



**Tacis Regional 2000 Traceca Programme**

**Rehabilitation of Caucasian  
Highways  
Azerbaijan, Georgia and Armenia**

**General Progress Report No 2**

Second Progress Report (July – December 2003)  
(PRP / No 2 / 2003 / G)

January 10, 2004



This Project is  
funded by the  
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A technical  
Support Project  
By Louis  
Berger SA

## Report Cover Page

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## 1.0 PROJECT SYNOPSIS

Project Title	Rehabilitation of Caucasian Highways Azerbaijan Georgia and Armenia
Project Number	EUROPEAID/113179/C/SV/MULTI
Country	Azerbaijan, Armenia and Georgia

<p><b>Wider Project Objectives</b></p>	<p>The Wider Project Objectives are to support the Republics to catch up with their serious backlogs in road maintenance, and to cope with growing local, and international transport. These include the following:</p> <ul style="list-style-type: none"> <li>• The improvement and provision of a better level of service for the travelling public on route corridors;</li> <li>• To reduce costs in road transportation;</li> <li>• To arrest deterioration of pavements by timely intervention;</li> <li>• To reduce costs for road rehabilitation and maintenance;</li> <li>• To strengthen the national road construction and maintenance capabilities through transfer of technology.</li> </ul>
<p><b>Specific Project Objectives</b></p>	<p>The Specific Project Objectives are to provide consultancy services for three Beneficiaries. These all being the State Departments of Roads in their respective Countries namely Azerbaijan, Georgia and Armenia.</p> <p><b>Azerbaijan: Component 1</b></p> <p>In Azerbaijan there are four subcomponents of the Project:</p> <ol style="list-style-type: none"> <li>1.1) Review of Designs and Tender Documents;</li> <li>1.2) Supervision of Construction of the WB (IDA) financed road sections under the Azerbaijan Highway Project;</li> <li>1.3) Assistance to the joint Project Implementation Unit (PIU) for the World Bank and EBRD roads Projects;</li> <li>1.4) Technical supervision of the TACIS project: Construction of two bridges/ Gasan Su Chay and Shemkir.</li> </ol> <p>Duration estimated 24 months.</p> <p><b>Georgia: Component 2</b></p> <p>In Georgia the main objective is the developing of a Pre-Feasibility Study for modernization of the existing Poti –Tbilisi- Red Bridge road under the standard of the international motorway passing by larger inhabited areas.</p> <p>Determining the deadline for road carrying capacity, based on the dynamics of traffic volume growth at sections of the existing road, and modernization periods, technical and economic study and comparison of the modernization alternative with the alternative of construction of international motorway (to a SNiP Category I). Also</p>

	<p>an exchange of technical expertise. Duration estimated 10 months, in conjunction with the project in Armenia.</p> <p><b>Armenia: Component 3</b></p> <p>The project in Armenia covers the investigations, designs, preparation of contract drawings, cost estimates and Tender Documents for 3 tunnels on the road from Vanadzor to the Georgian Border. Also an exchange of technical expertise. Duration estimated 10 months, in conjunction with the project in Georgia.</p>
<b>Planned Outputs</b>	<p><b>Azerbaijan: Component 1</b></p> <p>1.1) Assistance to the PIU such that they become an experienced unit and fully conversant with the procedures of all the International Funding Institutions (IFI); 1.2) Supervision of six Contracts such that they are all finished in accordance with the International Standards and within the programmed time and in accordance with the budget.</p> <p><b>Georgia: Component 2</b></p> <p>The production of a Pre-Feasibility Study for the road improvements to the Poti to Red Bridge Road.</p> <p><b>Armenia: Component 3</b></p> <p>The production of a complete set of Tender Documents for the 3 tunnels.</p>



## Project Activities

The Project is set up in the form of separate components all of which form the main basis of the proposed project activities. These are enumerated in the table below.

<b>Component</b>	<b>Location</b>	<b>Services</b>
<b>Component 1</b>	<b>Azerbaijan</b>	Design Reviews, Construction Supervision and Assistance to the Project Implementation Unit in Azerbaijan.
Sub-component 1.1		Review of the Design and Contract Documents.
Sub-component 1.2		Construction Supervision on Lots 1 (CW/2002/1) and 1 to 4 (CW/2003/1 to 4) of Ganja to Gazakh Road.
Sub-component 1.3		Technical assistance to the PIU.
Sub-component 1.4		Technical supervision of the TACIS project "Reconstruction of two bridges Gasan Su Chay and Shemkir".
<b>Component 2</b>	<b>Georgia</b>	Pre-Feasibility study of modernisation of Poti-Tbilisi-Red Bridge Road in Georgia.
<b>Component 3</b>	<b>Armenia</b>	Design and Preparation of Tender Documents for three Tunnels on the road from Vanadzor to the Georgian Border in Armenia.
<b>Project Starting Date</b>		Contract signed on 25 <sup>th</sup> November 2002.
<b>Project Duration</b>		24 months.

