

Tacis Regional 2000 Traceca Programme

# Rehabilitation of Caucasian Highways Azerbaijan, Georgia and Armenia

Final Report No 1- GEORGIA & ARMENIA

(FR / No 1 / 2004 / GE & AR)

April 18, 2004



This Project is funded by the European Union



A technical Support Project By Louis Berger SA

# Report Cover Page

Project Title	Rehabilitation of Caucasian Highways Azerbaljan, Georgia and Armenia	
Project Number	EUROPEAID/113179/C/SV/MULTI	200
Country	Azerbaljan, Georgia and Armenia	
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Date of Report Reporting Period Author of Report April 18, 2004 Final Report R. Degheim

Team Leader (EC Service Contractor's)

Georgia	Mr. R. Dalakishvili			
EC Delegation	1			
TACIS Bureau (Task Manager)	•			
	Name	Signature	Date	

### Report Cover Page

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Contact Person	Mr. E. Karapetyan	

April 18, 2004
Final Report
R. Degheim
Team Leader (EC Service Contractor's) Date of Report Reporting Period Author of Report

Armenia	Mr. E. Karapetyan		
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TACIS Bureau (Task Manager)			
,	Name	Signature	Date

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# LO PROJECT SYNOPSIS

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

Wider Project Objectives	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.
Specific Project Objectives	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.
	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. 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.
	Duration estimated 10 months, in conjunction with the project in Armenia.
	The Project in Armenia covers the investigations, designs, preparation of contract drawings, cost estimates, environmental impact assessment and tender documents for 3 tunnels on the road from Vanadzor to the Georgian Border. Also exchange of technical expertise.
	Duration estimated 10 months, in conjunction with the project in Georgia.
Planned Outputs	For Georgia Component, the planned output is the production of a Pre- Feasibility Study for the road improvements to the Poti to Red Bridge Road.
	In Armenia Component, the production of complete set of tender documents for the 3 tunnels.
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. For Georgia Component the project activities are to provide a Pre-Feasibility study of modernisation of Poti-Tbilisi-Red Bridge Road in Georgia. For Armenia Component is to provide design and preparation of tender documents for three tunnels on the road from Vanadzor to the Georgian Border.
Project Starting Date	Contract signed on 25 <sup>th</sup> November 2002
Project Duration	24 months for the 3 Components

#### 2.0 SUMMARY OF PROJECT SINCE THE START OF THE PROJECT

The Team Leader arrived in Baku on 19th January 2008 accompanied by the Project Director. The Project learn Leader has resigned from the project and LBSA project Coordinator has replaced him from June 10th to mid August 2003. The new Project Team Leader has been taking activities since 14th August 2003.

The Team Leader has visited Tbilisi in 23 - 25 March 2003 and 4 - 7 July 2003 to meet with EC

delegation and State Road Department.

LBSA Project Director, Mr. Signor in November 15-24, accompanied by the Team Leader, has visited the Project in order to perform project's progress review. Mr. Signor has participated to the meeting in TACIS Monitoring office, Tbilisi with Mr. Gotsiridze.

Meetings in Tbilisi with Team Leader and Mr. Gotsiridze have been performed on October 8, November 19, 2003 and March 2, 2004. This helped to receive monitor's valuable

recommendations on project progress.

Team Leader has performed site visits to Armenia in 1-3 July, 16-18 November 2003 and 22-29 February 2004. Meetings were held with Mr. H. Petrosyan and Mr. E. Karapetyan, SRD Armenia and the NCU. This helped to evaluate progress on submission of Tender Documents.

LBSA proposes to define commencement of July 2003 as the Project's start date for the 2 Components (Georgia and Armenia) through the arrival of LBSA highway engineer to Tbilisi.

2.1 Summary on Component 2, Georgia: Pre-Feasibility Study of Modernisation of Poti-Red Bridge Road

In order to improve project performance and reporting, it was agreed during the meeting with Mr. Gotsiridze in Tbilisi Tacis Monitoring Office that project components should be reviewed in terms of unification of understanding of project's specific objectives. Thus, updated definition was proposed and used in all required Forms included in the reports.

The revised definition of the specific objectives on Component 2 is as follows:

- 1. Data collection and Surveys;
- 2. Develop technical specification;
- 3. Perform environmental assessment:
- Assessment of economic costs:
- 5. Perform economic analysis;
- 6. Determining cost estimates; and
- 7. Reporting.

