



# Validation Report

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Reference Number: PCV: UZB 2008-60  
Project Number: 30506  
Loan Number: 1773  
November 2008

## Uzbekistan: Railway Modernization Project

Operations Evaluation Department  
**Asian Development Bank**

## ABBREVIATIONS

ADB	-	Asian Development Bank
EA	-	executing agency
OED	-	Operations Evaluation Department
OPEC	-	Organization of Petroleum Exporting Countries
PCR	-	project completion report
SBF	-	Small Business Fund
TA	-	technical assistance
UTY	-	Uzbekistan Temir Yullari

## NOTE

In this report "\$" refers to US dollars

### Key Words

uzbekistan, asian development bank, railways, railroads, transportation, lessons, operations evaluation department, performance evaluation

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## PROJECT COMPLETION REPORT VALIDATION

A. Basic Project Data		PCR Validation Date:	November 2008	
<b>Project and Loan Number:</b>	30506 Loan 1773-UZB		<b>Approved</b>	<b>Actual</b>
<b>Project Name:</b>	Railway Modernization Project	<b>Total Project Costs (\$M):</b>	155.00	131.19
<b>Country:</b>	Uzbekistan	<b>Loan/Grant (\$M):</b>	70.00	70.00
<b>Sector:</b>	Transport/Railways	<b>Total Cofinancing (\$M):</b>	5.00	5.00
<b>ADB Financing (\$M):</b>	ADF: None	<b>Borrower (\$M):</b>	80.00	56.19
	OCR: 70.0	<b>Beneficiaries (\$M):</b>		
<b>Cofinancers:</b>	<b>OPEC Fund for International Development (OFID)</b>	<b>Others (\$M): OFID</b>	5.00	5.00
<b>Approval Date:</b>	31 Oct 2000	<b>Effectiveness Date:</b>	15 Aug 2001	21 Sep 2001
<b>Signing Date:</b>	17 May 2001	<b>Closing Date:</b>	31 Dec 2005	30 Mar 2007
<b>Project Officers:</b>	<b>Name:</b>	<b>Designation:</b>	<b>From (year)</b>	<b>To (year)</b>
	J. Miller	ECID (Headquarters)	2002	2003
	M. Parkash	ECTC (Headquarters)	2003	2004
	R. Nadyrshin	URM (Resident Mission)	2005	2007
<b>Evaluator:</b>	T. F. Jones, Consultant	<b>Director:</b>	H. Hettige, OED2	
<b>Quality Control Reviewer/Peer Reviewer:</b>	N. Singru, Evaluation Specialist, OED2			
	R. Lumain, Senior Evaluation Officer, OED2			

### B. Project Description (summarized from the report and recommendation of the President)

- (i) **Rationale.** Uzbekistan is located in the heart of Central Asia, with a land area of nearly 450,000 square kilometers that stretches 1,425 kilometers (km) from east to west and 930 km from north to south. With a population of 24 million, the population density is significantly higher than that of neighboring Kazakhstan and Turkmenistan. Rich in natural resources, it is the world's fifth largest producer and second largest exporter of cotton, ninth largest producer of gold, tenth largest producer of natural gas, and fourth largest producer of uranium. Because the country is landlocked and its existing railway routes cross into neighboring countries, the use of its natural resources has posed a major challenge in the years since the breakup of the former Soviet Union.

The railroad is the primary mode of long distance and bulk freight transport and therefore essential for the country's international, subregional, and domestic economic development. Since the breakup of the Soviet Union, there has been considerable underinvestment in the railway sector, resulting in major operational inefficiencies and underutilization of railway carrying capacity. The Railway Modernization Project (the Project) was to complete the rehabilitation of the main railway route and to continue implementation of the policy reforms and restructuring initiatives started under the first railway rehabilitation project.<sup>1</sup> The partial overlap of the two projects was justified given (a) the satisfactory progress in policy reforms and implementation of the ongoing railway rehabilitation project, (b) satisfactory performance of the Executing Agency (EA), and (c) the need to complete rehabilitation of the main railway route to improve operational efficiency.

**Impact.** The Project's main goal was to facilitate pro-poor economic growth (i.e., improve per capita income and freight and passenger flows in the project areas).<sup>2</sup> The railway track that was rehabilitated passes through four regions: Bukhara, Dzhizak, Navoi, and Samarkand. These

<sup>1</sup> Asian Development Bank (ADB). 1998. *Report and Recommendation of the President for a Proposed Loan and Technical Assistance Grant to the Republic of Uzbekistan for the Railway Rehabilitation Project*. Manila (Loan 1631-UZB, for \$70 million, approved on 15 September).