## **2. SUMMARY OF PROJECT PROGRESS FROM THE START**

The Team Leader arrived in Baku on 19<sup>th</sup> January 2003 accompanied by the Project Director. The Project Team Leader has resigned from the project and LBSA Project Coordinator has replaced him from June 10 up to mid August 2003. The new Project Team Leader has been taking over activities since 14<sup>th</sup> August 2003.

### **2.1 Component 1: Design Reviews, Construction Supervision and Assistance to the Project Implementation Unit (PIU) IN Azerbaijan**

#### **Sub-component 1.1 Reviews of the Design and Contract Documents**

By the time of the start of consulting services, 2 out of 6 Contracts for Civil Works have already been tendered and contracts awarded. Thus, consultant had no possibility to review Tender Documents before Bids process. Reviews of Contract Documents have been taking place during the execution of the two Contracts (Ganja-Shemkir road section and the two bridges).

Designs and Tender Documents for Lots 1 – 4 of Shemkir – Gazakh Road Sections (4 ICB Contracts) requested from the PIU for reviews have been reviewed. Report on review of Tender Documents has been produced in August 2003 and additional recommendations have been submitted to PIU on 18 August 2003 (please refer to **Annex 1** of this Report).

Status of the sub-component: works are completed.

#### **Sub-component 1.2 Construction Supervision of Ganja to Gazakh Road**

Civil Works Contract for Ganja-Shemkir Road Section is ongoing but not as anticipated as serious problems with the original design survey data were found.

KOCKS Consultant's Managing Director and Transportation Engineer has visited the site in August 26, 2003 and reported on September 8, 2003 confirming the problematic issue with the longitudinal profile.

Redesigned longitudinal profile and cross sections for the total length (~ 21 km) have been carried out jointly and agreed by Consultants and Contractor.

Shemkir to Gazakh road sections are on Tenders Evaluation stage.

#### **Sub-component 1.3 Assistance to the PIU**

Consultant (LBSA) has been providing day-to-day assistance to the PIU, including equipping the PIU, providing salaries, providing a training session on implementation of internationally funded projects.

#### **Sub-component 1.4 Technical supervision of the TACIS project "Reconstruction of two bridges Gasan Su Chay and Shemkir"**

Design reviews for two bridges (re-designed by the contractor) are finalized. On 24 July 2003, permission was granted by GOSSTROY for construction to begin on the 2 bridges provided that existing piles on Gasan Su Chay Bridge shall be checked. Revised Construction Performance Date approved by the EC is by March 30, 2004.

Status of the sub-component: works are ongoing.

### **2.2 Component 2: Pre-Feasibility Study of Modernisation of Poti- Tbilisi-Red Bridge Road in Georgia**

LBSA Highway Engineer has arrived to Tbilisi on June 17, 2003. Inception and progress reports were produced in 15<sup>th</sup> August and 15<sup>th</sup> October 2003 respectively. Works are ongoing.

### **2.3 Component 3: Design and Preparation of Tender Documents for Three Tunnels on the Road From Vanadzor to the Georgian Border in Armenia**

Works started in May 2003. Four reports were produced, three technical reports: Engineering-Geological Conclusion, Survey of Tunnels and Site Inspection & Rehabilitation Works Proposal in addition to the inception report. Works are ongoing.

### 3. SUMMARY OF PROJECT PLANNING FOR THE REMAINDER OF THE PROJECT

Since the practical day-to-day work on the project has started with the Team Leader's arrival in Baku on 19<sup>th</sup> January 2003, LBSA proposes to define January 15 of 2003 as the project's start date and *January 15, 2005* as a project's completion date (Contract Duration is 24 months).

#### **3.1 Project Planning for Component 1: Design Reviews, Construction Supervision and Assistance to the Project Implementation Unit (PIU) in Azerbaijan**

##### **Sub-component 1.1 Reviews of the Design and Contract Documents**

Design reviews for two bridges are accomplished.

Designs for Ganja to Shemkir road section have been improved due to discrepancies in survey data. Consultants have undertaken topographical surveys jointly with Contractor on the total length (~ 21 km). Designs are accomplished.

Consultants reviewed the Tender Documents for Shemkir to Gazakh Road Section. Tenders are on the stage of Bids Evaluation and Works Contracts are expected to be awarded in *January-February 2004*. Consultants *will follow timing schedule* as described in **Table 5.1** of this Report.

##### **Sub-component 1.2 Construction Supervision of Ganja to Gazakh Road**

Civil Works Contract for Ganja-Shemkir Road Section is behind the schedule and completion date most likely will be affected by Design (survey) discrepancies have been found. Despite of delays, Civil Works for lot 1 are expected to be completed in 2004.