The ToR requires the following project's milestones on component 2:

- Inception Report end of month2;
- Progress Report end of month 4;
- Draft Final Report end of month 6 (postponed to end of month 8 without any change to overall calendar time);
- Final Report end of month 10.

Inception and Progress Reports were produced on 15<sup>th</sup> August and 15<sup>th</sup> October 2003 respectively and the Draft Final Report on 18 February 2004.

2.2 Summary on Component 3, Armenia: Design and Preparation of Tender Documents for Three Tunnels on the Road from Vanadzor to the Georgian Border

The proposed definition of the specific objectives on **component 3** is as follows:

- 1. Field investigations;
- 2.Design works;
- 3. Determination of excavation works;
- Technical description of construction and engineering process;
- 5.Cost estimate:
- 6. Preparation of Tender Documents;
- 7. Reporting.

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. Four Tender Documents have been **forwarded** to the SRD and appropriate authorities as per the ToR in the last week of February 2004.

#### 3.0 PROJECT PROGRESS IN FINAL PROJECT PERIOD

3.1 Project Progress on Component 2, Georgia: Pre-Feasibility Study of Modernisation of Potil-Red Bridge Road

Inception Report for the 3 Components was produced in April 2003. On Component 2, additional Inception Report was produced on August 15,2003. Progress Report and Draft Final Report delivered on October 15, 2003 and 18 February 2004, respectively.

The Final Report was submitted directly at the end of the project activities, as the Contract duration is less than 12 month "EU Visibility Guidelines "and as required by the ToR reporting Program.

The Final Report contains the following volumes:

Volume I	Explanatory note and tables of main works
Volume II	Drawings and photos
Volume III	Road transport economics
Volume IV	Environmental Assessment

All required tasks have been performed and reported in the above 4 volumes annexed to the Final Report. Output results carried out by Consultant and Local Sub Consultant "Transproject" are summarized in **section 4** of this Report.

Project progress and resources inputs for component 2, Georgia are presented in the Forms 2.2 Project Progress Report and 2.3 Resources Utilization Report.

3.2 Project Progress on Component 3, Armenia: Design and Preparation of Tender Documents for Three Tunnels on the Road from Vanadzor to the Georgian Border

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. Four Tender Documents have been forwarded to the SRD and appropriate authorities as per the ToR in the last week of February 2004. Consultant has prepared additional Tender Documents for the 3 tunnels jointly in order to help the MoT for future financial planning.

As required by the ToR, Consultant has submitted the Tender Documents using the World Bank Standard Bidding Documents (WB SBD) for International Competitive Bidding (ICB) including updated corrigenda. Tender Documents for each tunnel and for the 3 tunnels mutually have been presented in the following 4 documents:

Volume I	Sections I, II, III, IV and V
Volume II	Section VI
Volume III	Section VII
Volume IV	Sections VIII and IX

In addition, Consultant has submitted Environmental Impact Assessment Report and cost estimates for the 3 tunnels.

Project progress and resources inputs for component 3, Armenia are presented in the Forms 2.2 Project Progress Report and 2.3 Resources Utilization Report.

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

EC's staff approval is included in the **Annex 2** to this Report. **Table 1** shows the approval dates of International long and short-term **Experts. Tables 2** and **3** illustrate Local Staff approval on Components 2 and 3 respectively.

#### FORM 2.2: PROJECT PROGRESS REPORT

Project title: Rehabilitation of Caucasian Highways  Planning period: January 2004 - April 18, 2004		Projec	Project number: Europeaid/113179/C/SV/MULTI Prepared on: April 18, 2004					Country: Azerbaijan, Georgia and Armenia			Page: 1 of 2				
		Prepa						sultant: Ll	BSA						
Projec	t objectives: Component 1: Supervi						Component	2: Pre-Fea	asibility St	udies, Com	ponent 3	Design an	d		
No	ACTIVITIES IMPLEMENTED		TIME FRA	ME 2004					INPL	ITS					
							Month			COUNTERPART		EQUIPMENT AND MATERIAL		OTHER	
		Jan	Feb	March	April	Planned	Utilised	Planned	Utilised	Planned	Utilised	Planned	Utilised		
2 2.1 2.2 2.3 2.4 2.5 2.6 2.7	Component 2: Georgia Pre-feasibility Study for modernization of Poti-Tbilisi- Red Bridge Road  Data Collection and Surveys Develop Technical Specification Perform Environmental Assessment Assessment of Economic costs Perform Economic Analysis Determining Cost Estimates		x	40 STE <sup>1</sup> 97	40 85	313	313	n/a	n/a	n/a	n/a				
	Technical Reporting		X		-	<u> </u>					-	-	-		
3	Component 3: Armenia Design and Tender Documents for three tunnels on the road from Vanadzor to the Georgian Border					0 STE (97) <sup>2</sup>	0 (85)	235	235	n/a	n/a	n/a	n/a		

International Short-term Experts;
 Figures in brackets are shared with other Component.

