SECTOR ASSESSMENT (SUMMARY): TRANSPORT (RAIL TRANSPORT [NONURBAN])

Sector Road Map

1. Sector Performance, Problems, and Opportunities

1. **Railways as a backbone of Uzbekistan’s economy.** Uzbekistan is a doubly landlocked country that relies heavily on rail transport for freight and passenger movements. Its railways carry about 60 million tons of freight and 15 million passengers annually. The public railway company O’zbekiston Temir Yo’llari (UTY) is responsible for the management and operation of the nationwide, 4,669-kilometer (km) railway network.

2. The Uzbekistan railway network, with 9.46 km of rail per 1,000 square kilometers, is denser than that of the People’s Republic of China (6.9), Turkmenistan (6.4), Kazakhstan (5.2), and Iran (3.7). Railways have a strong position in the transport market in Uzbekistan. UTY operates transport services for freight and passengers and is in charge of infrastructure development and maintenance. It carries 40%–50% of the total freight traffic (ton-km) by volume, a significant market share compared with railways worldwide. The passenger rail market has a share of 35%–40% of total intercity passenger transport, much higher than the European average of 7%.2

3. **Freight traffic trends.** UTY is predominantly a freight railway company. The volume of freight transported by rail is gradually increasing, from 63.7 million tons in 2013 to 68.2 million tons in 2017. About one-third (in terms of ton-km) of the freight traffic carried by the railways consists of international movements (import, export, and transit), mostly grain, fuel, and other bulk and semi-bulk commodities. Despite this growth in traffic volumes, UTY’s freight traffic stays significantly behind the traffic volumes of the Uzbek sections of the Central Asian Railways3 before the disintegration of the Soviet railways. A decline in the fleet of freight wagons accompanied the decline in traffic. Thanks to a combination of solid economic growth forecasts for Uzbekistan, and the efforts under the new administration to improve connectivity with neighboring countries, the prospects for freight traffic, including cross-border freight, are promising.

4. **Passenger traffic trends.** Annual passenger traffic has increased by about 22% between 2013 and 2017, to about 21.4 million passengers. About 80% of UTY’s passengers are on local services, but two-thirds of the passenger-kilometers are on intercity regional trains, which connect Tashkent with all major centers.4 As more and more high-speed railway services connecting major cities are being introduced, and coupled with the government’s drive to use railways to boost the tourism potential of Uzbekistan, the prospects for passenger traffic are also promising.

5. **Completing missing links for domestic connectivity.** Before the breakup of the Soviet Union, the rail network in Central Asia was driven by a Moscow-centered planned economy without regard for internal boundaries between the Soviet republics. Since the 1990s,

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1 Railways in the European Union have an average freight market share of 17%; in North America, the percentage is 25%–30%.
2 Includes only public transportation and does not take into consideration private cars.
3 Sredneazitskaya Zheleznaya Doroga (Central Asian Railways) is the predecessor of UTY, which was based in Tashkent and existed until 1991, and included railway networks of Uzbekistan, Tajikistan, Turkmenistan, southern Kyrgyz Republic, and southern Kazakhstan.
4 O’zbekiston Temir Yo’llari, company reports.
national boundaries between the newly independent states of the former Soviet Union have created new barriers to trade flows and market access. This has had many serious effects on Uzbekistan’s railway operations and activities. Newly erected border crossings worsened internal connectivity because many rail and road routes had to cross into neighboring countries before crossing back into Uzbekistan. Similarly, neighboring countries depended on the Uzbekistan transport network to transport their goods and passengers (e.g., southern Uzbekistan provided transit for Tajikistan and northern Uzbekistan provided transit for the Kyrgyz Republic).

6. One of the most serious issues was connecting the Fergana Valley region to the rest of Uzbekistan and ensuring adequate capacity for traffic from this productive and fruitful region. Until 2016, rail traffic to and from the Fergana Valley was disrupted by lengthy border-crossing procedures and high transit tariffs through Tajikistan. With the commissioning of the Kamchik tunnel in September 2016, Uzbekistan was finally able to complete a fully internally integrated railway network.

