Operation Performance Evaluation Review

Volzhski Water Project
Technical Cooperation
for Due Diligence
Russian Federation

December 2010

Evaluation Department (EvD)
This Evaluation Report

The subject of this Operations Performance Evaluation Review (OPER) Report is the Technical Cooperation (TC) operation for Volzhski Water Project preparation: (“the TCs”) in the total amount of €285,900 (on a commitment basis) and funded in total of €269,113 through the EU MISP II Fund. The related TC assignments were carried out from December 2007 to February 2009.

The Operation Leader (OL) of this TC was Denis Terentiev, Senior Analyst, Municipal and Environmental Infrastructure Banking Group, who also prepared the Project Completion Report (PCR) in February 2009. The operation team and other relevant Bank staff commented on an early draft of this report. The Basic Data Sheet on page iii of this report and the PCR in Appendix 4 are complementary to this OPER are designed to be read together.

The evaluation was carried out by Hiromi Sakurai, Principal Evaluation Manager (“the OPER Team”). Information on the operation was obtained from relevant teams and departments of the Bank and its files as well as from external sector and industry sources. Fieldwork was carried out in 30 November – 3 December 2010. Appendix 1 presents a list of contacts. EvD would like to take this opportunity to thank those who contributed to the production of this report.

Post-Evaluation Selection and Process
Selection of an operation for post-evaluation by EvD uses the following criteria: relevance to the Bank's likely future operations; lessons-learned potential; size of the Bank's investment commitment/exposure; balance among countries of operation; balance among sectors and types of operations; relative priority of investment operation OPERs within EvD's overall work programme priorities and resources.

The Bank's post-evaluation process is described in Chapter 8 of the Operations Manual. The responsible Operation Leader first writes a TC Project Completion Report. The PCR serves a self-evaluation function and establishes the basic facts and lessons from the operation's preparation, implementation, and outcome. EvD’s independent evaluation follows, using the PCR as one of several inputs.
OPERATION PERFORMANCE EVALUATION REVIEW
VOLZHSKY WATER PROJECT TECHNICAL COOPERATION
(RUSSIAN FEDERATION)

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**ABBREVIATIONS**

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<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>ESAP</td>
<td>Environmental and social health and safety action plan</td>
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<td>EvD</td>
<td>Evaluation Department</td>
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<tr>
<td>FOPIP</td>
<td>Financial and operational performance improvement programme</td>
</tr>
<tr>
<td>IFI</td>
<td>International Finance Institution</td>
</tr>
<tr>
<td>IFRS</td>
<td>International Financial Reporting Standard</td>
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<tr>
<td>MDB</td>
<td>Multilateral Development Bank</td>
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<tr>
<td>MISP</td>
<td>Municipal Infrastructure Support Programme</td>
</tr>
<tr>
<td>OPER</td>
<td>Operation Performance Evaluation Review</td>
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<tr>
<td>PIP</td>
<td>Priority investment programme</td>
</tr>
<tr>
<td>PP&amp;R</td>
<td>Procurement policies and rules</td>
</tr>
<tr>
<td>RAS</td>
<td>Russian Accounting Standard</td>
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<tr>
<td>RUB</td>
<td>Russian Rouble</td>
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<tr>
<td>TC</td>
<td>Technical Cooperation</td>
</tr>
<tr>
<td>USS</td>
<td>United States Dollar</td>
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<tr>
<td>Vodokanal</td>
<td>Vodokanal, Water Utility of Municipal Unitary Enterprise</td>
</tr>
<tr>
<td>XMR</td>
<td>Expanded Monitoring Report</td>
</tr>
<tr>
<td>WWTP</td>
<td>Wastewater treatment plant</td>
</tr>
</tbody>
</table>

**DEFINED TERMS**

- **the Bank**: European Bank for Reconstruction and Development
- **the City**: Volzhski Municipality in Voldgrad Oblast
- **the City administration**: the City administration of Volzhski
- **the Investment**: three components in water supply and wastewater treatment services, which will be jointly financed by the Bank and Vodokanal for rehabilitation of water infrastructure in Volzhki
- **the Loan**: A Russian Rouble 360 million loan to Vodokanal guaranteed by the City
- **the OPER Team**: Staff of the Evaluation Department who carried out the evaluation
- **the TC Operation Team**: the staff in the Banking Department, OGC, OCE, and other respective departments within the Bank responsible for the TC proposal, negotiation and monitoring, including the project completion report / donor completion report
- **the Project**: The TC Operation, the Loan and the technical cooperation provided during the implementation period
- **the TC Operation**: three technical cooperation that made available a comprehensive due diligence in technical, environmental, financial and accounting aspects, involving three different consulting services
- **the TC Operation Leader**: the Banking staff in charge of the TC Operation
BASIC DATA SHEET

Operation Code: 38498, 38499, 38500
Location: Russian Federation
Operation: Volzhsky Water Project Technical Cooperation
Sector: Municipal Services
Type: Technical Cooperation
Facilitators: EC MISP II Fund
Bank Unit: Municipal Environment and Infrastructure

A. Funding

<table>
<thead>
<tr>
<th>TC</th>
<th>Commitment number</th>
<th>Commitment title</th>
<th>Amount (EUR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TC</td>
<td>EM12-2007-10-04</td>
<td>Volzhskii Water Environmental and Technical Due diligence</td>
<td>EUR 189,900 (EUR 173,112 utilised)</td>
</tr>
<tr>
<td>TC</td>
<td>EM12-2007-11-06</td>
<td>Credit Analysis of the City of Volzhskii</td>
<td>EUR 48,000 (EUR 48,000 utilised)</td>
</tr>
<tr>
<td>TC</td>
<td>EM12-2007-11-05</td>
<td>IFRS Audit of Financial Statement of the Volzhskii Vodokanal</td>
<td>EUR 48,000 (EUR 48,000 utilised)</td>
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</tbody>
</table>

B. Procurement

Consultancy services: Evaluation of Proposals
Sources by country:
- Netherlands
- Russian Federation

C. Visits

<table>
<thead>
<tr>
<th>Type of Visit</th>
<th>No. of Visits</th>
<th>Person-days</th>
</tr>
</thead>
<tbody>
<tr>
<td>EvD/OPER</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>
1. The Project

**The Technical Cooperation Operation and the Investment.** This evaluation report relates to the technical cooperation (“the TC Operation”) provided to the first-time borrower, Vodokanal, Water Utility of Municipal Unitary Enterprise (“Vodokanal”) in order to prepare the ensuing investment to be extended by the European Bank for Reconstruction and Development (“the Bank” or “EBRD”). The TC Operation aimed to provide comprehensive technical, environmental, financial and accounting due diligence, and utilised three different consulting services, from December 2007 to February 2009.

The ensuing investment, a Russian rouble (“RUB”) 360 million loan (“the Loan”) to Vodokanal was approved in July 2009 (“the Investment”), followed by the loan signing in January 2010. The Investment envisaged the rehabilitation and upgrade of water supply and wastewater treatment facilities in Volzhski.

**Investment components.** In a Priority Investment Programme (“PIP”) that was developed during technical due diligence under the TC Operation, the Bank and Vodokanal agreed to pick up three components for the Project scope. The Project components were approved as follows:

<table>
<thead>
<tr>
<th>Sub-sector</th>
<th>Component (expected completion date)</th>
<th>Cost estimates</th>
<th>To be financed from</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>EBRD</td>
</tr>
<tr>
<td>Water supply</td>
<td>Potable water supply main construction from the 3rd lift to the 4th lift pumping station (“Water Main”) (November 2010)</td>
<td>25</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Chlorination unit reconstruction involving conversion to hypochlorite use (“Hypochlorite”) (October 2011)</td>
<td>65</td>
<td>52</td>
</tr>
<tr>
<td>Wastewater</td>
<td>The 3rd line wastewater treatment plant (“WWTP”) reconstruction (including reconstruction and extension of the 3rd line WWTP, mechanical dewatering unit construction and reconstruction of sludge beds) (“the 3rd Line WWTP”) (October 2012)</td>
<td>360</td>
<td>288</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>450</td>
<td>360</td>
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</tbody>
</table>

The Investment is supported by the two technical cooperations for Financial and Operational Performance Programme (“FOPIP”) and for implementation support (“the Project”). Both are financed from Germany II Technical Cooperation Fund.

Currently, the conditions precedent of the Loan have yet to be fulfilled before the first disbursement.