<sup>2</sup> ADB. 2000. *Report and Recommendation of the President for a Proposed Loan and Technical Assistance Grant to the Republic of Uzbekistan for the Railway Modernization Project*. Manila (Loan 1773-UZB, for \$70 million, approved on 31 October).

regions have a population of 5.5 million, or 24% of the country's total, and depend heavily on farming, mainly cotton. In the largely rural regions of Bukhara and Navoi, farming and manufacturing are essential for creating employment. In addition, the Project was expected to facilitate exploitation of mineral reserves and, by improving transport efficiency and links to underdeveloped regions, to cut down travel time and business operating costs, thus attracting potential investors (i.e., increase foreign direct investment in the country). The Project was also envisaged to contribute to the tourism industry. The internationally known and historic cities of Bukhara and Samarkand and their environs on the Silk Road have a high tourism potential, which had not been fully utilized. The Project would also contribute to an efficient regional transport corridor (i.e., increase regional trade by rail). Enterprises taking advantage of cost-effective transport and improved access to economic opportunities would generate additional employment, increase incomes, improve living standards, and help reduce poverty. Railway users would have better access to economic and social services including markets, schools, and medical institutions.

- (ii) **Objectives or expected outcomes.** The long-term impact of the Project was envisaged to be technical improvements and restructuring initiatives to improve the operational efficiency of railway transport. The Project was expected to (a) provide more efficient movement of freight and passengers; (b) facilitate international trade by improving access to neighboring countries; and (c) enhance the institutional capacity of the Uzbekistan Temir Yullari (UTY), the railway company, through organizational restructuring, effective business planning, and improved management practices.
- (iii) **Components and/or outputs.** The components of the Project comprised (a) rehabilitation of 341 km of railway tracks on the Dzhizak–Samarkand–Bukhara–Khodjadavlet route; (b) provision of equipment for track laying and efficient maintenance of railway tracks; (c) installation of an optical fiber telecommunications system, including train-to-station radio equipment; (d) computerization of UTY's financial accounting system, including the related consulting services; (e) development of human resources to sustain technological improvements; and (f) establishment of the Small Business Fund (SBF), a revolving fund that provides start-up capital for business opportunities to former UTY employees.

### C. Evaluation of Design and Implementation (project completion report [PCR] assessment and validation)

- (i) **Relevance of design and formulation.** The PCR considers much of the Project to be highly relevant and thus rates the overall Project as being *highly relevant*. However, at the current stage, some of its social aspects have not been realized. The physical components were highly relevant for internal transport purposes, but it is unclear whether the regional trade aspects will be fully realized anytime soon (PCR, paras. 7–18).
- (ii) **Project outputs (or conditions in the case of program loans).** The expected outputs and actual results are summarized in Table 1.

**Table 1: Expected and Actual Outputs**

Expected Outputs	Actual Outputs
1. Rehabilitation of 341 km of railway tracks on the Samarkand–Bukhara–Khodjadavlet route and other selected sections	Completed
2. Modernization of track laying and maintenance	Completed
3. Procurement of telecommunications equipment	Completed
4. Computerization of UTY's financial accounting systems	Under way with completion expected in early 2008
5. Human resource development through training for computerized accounting system and workshop equipment	Implementation of the accounting system and installation of the workshop equipment under way at the time of PCR preparation
6. Establishment of SBF	UTY chairman issued Order 200-H establishing the SBF after its due date in September 2001

km = kilometer, PCR = project completion report, UTY = Uzbekistan Temir Yullari.

Source: Asian Development Bank PCR.

These components and their status are adequately covered in the PCR (paras. 19–26).

- (iii) **Project cost, disbursements, borrower contribution, and conformance to schedule (as relevant to project performance).** In terms of number of components and sources of funds, the Project was uncomplicated. All sources of funding were appropriately used, and the Government's contribution was forthcoming. The total estimated cost was \$155.00 million, while the actual cost was \$131.19 or about 15% less than the appraisal estimate (Table 2). The savings came largely from unused price or physical contingencies. Disbursements, while delayed by about a year, closely followed the pattern prepared at appraisal. Physical completion of the Project was delayed by about 1.5 years, with about 9 months due to start-up delays prior to loan effectiveness and the delay in the completion of the first railway rehabilitation project, which was a necessary prerequisite for implementation of this Project. Other minor delays were also experienced.