7. Electrification. In parallel with the completion of missing links, UTY focused on improving the condition of its infrastructure and in electrifying its main lines. The incremental electrification efforts started in 1971, but the greatest progress has been made since 2010, when Uzbekistan electrified about 800 km of its railway network. Currently, 2,530 km—more than 50% of the network—are electrified. Enabled by electrification, high-speed passenger trains (above 200 kilometers per hour) operate between Tashkent, Samarkand, Bukhara, Karshi, and Termez. The new line to the Fergana Valley is electrified from Tashkent to Angren and Pap. The Fergana rail loop, linking Pap, Kokand, Andijan, and Namangan, is also being electrified. New higher-speed passenger services will begin operating on these new lines in the near future.

8. UTY’s ability to fully benefit from the increasingly electrified network depends on the speed at which electric locomotives can be procured and commissioned. The current fleet of UTY consists of 75% diesel locomotives and only 25% electric ones; 37 electric units were procured within the last 10 years. The overall fleet is old, with most units having served more than 30 years. This and limitations in the absolute number of electric locomotives caused by lack of financial resources make it very difficult to keep expanding freight and passenger train services reliably.

9. Operational improvements. UTY is a strongly managed organization with a focus on infrastructure development and operation of train services, but has scope for improvement on improving commercial aspects of its business. Assisted by the Asian Development Bank (ADB) and other development partners, UTY is enhancing its operational efficiency to maximize the use of the improved infrastructure. The operating staff of UTY has barely changed between 2011 and 2015, and labor productivity stands at 500,000–600,000 traffic units per operating employee. UTY’s labor productivity is 20% lower than that of neighboring Turkmenistan Railways, and only a small fraction of what was achieved in Kazakhstan (3.2 million traffic units per operating employee).

10. Financial improvements are possible if UTY can increase premium passenger services and operational efficiency in freight operations. It has the potential to improve its service to all categories of clients and develop new logistics products, especially in general freight traffic. Once it strengthens its commercial orientation, UTY has a good chance to offer new logistics services.

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5 The 19.2 km long tunnel on the Angren–Pap railway section was completed in 2016.
products at high profit margins, which will further improve its profitability and prospects of long-term growth.

11. UTY has retained its technical and operating expertise. It has a workforce of about 70,000 in main operations and subsidiary divisions, and undertakes rail construction projects as well as operation and maintenance. The company is profitable and it does not receive operating subsidies from the state. It is able to finance most investments necessary to preserve the current infrastructure and modernize its rolling stock. It also finances a significant portion of the modernization of the railway corridors. UTY has historically financed most of its investment from its own sources, but any further deterioration of its operating assets will begin to restrict its ability to fund their replacement, while also limiting its ability to obtain loans on its own account. UTY should therefore make it a priority to improve its technical efficiency and operating ratio.

2. Government’s Sector Strategies

12. The government, cognizant of the relative strengths of railway transport, continues to support the development and expansion of railway operations.

13. It created UTY by presidential decree in November 1994. Initially, UTY was a policy maker, regulator, and operator of all railway services in Uzbekistan until institutional reforms separated policy-making and regulatory functions from the commercial management of the company. The government, supported by ADB, began UTY’s institutional reform in 1997, largely separating ancillary rail services from core operations. Some downsizing of staff and noncore assets improved the efficiency and sustainability of operations. In 2001, UTY was corporatized as an open joint stock company with reformed management structure and a new board of external appointees, including representatives of some of UTY’s main customer industries. However, it remains 100% owned by the state, similar to railway organizations across the world.

14. A presidential resolution issued in May 2018 calls for a program to strengthen the governance and management of state-owned enterprises, including UTY. ADB will assist the government in supporting further meaningful reforms in the railway subsector, based on sound transport sector principles. The project directly supports these efforts through the implementation of UTY’s long-term development strategy.