Completion of Civil Works for Shemkir to Gazakh Road is obviously going to be beyond LBSA project completion date. Impacts on delay are detailed in **section 5** of this Report.

##### **Sub-component 1.3 Assistance to the PIU**

Consultants have been providing day-to-day assistance to the PIU, including equipping the PIU, providing salaries, providing a training session on implementation of internationally funded projects. Assistance to PIU carried out by Consultants is detailed in **Section 4** of this Report.

*Consultants (LBSA) will continue assistance as required by the ToR until the Project Completion Date.*

Progress on Sub-component 1.3 is detailed in **section 4** of this Report.

##### **Sub-component 1.4 Technical supervision of the TACIS project "Reconstruction of two bridges Gasan Su Chay and Shemkir"**

Revised Construction Performance Date approved by the EC is by March 30, 2004.

The Consultants did not approve contractor Revised Program of 12 December 2003.

*Consultants will continue Works supervision until the Completion Date.*

#### **3.2 Planning for Component 2: Pre-Feasibility Study of Modernisation of Poti- Tbilisi-Red Bridge Road in Georgia**

LBSA Highway Engineer has arrived to Tbilisi on June 17, 2003.

Inception and progress reports were produced in August and October 2003 respectively.

Draft final report was due in *December 2003* postponed to *19 February 2004* and final report in *19 April 2004* (please refer to **Annex7** of this Report, important correspondences, letter P78 of November 12,2003).

#### **3.3 Planning for Component 3: Design and Preparation of Tender Documents for Three Tunnels on the Road From Vanadzor to the Georgian Border in Armenia**

Works started in May 2003. Draft final report is due in *January 2004*. Four reports have been produced so far. Three technical reports: Engineering-Geological Conclusion, Survey of Tunnels and Site Inspection & Rehabilitation Works Proposal, in addition to the inception report, **Annex 4**. The RSD of Armenia has approved the inception report.



## 4. PROJECT PROGRESS IN REPORTING PERIOD

EU's Task Manager, Mr. Dalamangas has visited the site in October 15 accompanied by Mr. Rössig and attended meeting in October 16 in TRACECA office, Baku with Azerkorpu (2 bridges Contractor). This helped to review progress on the TACIS project "Reconstruction of two bridges Gasan Su Chay and Shemkir".

LBSA Project Director, Mr. Signor in November 15-24, accompanied by the TL, has visited the project (3 components) in order to perform project's progress review. He has attended important meetings at the MoT and Traceca offices. Mr. Signor has participated to the meeting in TACIS Monitoring office, Tbilisi. This helped to receive monitor's valuable recommendations of project progress and especially on Environmental issue for component 2, Georgia.

The WB mission has visited Baku in November 5-11 directed by Mr. Talvitie accompanied by Messrs.Tharakan, Mr. Nooter and Mr. Mamedov. This helped to review progress on WB financed projects, Azerbaijan and to update the PP as agreed at negotiations with PIU/Government (please refer to **Annex 6** of this Report).

The Team Leader has performed project management mission to Ganja - Gazakh on 3<sup>rd</sup>, 4<sup>th</sup> of September 2003, 15 October and 13 November 2003. During the mission project's progress for Ganja-Shemkir and the 2 bridges Contract has been reviewed. Mission has helped to evaluate supervision tasks.

The Pre-Bid meeting for Contracts (CW 2003/1 to 4) was held on September 16, 2003 to clarify Bidding Documents and to answer to Bidders questions. Bid opening was on October 16, 2003 (Please see Minutes of Bid opening in **Annex 2**).

Meetings with Mr. Graille were held on September 17 and 29, 2003 to discuss progress on component 1 Azerbaijan as well as the most recent matters on Bridges Contract.

The Team Leader has attended meetings with Mr. Gotsiridze in October 8 and November 19, 2003 in Tbilisi TACIS Monitoring Office. Mr. Gotsiridze has arrived to Baku for project reviews and progress monitoring process on October 30. As results, important issues were discussed to improve project reporting and progress reviews. It was decided to include separate cover page on each component.

Meeting with Mr. Alakbarov, TACIS National Coordinating Unit for the EU was held on December 1, 2003. This facilitated to discuss progress on Component 1, Azerbaijan and to receive administrative help from TACIS support office.

### 4.1 Project Achievements in Comparison with Planned Results

#### 4.1.1 Progress on component 1

##### **Progress on Sub-component 1.1 Reviews of the Design and Contract Documents**

Design reviews for two bridges (re-designed by the contractor) are finalized. On Gasan Su Chay Bridge, upon excavation a number of problems were discovered with the existing piles installed 15 years ago. Consultants Expatriate Bridge Expert has performed in the 4<sup>th</sup> week of September a mission to review the Contractor proposal (installing two new 1.2 m diameter bored piles at each intermediate support to take the bridge loads) and reported on September 2003. Report is included in (**Annex 3**). Impacts are detailed in comments on constrains and assumptions of the **Form 2 Output Performance Report**.

