

**PROJECT INFORMATION DOCUMENT (PID)
APPRAISAL STAGE**

Report No.: AB3387

Project Name	RAIL TRADE AND TRANSPORT FACILITATION
Region	EUROPE AND CENTRAL ASIA
Sector	Railways (90%);Other domestic and international trade (10%)
Project ID	P083108
Borrower(s)	REPUBLIC OF AZERBAIJAN Azerbaijan State Railways (ADDY)
Implementing Agency	Azerbaijan State Railways (ADDY) Azerbaijan
Environment Category	<input type="checkbox"/> A <input checked="" type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> FI <input type="checkbox"/> TBD (to be determined)
Date PID Prepared	October 15, 2007 (revised November 16)
Date of Appraisal Authorization	November 2, 2007
Date of Board Approval	February 5, 2008

1. Country and Sector Background

In the early to mid-1990s, the collapse of the Soviet Union and the war with Armenia caused massive economic and human dislocation in Azerbaijan, a 60 percent drop in GDP and hyperinflation. Much of the industrial sector was closed, and the agricultural sector was transformed into small holding. The oil and gas sector emerged as the engine of economic growth. Azerbaijan's economy now draws more than 50 percent of GDP from oil and gas extraction. Rapid investment in the oil and gas sector has spurred strong GDP growth—GDP increased at an annual rate of around 10 percent per year from 2000 to 2004, with 26 percent and 34 percent spurts in 2005 in 2006 respectively.

Azerbaijan's oil production is expected to peak in 2010-2012 and decline in subsequent years. Although a large share of GDP, the oil and gas sector only provides about one percent of employment in Azerbaijan. Thus, Azerbaijan's economic challenge is to use the oil boom resources to catalyze growth and employment in non-oil sectors and achieve sustainable reductions in poverty.

The **Azerbaijan Country Partnership Strategy, FY07-10 (CPS)** aims to support sustainable development in Azerbaijan through: (1) increasing the quality and transparency in public sector governance; (2) supporting sustainable and balanced growth of the non-oil economy; (3) increasing the quality and access to social services; and (4) improving environmental management and furthering the climate change agenda. The second pillar of the CPS will be accomplished by “developing essential infrastructure and services, with special attention to the rural economy and Central Asia-South Caucasus-Black Sea regional transit routes”¹.

¹ IBRD/IDA/IFC, Country Partnership Strategy FY07-10 for Republic of Azerbaijan (November 8, 2006) p. v.

One of Azerbaijan's natural advantages is its location. Azerbaijan is located on the Western shore of the oil-rich Caspian Sea, between Russia to the North, Georgia to the West and Iran to the South. Azerbaijan is part of the shortest land corridor (Azerbaijan-Georgia) from the Caspian Sea to the nearest open sea, making it attractive as a transit country. Baku is the only major city on the Caspian Sea. It has managed to capitalize on its location by attracting significant volumes of transit cargo by rail (about 6 million tons annually) from Kazakhstan and Turkmenistan and more recently by pipeline.

Rail transit services generate significant income for Azerbaijan. In 2006, rail transit services produced the equivalent of 5 percent of non-oil export of goods and of the service credit in the balance of payment. Demand for those transit services and for export of goods from Azerbaijan by railways has been sustained over the past three years. Based on a review of markets in the Caspian Basin, this railway traffic is expected to continue a gradual expansion over the next ten years. While most crude oil from the Caspian Sea is expected to continue using pipeline as a primary mode of transportation, the railway across the Caucasus is expected to remain an important alternative for shippers, and a small increase in rail transport of oil and oil products (1 percent per annum) is foreseen over the period.

Two main rail corridors carry 96 percent of railway traffic. The most heavily used corridor runs east-west from Baku to the Georgian border. It is part of the larger corridor from Baku to Georgian ports that carries 87 percent of transit cargo. In 2006, this corridor carried 22 million tons, or 73 percent of railway total traffic. The other major corridor links Baku to the Russian border.