3.1 3.2 3.3 3.4 3.5 3.6	Field Investigations Design works Determination of Excavation works Technical description of Construction and Engineering Process Cost estimates Preparation of the Tender	Con	npleted					
3.7	documents Reporting			X				

95.55

\*2

#### FORM 2.3 RESOURCE UTILISATION REPORT

Project title: Rehabilitation of C	aucasian Highwa		number: iid/113179/C/SV/MULTI	Country: Aze	erbaijan, Georgia an	Page: 1 of 1		
Planning period January 2004	April 18, 2004	Prepare	d on: April 18, 2004	EC Consulta	EC Consultant: LBSA			
Project objectives								
RESOURCES	TOTAL PLANNED				REALISED <sup>1</sup>	1	AVAILABLE FOR REMAINDER	
		GE	AR	GE	AR	GE	AR	
International Experts Long term:								
Team Leader	(440)	(57) <sup>2</sup>	(57)	(297)	(297)	(143)	(143)	
Highway Engineer	(220)	(28)	(28)	(150)	(150)	(70)	(70)	
International Short term:	68	40	<del></del>	48	19	1	-	
Local Long term:				_				
Senior	822	116	49	602	220			
Junior	.587	0	98	147	440			
Local Short term:								
Senior	1047	161	35	591	456	1		
Junior	404	36	53	178	226			
Total Long and Short term	2860	313	235	1518	1342	0	0	
EQUIPMENT AND MATERIAL Euro	n/a	0	0	0	0	0	0	

<sup>&</sup>lt;sup>1</sup> From the start; <sup>2</sup> Figures in brackets are shared with other Component.

#### **FORM 2.4: OUTPUT PERFOMANCE REPORT**

Project title: Rehabilitation of Caucasian Highways	Project nr: Europeaid/113179/C/SV/MULTI	Country: Azerbaijan, Georgia and Armenia	Page: 1 of 2			
Prepared on: April 18, 2004		EC Consultant: LBSA				
Output results	Deviation original plan + or - %	Reason for deviation	Comments on constrains & assumptions			
Component 2: Pre-feasibility Study for modernization of Poti-Tbilisi-Red Bridge Road in Georgia  2.1Data Collection and Surveys 2.2Develop Technical Specifications 2.3Perform Environmental Assessment 2.4Assessment of Economic Costs 2.5Perform Economic Analysis 2.6Determining Cost Estimates 2.7Reporting  Total reports produced on Component 2, Georgia = 3 reports including this one  Component 3: Design and Tender Documents for three tunnels on the road from Vanadzor to the Georgian Border in Armenia	Completed Completed On target On target On target On target On target On target		April Inception Report signed with objections  No comments No comments No comments No comments No comments No comments Draft Final Report postponed to 19 February 2004 without any change to the overall calendar time frame as specified in the project Terms of Reference.			

<sup>&</sup>lt;sup>1</sup> Please refer to **Annex 1** of this Report for more details on reports produced; <sup>2</sup> Please refer to **Annex 1** of this Report for more details.

3.1Field Investigations 3.2Design Works 3.3Determination of Excavation Works 3.4Technical Description of Construction and Engineering Process 3.5Cost Estimates 3.6Preparation of the Tender Documents 3.7Reporting  Total reports produced on Component 3, Armenia = 5 reports including this one. <sup>2</sup>	Completed Completed Completed Completed Completed On target On target		No comments No comments No comments No comments No comments Additional Tender Documents for 3 tunnels mutually has been prepared No comments
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#### 4. OVERALL REPORT ON THE TOTAL PROJECT

4.1 Overall report on Component 2, Georgia: Pre-Feasibility Study of Modernisation of Poti-Red Bridge Road

Inception and Progress Reports were produced on August 15 and October 15, 2003 respectively and the Draft Final Report on 18 February 2004.

The road design was performed using Trans European North-South Motorway<sup>1</sup> (TEM). According to the ToR, Consultant is required to investigate whether it is possible to improve the existing road to motorway standard. For this purpose the road was divided into fourteen sections as shown in Table 4.1 of this report.