Designs for Ganja to Shemkir road section have been improved after resolving discrepancies in survey data.

Redesigned longitudinal profile and cross sections on the total length has been carried out jointly with the Consultants and Contractor. On the first 5 km in August, from km 5

to12+955 on 25 September, from km 12+955-15+000 in 22 October and from km 15+000 to the end of the project on 06 November 2003.

Designs are accomplished.

KOCKS has reported on September 8, 2003 confirming the problematic issue with the longitudinal profile. The MoT after consultation with KOCKS has requested the Consultants on September 23, 2003 to instruct the Contractor to carry out Works based upon the revised vertical alignment.

Consultants reviewed the Tender Documents for Lots 1 to 4 of Shemkir to Gazakh Road Sections and produced "Design Review and Review of Tender Documents" and "Pavement Design Evaluation" Reports in August 2003. Tenders are on stage of Bids Evaluation.

LBSA is contractually not responsible for re-designing of road sections, but for the project's progress LBSA expressed its readiness to help to Client to overcome of arisen situation. LBSA expects that "RoadTransService" would provide its design engineer to take part in design corrections and recommendation mentioned in Consultants Report entitled "Design Review and Review of Tender Documents" for Shemkir to Gazakh Road Section.

**Progress on Sub-component 1.2 Construction Supervision of Ganja to Gazakh Road Civil Works Contract for Ganja-Shemkir Road Section** are ongoing. However, Design (survey) discrepancies have been found and appropriate measures were being taken as described above. Design discrepancies may eventually affect the civil works completion date. The project data is briefly presented in the **Table 4.1 Civil Works Progress Data**.

**Table 4.1 Civil Works Progress Data**

<b>Works Contract:(CW 2002-1)</b>	
Works Tender Opened	14 <sup>th</sup> May 2002
Contract Awarded Article 33.2	30 <sup>th</sup> December 2002 by IDA
Letter of Acceptance Issued 33.1	24 <sup>th</sup> March 2003
Contract Agreement Signed Article 33.3	April 9, 2003
Tender Amount	28,749,462,180.50 AZM
Contract Amount Article 15.3	29,903,403,179.00 AZM
Contract Start Date	21 <sup>st</sup> April 2003
Original Contract Completion Date	21 <sup>st</sup> July 2004
Extended Completion Date	21 <sup>st</sup> October 2004
Works Programme received	18 <sup>th</sup> April 2003
Last revision of Works programme	30 <sup>th</sup> July 2003
Value of Works to date	6,172,500,914.00 AZM
Variations	Extension 3 months with no additional cost
Advance Payment Received	5,980,680,936.00 AZM
Repayments made	0%
Delays	3 months
Claims	Nil to Date
Time elapsed to date	255 days
Time remaining to date	295 days

## **Contracts CW 2003 -1 to CW 2003 - 4 Rehabilitation and upgrading of Shemkir – Gazakh Road sections**

Specific Procurement Notice (SPN) has been published on dgMarket on August 29, 2003 and advertised in the newspaper of national circulation on 02 September 2003.

The PIU and the WB have prepared Procurement Plan entitled "Procurement Plan as agreed at negotiations" which indicates the date of August 30, 2003 as the deadline of Bid submission.

The Consultants with PIU have prepared a Tendering Schedule approved by the WB on September 18, 2003. The tendering schedule dates would be estimated as shown in **Table 5.1 Tendering Schedule**.

### **Progress on Sub-component 1.3 Assistance to the PIU**

Assistance to PIU during reporting period was focused on:

#### **1.3.1 Procurement Plan**

The PIU has provided Procurement Plan of WB and EU projects requested by Consultants in order to follow up with further assistance. The Procurement Plan (as agreed at negotiations is updated after discussion with WB mission and attached in the **Annex 6** of this Report.

#### **1.3.2 Example of Contractor Quality Management System**

Consultants has provided to PIU an example of Contractor Quality Assurance Plan (QAP) which contains the following:

Contractor Organization, Management responsibility, Documentation of the Quality System, Subcontracted Works, Safety and Signing during road works, Quality Assurance for final Acceptance, Test and records.

#### **1.3.3 Laboratory Equipment**

Consultants have assisted on preparing detailed laboratory equipment for PIU fix and mobile laboratories.

#### **1.3.4 HDM International Shopping**

Consultants have assisted and provided PIU the appropriate WB Invitation To Quote Document for International Shopping (IS) regarding the Contract: Supply to PIU Office Equipment and Software Package for HDM and Financial Management System (FMS) Programs.