**The Volzhski City and Vodokanal.** Volzhski, located 20km to the north-east of Volgograd on the banks of the Akhtuba River (a tributary of the Volga River), started its history as a settlement of construction workers who were building the large hydroelectric power plant. The settlement was upgraded to a city in 1954. The hydropower plant generates more than 11,000kWh per year and feeds industries in Volgograd Oblast. Close to Volgograd and the canals joining the Mother Volga and the Father River Don, Volzhski has hosted many large industries because of its advantageous location. The City of Volzhski (“the City”) accommodates large producers of steel, chemicals, pipes and tubes, tyres and bearings. The City has a population of about 318,000.

Vodokanal is the water utility department of the municipal utility enterprise that is wholly owned by the City of Volzhski. Vodokanal has some 1,100 employees and was mandated to provide water
supply and waste water services. The water supply network is about 500km, and the pipes are on average 35 years old. The wastewater sewerage network stretches over 420km. In 2007, 85 per cent of the population were connected to the water supply network and 75 per cent of households were connected to the municipal sewerage network. In 2010, the connection rates have increased to 100 per cent for water supply and 90 per cent for sewerage.

2. Project rationale, country strategy and sector policies, and relevance of Technical Cooperation

Challenge: The City and Vodokanal developed a long-term investment plan for 2008 to 2025. The total estimated cost amounted to RUB 7.8 billion (RUB 4.7 billion for water supply and RUB 3.1 billion for wastewater). Among the many projects listed in their investment plan, some appeared to address the most urgent needs, including the rehabilitation of the existing wastewater treatment plant. In the wastewater of Volzhsky, two lines (the 1st and 3rd Lines) of the wastewater treatment plant are for municipal wastewater, thus owned and operated by Vodokanal. Out of the many industries in Volzhski, only three of them have their own wastewater treatment plants, and the others discharge into the municipal sewers. Due to the concentration of the industry facilities, both lines, especially the 3rd Line, were heavily loaded and the effluent with accompanying pollutants constantly exceeds the regulated levels. Treated water is discharged into ponds before going into the Akhtuba River. The ponds are also used for irrigation but the farmers are reluctant to take water from there. Sludge treatment in both water supply and wastewater is substandard and most problematic. There were some other critical needs, and proper prioritisation according to the financing availability seemed important for the City administration and Vodokanal.

Response: In order to realise the investment of the most urgent needs, Vodokanal requested the City administration to make a joint approach to the Bank for assistance. In order to help the well-established utility company, a first-time borrower, to prepare the project, the Bank mobilised EC Municipal Infrastructure Support Programme (“MISP”) II Fund to provide consultancy services, which could make the investment suitable for the Bank’s financing.

Compliance with country strategy and sector policies: The TC Operation is in line with the Municipal and Environmental Infrastructure Operations Policy [BDS 04/68F] and the Strategy for the Russian Federation [BDS/RF/06-1] to support reform-minded city administrations in decentralised financing for municipal services and infrastructure. The TC Operation for due diligence was expected to particularly assist in the following transition agenda:

- assessment of creditworthiness of the City and Vodokanal to strengthen the decentralised infrastructure financing
- introducing international financial reporting standards (“IFRS”) at Vodokanal
- examining the present status of the water infrastructure and introducing a project prioritisation tool into the investment decision making.

Relevance: The TC Operation was necessary for the first-time borrower to be eligible for the Bank’s financing. Its relevance is assessed as Substantial.

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1 The mandated activities include: (i) drinking water production; (ii) operation of water and wastewater networks and facilities; (iii) uninterrupted water and wastewater services; (iv) wastewater collection and treatment; (v) construction of water and sewerage networks and facilities; and (vi) acting as a united cash settlement centre for charging for maintenance and repair of housing stock, utility services, including subsidies calculation.

2 The 2nd Line is owned by a private company producing oxygen and nitrogen.
3. Achievement of objectives

Given the nature of a due diligence TC (for project preparation), the overall objective of the TC Operation was to assist Vodokanal, the City administration and the Bank in preparing the Project. It comprised three consulting assignments with different objectives.

The Project was successfully approved by the Board in 2009, which indicates that the TC Operation was accomplished. This section assesses each of the three consulting assignments against their respective objectives, mainly from the viewpoint of the Bank, as the primary beneficiary of the TC Operation, while the transition impact section looks into the impact on Vodokanal and the City administration as the secondary beneficiaries of the project preparation assistance.

Overall, the fulfilment of the objectives in the TC Operation is considered **Good**.

3.1. IFRS audit of Vodokanal’s financial statements

Vodokanal had no experience in International Financial Reporting Standards (IFRS)-based financials and the Bank requested an audit firm to conduct an audit and restate the financial statements (prepared in accordance with Russian Accounting Standards [“RAS”]) into IFRS. The assignment started in November 2007 and was completed in a year. The audited financial statements for 2007 were prepared and used for the Bank’s credit analysis and creditworthiness assessment. The IFRS-based figures for 2006 and 2007 were reflected in the appraisal Board document. However, due to the time that had elapsed prior to Board approval of the Loan (see “Lessons learned”), the 2008 IFRS figures were not reflected in the Board document and the figures presented were based on RAS, which made the presentation lose consistency in some sense.

The consultants’ analysis, which covered the pre-crisis period, was considered comprehensive, highlighting the differences between IFRS and RAS. Such major differences with regard to Vodokanal required a re-examination of the historical value of the assets, as Vodokanal had applied the useful life for the assets for the tax authorities. Also, the adjustments were necessary to reflect the hyperinflationary period (1992-2003) in the asset value and respective depreciation expenses. A slight complication in transferring assets from the City to Vodokanal was also sorted out according to IFRS. The most distinctive deviations were the treatment of financial lease, ageing of receivables and the valuation of impaired assets like accounts receivable and stocks. These differences resulted in changes to profit margins, account receivable turnover, and current ratio, but all seemed to be minor. In the end, the Bank was able to properly examine Vodokanal’s financial position and developed financial projections for Board approval. Vodokanal’s financials appeared to be suitable for the Bank’s financing. The performance of the consultants was assessed as **Good** by the TC Operation Leader.

This objective is considered **Achieved**.

3.2. Credit analysis of the City of Volzhski

This objective is considered **Achieved**.

The City administration is the guarantor of the Loan, with which the final risk is taken. A thorough credit analysis of the City administration was conducted by the consultants working from December 2007 to May 2008. The consulting firm delivered the work as expected and scheduled. The analysis included the legislative set up, detailed assessment of the municipal assets, historical revenue and expenditure, and the budgetary mechanism as to how the investment was decided and staged. Sensitivity analysis was conducted to see the impact of the Investment on the City’s financial
A financial model was provided in order for the City administration to adjust, modify and run the sensitivity according to any changes in the situation. The final report was submitted in May 2008, before the financial crisis affected Russia. The contribution and performance of the consultant was highly appreciated by the City administration and the TC Operation Leader rated Excellent.

Based on the consultants’ outputs, the Bank considered that the City’s financial management was conservative and sound, with little risk of going beyond the federal budget code. The various sensitivity analyses were run and demonstrated that the City administration was very likely to maintain control over its indebtedness and deficit against revenues. In 2009, the Bank elaborated the analysis, taking the signs of crisis into account before consideration by the Board. The City’s creditworthiness seemed to be well maintained within the sensitivity analysis.

After the crisis, the actual City revenues in 2009 were 56 per cent of the Bank’s forecast for 2009. It was even 18 per cent lower than the City’s own planned budget. Similarly, expenditure shrunk in 2009 by 17 per cent compared with the City’s own planned expenditure, and was only 65 per cent of the Bank’s forecast for 2009.

The analysis assumed that consumer price index was 7.7 per cent and 6.8 per cent, respectively. However, it appeared higher in reality, 11.2 per cent in both 2008 and 2009. In 2010, the inflation rate is up further, at 14.8 per cent. Although the Russian rouble exchange rate against hard currency (US dollars or euro) was not a major issue in the analysis as the loan was to be denominated in rouble, it is now an issue for caution for Vodokanal in the context of procurement (see “Bank handling”).

Deviations from the forecast might continue and signal to the Bank that close monitoring of the City administration’s pockets is required (see “Lessons learned”). Nonetheless, the OPER Team takes the conservatism of the City’s financial management at face value, as the consultants’ report described. Moreover, the Russian Budget Code would serve as a safeguard in difficult times.