As mentioned in Section C (ii), two minor components are still under way, which are also covered in the PCR (paras. 19–32).

**Table 2: Estimated and Actual Project Cost**  
(\$ million)

Item	Appraisal			Actual			Actual/ Appraisal
	Foreign	Local	Total	Foreign	Local	Total	
Track Rehabilitation	72.50	31.30	103.80	72.04	37.95	109.99	1.06
Telecommunications and Computerization	7.80	9.00	16.80	14.03	5.54	19.57	1.16
Consulting Services, HRD, SBF, and Administration	0.70	5.60	6.30	0.37	0.56	0.93	0.15
<b>Subtotal (Base Cost)</b>	<b>81.00</b>	<b>45.90</b>	<b>126.90</b>	<b>86.44</b>	<b>44.05</b>	<b>130.49</b>	<b>1.03</b>
<b>Contingencies</b>	<b>12.00</b>	<b>6.30</b>	<b>18.30</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>IDC</b>	<b>9.80</b>	<b>0.00</b>	<b>9.80</b>	<b>0.70</b>	<b>0.00</b>	<b>0.70</b>	<b>0.07</b>
<b>Total Project Cost</b>	<b>102.80</b>	<b>52.20</b>	<b>155.00</b>	<b>87.14</b>	<b>44.05</b>	<b>131.19</b>	<b>0.85</b>

HRD = human resource development, IDC = interest and other charges during construction, SBF = Small Business Fund.

Source: Asian Development Bank project completion report.

- (iv) **Implementation arrangements, conditions and covenants, related technical assistance, and procurement and consultant performance.** In essence, the PCR considers that the implementation arrangements were appropriate and had the advantage of lessons learned from other projects funded by the Asian Development Bank (ADB). This Evaluator agrees, based on the relative timeliness of implementation and extensive delays experienced on other ADB-funded projects in which there is little or no continuity of project implementation institutions or personnel.

Compliance with covenants was mixed. UTY complied with the general covenant requiring it to adhere to sound administrative, engineering, environmental, and railway practices. UTY's compliance with financial covenants, particularly timely submission of audited project accounts and financial statements, was considered unsatisfactory by the PCR. However, targeted operational and financial indicators were achieved except for the desired reduction in its due accounts receivable. This reduction may be difficult to achieve since most are due from state-owned enterprises and the oil and natural gas sector, which are considered strategic goods.

According to the PCR, procurement of all goods and equipment financed under the loan was carried out in accordance with ADB's *Procurement Guidelines (1999)* and other agreed procedures. From the Chronology of Major Events (PCR, Appendix 2), it appears that procurement was carried out in a timely manner. The PCR is silent on the procedure used by UTY for the recruitment of consultants under the loan. The PCR found that the consultants performed well, but training of computer and financial accounting personnel has yet to demonstrate the desired impact.

- (v) **Performance of the Borrower and Executing Agency.** The PCR considered the performance of the Borrower and EA as *partly satisfactory*. Although implementation of the civil works was relatively smooth, the main reasons for the lower rating were poor compliance with covenants relating to (a)

submission of reports, (b) UTY's financial performance, and (c) lack of progress in important reform areas. These issues are well explained in the PCR.

- (vi) **Performance of Asian Development Bank.** The PCR rated the performance of ADB as *partly satisfactory*. This rating relates to the composition of personnel on review missions, which did not meet the needs of the Project, and the failure to undertake a midterm review mission. Additionally, the project framework was considered unrealistic and overly optimistic concerning project outcomes, and ADB was considered lenient in dealing with repeated noncompliance with important covenants. This Evaluator agrees with the rating, and the PCR adequately details it.