#### **1.3.5 Tendering and Evaluation of Tender Documents Shemkir to Gazakh**

Consultants have participated to the Pre-Bid and Bid opening meetings and assisted PIU during Bids evaluation on the 4 ICB Contracts (Shemkir to Gazakh).

In addition to above, Consultants have been providing day-to-day assistance to the PIU Staff (Highway Engineer, Financial Specialist; Procurement Specialist and Translator) including equipping the PIU and providing salaries.

### **Progress on Sub-component 1.4 Technical supervision of the TACIS project "Reconstruction of two bridges Gasan Su Chay and Shemkir"**

The revised Contractor's work program has been submitted on 31 October 2003 to construction supervision Consultant for Shemkir Bridge only. He has been requested to submit Works Program for Gasan Su Bridge. He has submitted a Revised Program on 12<sup>th</sup> December 2003, which was not approved by the Consultants. The Contractor has also submitted revised Performance and Advance Payment Bank Guarantees.

On 24 July 2003 the Azerbaijan State Construction and Architecture Committee “GOSSTROY” granted permission for construction to begin on the two Bridges. The EC has approved a revised Performance Date by March 30, 2004.

The project data is presented in the **Table 4.2 Project Data** below:

**Table 4.2 Project Data**

<b>Works Contract EUROPEAID/112944/CW/AZ</b>	
Works Tender Opened	
Contract Awarded	27 <sup>th</sup> December 2002
Contract Agreement Signed	27 <sup>th</sup> December 2002
Tender Amount	€1,424,017.80
Contract Amount	€1,424,017.80
Contract Start Date	10 <sup>th</sup> March 2003
Original Contract Completion Date	4 <sup>th</sup> November 2003
Extended Completion Date	30 <sup>th</sup> March 2004
Works Programme received	31 <sup>th</sup> October, 2003
Revised Works Program	12 <sup>th</sup> December 2003
Works complete to date	34 %
Value of Works to date	€432,912.21
Value IPC issued to date	€384,062.14
Variations revised bridge design at Contractors cost	Nil
Advance Payment Received	€142,401.78
Repayments made	0%
Delays	150 days
Claims	Extension of Performance Date by March 30, 2004 with no additional cost
Time elapsed to date	296days
Time remaining	90 days

#### **4.1.2 Progress on Component 2: Pre-Feasibility Study of Modernisation of Poti-Tbilisi-Red Bridge Road in Georgia**

Inception and Progress Reports were produced in August 15 and October 15, 2003 respectively.

The progress on component 2 in reporting period is as follow:

1. Surveys
  - 1.1 Field reconnaissance of existing road;
  - 1.2 Traffic counts;
  - 1.3 Original Destination (O-D) survey, analysis and storing;
  - 1.4 Analysis of traffic counts results;
  - 1.5 Results analysis for 9 complementary points of traffic counts data for 2003 provided by SRD, Georgia;
  - 1.6 Calculation the Level of Service (LOS) on each road section (the project is divided in 14 sections) by applying the highway Capacity Software developed by McTrans (HCS 2000);

- 1.7 Analysis of road accident database provided by the Police Department of Georgia;
- 1.8 Calculation the road carrying capacity based on the dynamic of traffic growth
2. Specifications for the designed international motorway
  - 2.1 Collection of the main characteristics of the existing road (geometry, pavement, structures, roughness and etc.);
  - 2.2 Selection of alternatives on a scale of 1:50000 and of some alternatives in mountainous areas on a scale of 1:25000;
  - 2.3 Choice alternatives to be carried out and updating them after field reconnaissance and examination of satellite photographs;
  - 2.4 Analyze local roads and interchanges;
  - 2.5 Preparing layouts of horizontal alignment (TEM Standard), 2 or 3 alternatives for each section with a scale of 1:50000 using AutoCAD;
  - 2.6 Preparing layouts of interchanges, local roads and facilities as parking using AutoCAD and according to TEM Standards.
3. Environmental Assessment

Consultants have identified nature of environment problems with landslides, subsidence and proximity of residential areas along the route and environmental constraints and conducted meetings with Biodiversity and protection of Mineral Resources and Mining departments. Records of meetings are included in the **Annex 8** of this Report. In addition, Progress on environmental issues performed by Consultants during reporting period is as follow:

  - 3.1 General environmental analysis of the construction and operations stages in terms of expected impacts;
  - 3.2 General data collection and analysis of the existing condition of the route;
  - 3.3 Consultations with the Ministry of Environment;
  - 3.4 Identification of the main impact categories, sources and receptors;
  - 3.5 Prognosis for the qualitative and quantitative changes of the environment;
  - 3.6 General assessment of the environmental and social risks (partially);
  - 3.7 Public awareness and public consultations (partially);
  - 3.8 Overview of the EU and local legislations.
4. Economic Analysis
  - 4.1 Data Collection;
  - 4.2 Calculation and determination of traffic forecast till 2030 (please refer to **Annex 9** of this Report)
5. Economic Costs
- 6 Cost estimates

Calculation of the cost estimation for each alignment section by section for:  
Preparatory works; Removal of existing structures; Land acquisition; Earthworks; Road pavement; Box and pipe culverts; Bridges and retaining walls; Tunnels, overpasses junctions and interchanges; Local roads; Road marking and etc.