3.3. Environmental and technical due diligence

This consulting assignment was the largest in the TC Operation, forming the major part of the Bank’s due diligence exercises. The scope of work included (i) examining the status of the water supply and wastewater infrastructure, including facilities and services, and the financial and institutional capacity of Vodokanal; (ii) analysing the affordability of various user groups in the context of the current social mechanism; (iii) preparing the priority investment programme (“PIP”), focusing on operational and cash flow benefits; (iv) conducting the environmental analysis and the environmental management plan; and (v) preparing a project presentation report for the Bank covering all the above tasks.

The consulting services took about eight months to complete these extensive tasks and the final report was submitted in June 2008. Except for task (v), all the tasks were critical and form the core of the Bank’s due diligence. A detailed assessment of the existing facilities, institutional set up, and environmental health and safety legislation was conducted with existing and potential problems identified. The consultants also screened the Priority Investment Programme (“PIP”) and proposed the Project components indicating the potential benefits. Furthermore, a comprehensive environmental and social health and safety action plan (“ESAP”) was presented in the report. The cost of implementing ESAP to 2014 was estimated at RUB 1.3 billion in total (of which PIP

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3 In 2005-07, debt to own revenues ranged around 16-17 per cent, and deficit was around 6-7 per cent of revenues.
account for RUB 450 million and RUB 400 million is for maintenance and rehabilitation of the existing networks). ESAP was accordingly included in the lending conditions (see “Lessons learned”). The consultants also reviewed the existing water tariff mechanism (see “Company Financials” and “Lessons learned”). The TC Operation Leader rated their performance as Good.

The report stated that the Project components (that is, PIP) will result in the following benefits:

- improved potable water quality
- improved water supply reliability
- enhanced safety of the production process at the pumping station and the chlorination unit in the residential area, which were considered “potentially the most dangerous facilities”
- decreased volume of sludge formation at wastewater treatment plant facilities (by 20-25 per cent)
- safe disposal of dewatered sludge
- increased efficiency of wastewater treatment, mitigation of soil and groundwater contamination risks and achievement of regulatory compliance
- decreased environmental charges.

Large parts of the consultants’ report were copied on to the appraisal Board document to highlight the Project’s salient features (see “Lessons learned”). This objective is considered Achieved.

4. Overall assessment

The grant-financed TC Operation made three consulting services available for the benefit of Vodokanal (the water utility department of the municipal utility enterprise wholly owned by the City of Volzhski) as the prospective first-time borrower and the City administration as a prospective guarantor. As the ensuing loan aimed to rehabilitate Volzhski’s water infrastructure, a large part of the TC Operation comprised the technical and environmental due diligence. The restatement of Vodokanal’s financial statements and the analysis of the City’s creditworthiness were included in the TC Operation. All three assignments were completed in a year in a satisfactory manner. The achievement of the objectives is assessed as Good. Mobilising the grant financing and providing due diligence for the key areas of the project preparation, the additionality of the Bank for the TC Operation is Verified in all respects, financially and in terms of value added.

The transition impact of the TC Operation lies mainly in the new standards introduced to Vodokanal and the City administration. Such new standards include the IFRS exercise and modern financial concepts and knowledge, particularly for indebtedness management using the financial model and running the sensitivity analysis. Vodokanal and the City administration have been exercising the new standards. The transition impact is considered Satisfactory at Low risk.

Bank handling of the TC Operation is assessed as Good, quickly moving from the issue of the mandate letter to the internal approval and securing of funding, followed by the consultant recruitment for three different contracts. The year-long consulting services had no major variations and were completed as expeditiously and comprehensively as possible. Unfortunately, after the outbreak of the financial crisis, the investment processing slowed down in the second half of 2008. The crisis has caused a reduction in water consumption, which resulted in a double-dip financial blow to Vodokanal. Vodokanal has felt more imminent threats to its financial stability than in the pre-crisis period. Company financials are assessed as Satisfactory tending toward Marginal at this stage. Tariff reforms are seriously urged and a stronger policy dialogue would be needed during project implementation. Overall, the TC Operation is assessed as Successful, while a slow investment approval process has generated an important lesson to the Bank – as the saying goes, “Eat your soup while it is hot”, and this is very true when the soup is good.
5. Transition impact and additionality

5.1 Overall transition impact

This section focuses on the impact of the TC Operation on the secondary beneficiaries, namely Vodokanal and the City administration. The overall transition impact of the TC Operation is assessed as Satisfactory. The major stream of impact consists of introducing new standards. Risks associated with new standards are considered Low as the new practices are being established.

5.2 Company impact

Financing from an international financial institution (“IFI”) requires a large amount of preparatory work, particularly so for the first-time borrower. The TC Operation primarily benefited the Bank, while the requirements for IFRS-based analysis and PIP for prioritisation of the investment projects induced new standards that Vodokanal had not practiced as corporate exercises. Transition impact at corporate level is considered Satisfactory.

IFRS: Working with the consultants, Vodokanal developed their knowledge of IFRS extensively, and recognised the differences with RAS, and the impact of that difference when reading and presenting the figures. It seems as if Vodokanal is “gritting its teeth” at this stage. Very probably, IFRS does not seem fully convincing when compared with the RAS that they have already used for the long term. They might have felt that the IFRS exercises only added to the workload and that it often produced unfavourable results compared with RAS. However, the OPER Team is of the opinion that their good capacity for financial management will soon absorb the IFRS practices and will lead to an appreciation of the track record of IFRS exercises in the future, when the need for further foreign external financing arises.

Financial model: Vodokanal stated that they are making good use of the financial model provided by the consultants, particularly to monitor the sensitivity of the debt service coverage ratio. Skills transfer in using this tool has been realised. The model keeps them aware of their maximum borrowing capacity.

PIP: At appraisal, the Bank praised PIP highly, as it would generate strong benefit streams. It was considered that the methodology using economic and financial internal rates of returns and other factors (social and environmental benefits) would be used to rank the planned projects. The methodology was presented, but in reality, Vodokanal had already prioritised the investments according to its five-year plan and long-term investment plan. Given Volzhski’s aged water infrastructure, any improvement could result in significantly positive and tangible benefits. Therefore, most such projects were very probably largely consistent with the ranking according to the consultants’ methodology. Also, the water and wastewater tariffs were regulated by the authorities, therefore the financial benefits are determined without the recovery of capital cost (see “Company financials”). For Vodokanal, the issue was the availability and mode of financing rather than the prioritisation according to economic, financial and social benefits. The Bank probably overstated the achievement of PIP’s project screening at appraisal.

The consultants echoed Vodokanal’s own investment programme and picked up three investment components: (i) water main rehabilitation; (ii) rehabilitation of the chlorination unit; and (iii) rehabilitation of the wastewater treatment plant (“WWTP”) and sludge handling. The Project components (i) and (ii) had actually already been completed at the time of TC evaluation.
The time gap between the consultants’ report and Board approval, about a year, created a deviation from the implementation schedule and arrangements. Vodokanal commenced the rehabilitation of water main and chlorination unit according to their own schedule, using their own construction unit (for labour) and procuring materials and equipment according to their own practices without using EBRD’s procurement policies and rules (“PP&R”). The rehabilitation of the chlorination unit had been completed even a month before the Board approval of the Loan, while the appraisal Board document indicated the estimated completion for 2011 after going through EBRD’s PP&R. The water main has also already been completed. The Bank was unaware of the progress as Vodokanal did not particularly feel the need to advise the Bank that they had implemented their own investment plan using their own resources, even though they had been listed in the Project scope.

The WWTP rehabilitation was a long-standing aspiration of both the City and Vodokanal. It formed part of the municipal target programme – Project for Reconstruction of Domestic Wastewater Treatment Facilities (Stage III). Under this investment plan, an external financing source was sought. Therefore, it was not PIP that identified this component as a priority, but their own project Stage III.

Based on the foregoing, the OPER Team considers that PIP had little impact on the investment decision making of Vodokanal and the City.

5.3 Municipal impact

Transition impact on Volzhski at large is also derived from new standards introduced during due diligence exercises.

Historically, the City has enjoyed a good financial position compared with other municipalities in Russia. The large industries and relatively diversified economy contributed to a steady revenue stream, which has made current surplus constantly positive.

Before the Project, the City administration had mainly short-term borrowings apart from budgetary loans. The Loan was the first financial instrument they had come across in the international market. The guarantee under the Project was significant to the extent that it could change key financial ratios when the Loan is fully disbursed. Caution should be exercised regarding significant change of the indebtedness, if any, in the coming years, when the Loan disbursement has commenced.

