for the first time, passenger revenues exceeded costs—resulting in a surplus from passenger operations.

13. **Improvement in services.** The increase in the speed of passenger trains linking major cities has substantially reduced travel time, making train travel more attractive and appealing, particularly for tourists and businesspeople. The journey time from Tashkent to the ancient city of Samarkand has been halved to 3.5 hours; Karshi can now be reached from Tashkent in 5.5 hours and Bukhara in 6.5 hours. This has stimulated tourist traffic to these cities. The quality of services in the trains has also been improved significantly by providing more comfortable cars and upgrading services to meet passenger needs.

14. In September 2011, UTY plans to start a high-speed (250 km/hour) passenger rail services between Tashkent and Samarkand—the first in Central Asia.\(^6\) The project comprises (i) upgrading of infrastructure, including construction of the double-track electrified Yangier–Jizzak railway line, tracks and stations, installation of fencing along the track, and a new contact wire system; and (ii) the purchase of rolling stock for the high-speed train. Upgrading of infrastructure is expected to cost $100 million, financed by UTY. Two high-speed trains—Talgo AVE (Alta Velocidad Espanola [Spanish high-speed]) 250 series consisting of four leading and 18 passenger cars—have been procured from Patentes Talgo of Spain at a cost of about €38 million. The purchase of Talgo trains is financed 50% by UTY and the remaining 50% from the Fund for Reconstruction and Development of Uzbekistan.

C. **Financial Status of Uzbekistan Temir Yullari**

15. Rail revenue has steadily grown over 2007–2010 by 20%–40% per year, and rail assets have expanded rapidly by 30% per year. Profitability maintained high at about 20% of operating income ratio. The return on total assets was maintained at 10% and the return on equity at 15%. This high return and profitability enabled the high self-financing ratio of 0.6 over the period. The high self-financing ratio in turn led to a debt–equity ratio of less than 50% and a debt

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\(^6\) The high-speed train project was developed by Uztyajneftegazhimproyekt Institute, a subsidiary of UTY, which provided the technical and economic justification.
service coverage ratio of about 10. In terms of profitability, capital adequacy, and liquidity, UTY performed excellently and proved its long-term financial sustainability. For 2011–2015, the rapid growth is expected to slow down, with a 3%–6% annual increase of rail revenue. Nonetheless, profitability will stay intact with an operating income ratio of 23% and a net profit ratio of 20%. Since the rail investment will also slow down from 30% to 15% per year, the self-financing ratio will reach almost 100%. The debt–equity ratio will remain less than 50% but the debt service coverage ratio will fall to 7–9 because of the accumulated debt incurred during the high expansion period of 2007–2010. Nonetheless, UTY’s financial performance will remain outstanding and its financial position strong.

16. **Operations staff.** The number of staff engaged in operations decreased from 41,910 in 2000 to 34,782 in 2007. However, the staff number increased to 36,648 in 2008. Staff productivity has been steadily increasing from 471,000 traffic units per employee in 2000 to 696,000 traffic units per employee in 2008—growth of about 5% per annum. Comparison with other countries shows that UTY’s productivity is lower than in Russia and Sweden, but better than some developed countries such as France, Germany, Italy, and Spain.

D. **Capital Investment Program of Uzbekistan Temir Yullari**

17. Overall, the railway subsector will continue to play a dominant role in Uzbekistan’s economic development because (i) the railway is already connected to the major industrial mining and commercial centers; (ii) for transportation of bulk commodities in large volumes, competitive tariff rates are offered; (iii) existing road facilities do not offer a competitive alternative for transportation of commodities in bulk; and (iv) railways have less adverse impact on the environment. The government intends to restructure UTY into a commercial and efficient entity responsive to the changing market conditions in the region.

18. To fulfill its commitments on freight and passenger transport, UTY has formulated a five-year capital investment plan, 2009–2013 amounting to a total of $1.7 billion. The financing structure is composed of UTY’s own funds, loans from international institutions, and the funds allocated by the Fund for Reconstruction and Development of Uzbekistan.7 The investment plan is categorized into three major groups:8

(i) Construction and modernization of railway lines, track, and other infrastructure facilities.
(ii) Electrification of the Marakand–Karshi–Tashguzar–Boysun–Kumkurgan–Termez (465 km) and Tukimachi–Angren (114 km) rail lines.
(iii) Procurement and rehabilitation of rolling stock (electric and diesel locomotives, freight wagons, passenger coaches) and development of the rolling stock repair base. The government approved this investment plan in March 2009.