3. ADB Sector Assistance

15. ADB has assisted the development of railways in Uzbekistan at two levels: subregional and national. This embodies the need for railway investments to be planned subregionally, augmented by projects executed nationally.

16. Subregional planning. Uzbekistan, having once been the headquarters of the Central Asian Railways, has a strong subregional identity and actively participates in regional railway cooperation initiatives. UTY is a member of the Organization for Cooperation among Railways

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6 UTY completed with its own workforce and equipment the construction of several new railway investment projects (including sections Navoi–Uchkuduk–Nukur–Sultanuzdag, Tashguzar–Baisun–Kumkurgan, Angren–Pap, and Bukhara–Miskin). UTY also built the 75 km Hairatan–Mazar–i-Sharif rail link in Afghanistan funded by the Asian Development Bank (ADB).


(OSJD), International Union of Railways (UIC), and Commonwealth of Independent States (CIS) Railway Transport Council. Its operational development priorities are aligned with the Strategic Development Concept for CIS Railways until 2020, which was endorsed by the heads of CIS countries in 2011.

17. ADB has assisted the government and UTY in further improving these strategic subregional links, largely through the Central Asian Regional Economic Cooperation (CAREC) program. Established in 2001, CAREC brings together 11 partner countries and promotes the implementation of regional projects in energy, transport, and trade. Out of the six CAREC multimodal corridors that link the region's key economic hubs with each other and connect the landlocked CAREC countries to other Eurasian and global markets, three transit Uzbekistan.

18. In 2013, CAREC member countries endorsed the CAREC Transport and Trade Facilitation Strategy (CAREC TTFS 2020), which calls for a more integrated approach to improving transport and logistics infrastructure, and trade and transport facilitation. Compared with the original CAREC TTFS, endorsed in 2008, CAREC TTFS 2020 emphasizes the importance of more investments in railway infrastructure, and institutional and operational reforms. CAREC TTFS 2020 includes 18 investment projects in Uzbekistan with an estimated total value of about $4.3 billion during 2012–2021. Among these, three with an estimated total value of $1.2 billion are railway electrification projects, parts of which have been completed or are ongoing with financing from the state budget, ADB, and the World Bank.

19. In 2016, the CAREC program facilitated the development of “Unlocking the Potential of Railways: A Railway Strategy for CAREC (2017–2030)”. This strategy augments CAREC TTFS 2020, and identifies six designated rail corridors. It offers a long-term framework for the sound development of railways in the CAREC region. While the strategy recognizes the importance of building missing railway links and investing in modern railway technologies, significant attention is given to promoting cooperative operational arrangements between regional railways and commercial reforms in the railway subsector.

20. **Nationally executed projects.** ADB has provided four loans to Uzbekistan, two for the rehabilitation and modernization of the railway infrastructure, and two for the electrification of the Marakand–Karshi and Pap–Namangan–Andijan railway lines. All these projects support the regionally planned approach (paras. 16–19) and have had UTY as the executing agency. ADB’s Independent Evaluation Department rated the two completed projects successful and the government’s and UTY’s performance highly satisfactory. Electrification of the Marakand–Karshi railway line has been fully completed to budget and schedule. Electrification of Pap–Namangan–Andijan railway remains broadly on track. Future support for railways in Uzbekistan will be formulated in view of the remaining challenges (section 1), and in support of a regionally integrated approach.

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Problem Tree for Rail Transport (Nonurban)

Effects
- Lost economic opportunities
- Suboptimal regional trade
- Negative environmental impacts (noise, vibration, greenhouse gas emissions)

Core problem
- Long transport time, inadequate service quality, and high operating costs

Causes
- Aged or inadequate infrastructure
- Insufficient and outdated fleet of locomotives
- Competition from road transport

Root causes
- Lack of investment in critical infrastructure
- Weak client focus and marketing
- Lack of multimodal planning

Tackled through existing ADB projects
- Tackled through this project