It seems that the TC Operation helped the City administration to maintain an adequate financial control. The interaction with the public finance and accounting experts and the comprehensive analysis provided the City administration with objective views of their financial positions and suggestions for improvement in their financial management. The financial model helped the City administration see potential issues in the case of a change in conditions. The consultants assessed that the City exercised conservative financial management, which is consistent with the OPER Team’s view. The City administration stated that they could identify the risks and opportunities (in the larger financial markets) and that they are considering another investment, similar to the Project, for the municipal infrastructure.

The impact is positive thus assessed Satisfactory.

6. Company financials

A comprehensive analysis of Vodokanal’s financial position was conducted for appraisal in 2009. Therefore, this section only highlights issues emerging post-crisis: (i) the impact of reduced water
consumption; and (ii) the potential impact of the recently approved Law on Energy Savings (No. 261).

The Project set two major transition objectives at appraisal: tariff reforms and commercialisation. The Bank particularly underscored the elimination of cross subsidies between wastewater–water supply and household-industry tariffs, which, to the OPER Team, is not the core issue of the tariff reforms. The technical and environmental due diligence consultants carried out tariff analysis that, however, was not very critical but mainly described how the tariffs were set and approved.

Like other Russian municipal water tariffs, Volzhski’s water tariffs are too rigid and allow Vodokanal little room for commercialisation. They are formulated on a cost-basis, plus a profit within a certain allowed limit. Due to the absence of managerial accounting, Vodokanal is unable to calculate a unit production cost by cost centre (for example, by labour, by materials, by electricity for each of water supply and wastewater services). Therefore, Vodokanal uses the previous years’ aggregate sums in order to estimate its production costs for its annual tariff proposal.

Many flaws exist in the tariff estimation mechanism. First, capital expenditure is not included in the costs, meaning that Vodokanal is unable to finance new infrastructure from its recurrent revenue. Amortisation of large repair works can only be included in tariff proposals on the basis of a prior approval by the City administration. Vodokanal’s water infrastructure is already 60-75 per cent depreciated. The unavailability of a capital element in the tariffs will cause a problem in the future. The electricity prices that Vodokanal use for the cost estimate are not actual costs, but the planned and recommended prices at the federal level (that is, federal guide prices). In addition, there are caps imposed by the federal laws on tariff increase, particularly for households. At worst, Volzhski’s water tariffs are variable, determined based on the previous year’s water consumption. If the water consumption is reduced, the following year’s water tariffs will decrease accordingly (presuming that the production costs have also decreased accordingly). This tariff scheme, as a concept, would give an incentive to the users to use less water, thereby managing the demand side, that is consumption behaviours. It is probably aimed at curbing water consumption gradually in the long term, introducing technology in water production and modifying the users’ behaviours over time in order to conserve resources.

However, there is a fallacy of this mechanism in making the consumption as a function to applicable tariffs (not the other way round), thereby hitting Vodokanal with a “double-dip” reduction of revenues (first, by diminishing consumption and second, by reducing the tariff for every cubic metre of water sold). In short, it gives an excessive incentive to the consumers by penalising the supply side.

Given these constraints, in the past few years Volzhski’s water and waste water tariffs have not increased significantly in real terms. The following chart shows how, in real terms, the water supply and wastewater tariffs have increased from 2004 to 2009. There were significant increases in 2004, since which no major increase has taken place, particularly for the industry users. In real terms, the present industry tariffs are even 4 per cent lower than the tariffs in 2004.
The financial crisis drastically changed the consumption by industries as well as households. In 2009, water consumption in Volzhski was reduced by 5 per cent (12 per cent before the crisis level). It resulted in a decrease of the applicable tariff in 2010, which caused 15.8 per cent or (RUB 70 million) decrease of revenue in 2010. In the same period, the electricity price was hiked by 15 per cent as a result of power sector reforms. Again, consumption continues decreasing (not because of energy efficiency gains from technological improvements, but for simple cost-saving purposes), Vodokanal is concerned about the financial performance in 2011, applying tariffs based on the actual consumption in 2010.

The viability of wastewater services is more or less the same. Obviously, the current wastewater tariffs do not cover the economic costs of polluted water discharges and inadequate sludge handling, nor, more importantly, will they pay for the upcoming WWTP rehabilitation. How, then, can it finance the RUB 1.3 billion ESAP implementation up to 2014? In many ways, the current tariffs are unsustainable (see “Lessons learned”).

Another financial blow to Vodokanal has come from new legislation concerning conformity with international endeavours for energy efficiency. At appraisal, the Bank stated that the meters were installed for 12 per cent of users in 2008 and would increase to 55 per cent of users in 2018. The newly approved law in 2010 stipulated that water meters for every user, for the sake of energy savings, must be installed by 2012. This presumed that, if the users do not want voluntarily to install the meters, the municipal water company would be liable for installing all of them at the water company’s expense. Potentially this could be an unexpectedly large expenditure for Vodokanal. Vodokanal has 2,000 household users, of which 1,700 are in multi-storey buildings (3-
16 floors) and which would need individual meters under this legislation. Although, in the long-
term, metering of individual households would benefit the economy by curbing consumption, 
Vodokanal is fearful of the installation costs it will incur in the coming years. The current tariff 
system does not make such a large expenditure affordable for Vodokanal without the City’s 
financial support.

The updated company financials are assessed *Satisfactory, but tending toward Marginal* given 
potential setbacks mentioned above.

7. **Additionality**

The Bank’s additionality with regard to the TC Operation is *Verified in all respects*. The 
mobilisation from the MISP II Fund and the selection of due diligence subjects, which covered the 
critical aspects for the Project, justifies the TC Operation on both financial and design and 
functionality grounds.

The Project is one of the common examples in which the Bank is additional to the TCs but not fully 
so to the investment (see “Lessons learned”).

8. **Bank handling**

Bank handling of the TC Operation is assessed as *Good*. The TC Operation Team properly handled 
the TC Operation for three different consulting services, from TC inception, obtaining a funding 
commitment, recruiting the consultants, implementation monitoring to completion, swiftly moving 
from one milestone to another (although some slow-down occurred between TC completion and the 
Board approval of the Loan).

On the other hand, handling of the Investment appears less than satisfactory to date, particularly the 
relatively weak policy dialogue during the project preparation stage, which led to some loose-ends 
in project scoping, with one component being completed without the Bank’s financing and before 
the Board approval. The Loan agreement did reflect fully the financing shares for the Project 
components, which were presented in the appraisal Board document for approval.

During the implementation, communications with the first-time borrower Vodokanal have 
improved. Vodokanal appreciated good cooperation with the Operation Team. The procurement of 
the major component has been conducted in close coordination. The Bank has been providing 
Vodokanal with guidance on fulfilling the conditions precedent to the first disbursement, which 
include major a transition agenda such as the signing of a public service agreement, tariff reforms, 
and the 2008 IFRS-audited financial statements. Some of these will be due soon, at the end of 2010. 
The progress of a corporate development plan through Financial and Operational Performance 
Improvement Programme (FOPIP) also needs to be monitored closely as FOPIP could generate 
significant benefits to Vodokanal if formulated properly.

9. **Key issues and lessons learned**

9.1 Best-before date of the due diligence output

The Project concept was approved by the Bank in January 2007 and Vodokanal provided a mandate 
letter in September 2007. A few months later, the consulting services for technical and 
environmental due diligence were engaged and fielded to Volzhski. Also, the audit firm for the 
IFRS restatement was engaged at the same time. Progress was fast up to that point.
After a long assignment, the consultants for the technical and environmental due diligence submitted the final report in June 2008. The report included PIP, which recommended three components for the Project scope. In November 2008 the IFRS-based restatement of accounts was submitted to the Bank.

Somehow the Project processing slowed down in the Bank in the second half of 2008, due probably to the financial crisis. Structural review only took place in February 2009, followed by final review in July, one year from the submission of the technical and environmental due diligence final report submission.

The Operation Team had to add Vodokanal’s 2008 financial figures, which were not restated into IFRS since the audit firm only covered up to 2007. While the Board approved the Project in the same month as the final review, one of the PIP components, the modernisation of the chlorine unit, had already been completed using Vodokanal’s own resources and an SKB bank loan. According to the Board document, this modernisation was expected to be completed in November 2010.

Except for the WWTP component, it was likely that the PIP screened the projects that Vodokanal intended to implement soon, or was about to start due to the urgent need. While the Bank took one year to prepare for the Project approval, Vodokanal had executed their urgent projects at their own pace. In a project like this, which contains various components, when project processing takes more time than expected, it would be sensible to update the latest status with the borrower prior to Board approval.