Azerbaijan Railway (ADDY) is a vertically integrated, state-owned railway company that provides rail freight and passenger services using its own infrastructure. ADDY operates a small, loss-making passenger service, but is predominantly a freight railways (81 percent of traffic units). ADDY is profitable overall, based on available financial data². It generated revenues of US\$219 million and a net profit of US\$30 million in 2006. This overall healthy financial performance is a direct consequence of traffic recovery in recent years. However ADDY has been under-investing in infrastructure and rolling stock for an extended period of time and will be unable to continue serving its market without significant new investments in the near term.

A detailed review of ADDY took place over the past 18 months as requested by the Government of Azerbaijan. This review, funded by a Japanese PHRD Grant, led to the drafting of a comprehensive "Government Program for the Development of Azerbaijan State Railways 2008-2011" (the Program) entailing institutional modernization and a list of priority investments.

The first priority of this Program is to transform ADDY's structure to ensure proper incentives are in place for ADDY to offer services that respond to its clients' needs in terms of price, quality and dependability. The reorganization would build on close monitoring of service delivery, revenue generated and cost of service. It would entail, as a first step, the conversion of ADDY into a state-owned joint stock company, with appropriate corporate governance and transparent accounting aligned with international financial reporting standards (IFRS). In the

² Azerbaijan State Railways, unaudited financial statements restated as per IFRS requirements.

next stage, the railway would be reorganized by line of business, or profit centers.³ This transformation would draw on global experience in railway restructuring.

The second priority is to provide ADDY with suitable investments in infrastructure and rolling stock to allow it to maintain and expand gradually its operation. PHRD Consultants estimated that 3 to 4 million tons annually, or the equivalent of US\$13 – 18 million in revenues, are diverted to other routes because ADDY lacks the locomotive capacity. This situation is expected to worsen dramatically over the next four to five years in case investments are not carried out with a large drop in capacity expected in the absence of investments in new locomotives. To that end the Program identifies a broad set of priority investments to be executed in phases over 4 years, building on technical assessments carried out during project preparation as well as on other national priorities defined in the Presidential Decree No. 1974 dated February 21, 2007.

The Program includes investments in rail infrastructure on main corridors. Rail tracks have deteriorated severely as a result of significant deferred maintenance. ADDY lines were built to a heavy freight standard, which allowed 80 km/hour speed for freight and 100 km/hour for passengers. Over the last 15 years, however, ADDY could not invest sufficiently to keep its assets in good condition, leading to many speed restrictions on the main corridors. On the main east-west line, 24 percent of the track require immediate track repair, as confirmed by independent visual surveys. This leads to less efficient use of rolling stock and creates significant risk of derailments caused by track failure. Given ADDY's focus on oil and oil product transport, investment in upgrading rail tracks are required to reduce this derailment risk.

The Program also includes the renewal of the traction power on the east-west corridor. The electrification system and ADDY's locomotives (119) are likely to experience major breakdowns in the short to mid-term, as the electrification system on the east-west corridor and most of the locomotive fleet are well past the end of their service life. ADDY currently needs a fleet of about 120 mainline locomotives in good condition. With improved operating practices, which depend in part on having more reliable locomotives, the number of required locomotives could be reduced to about 100 by 2011 and would increase in line with traffic growth afterwards. By contrast, within five years, ADDY is expected to have only 41 main line locomotives of less than 40 years in service. Even with operating improvements, ADDY would need to replace more than 50 locomotives over the next five years.

The poor state of the locomotives and electrification provided ADDY with an opportunity to define a long term strategy for traction. The main options were: (1) rebuilding the existing 3.3 kilovolt (kV) direct current electrification and purchasing 3.3 kV locomotives; (2) replacing the existing 3.3. kV direct current electrification with more efficient 25 kV alternating current electrification and purchasing 25 kV locomotives; and (3) purchasing diesel locomotives. There were substantial differences in cost between the various options. Rebuilding the existing system would cost about US\$330 million more than the diesel or 25 kV alternatives over 25 years. Considering long term operation and maintenance costs, environmental impacts, and the development of passenger traffic, the Government of Azerbaijan opted for the electrification of

³ A line of business is defined by a set of services sold to a similar group of customers, using a common set of assets and employees to provide the service.

the east-west corridor with 25 kV power supply. This system is expected to lead to a significant reduction in energy used per net ton-km transported.