#### **4.1.3 Component 3: Design and Preparation of Tender Documents for Three Tunnels on the Road from Vanadzor to the Georgian Border in Armenia**

Works started in May 2003. Four reports have been produced. Three Technical Reports: Engineering-Geological Conclusion, Survey of Tunnels and Site Inspection & Rehabilitation Works in addition to the Inception Report included in the **Annex 4** of this Report.

The activities carried out during site inspection summarize the present condition of each of the three tunnels, and examine a range of possible rehabilitation options, together with recommendations for short term, and long term action.

The inspection of each tunnel consisted of a detailed walk-through visual examination. None of the tunnels has artificial light supplied, so light for the inspection had to be provided by hand held torches. No means of access was available to allow a close inspection of the crown, and no integrity tests were carried out on the concrete lining. The **Table 1, Annex 4** inception report, Armenia summarizes the visual findings on the 3 tunnels.

Project progress and resources in reporting period for components 1, 2 and 3 are presented in the **Forms 2.2** and **2.3**, respectively.

Important Correspondences during reporting period are attached in **Annex 7** to this Report.

#### **4.2 Deviation from Original Planning and Reasons**

Deviations from original planning are occurring in design reviews, construction supervision of Ganja – Gazakh road rehabilitation, and Construction of two bridges. Reasons for these deviations are explained in the **section 4.1.1** of this Report.

Deviation on Performance Date on 2 bridges Contract has occurred due to Design review and GOSTROY approval.

Components in Armenia and Georgia have started in May. The delay, in comparison with originally planned start (January, as per original schedule stated in LBSA proposal – the first month of the project), has occurred due to better convenience for field investigations and studies in mountainous conditions.

Deviations, reasons for deviations and comments are presented in **Form 2.4 Output Performance Report**.

#### **4.3 Specific Action Needed from the Local Authorities – Including the Coordinating Unit Concerned – and/or the European Commission**

Specific actions from the local authorities, Regional TRACECA Coordinating unit and EU are being provided to overcome of problems arisen during the project implementation. However, the project will need the following actions from Project partners in the nearest time:

##### **Component 1: Azerbaijan**

Supervision Consultant hopes that the Client would consider LBSA recommendation established in “Design Review and Review of Tender Documents” and “Pavement Design Evaluation” Reports dated August 2003 regarding the review of Tender Documents for Shemkir to Gazakh Road section, In addition to recommendations (please refer to **Annex 1** of this Report).

Additional cost on Gasan Su Bridge needs to be approved by the EC.

##### **Component 2: Georgia**

Consultants expect that Project partner and EU provide their comments on the recommendations of consultant for performing studies for two alternative options: motorway on a new alignment and upgrading of the existing road up to motorway standards by choosing alternatives to avoid inhabitants areas.

##### **Component 3: Armenia**

The Table 5.2 of section 5 Preparation of Detailed Design on Component 3 shows the Norms to be applied on the design. Consultants expect that the Client would provide comments on the proposed Norms.

It is noted that in Tunnel 2, the radius of horizontal curve is kept as the existing one in order to do not have additional cost if it follows the required Standard.

## 5. PROJECT PLANNING FOR THE NEXT REPORTING PERIOD.

Next reporting period is January – March 2004 (the General Quarterly Report No 2). This section of the report is presenting LBSA's plans for the next reporting period.

### 5.1 Important observations for the project success

#### Component 1: Design Reviews, Construction Supervision and Assistance to the Project Implementation Unit (PIU) in Azerbaijan

##### Sub-component 1.1 Reviews of the Design and Contract Documents

Designs and Tender Documents for Shemkir-Gazakh Road section have been reviewed.

For the next reporting period, Consultant is planning to follow the *Tendering and Evaluation Timing* as provided in **Table 5.1** of this Report particularly the following topics:

- 5.1.1 Invitation of the lowest evaluated Bidder;
- 5.1.2 Contract Finalisation Meetings with the successful Bidder (s);
- 5.1.3 Contract (s) signing;
- 5.1.4 Notifying the unsuccessful Bidders.