Lesson learned:
The due diligence consultants’ findings and recommendations need to be expeditiously reflected in the Bank’s project document for approval, while they are still fresh. In this Project, the Bank took one year from receipt of the consultants’ final report to process the loan for approval. When the Project was approved, one of the Project components had already been completed using the borrower’s own resources, which the Bank was unaware of. Due diligence outcome often has a “best-before” date, which must be observed in order to formulate the project properly. The best value of the due diligence exercises is realised when their outcome is used in a timely manner.

9.2 Validity of credit analysis in the pre-crisis period

As mentioned earlier, the delivery of the Investment took place one year after the financial due diligence exercises, which were based on the previous year’s outcome, while the financial crisis spread and deepened over Russia.

Credit analysis during due diligence still embraced an upward trend and positive outlook. While the Bank made a little update in the appraisal Board document, it could not change the overall uptrend. There might be notable deviations from what was forecast in the financials of the City and Vodokanal and such deviations could appear in the coming years.

Sensitivity analysis with various assumptions was conducted in the consultancy services. However, the complexity of this crisis could go beyond the conventional “combined downside” cases as some macroeconomic indicators swing unfavourably in addition to the conventional investment specific parameters.
Lesson learned:
Close monitoring and updates on creditworthiness will be necessary when the credit analysis was conducted in the pre-crisis period. The financial crisis has very probably changed the financial status of the borrower and the guarantor. Therefore, the assumptions in credit analysis conducted before the crisis would not fully hold up at present time and their financial positions would need to be updated closely.

9.3 Due diligence TC as a mirror of the Bank’s commitment to the EBRD mandate issues

Due diligence for the first-time borrower could come across many different areas. In the project, tariff reforms were listed as the major transition agenda. However, this subject was taken care of by the technical and environmental consultants. The descriptions of the existing tariff system were adequate, but the report did not present the potential problems or endemic issues in the Russian municipal water tariffs, or specific recommendations for tariff reforms.

There has been a pressing need for tariff review and reforms. However, reflecting the due diligence report, the Bank’s tariff reform proposal to the City and Vodokanal appeared weak, and quite constrained by the federal authorities’ interventions. The appraisal document mentioned the indefinite-term cap set on water and wastewater tariffs referring to the “reform” in tariff legislation. Obviously the Bank refrained from going into the core problem of the municipal water tariff system in Russia and ended up with a non-specific and accommodating proposal for tariff reforms largely deferring to the higher authorities. This “going with the flow” approach would not yield the Bank’s value added despite what was emphasised in the additionality at appraisal.

Applying what is lacking in most municipal water companies is a managerial accounting concept. Introducing IFRS was worthy, but the greatest beneficiary of such a standard is external parties like banks and investors. Managerial accounting would definitely benefit the company itself by changing old-fashioned normative production management to modern market-based production practices. If equipped with a managerial accounting tool, the water company could bring more convincing tariff proposals to the municipal council. And this could be the first step for municipal water tariff reforms. FOPIP is expected to inspire Vodokanal to aim for that.

The transition potential in the investment in the municipal infrastructure would be limited if it was always constrained by federal rules and if the Bank opted not to bring a policy dialogue to the municipal authorities and beyond. Even though the Bank has piled up several hundred municipal deals, this way of formulating an investment would not be a break through for a major transition agenda, which the Bank has been pursuing in other countries of operations. The self-limiting transition agenda from appraisal would make the Bank’s financing easier and cheaper, which would not serve the mandate of the Bank vis-à-vis the taxpayers of the member countries as well as the public interest at large.

Lesson learned:
The Bank’s degree of commitment to the transition agenda is reflected in the design and scope of the due diligence expert services. In this Project, the important transition agenda was not treated as a core subject from the project inception, probably because of the highly regulated area in which the Bank would have felt itself already defeated in policy dialogue. The study of this subject at appraisal was handled by the consultants of different disciplines, which resulted in no specific recommendations for reforms. The Bank ended up with a broad and weak transition objective without a specific agenda. This approach obviously avoided a strong, concrete and meaningful policy dialogue at a higher level, which could have served not only the client but the sector at large, which could have been to the benefit of the municipal utility users.
9.4 Importance of policy dialogue during implementation in a project with weak additionality

Vodokanal is a well-established technically strong water utility. Water loss is as low as 10 per cent, much better than its Russian municipal peers. About 350 burst pipe cases have been reported annually, which is one of the lowest among the water utilities in Russia. It actively uses a leasing scheme for the latest technology equipment from western countries. The due diligence consultants described that Vodokanal is one of the top 10 water utilities in Russia. It would be difficult for the Bank to convince such a determined client, who only needs better lending conditions, to share and pursue the transition objectives of changing standards and practices.

However, at appraisal, the Bank’s involvement was justified based on (i) long maturity; (ii) local currency funding; and (iii) transition conditionality such as procurement, tariff setting, the public service agreement and the corporate development plan. The appraisal document stated that the Project will provide for improvement of vital communal services and will further contribute to the institutional strengthening of Vodokanal and the City in respect of procurement, billing, commercialisation and enhancement of creditworthiness.

From Vodokanal’s viewpoint, there was only one reason for applying for the Bank’s financing; long maturity, as its core bank offers financing for only five years at the longest. When the additionality is weak at appraisal, the project’s transition impact tends to be less than expected during implementation.

In procurement, though still at an early stage, it seems that Vodokanal’s unfamiliarity with multilateral development banks (“MDBs”) has resulted in some misunderstanding as to how the Project would proceed. Deviations from the appraisal Board document have occurred as Vodokanal implemented the Project components on its own.

Local currency financing should generally be favourable for Russian enterprises because it eliminates a currency mismatch between debt and revenues. However, it may not always be ideal when there is a mismatch between debt and a large contract. When a Project component is to be financed 100 per cent from the Loan, and if such equipment or plant is denominated in hard currency in the contract, a mismatch would occur unless the contract is based on a fixed-price basis without escalation. Otherwise, it would potentially force Vodokanal to bear the possible cost overrun (increase of the contract prices during the installation term). Vodokanal sets 36 months for a contract period. Risks in this respect are not negligible.

Fortunately, to date Vodokanal has been keen to cooperate and has made a positive gesture in fulfilling the agreed transition milestones. There would be a shared interest between the Bank and Vodokanal in bringing a policy dialogue to the City administration, especially for tariff reforms. The forthcoming FOPIP is expected to generate genuine benefits to Vodokanal and to enhance the tripartite dialogue. Policy dialogue for market framework change could be stronger if a well-managed client like Vodokanal joined the Bank’s aspiration for making transition.

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4 In 2006 it exceeded 550 cases due to the exceptional weather conditions in the winter time.
Lesson learned:
The Bank could turn around an investment with weak additionality, making it a project with positive transition impact by strengthening dialogue during project implementation. Gaining the client’s cooperation for transition objectives is a hard task when the Bank’s additionality is only financial. In this Project, some novel practices were introduced to the client during due diligence and were well accepted. Close communication during implementation encourages the client’s reform orientation and the quality of cooperation could increase transition potential.
### OPERATION PERFORMANCE RATINGS