Table 4.1- Splitting up the road into 14 sections

No	Section	Land Description	Design Speed [km / h]
1	Poti – Samtredia	Flat	120
3	Samtredia – Kutaisi	Flat	120
4	Kutaisi Bypass	Flat	120
5	Kutaisi - Zestafoni	Rolling	120
6	Zestafoni Bypass	Rolling	120
7	Zestafoni - Khashuri	Mountainous	80
8	Khashuri Bypass	Rolling	120
9	Khashuri - Gori	Rolling	120
10	Gori - Natakhtari	Rolling	120
11	Natakhtari - Zagesi	Rolling	120
12	Zagesi – Lochini	Mountains and rolling	80 & 120
13	Lochini – Rustavi	Rolling	120
14	Rustavi - Red Bridge	Rolling	120

An economic analysis of each alternative has been carried out. This analysis consisted of comparing the construction cost with the Vehicle Operating Cost (VOC).

To complete the economic analysis on the chosen alignment a World Bank's HDM-4<sup>2</sup> has been applied.

The Final Report was submitted in the following 4 Volumes:

Volume	1	Explanatory note and tables of main works
Volume	II	Drawings and photos
Volume	111	Road transport economics
Volume	IV	Environmental Assessment

All the following tasks have been performed and reported in the above 4 volumes attached to the Final Report and in order to emphasize output results on Component 2, the performance carried out by Consultant and Local Partner "Transproject, the Sub Consultant" could be summarized as follows:

#### Volume I: Explanatory note and tables of main works

The volume I highlights the Project location and Standards used while developing the Pre-Feasibility study. It contains historical examination and archeological consideration and focused generally on:

<sup>&</sup>lt;sup>1</sup> European Standards TEM prepared by UNECE, Third Edition, February 2002;

<sup>&</sup>lt;sup>2</sup> HDM-4 Highway Development and Management series, version 1.3 revised and updated 2001.

- 1.1 Main Characteristics of the existing road (geometry, pavement, sinuctures, roughness and atc.) and Standards used:
- 1.2 Selection of alternatives on a scale of 1:50000 and of some alternatives in mountainous areas on a scale of 1:25000;
- 1.3 Choice alternatives to be carried out and updating them after field reconnaissance and examination of satellite photographs;
- 1.4 Analysis of the main technical parameters, estimated volumes and construction costs of the alternatives;
- 1.5 Analysis of local roads and interchanges;
- 1.6 Preparing layouts of horizontal alignment (TEM Standard), 2 or 3 alternatives for each section with a scale of 1:50000 using AutoCAD;
- 1.7 Preparing layouts of interchanges, local roads and facilities as parking using AutoCAD and according to TEM Standards;
- 1.8 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;
- 1.9 Analysis of the natural conditions (Climate, precipitation, geological conditions and etc.);
- 1.10 Analysis of the construction volumes and costs and Calculation of the cost estimation for each alignment section by section for the preparatory works, removal of existing structures, land acquisition, earthworks, road pavement, box and pipe culverts, bridges and retaining walls, overpasses junctions and interchanges, local roads, road marking and etc.

#### Volume II: Drawings and Photos

As required by the ToR, the following Drawings have been included in the Volume II:

- 2.1 Longitudinal profile and typical cross-sections;
- 2.2 Typical drawings of road pavement;
- 2.3 Typical drawings of pipe and box culverts;
- 2.4 Typical drawings of bridge (deck and beam);
- 2.5 Typical design of overpasses (roads and railways);
- 2.6 Typical design of tunnels;
- 2.7 Typical design of retaining walls;
- 2.8 Typical design of interchanges;
- 2.9 Photos for road sections Senaki-Poti-Sarpi, Tbilisi-Senaki-Leselidze, Tbilisi-Red Bridge and Tbilisi bypass.

#### Volume III: Road Transport Economics

Georgia's geographic location takes a particular significance on international trade between the countries of western and Eastern Europe and those of central Asia and the Far East. The Voulme III emphasizes the economic analysis and economic appraisal and consists of:

- 3.1 Economic review: Trends in gross domestic product; Transport section and road traffic growth projections;
- 3.2 Description of the existing road and traffic: Analysis of the Origin-Destination (OD) Survey results; Analysis of the traffic counts results; Calculation and determination of traffic forecast till 2030; Analysis of road accident Database;
- 3.3 Determination of the road capacity by using Highway Capacity Manual HCM 2000;
- 3.4 Calculation of the Level of Service (LOS) for the existing road;
- 3.5 Calculation of the LOS for the next 20 years;
- 3.6 Economical appraisal and Road network input data;
- 3.7 Analysis of alternative motorway alignments;
- 3.8 Vehicle fleet input data;
- 3.9 Works standards input data;
- 3.10 Methodology approach;
- 3.11 Results of the Economic appraisal.