**Table 5.1 Tendering Schedule**

Step	Action	Estimated Date Plan	Actual Date
1	PIU sells the Tender Documents to the prospective Bidders	From September 2, 2003	September 2, 2003
2	Pre-Bid Meeting	September 16, 2003	September 16, 2003
3	Deadline for submission of Bids	October 16, 2003	October 16, 2003
4	PIU carries out Bid opening	October 16, 2003	October 16, 2003
5	PIU submits to the Bank the Minutes of the Bid opening	October 16, 2003	October 16, 2003
6	PIU carries out the evaluation of the Bids and submits to the Bank the Evaluation Report	December 9, 2003	December 9, 2003
7	Banks reviews the Evaluation Report and sends comments/no objection to PIU	December 20, 2003	December 25, 2003
8	Government/PIU invites the lowest evaluated Bidder to sign the Contract (Clause 33.1 of Instructions to Bidder)	January 02, 2004	December 27, 2003
9	Government/PIU signs the Contract (Clause 33.3 of Instructions to Bidders)	January 30, 2004	
10	The successful Bidder signs the Contract (Clause 33.3 of Instructions to Bidders)	February 20, 2004	
11	Government/PIU sends to the Bank conformed copy of the signed Contract	March 04, 2004	
12	Government/PIU notifies the other Bidders that their Bids have been unsuccessful (Clause 33.4 of Instructions to Bidders)	When successful Bidder furnishes the PS	

Designs reviews of two bridges Contract (Gasau Su Chay and Shemkir) are completed.

### **Sub-component 1.2 Construction Supervision of Ganja to Gazakh Road**

Civil Works Contract for Ganja-Shemkir Road Section is behind the schedule and completion date most likely will be affected by Design (survey) discrepancies have been found. Despite of delays, Civil Works for lot 1 are expected to be completed in 2004.

LBSA has revised the original proposal concerning local Staff for component 1.2 (Construction Supervision of Ganja - Gazakh Road) and assessed the impact of delay of the 4 ICB Contracts (Shemkir - Gazakh) on required staff resources.

Consultant has submitted to the Contracting Authority two scenarios for the Consultant extension budget.

### **Sub-component 1.3 Assistance to the PIU**

Consultant (LBSA) has been providing day-to-day assistance to the PIU, including equipping the PIU, providing salaries, providing a training session on implementation of internationally funded projects. *LBSA will continue assistance as required by the ToR until the project completion date.*

Consultant intends to help PIU in development of the EU financed project as well, as part of the TOR requirements.

### **Sub-component 1.4 Technical supervision of the TACIS project “Reconstruction of two bridges Gasan Su Chay and Shemkir”**

The revised Contractor's work program has been submitted on 30 October 2003 to construction supervision Consultant on Shemkir Bridge only. The Contractor on 12<sup>th</sup> December 2003 has provided a Revised Works Program, which has not been approved by the Consultant. He has been requested to submit a comprehensive Program.

He has been requested to provide revised Works Insurance taking into consideration the revised Performance Date and to submit Works Program for Gasan Su Bridge.

*Consultants will continue to supervise TACIS project and to submit the required reports as per the ToR.*

Planning for component 1 is presented in the **Form 1.6 Plan of operations for the next period.**

### **Component 2: Pre-Feasibility Study of Modernisation of Poti- Tbilisi-Red Bridge Road in Georgia**

Draft final Report is due in February 2004 and Final Report in April 2004.

*The project planning for the next reporting period for the component 2 is as follow:*

#### 2. Specification:

Preparation the vertical alignment for all chosen alternatives by mean of CREDO (local software for road design) after calculation of economical cost and choice of alternatives for each section.

#### 3. Environmental Assessment:

To conclude the general assessment of the environmental and social risks;

To complete Public awareness and public consultations;

Submission of the draft environmental assessment report based on the topics detailed in **section 4.1.2 (3)** of this Report.

5. Economic cost: preparation of HDM-4 model for each analysed alternative section by section.

#### 7. Reporting:

7.1 Submission of the Draft Final Report in 19 February 2004;

7.2 Reviewing comments.



According to Consultants plan, the Pre-Feasibility report will be presented in the following four documents:

<b>Volume</b>	<b>I</b>	Explanatory note and tables of main works
<b>Volume</b>	<b>II</b>	Drawings and photos
<b>Volume</b>	<b>III</b>	Road transport economics
<b>Volume</b>	<b>IV</b>	Conclusions and recommendations

Alternatives for the modernization of Poti to Red Bridge road section are shown in the **Annex 10** of this Report. The blue discontinuous variant between Zestaponi to Khashuri is rejected due to environmental problems.

Planning for Component 2 is presented in the **Form 1.6 Plan of operations for the next period.**

### **Component 3: Design and Preparation of Tender Documents for Three Tunnels on the Road from Vanadzor to the Georgian Border in Armenia**

Draft final Report is due in *January 2004*.