#### D. Evaluation of Performance (PCR assessment and validation)

- (i) **Relevance.** The PCR rated the Project as *highly relevant*, and this Evaluator concurs with the rating. In financial terms, two components were needed for operational efficiency: (a) rehabilitation of 341 km of railway tracks to a maintainable standard and provision of equipment for that maintenance, and (b) installation and commissioning of a fiber optic telecommunications system. Other components were oriented toward institutional development required in a transitional economy and social issues. These issues were correctly identified during project preparation and are still highly relevant.
- (ii) **Effectiveness in achieving outcome.** Of the Project's six components, the PCR rated four as being highly effective. These included (a) track rehabilitation, (b) tracklaying technique modernization, (iii) telecommunications improvement, and (iv) establishment of the SBF. The first three "hard" components of the Project simply improved transport operational efficiency. It is not known if efficiency savings have been passed on to consumers. Similarly, it is not clear to what extent these components have contributed to rural employment opportunities, mineral exploitation, or the tourism industry, three of the stated goals of the Project. The need for the two partly effective "soft" components, which have yet to be completed, cannot be overstated. If a good, comprehensive, and modern accounting system and trained personnel are not in place, all other aspects of the Project may not be positively realized—because good accounting and budgeting are prerequisites for effective, efficient, and cost-based operation and pricing. The Project is, therefore, rated as *effective*, and further justification is given in the PCR (paras. 45–47).
- (iii) **Efficiency in achieving outcome and outputs.** The economic internal rate of return was estimated as 14.9% at appraisal and 15.9% in the PCR. The evaluation method was revised slightly to ignore the cost of diversion of traffic to roads and the residual value of tracks and sleepers, which were rehabilitated and used for the Project. These changes appear reasonable. A major difference was to count the value of passenger time savings as a benefit, which is appropriate. The findings of this PCR validation concur with the PCR rating of *efficient*.
- (iv) **Preliminary assessment of sustainability.** The PCR considers the Project as technically sound and that adequate maintenance and operating policies are in place. The reestimated financial internal rate of return is 7.3% as compared to 8.7% at appraisal. Select financial targets are shown in Table 3. The PCR rated sustainability conservatively as *likely* bordering on *highly likely*.

**Table 3: Financial Ratios, 2000–2006**

Item	Target	2000	2001	2002	2003	2004	2005	2006
Debt to equity ratio (%)	<80%	70.3	54.0	50.9	28.1	31.8	38.5	41.2
Debt service ratio (x)	>1.2 x	(39.9)	(6.4)	0.9	21.4	23.2	26.8	30.6
Working ratio (%)	<70%	143.4	114.6	98.7	72.3	67.6	55.7	47.3
Operating ratio (%)	<80%	146.6	118.7	102.5	77.0	72.4	61.1	53.2

Source: Asian Development Bank project completion report.

The main concern is the absence of good financial accounting practices and limited progress toward adopting internationally recognized accounting standards, limiting UTY's ability to achieve good financial planning and budgeting, including funds for maintenance. Another issue affecting

operational sustainability is that Iran, Kazakhstan, and Turkmenistan recently announced plans to construct a new railway line that will link the three countries via a more direct route, thus avoiding the need to traverse Uzbekistan. This Evaluator agrees with the more conservative *likely* rating.

- (v) **Impact (both intended and unintended).** The project framework (PCR, Appendix 1) lists the goals of the Project and claims that all indicators have increased with the exception of passenger traffic. While it is difficult to ascribe such growth directly to the Project as opposed to general economic growth, it was noted that per capita incomes and freight and passenger flows by all modes have increased in the project area, as well as transport performance and foreign direct investment.

As envisaged at appraisal, the Project did not have any adverse environmental impacts. The cost of restructuring UTY, which began under the first railway project, was addressed by the establishment of the SBF.<sup>3</sup>

The technical assistance (TA) provided in connection with the Project had a very broad scope, which included (a) preparing a railway master plan, (b) drafting policies and procedures for the operation of the SBF, (c) preparing a marketing strategy for tourists, and (d) assessing the impact of soil salinity on railway infrastructure and proposed mitigation measures. The TA completion report prepared considered the impact of the TA as limited as the scope was too broad relative to TA resources. The PCR does not rate the impact of the Project, but the impact overall is rated *substantial*.

#### E. Overall Assessment, Lessons, and Recommendations (validation of PCR assessment)

- (i) **Overall assessment.** Based on the quantitative assessment of project relevance, effectiveness, efficiency, and sustainability, this PCR validation confirms the overall PCR assessment of *successful*. It achieved its main objectives of rehabilitating the railway line, improving maintenance capability, and contributing to institutional development.
- (ii) **Lessons.** The PCR identifies three important lessons: (a) the project framework was overly optimistic, expecting outcomes that had, at best, a tenuous cause-and-effect relationship with the Project; (b) capacity building under the Project would have benefited from more focused TA and a more consistent dialogue between ADB and UTY on reform issues; and (c) sector specialists and a railway sector focal point would have been desirable at the Uzbekistan Resident Mission and ADB headquarters, respectively.

Start-up of the Project was delayed, in part, by the late completion of the first railway rehabilitation project. If approval of the loan was contingent on the completion of the former, this delay could have been reduced.