2. Objectives

The main project objective is to improve railway services in Azerbaijan, as well as the competitiveness, financial sustainability, operating and cost efficiency, and capacity of ADDY in particular along the transport corridor toward Georgia (east-west corridor).

This objective would come in support to the proposed 2008-2011 Railway Development Program, which main objectives are to: (i) to satisfy the increasing demand from the population and the economy in railway transportation services; (ii) to satisfy the security demands of the state; (iii) to increase the transit potential of the country; (iv) to improve the quality of railway services; (v) to support social and economical development of the country by decreasing the costs of passengers and cargo transportation; (vi) while progressively attaining financial self-sustainability for freight services.

The project will focus on the following part of the Government Program: (i) maintaining and growing the railway business by focusing on providing the profitable freight market segment with proper service, infrastructure and locomotive capacity; (ii) transforming the Azeri Railways into a financially self-sustainable operation in freight transportation, covering all its costs (including infrastructure maintenance and traction) from revenues, while improving its operational efficiency; and (iii) improving the transparency of the Railway sector by introducing International Financial Reporting Standards and profit centers⁴ (passenger/freight) and by separating on an accounting basis passenger service that could be self-sustained from others.

Other parts of the Government Program are expected to be covered through separate projects, once the proper financial and technical due diligence has been completed.

Key Indicators. Project performance would be assessed through a number of qualitative and quantitative indicators. The specified indicators would be regularly monitored by ADDY and MoT. The key proposed indicators include:

Project Outcome Indicators

- Volume and service quality of transport on the East-West corridor
- Operational cash flow/revenues and ADDY working ratio
- Net ton-km per new locomotive and train transit time using new locomotives
- Train revenue and cost per net ton-km
- Energy consumption per net ton-km
- Locomotive availability

Intermediate Outcome Indicators

- Percentage of track in critical condition on east-west corridor

⁴ Accounting on the basis of profit centers will provide a good understanding of the revenues and costs associated with the provision of passenger and freight services respectively.

- Number of locomotives able to cross Azerbaijan reliably.
- Locomotive reliability
- Systematic follow up of audit qualifications.
- Increased client satisfaction

The project is expected to support the development of services, in line with the second pillar of the CPS, by enabling the railway to maintain its transport capacity and attracting some additional transit business to Azerbaijan. While such services remain related to the regional oil industry, they provide Azerbaijan with an opportunity to capitalize on its location by continuing to offer value added services for transit from neighboring countries. This will benefit not only the railway, but also other logistics businesses (port services, storage) that provide services for transit goods. As noted in the CPS, “[t]he long term vision is for Azerbaijan to become a prosperous transit center for energy and goods flowing between Europe and Central Asia.”⁵ The project, outlined in the CPS, will also contribute to the first pillar of the CPS, improving quality and transparency in public sector governance, by improving the governance and transparency of a major state owned enterprise. It will reduce the risk of accidents and environmental hazards by improving track conditions on ADDY’s main line and upgrading ADDY’s environmental prevention and preparedness response capabilities.

3. Rationale for Bank Involvement

The Bank is sought both as an advisor and as a financier at a time when proper management of oil proceeds will define the sustainability of Azerbaijan’s growth. With its depth of experience worldwide in restructuring railway, the World Bank is in a unique position to advise and support the government through the transition to a more commercial, efficient and sustainable railway sector and through regular contact with railways and transport operators in Georgia. The Ministry of Transport particularly seeks support in defining the relationship between the Ministry and the railway, and in implementing its modernization program for the transport sector. The Government seeks support in ensuring that the program of investment is accompanied by institutional reforms that will strengthen the commercial focus and sustainability of the railways.