As required by the ToR, Consultants will submit Tender Documents according to the World Bank Standard Bidding Documents (WB SBD) for International Competitive Bidding (ICB) including updated corrigenda. Tender Documents will be presented in the following 4 documents:

<b>Volume I</b>	Sections I, II, III, IV and V
<b>Volume II</b>	Section VI
<b>Volume III</b>	Section VII
<b>Volume IV</b>	Sections VIII and IX

#### **VOLUME I:**

**SECTION I** Invitation for Bids (IFB).

**SECTION II** Instructions to Bidders:

- A. General
- B. Bidding Documents
- C. Preparation of Bids
- D. Submission of Bids
- E. Bid Opening and Evaluation
- F. Award of Contract
- G. Bidding Data

**SECTION III** Forms of Bid, Qualification Information, Letter of Acceptance, and Agreement.

**SECTION IV** Conditions of Contract:

- A. General
- B. Time Control
- C. Quality Control
- D. Cost Control
- E. Finishing the Contract

**SECTION V** Contract Data

**VOLUME II:** **SECTION VI** Specifications

**VOLUME III:** **SECTION VII** Drawings

**VOLUME IV:**

**SECTION VIII**  
**SECTION IX**

Bill of Quantities  
Security Forms:  
Form of Agreement;  
Forms of Performance Security Bank Guarantee for Advance  
Payment.

The technical characteristics and appropriate Norms on each tunnel during the preparation of detailed Drawings, Volume III of the Tender Documents, will be according to Norms as shown in **Table 5.2** of this Report.

Planning for Component 3 is presented in the **Form 1.6 Plan of operations for the next period.**

**Table 5.2 Preparation of Detailed Design on Component 3**

Description	Tunnel 1	Tunnel 2	Tunnel 3
Location From km to km	25+460-25+566	31+200-31+476	31+910-32+090
Road Technical Category	IV	IV	IV
Assignment purpose	CNRA II-2.02-94	CNRA II-2.02-94	CNRA II-2.02-94
Traffic Volume (vpd)	1865	1889	1889
Seismic zone	2nd	2nd	2nd
Carriageway pavement type	Asphalt-concrete	Asphalt-concrete	Asphalt-concrete
Clearance of obstructions and equipment	GOST 24451-80	GOST 24451-80	GOST 24451-80
Width of secondary passage mm	500	500	500
Width of protection zone mm	350	350	350
Radius of horizontal curve m	Keep the existing radius R 175 m	Keep the existing radius R 90 m <sup>1</sup>	Keep the existing radius R 550 m
Road design near the tunnel	CNRA IV-11.05.02-99 & 11.05.04-97	-	CNRA IV-11.05.02-99 & 11.05.04-97
Tunnel lining design	CNRA IV-2.02-94	CNRA IV-2.02-94	CNRA IV-2.02-94
Rehabilitation of tunnel lining	CNRA IV-11.05.04-97	-	CNRA IV-11.05.04-97
Portals rehabilitation	CNRA IV-11.05.04-97	CNRA IV-11.05.04-97	CNRA IV-11.05.04-97
Electric lighting	Natural according to table 7 of CNRAIV-11.05.04-97	CNRA IV-11.05.04-97	CNRA IV-11.05.04-97
Ventilation	Natural	Natural	Natural
Fire protection	Do not provide L=106 m <600 m	Do not provide L=276 m <600 m	Do not provide L=180 m <600 m
Turning area for vehicles before portal	Do not provide; narrow mountains condition	Do not provide; narrow mountains condition	Do not provide; narrow mountains condition
Approaches M-6	Use the existing approaches	Use the existing approaches	Use the existing approaches
Other conditions	1.Implement reconstruction by closing the traffic and rehabilitate the existing bypass; 2.Follow the organizational plan of tunnel construction (OPC).	1.Replace and reinstall existing water pipe; 2.Implement reconstruction stage by stage; 3. Follow the organizational plan of tunnel construction (OPC).	1.Replace and reinstall existing water pipe; 2.Implement reconstruction stage by stage; 3. Follow the organizational plan of tunnel construction (OPC).

<sup>1</sup> For economic point of view.

## 5.2 Proposals for adjustment of overall planning and their consequences.

Start date of Works on Component 2 Georgia and Component 3 Armenia does not effect to the overall project implementation. Being 10 months long, these components will be finalised within the service contract period (24 months).

As it is described in the **section 5.1** of this Report, there is a delay in sub-component **1.2**, which is expected in implementation of construction supervision on Shemkir – Gazakh road rehabilitation. Proposal for adjustment and consequences has been submitted to the EC (please refer to **section 5.1 Sub-component 1.2**, Construction Supervision of Ganja to Gazakh Road).

Reports produced on this project including this Progress Report are detailed in **Annex 5** of this Report. The summary illustrates reports produced on each component (tables 1, 2 and 3) as well as general reports for the 3 Components (table 4).





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