Some covenants were either not complied with or only partly complied with, which raises a question about their crafting and suitability. In the future, covenants should only be crafted (a) that can be reasonably complied with, or (b) with assistance from ADB or consultants to help ensure compliance.

As a small component of the overall economy, it is difficult for UTY to change its accounting system unless there is a commitment at the national level for such change. This commitment needs to be discussed and details of the change process need to be addressed prior to including it as a component.

- (iii) **Recommendations.** The PCR was prepared prior to completion of all project components. As a result, the PCR suggests that two additional missions be conducted: (a) in mid-2008 to assess the final status of work at the Bukhara workshop and, (b) in late 2009 to evaluate if the first railway

<sup>3</sup> At completion, the SBF disbursed SUM163 million or \$133,000 equivalent (*vis-à-vis* a pledged amount of \$3 million) for four small commercial projects and provided jobs for 103 redundant staff (PCR, Appendix 6, page 28).

rehabilitation project and this Project be should be combined. The credibility of the project framework could be fully evaluated at that time.

Provision for civil works supervision was not a part of the Project, implying that the EA was competent to undertake the work with ADB providing technical oversight. However, this did not occur. In such a case, it would be preferable for ADB to ensure that such expertise is available either through staff or consultants.

From the lessons learned, ADB could more carefully project approval to avoid artificial delays or recognize that some delays are unavoidable and include them in the implementation schedule.

#### **F. Monitoring and Evaluation Design, Implementation, and Utilization (PCR assessment and validation)**

The goals identified in the project framework were clear, but their measurements largely come from published government reports, which generally require considerable preparation time. The PCR was prepared so soon after civil works completion that such reports will not be available for some time.

Implementation was monitored through one inception and five review missions. No midterm review was undertaken. Nevertheless, physical progress of the Project could be easily monitored through review of periodic progress reports. As such, pertinent data were available. It appears that the available data were well used during preparation of the PCR.

#### **G. Other (e.g., safeguards, including governance and anticorruption; fiduciary aspects; government assessment, as applicable) (PCR assessment and validation)**

UTY implemented the Project well. The prevalence of corruption—or lack thereof—is more difficult to detect. The change from command economy accounting to market economy accounting is often difficult, time consuming, and requires considerable training. The PCR covers the need for modern accounting and for further encouragement and assistance from ADB.

UTY's compliance with financial covenants, particularly timely submission of audited project accounts and financial statements, was considered unsatisfactory by the PCR. The desired achievement to reduce accounts due was not reached.

<b>H. Ratings</b>	<b>PCR</b>	<b>OED Review</b>	<b>Reason for Disagreement/Comments</b>
Relevance:	Highly relevant	Highly relevant	
Effectiveness in achieving outcome:	Effective	Effective	
Efficiency in achieving outcome and outputs:	Efficient	Efficient	
Preliminary assessment of sustainability:	Likely	Likely	
Borrower and Executing Agency:	Partly satisfactory	Partly satisfactory	
Performance of the Asian Development Bank:	Partly satisfactory	Partly satisfactory	
Impact:		Substantial	Not rated by the project completion report
Overall assessment:	Successful	Successful	
Quality of project completion report:		Satisfactory	

**I. Comments on PCR Quality**

The PCR was well prepared, concise, and thorough. It was consistent with project administration instructions and Operations Evaluation Department (OED) requirements. The PCR was consistent internally, while its assumptions concerning the economic and financial internal rates of return were sound. Safeguard issues were well covered, and exogenous factors, including future external factors, were incorporated into the evaluation. Lessons learned and recommendations made were appropriate but could be improved further.

**J. Recommendation for Operations Evaluations Department Follow-Up**

This Project encountered a generic problem endemic to several Central Asian republics transitioning from a planned economy to a market economy; it seems that the conversion of accounting systems is fraught with difficulties, including acceptance at the national level. OED should evaluate this issue more closely in the future, and a project performance evaluation report after 2 years would be useful.

**K. Data Sources for Validation**

The validation report has mainly relied on the PCR and back-to-office reports for sourcing information on this Project.

**REGIONAL DEPARTMENT'S RESPONSE TO THE PROJECT COMPLETION REPORT  
VALIDATION REPORT**

On 12 September 2008, Director, OED2, Operations Evaluation Department (OED), received the following comments from the Uzbekistan Resident Mission, Central and West Asia Department.

Regarding your memo dated 29 August 2008, we have no specific comment on the Project Completion Validation Report of Loan 1773-UZB.