**VOLZHSKI WATER PROJECT DUE DILIGENCE TECHNICAL COOPERATION**

**(RUSSIAN FEDERATION)**

<table>
<thead>
<tr>
<th>Performance Indicator</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OVERALL TRANSITION IMPACT (Analysis in Appendix 3):</strong> (Excellent, Good, Satisfactory, Marginal, Unsatisfactory, Negative)</td>
<td>Satisfactory</td>
</tr>
<tr>
<td><em>The TC Operation primarily aimed to benefit the Bank, while it has resulted in some positive transition impact on Vodokanal and the City administration. Transition impact on the first time borrower is mainly derived from introducing new standards, more specifically the IFRS exercises, modern financial management concepts, and PIP. For the City administration, through creditworthiness analysis, a set of modern debt management concepts have been introduced. Although PIP did not influence in the way that it was supposed to, Vodokanal and the City administration have capitalised well the financial knowledge and new standards so as to view their financial positions more objectively.</em></td>
<td></td>
</tr>
<tr>
<td><strong>ENVIRONMENTAL PERFORMANCE OF THE PROJECT AND SPONSOR:</strong> (Ratings: Excellent, Good, Satisfactory, Marginal, Unsatisfactory, Highly Unsatisfactory)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td><strong>EXTENT OF ENVIRONMENTAL CHANGE:</strong> (Ratings: Outstanding, Substantial, Some, None/Negative)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td><strong>ADDITIONALITY:</strong> (Ratings: Verified in all respects, Verified at large, Verified only in part, Not verified)</td>
<td>Verified in all respects</td>
</tr>
<tr>
<td><em>Mobilising the MISP II Fund and providing due diligence for the key areas necessary for the project preparation, the additionality of the Bank for the TC Operation is verified in all respects, financially and in terms of value added.</em></td>
<td></td>
</tr>
<tr>
<td><strong>PROJECT FINANCIAL PERFORMANCE:</strong> (Ratings: Excellent, Good, Satisfactory, Marginal, Unsatisfactory, Highly Unsatisfactory)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td><strong>COMPANY FINANCIAL PERFORMANCE:</strong> (Ratings: Excellent, Good, Satisfactory, Marginal, Unsatisfactory, Highly Unsatisfactory)</td>
<td>Satisfactory / Marginal</td>
</tr>
<tr>
<td><em>The crisis has made Vodokanal’s financial position more vulnerable. The reduced water consumption diminished tariffs, which created severer impact on Vodokanal’s revenue. The new legislation about water meter at an individual household would likely impose the installation costs on Vodokanal by 2012. However, the current tariff system is outdated and needs reforms toward market-based one before weakening the viability of Vodokanal.</em></td>
<td></td>
</tr>
<tr>
<td><strong>FULFILMENT OF PROJECT OBJECTIVES:</strong> (Ratings: Excellent, Good, Satisfactory, Marginal, Unsatisfactory, Highly Unsatisfactory)</td>
<td>Good</td>
</tr>
<tr>
<td><em>The TC Operation included three consulting services assignments, which were critical elements for the Bank’s due diligence. All assignments were completed in a year and their performance was more than satisfactory.</em></td>
<td></td>
</tr>
<tr>
<td><strong>BANK HANDLING:</strong> (Ratings: Excellent, Good, Satisfactory, Marginal, Unsatisfactory, Highly Unsatisfactory)</td>
<td>Good</td>
</tr>
<tr>
<td><em>Bank handling of the TC Operation is assessed Good. Quick move from the deal mandate issue to the TCCom, funding commitment followed by the consultant recruitment for three different contracts. A year long consulting services had no major variations and were completed as expeditiously and comprehensively as possible.</em></td>
<td></td>
</tr>
<tr>
<td><strong>BANK’s INVESTMENT PERFORMANCE:</strong> (Ratings: Excellent, Good, Satisfactory, Marginal, Unsatisfactory, Highly Unsatisfactory)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td><strong>OVERALL PERFORMANCE:</strong> (Ratings: Highly Successful, Successful, Partly Successful, Unsuccessful)</td>
<td>Successful</td>
</tr>
<tr>
<td><em>The TC Operation has resulted in benefits, which have not fully passed onto the Investment. An important lesson to the Bank has appeared: ‘Eat your soup while it is hot’.</em></td>
<td></td>
</tr>
</tbody>
</table>
## Transition Impact Analysis
(Volzhski Water Project Technical Cooperation)

<table>
<thead>
<tr>
<th>TI checklist categories</th>
<th>STEPS OF RATING TRANSITION IMPACT Ex Post</th>
<th>Short-term verified impact</th>
<th>Longer-Term transition impact potential</th>
<th>Risk to potential T1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STEP I: CHANGE BY THE PROJECT AT CORPORATE LEVEL</strong></td>
<td></td>
<td>Rating¹</td>
<td>Rating²</td>
<td>Rating³</td>
</tr>
<tr>
<td>3</td>
<td>Private ownership</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Skill transfers</td>
<td>Vodokanal uses the financial model to see the sensitivity of the financial covenant compliance, enhancing the financial management.</td>
<td>Good</td>
<td>Good</td>
</tr>
<tr>
<td>6</td>
<td>Demonstration effects</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>New standards for business conduct</td>
<td><em>IFRS</em>. While gritting teeth, Vodokanal is trying to be accustomed to the IFRS-based accounting. <em>PIP</em>. The consultants introduced Priority Investment Programme and the method to prioritise the projects. However, this does not seem to impact on Vodokanal’s decision making mechanism for the investments.</td>
<td>Satisfactory</td>
<td>Satisfactory</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Competition</td>
<td></td>
<td>Not Applicable</td>
</tr>
<tr>
<td>2</td>
<td>Market expansion</td>
<td></td>
<td>Not Applicable</td>
</tr>
<tr>
<td>3</td>
<td>Private ownership</td>
<td></td>
<td>Not Applicable</td>
</tr>
<tr>
<td>4</td>
<td>Frameworks for markets</td>
<td></td>
<td>Not Applicable</td>
</tr>
<tr>
<td>5</td>
<td>Skills transfers</td>
<td></td>
<td>Not Applicable</td>
</tr>
<tr>
<td>6</td>
<td>Demonstration effects</td>
<td></td>
<td>Not Applicable</td>
</tr>
<tr>
<td>7</td>
<td>New standards for business conduct</td>
<td>Creditworthiness analysis helped the City administration to strengthen its borrowing norms and practices. <em>Introducing IFRS into the Russian municipal enterprise is worthy, although the positive impact might emerge in the mid/long term and no immediate replication is expected.</em></td>
<td>Satisfactory</td>
</tr>
</tbody>
</table>

**Summary of verified, potential and risk ratings**

| | Satisfactory | Satisfactory | Low |

**Overall Transition Impact Rating:**

Satisfactory

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¹ This range is: Excellent/Good/Satisfactory/Marginal/Unsatisfactory/Negative.
² This range is: Excellent/Good/Satisfactory/Marginal/Unsatisfactory/Negative.
³ This range is: Low/Medium/High/Excessive.
⁴ This range is: Excellent/Good/Satisfactory/Marginal/Unsatisfactory/Negative.
Standard Completion Report for EM12-2007-10-04

Commitment Details
Commitment Number: EM12-2007-10-04
Project Title: Volzhski Water Environmental and Technical Due Diligence
Country: RUSSIAN FEDERATION
Sector: Municipal Services
Total Commitment Amount: EUR 189,900
Total Amount Disbursed: EUR 173,113
Date of Internal Approval: 11-SEP-2007
Date of Funding Approval: 22-OCT-2007
Related Investment(s) (EBRD Amount and DTM No.): Operation Name: Volzhski Water Project
Operation Status: Active
Operation EUR: 8,632,061
DTM Number: 37020
Related TC(s): ID: 26488 - Volzhski Water Environmental and Technical Due Diligence - EUR 189,900

Consultant
Contract Start Date: 28-OCT-2007
Original Contract End Date: 19-DEC-2007
Final Contract Expiry Date: 19-DEC-2007
Commitment Closure Date: 12-FEB-2009
Has the consultant's final report been received? Yes

Objectives & Tasks
Main rationale for the proposed TC project: EBRD (the "Bank") is considering providing a loan of RUB 360 mln. to Volzhski Water Utility (the "Company" or the "Vodokanal") to finance a capital expenditure programme in the municipal and wastewater sector (the "Project"). In order to determine the priority investments to be financed through the Bank's loan and appraise the Project, the Bank wishes to engage a Consultant to carry out an Environmental and Technical Due Diligence of the Company.

Why is the TC needed and why use TC funds? It is expected that the TC will provide for a comprehensive analysis of the potential Client, as well as advice on particular technical and environmental issues, which corresponds with the Bank's requirements and procedures for the Project's appraisal. The deliverables under this TC will be the basis for the Bank's decision to enter into the Loan Agreement with the Company.

Main components/tasks the consultant was asked to undertake: The overall objective of the assignment was to enable the Bank to assess the Project by: (i) preparing an appraisal of the present status of water and wastewater services, systems and facilities, as well as the financial and institutional capacity of the Company; so as to provide input for further detailed financial analysis; (ii) preparing a technical review of the Company; (iii) preparing an affordability analysis of various consumer groups and current social mechanisms; (iv) preparing an environmental analysis and Environmental Management Plan; (v) preparing an investment programme focusing on operational and cash flow benefits; (vi) preparing a Project Presentation Report for the Bank covering all the above tasks.

How well were tasks completed by the consultant? Good

Comment on the relevance of the objectives and how the tasks covered in the TOR contributed to achieving the objectives

Were there any changes to objectives, tasks, timing of implementation, or budget after TC Comm. approval? No

Describe and explain any changes

Assessment of Inputs

Page 1
Describe identified risks (internal and external) and mitigating measures taken

How do you rate the Bank's performance in terms of preparation and monitoring of the assignment?
Justify this rating. What would you change with regard to design and monitoring if you were to handle a similar assignment in the future?