4. Description

The project total cost is estimated at US\$673 million, with US\$450 million of World Bank funding. Project costs include renewal of critical assets (track, locomotives, power supply), implementation of IFRS accounting system and technical services to support the restructuring. The components are shown below.

Component 1: (total cost with contingencies – US\$373 million). The *Rehabilitation of East-West Main Line* component would include track, signaling and power supply rehabilitation along the east-west corridor. It would rehabilitate about 240 km of mainline track in poor condition. The investment would remove the most critical speed restrictions and allow ADDY to handle existing and potential traffic at up to 100 km/hour for passenger trains and 80 km/hour for freight

⁵ IBRD/IDA.IFC, Country Partnership Strategy FY07-10 for Republic of Azerbaijan (November 8, 2006) p. v.

trains without significant track delays on those 240 km. It would finance the conversion of the power supply on the East-West corridor to 25 kV, including new power stations, catenary and the related upgrade in signaling equipment. This component includes the technical services required to design and supervise the above investments.

Component 2: (total cost with contingencies – US\$283 million). The *New Mainline Locomotives* component would finance about 50 new mainline electric locomotives to operate on the east-west corridor.

Component 3: (total cost with contingencies – US\$14 million). The *Modernization* component would include support for the full implementation of IFRS accounting, provision of Advisory services to ADDY to implement its modernization program and provision of equipment to ADDY to improve its oil spill prevention and response capacity.

The *IFRS Accounting System* sub-component would fund the implementation of a computerized accounting system in ADDY and a first full audit of ADDY.

The *Advisory Services for ADDY* sub-component would provide technical services and training to ADDY and MoT to implement the modernization program. These services will include inter alia consultancy support to ADDY and MoT to: (a) establish an appropriate corporate governance and performance-based incentive structure for ADDY, (b) implement the separation of ADDY into lines of business; (c) define required passenger services, finalize a business plan for passenger services (including a review of the need for high speed train) and prepare public service obligation agreements; (d) define a new tariff policy for the railway and track access charges; and (e) develop contracts with rollingstock providers.

The *Oil Spill Prevention and Response* sub-component would provide ADDY with the equipment, procedures and training required to meet fully the expectations of the population and oil shippers in oil spill prevention and response capacity. This component would enable the implementation of recommendations identified under the oil spill response study prepared for the project.

Component 4: (total cost without contingencies – US\$2 million). The *Project Implementation Component* would provide training and consultant services to the PIU for procurement, financial management, financial audit, as well as equipment required for project implementation.

5. Financing

Source:	(\$m.)
Borrowers (Government of Azerbaijan and ADDY)	224
International Bank for Reconstruction and Development	450
Total	674

6. Implementation

The World Bank has maintained regular contact with representatives of the TRACECA, as well as the European Bank for Reconstruction and Development (EBRD) and the Asian Development Bank (ADB), to keep them informed and to consult with them on the content of the Project during its preparation phase. The Project concept fully complies with the objectives of the TRACECA and is broadly shared and supported by this program. While ADB is not currently active in the railway sector, EBRD is negotiating a railway loan with the Government of Azerbaijan. The World Bank is coordinating with EBRD on the respective investments to avoid any overlap and ensure synergies are achieved wherever feasible.

Implementing Entities. ADDY will be responsible for Project management and coordination through an integrated Project Implementation Unit (PIU). The PIU will be responsible for the day-to-day management of the Project including procurement, financial management, and liaison with the Bank. Procurement of all items funded by the loan will follow World Bank procurement procedures and guidelines.

The successful implementation of the Project requires strengthening of the implementation capacity of ADDY and the PIU. ADDY has limited experience in IFI-financed project implementation and acquaintance with the Bank procedures is likely to take some time. The core operational PIU staff will include a PIU Chief, a Procurement Specialist and a Financial Management Specialist. The two specialists will be full-time staff (consultants) selected competitively. External independent consultants will be also be hired to provide support in preparing tender documents, reviewing designs and supervising works and delivery for all large contracts foreseen under this project. Incremental operational expenses of PIU will be financed out of the loan funds, with retroactive financing applied for the cost of those consultant services.