E. **Strategy for Railways**

19. **Reforms and restructuring.** UTY has been the beneficiary of technical assistance focused at reforming the railway to best serve the country’s emerging market economy. The government and UTY should consider major policy issues to promote policy and regulatory conditions that will further advance the three important and mutually reinforcing restructuring

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7 The fund was established in 2006 with $1 billion chartered capital in accordance with a presidential decree for financing important investment projects with major contribution to economic development and structural reforms.
8 A presidential decree PP-1074 “On comprehensive program of development and modernization of railway sector for 2009–2013” was issued on 18 March 2009. Subsequently, the chairman of UTY issued a directive toward realization of the electrification project for Marakand–Karshi–Tashguzar–Boysun–Kumkurgan (UTY Chairman’s Order No. 121-H dated 24 March 2009), which was approved by the government in October 2009 through another presidential decree PP-1213 “On investment program of Uzbekistan for 2010” dated 28 October 2009. According to this Presidential Decree, Marakand–Karshi–Tashguzar–Boysun–Kumkurgan–Termez railway section (465 km) will be electrified.
objectives—competition, productivity, and accountability—for moving UTY toward a market-oriented rail industry.

20. **Network rationalization.** Changes in the pattern of transport demand since independence have resulted in parts of the UTY and other rail networks becoming surplus to requirements. Many industrial facilities have closed and some others are originating and/or receiving so little traffic that they are uneconomic to service. Much of the rolling stock fleet has deteriorated beyond economic repair. The problem needs to be addressed sooner rather than later. Structured rationalization will help separate economic from uneconomic services (both passenger and freight) and produce a more manageable system, fit for long-term purpose.

21. **Network development.** A prioritized medium-term program of asset renewal (infrastructure and rolling stock) should be developed for the long-term sustainability of the system. This would include remedial maintenance and repair. Investment priorities should be proposed by UTY, based on customer needs, and the railway’s priorities should align with the priorities and preferences of its patrons.

22. **Rail safety.** Although rail is a much safer mode than road transport, there is potential for occasional major accidents. Uzgorjeldornadzor, a subsidiary of UTY, has recommended 20 measures that could form the basis of an accident prevention program. Some of the measures (e.g., replacement of obsolescent rolling stock) are covered in the main investment program. The others should be prioritized in a long-term prevention and mitigation program.
<table>
<thead>
<tr>
<th>Country Sector Outcomes</th>
<th>Indicators with Targets and Baselines</th>
<th>Sector Outputs with ADB Contribution</th>
<th>Indicators with Incremental Targets</th>
<th>Planned and Ongoing ADB Interventions</th>
<th>Main Outputs Expected from ADB Interventions</th>
</tr>
</thead>
</table>
| Improved connectivity, safety, and effective management of transport sector | 1a: Higher traffic volumes and reduced travel time along strategic transport corridors  
Traffic volumes on CAREC Corridor 2 doubled to 2,000 vpd by 2016 (2009 baseline: 1,000 vpd)  
Average running speed on CAREC Corridor 6 for passenger trains increased to 110 km/h by 2016 (2010 baseline: 77 km/h) and freight trains to 66 km/h by 2016 (2010 baseline: 40 km/h) | Selected sections of CAREC Corridor 2 reconstructed by the Republic Road Fund  
Railway network (sections on CAREC 3 and 6) electrified by UTY | Roads upgraded and/or rehabilitated increased by 514 km by 2016 compared with 2010  
Railways with electric traction increased by 140 km by 2016 compared with 2011 | Planned key activity areas  
CAREC roads (62% of funds)  
CAREC railways (38% of funds)  
Pipeline projects with estimated amounts  
Second CAREC Corridor 2 Road Investment Program – tranche 1 ($130 million)  
CAREC Corridor 6 Marakand–Karshi Railway Electrification Project ($100 million)  
CAREC Corridor 3 Marakand–Bukhara Railway Electrification Project ($250 million)  
Second CAREC Corridor 2 Road Investment Program–tranche 2 ($180 million)  
Second CAREC Corridor 2 Road Investment Program–tranche 3 ($190 million) | Planned key activity areas  
About 514 km of CAREC roads rehabilitated  
About 140 km of CAREC railway routes electrified  
Pipeline projects  
246 km of CAREC roads rehabilitated  
250 km of CAREC railway electrified  
Ongoing projects  
268 km of roads rehabilitated |
| 1b: Expanded regional trade | Uzbekistan’s trade volumes doubled with Afghanistan and Kazakhstan by 2016 (2010 baseline: $876 million with Afghanistan and $1.8 billion with Kazakhstan) | | | |

ADB = Asian Development Bank, CAREC = Central Asia Regional Economic Cooperation, h = hour, km = kilometer, UTY = Uzbekistan Temir Yullari, vpd = vehicles per day. Source: Asian Development Bank estimates.