Level of the local client's commitment during design and implementation
Justify your rating of the client's commitment. Comment on the client's involvement during TOR design, consultant selection and implementation
Quality and timeliness of consultant's deliverables
Consultant's organisation and execution of task
Consultant's overall compliance with the Terms of Reference
Would you recommend the consultant for other, similar assignments?
How do you rate the 'value for consultant money' of this assignment?
Overall rating of the consultant's performance
Justify this overall rating

Assessment of Outputs
What will be the impact of the Bank investment?
Comment on how technical co-operation will contribute to this impact

Has this assignment identified the need for additional TC assignments or the need for any other type of follow up by the Bank?

How was donor visibility ensured for this assignment?

Success Indicators

Expected Transition Impact

Comment

How do you categorise the assignment's overall outcome?

The risk of the Company's non-commitment is mitigated by the signed Pre-Financing Agreement, which indicates the willingness of both the Company and the City to take on the loan to finance the planned programme. Priority Investments Programme is also identified and subsequently approved by all the parties.

Excellent

The assignment was prepared quickly, but well. This ensured the timeliness and the high effectiveness of the TC. The Consultant proved to be very reliable and established a good contact with both, the Company and the Bank, so it was relatively easy to monitor this task.

N/A

The Client was the Bank, but the Company was very supportive and facilitated the work of the Consultant to a great extent.

Good

Excellent

Yes

Excellent

The Consultant is a well known engineering firm with extensive experience on the Russian market in general and on the EBRD's projects in particular. The Consultant also subcontracts best auditors and financial analysis for the environmental/financial parts of their assignments. As expected, the results of the assignment proved to be excellent.

The proceeds of the Volzhsky Water Loan (RUB 360 mln.) will be used to finance a capital-expenditure programme in the water and wastewater sector of the municipal services of the Volzhsky City. It is expected that the Project will create significant operational benefits for the Company and improve the environmental situation of the City. The proposed TC Project will enable the Bank to carry out a comprehensive analysis of the Client prior to entering into a Loan Agreement. The proposed TC Project enabled the Bank to carry out a comprehensive analysis of the Client prior to entering into a Loan Agreement. The assignment is finished.

Yes. There have been launched three TCs: "Consultant's Services on Project Management; Project Implementation Support, Engineering, Procurement, Design and Contracts Supervision" (funding of EUR 360,000 is allocated) and "Financial and Operational Performance Programmes" (funding of EUR 250,000 is allocated).

The reference to the donor fund is made whenever possible.

Priority Investments identified and subsequently approved by all the parties. Signed Loan Agreement, signed Service Agreement, achievement of substantial energy savings and reformed tariffs.

The Project will contribute significantly to transition impact expected from: (i) tariff reform and reduction of cross-subsidies between different categories of customers; (ii) greater cost recovery and stability of revenue at the level of the Company; (iii) enforcement of management accountability; (iv) familiarisation of the world's best implementation principles.

The Project has passed Concept Review and Structure Review and is expected to undergo Final Review in early April 2009. The Loan Agreement is expected to be signed later in 2009. The tariff reform, signing of the Service Agreement, etc. will be canvassed in the Loan Agreement.

Highly Successful
**Standard Completion Report for EM12-2007-10-04**

<table>
<thead>
<tr>
<th>Lessons Learned</th>
</tr>
</thead>
<tbody>
<tr>
<td>What were the lessons learned for assignment preparation and design?</td>
</tr>
<tr>
<td>What were the lessons learned for assignment implementation and monitoring?</td>
</tr>
</tbody>
</table>

The deliverables were comprehensive, extensive and reliable. They were submitted in an accurate and timely manner. The Consultant will be recommended for the similar assignments in the future.

Preparation should not necessarily take long. The quicker the preparation cycle is the more effective and applicable the results of the Assignment are. Keeping in close contact with all the parties involved ensures adequate deliverables.
### Standard Completion Report for EM12-2007-11-05

**Commitment Details**

- **Commitment Number**: EM12-2007-11-05
- **Project Title**: Russian Federation: IFRS Audit of Financial Statements of the Volzhskii Vodokanal
- **Country**: RUSSIAN FEDERATION
- **Sector**: Municipal Services
- **Total Commitment Amount**: EUR 48,000
- **Total Amount Disbursed**: EUR 48,000
- **Date of Internal Approval**: 12 SEP-2007
- **Date of Funding Approval**: 09-NOV-2007
- **Related Investment(s) (EBRD Amount and DTM No.)**: Operation Name: Volzhskii Water Project
  - Operation Status: Active
  - Operation EUR: 8,632,061
  - DTM Number: 37620
- **Related TC(s)**: ID: 38500 - Russian Federation: IFRS Audit of Financial Statements of the Volzhskii Vodokanal - EUR 48,000

**Consultant**
- **Contract Start Date**: 13-NOV-2007
- **Original Contract End Date**: 31-DEC-2007
- **Final Contract Expiry Date**: 31-DEC-2007
- **Commitment Closure Date**: 14-NOV-2008
- **Has the consultant's final report been received?**: Yes

**Objectives & Tasks**

- **Main rationale for the proposed TC project**: The EBRD (the "Bank") is considering providing a loan of RUB 360 mln. to Volzhskii Water Utility (the "Company" or the "Vodokanal") to finance a capital expenditure programme in the municipal water and wastewater sector (the "Project"). One of the pre-requisites of the potential Project is to confirm the creditworthiness of the Company, whose financial accounts should be audited and restated according to IFRS. The Company's ability to service the loan will be the basis for Project appraisal and approval by EBRD.

- **Why is the TC needed and why use TC funds?**: It is expected that the TC will not only help to thoroughly assess the potential Client, which will be the basis for the Bank's decision to enter into the Loan Agreement with the Company, but also the assignment will allow for the transfer of know-how and a better understanding of the IFRS principles.

- **Main components/tasks the consultant was asked to undertake**: The overall objective of the assignment is to assist the Bank in its financial due diligence of the Company by: (i) compiling financial statements of the Company in accordance with IFRS for the years ending 31 December 2005, December 2006 and the first half (1H) 2007; (ii) preparing a comprehensive set of notes upon which the Bank can conduct its creditworthiness assessment and update the Company's financial forecasts, and (iii) audit the Company's financial statements for 1H 2007.

- **How well were tasks completed by the consultant?**
  - **Comment on the relevance of the objectives and how the tasks covered in the ToR contributed to achieving the objectives**: Good
  - **In order to assess the creditworthiness of the Volzhskii Water Utility, the EBRD required a consultant to carry out a restatement of the Company's financial accounts for the years ending 31 December 2005, December 2006 and the first half (1H) 2007; preparing a comprehensive set of notes upon which the Bank can conduct its creditworthiness assessment and update the Company's financial forecasts. The objectives have been covered to the full satisfaction of the Bank.**

**Assessment of Inputs**

- **Were there any changes to objectives, tasks, timing of implementation, or budget after TC Com approval?**: No
- **Describe and explain any changes**: N/A
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Describe identified risks (internal and external) and mitigating measures taken

The risk of the Company's non-commitment is mitigated by the signed Pre-Financing Agreement, which indicates the willingness of both the Company, and the City to take on the loan to finance the planned investment programme.

How do you rate the Bank's performance in terms of preparation and monitoring of the assignment?

Excellent

Justify this rating. What would you change with regard to design and monitoring if you were to handle a similar assignment in the future?

The assignment was prepared quickly and well. This ensured the timeliness and the high effectiveness of the TC. Monitoring was relatively easy considering good cooperation from the Company's side.

Level of the local client's commitment during design and implementation

N/A

Justify your rating of the client's commitment. Comment on the client's involvement during TOR design, consultant selection and implementation

The Client was the Bank, but the Company was very supportive and facilitated the work of the Consultant to a great extent.

Quality and timeliness of consultant's deliveries

Excellent

Consultant's organisation and execution of task

Good

Consultant's overall compliance with the Terms of Reference

Excellent

Would you recommend the consultant for other, similar assignments?

Yes

How do you rate the value for consultant money of this assignment?

Good

Overall rating of the consultant's performance

Excellent

Justify this overall rating

The Consultant is a well known auditing firm with international expertise and is approved by the Bank. The Consultant is very well familiar with the Bank's requirements and procedures, which extremely facilitates the work. They sustain good quality results and provide well prepared deliverables.