Specific financial management arrangements for the project are in the process of being established with the objective of being ready for review in late November 2007. The current financial management and reporting systems of ADDY are in the process of transition to International Financial Reporting Standards system which includes strengthening of the management capacity and integration of the accounting and reporting systems, all of which are required for sound financial management at ADDY. The Government of Azerbaijan established the end of 2007 as a deadline for universal conversion to IFRS accounts in the country. The progress with transition to IFRS accounts and building up the financial management capacity is monitored closely by the MoF and necessary technical support in the area will be provided through the project.

Funds Flow. Similar to other Bank-financed projects, Designated and Project accounts will be opened in a commercial bank acceptable to the Bank. All payments to the contractors, suppliers and consultants will be made from these accounts with the endorsement of responsible senior staff.

7. Sustainability

Project sustainability stems from both the restructuring process to be launched through the project and the strategic identification of components that took place during project preparation. The introduction of transparent accounting, strengthened marketing and profit-center based organization will empower ADDY management to manage railways commercially through closer interactions with its clients. The proposed investments will address essential parts of the massive maintenance backlog that has accumulated on the east-west corridor, which generated US\$137 million of revenues in 2006. It will ensure that the most profitable market segments are properly served with reliable equipment and proper infrastructure and avoid a drop in revenue by lack of capacity. By defining such components as part of a review of ADDY requirements for the next 15 years, the project addresses strategic needs. Careful economic and financial analysis indicates that the project will have a high return on investment.

8. Safeguard Policies (including public consultation)

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment (OP/BP 4.01)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Natural Habitats (OP/BP 4.04)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Pest Management (OP 4.09)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cultural Property (OPN 11.03 , being revised as OP 4.11)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Involuntary Resettlement (OP/BP 4.12)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Indigenous Peoples (OP/BP 4.10)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Forests (OP/BP 4.36)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Safety of Dams (OP/BP 4.37)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Projects in Disputed Areas (OP/BP 7.60)*	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Projects on International Waterways (OP/BP 7.50)	<input type="checkbox"/>	<input checked="" type="checkbox"/>

ADDY specialists prepared the Environmental Assessment and Management Plan (EA) which was published on May 1st 2007 on the World Bank website. The EA identifies possible impacts of the project activities and mitigation measures. This document is publicly available and can be obtained from ADDY (Environmental Department), the Aarhus Convention Center of the Ministry of Ecology and Natural Resources, and through the World Bank external internet site. A series of public consultations were carried out by ADDY in April 2007 in the project areas, namely in Agstafa, Ganja, Hajigabul, Kurdemir, Yevlakh and Sangachal.

Prior to the consultations, the draft EA was translated into Azeri and sent to these rayons. The public was informed through newspapers of local circulation that the document could be accessed and reviewed at the relevant Executive Authorities offices. The consultations were attended by local executive and environmental authorities, representatives of municipalities and communities, local NGOs and other stakeholders. Minutes of the consultation meetings have been recorded in Azeri and are kept at ADDY's office for reference.

9. List of Factual Technical Documents

* *By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas*

- A. Project Information Document, Concept Stage, January 2006
- B. Environmental Assessment and Management Plan, May 2007
- C. Bank Staff Assessment

- Appraisal mission Aide Memoire, November 16, 2006
- Pre-Appraisal mission Aide Memoire
- Preparation Mission Aide Memoire

D. « Restructuring and Revitalizing the Railways of Azerbaijan» Study

- Inception report, PADECO, June 2006
- Marketing report, PADECO, August 2006
- Infrastructure and rolling stock renewal reports, PADECO, November/December 2006
- IFRS accounting report, PADECO, November 2006
- Restructuring, railway administration, PADECO, March 2007
- Business Plan for ADDY, June 2007
- Oil Spill Response Study, Briggs Marine, November 2007

10. Contact point

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