### Assessment of Outputs

**What will be the Impact of the Bank Investment?**

The proceeds of the Volzhski Water Loan (RUB 380 Mn.) will be used to finance a capital expenditure programme in the water and wastewater sector of municipal services of the Volzhski City. It is expected that the Project will create significant operational benefits for the Company and improve the environmental situation in the Region. The assignment's deliverables will be used by the Bank to decide on whether to extend the Loan to the Company.

**Comment**

Has this assignment identified the need for additional TG assignments or the need for any other type of follow up by the Bank?

Yes, 3 Implementation TCOs have been launched: "Consultant's services on Project Management: Project Implementation Support, Engineering, Procurement, Design and Contracts Supervision" (EUR 360,000 is allocated) and "Financial and Operational Performance Programme" (funding of EUR 250,000 is allocated).

How was donor visibility ensured for this assignment?

The reference to the donor fund is made whenever possible.

**Success Indicators**

Completion of a financial review and IFRS audit and approval of the Project at the Final Review by the Bank.

**Expected Transition Impact**

The Project will contribute significantly to transition impact expected from: (i) tariff reform and reduction of cross-subsidies between different categories of customers; (ii) greater cost recovery and stability of revenue at the level of the Company; (iii) enforcement of management accountability; (iv) familiarisation with the world's best implementation principles.

**Comment**

The Project has passed Concept Review and Structured Review and expected to undergo Final Review in early April 2009. The Loan Agreement is expected to be signed later in 2009. The tariff reform, signing of the Service Agreement, etc. will be covenanted in the Loan Agreement.

**How do you categorise the assignment's overall outcome?**

Successful

**Justify this overall rating**

The Consultant has produced high quality work and will be recommended for the future assignments.

### Lessons Learned

**What were the lessons learned for assignment preparation and design?**

The quicker the preparation cycle is, the more effective and applicable the results of the Assignment are.

**What were the lessons learned for assignment implementation and monitoring?**

Keeping in close contact with all the parties involved ensures adequate deliverables.
Standard Completion Report for EM12-2007-11-06

Commitment Details
Commitment Number: EM12-2007-11-06
Project Title: Russian Federation: Credit Analysis of the City of Volzhski
Country: RUSSIAN FEDERATION
Sector: Municipal Services
Total Commitment Amount: EUR 48,000
Total Amount Disbursed: EUR 48,000
Date of Internal Approval: 12-SEP-2007
Date of Funding Approval: 09-NOV-2007
Related Investment(s) (EBRD Amount and DTM No.):
- Operation Name: Volzhski Water Project
  - Operation Status: Active
  - Operation EUR: 6,632,061
  - DTM Number: 37620

Related TC(s):
- ID: 38499 - Russian Federation: Credit Analysis of the City of Volzhski - EUR 48,000

Consultant:
- Consultant Name: 19-NOV-2007
- Original Contract End Date: 28-DEC-2007
- Final Contract Expiry Date: 28-DEC-2007
- Commitment Closure Date: 14-NOV-2008
- Has the consultant's final report been received?: Yes

Objectives & Tasks
Main rationale for the proposed TC project:
The EBRD (the "Bank") is considering providing a loan of RUB 360 mln. to Volzhski Water Utility (the "Company" or the "Vodoznan") to finance a capital expenditure programme in the municipal water and wastewater sector (the "Project"). In order to enter into the Loan Agreement the Bank requires a credit analysis of the City as the Guarantor of the Loan.

Why is the TC needed and why use TC funds?:
It is expected that the result of the assignment will be generating data on all key factors influencing credit position of the City, and develop financial forecasts over the loan repayment period.

Main components/tasks the consultant was asked to undertake:
The overall objective of the assignment was to carry out a credit analysis of the City of Volzhski for the years 2006 and for 9 months of the year 2007, (up to 30 September 2007), and therefore, to confirm the debt service capacity of the City to undertake the covenants outlined in the Deed of Guarantee. The Consultant provided: (i) analysis of the national and local context of the City; (ii) description and analysis of the City's financial operations; (iii) assessment of the creditworthiness of the City and make financial projections.

How well were tasks completed by the consultant?:
Excellent

Comment on the relevance of the objectives and how the tasks covered in the ToR contributed to achieving the objectives:
The Assignment's objective was to confirm the debt service capacity of the City to undertake the covenants outlined in the Deed of Guarantee for the proposed investment. The objectives were achieved and no problems were encountered.

Were there any changes to objectives, tasks, timing of implementation, or budget after ToR approval?:
No

Describe and explain any changes:
N/A

Assessment of inputs:
Describe identified risks (internal and external) and mitigating measures taken:
The risk of the Company's non-commitment is mitigated by the signed Pre-Financing Agreement, which indicates the willingness of both the Company, and the City to take on the loan to finance the planned investment programme.

How do you rate the Bank's performance in terms of preparation and monitoring of the assignment?:
Good

Justify this rating. What would you change with regard to design and monitoring if you were to handle a similar assignment in the future?:
The assignment was prepared quickly but well. This ensured the timeliness and the high effectiveness of the TC. The Consultant proved to be very reliable and established a good contact with both the Company and the Bank, so it was relatively easy to monitor this task.
# Standard Completion Report for EM12-2007-11-06

<table>
<thead>
<tr>
<th>Level of the local client's commitment during design and implementation</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Justify your rating of the client's commitment, Comment on the client's involvement during TOR design, consultant selection and implementation</td>
<td>The Client was the Bank, but the Company was very supportive and facilitated the work of the Consultant to a great extent.</td>
</tr>
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<td>Quality and timeliness of consultant's deliveries</td>
<td>Excellent</td>
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<td>Consultant's organisation and execution of task</td>
<td>Excellent</td>
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<tr>
<td>Consultant's overall compliance with the Terms of Reference</td>
<td>Excellent</td>
</tr>
<tr>
<td>Would you recommend the consultant for other, similar assignments?</td>
<td>Yes</td>
</tr>
<tr>
<td>How do you rate the 'value for consultant money' of this assignment?</td>
<td>Excellent</td>
</tr>
<tr>
<td>Overall rating of the consultant's performance</td>
<td>Excellent</td>
</tr>
<tr>
<td>Justify this overall rating</td>
<td>The Consultant is a reputable auditing firm, one of the so-called &quot;Big-Four&quot;, with a professional team providing reliable deliverables.</td>
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</table>

## Assessment of Outputs

<table>
<thead>
<tr>
<th>What will be the impact of the Bank investment? Comment on how technical co-operation will contribute to this impact</th>
<th>The proceeds of the Volzhsk Water Loan (RUB 360 mln.) will be used to finance a capital expenditure programme in the water and wastewater sector of the municipal services of the Volzhsk City. It is expected that the Project will create significant operational benefits for the Company and improve the environmental situation in the City. The proposed TC contributed to the Bank's ability to assess the debt service capacity of the future Guarantor of the Project. The deliverables obtained under the assignment will be the basis for the Bank's decision to extend the Loan.</th>
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<tbody>
<tr>
<td>Has this assignment identified the need for additional TC assignments or the need for any other type of follow up by the Bank?</td>
<td>Yes. It was decided that the &quot;Financial and Operational Performance Programme&quot; (funding of EUR 250,000 is allocated) is required. The TC was approved by TC Com in 2009.</td>
</tr>
<tr>
<td>How was donor visibility ensured for this assignment?</td>
<td>The deliverables of this Assignment are key to the Project preparation, so they will be relied upon throughout the duration of the investment operation.</td>
</tr>
</tbody>
</table>

## Success Indicators

<table>
<thead>
<tr>
<th>Expected Transition Impact</th>
<th>Signing the Loan Agreement between the EBRD and the City. The Project will contribute significantly to transition impact expected from: (i) tariff reform and reduction of cross-subsidies between different categories of customers; (ii) greater cost recovery and stability of revenue at the level of the Company; (iii) enforcement of management accountability; (iv) familiarisation with the world’s best practices.</th>
</tr>
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<tbody>
<tr>
<td>How do you characterise the assignment’s overall outcome?</td>
<td>Successful</td>
</tr>
<tr>
<td>Justify this overall rating</td>
<td>The Consultant engaged in this assignment is a reliable source of information and provides high quality deliverables.</td>
</tr>
</tbody>
</table>

## Lessons Learned

<table>
<thead>
<tr>
<th>What were the lessons learned for assignment preparation and design?</th>
<th>The quicker the preparation cycle is the more effective and applicable the results of the Assignment are.</th>
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<td>Keeping in close contact with all the parties involved ensures adequate deliverables.</td>
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