Volume IV: Assessment of the Environmental Impact

Consultant has identified nature of environment problems with landsildes, subsidence and proximity of residential areas along the route and environmental constraints. He has attended meetings on 17 October 2003 with Biodiversity and protection of Mineral Resources and Mining departments. Records of meetings are included in Annex 4 of this Report.

Meeting held on 26 November 2003 with Consultant, Mr. G. Gogiashvili, Dr. M. Chantladze (TRACECA IGC), and Mr. Shota Keldishvili. This helped finalizing the Environmental Assessment Study.

In the Volume IV of the Final Report, Consultant has assessed the environmental impacts and mainly the following:

- 4.1 Overview of the relevant legislation and general environmental analysis of the construction and operations stages in terms of expected impacts;
- 4.2 General data collection and analysis of the existing condition of the route;
- 4.3 Identification of the main impact categories, sources and receptors;
- 4.4 Prognosis for the qualitative and quantitative changes of the environment;
- 4.5 Concluding the general assessment of the environmental and social risks;
- 4.6 Public awareness and public consultations;
- 4.7 Environmental Management System;
- 4.8 Environmental Analysis of the alternatives.

Project completion report and output performance resources for **component 2** are presented in **Forms 3.2** and **3.3** respectively.

# 4.2 Overall report on Component 3, Armenia: Design and Preparation of Tender Documents for Three Tunnels on the Road from Vanadzor to the Georgian Border

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. The output results carried out was the submission of the Tender Documents for the 3 tunnels. Four Tender Documents have been forwarded to the SRD and appropriate authorities as per the ToR in the last week of February 2004. Consultant has prepared additional Tender Documents for the 3 tunnels jointly in order to help the MoT Armenia for future financial planning.

As required by the ToR, Consultant has submitted the Tender Documents using the World Bank Standard Bidding Documents (WB SBD) for International Competitive Bidding (ICB) including updated corrigenda.

Technical characteristics and appropriate Norms on each tunnel during the preparation of detailed Drawings, Volume IIII of the Tender Documents, have been carried out in accordance with Norms and features as shown in **Table 4.2** of this Report.

Tender Documents for each tunnel and for the 3 tunnels mutually have been presented in the following 4 documents:

Volume I	Sections I, II, III, IV and V	
Volume II	Section VI	
Volume III	Section VII	
Volume IV	Sections VIII and IX	

Table 4-2 Features and Norms for the 3 Tunnels

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	V	V	IV
Assignment purpose	CNRA II-2.02-94	CNRA II-2.02-94	CNRA II-2.02-94
Trafic 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>3</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).

Each volume of The tender Documents comprises the following:

# VOLUME I: Section I

Invitation for Bids (IFB).

Section II

Instructions to Bidders:

A. General;

B. Bidding Documents;C. Preparation of Bids;

<sup>&</sup>lt;sup>3</sup> For economic purpose.

D. Submission of Bids;

E. Blot opening and Evaluation;

F. Award of Contract; C. Biolog Data.

Section III

Forms of Bid, Qualification Information, Letter of Acceptance, and Agreement

Section IV

**Conditions of Contract**:

General; Time Control; Quality Control; Cost Control;

Finishing the Contract.

Section V

**Contract Data** 

**VOLUME II:** 

Section VI

Specifications

**VOLUME III:** 

Section VII

Drawings

**VOLUME IV**:

Section VIII

**Bill of Quantities** 

Section IX

Security Forms: Form of Agreement, Forms of Performance Security and

Bank Guarantee for Advance Payment

In addition to the Tender Documents, Consultant has submitted:

Environmental Impact Assessment Report and cost estimates for the 3 tunnels. The Environmental Report comprises:

- The project objectives;
- Policy and administrative framework;
- Project description and baseline conditions;
- Potential environmental impacts;
- Environmental management plan;
- Implementation arrangements; and
- Summary of mitigation plan.

Project completion report and output performance resources for **component 3** are presented in **Forms 3.2** and **3.3** respectively.

#### FORM 3.2: PROJECT COMPLETION REPORT

Project title: Rehabilitation	of Caucasian Highways	Project number:	Europeaid/113179/C/S	SV/MULTI	Country: Azerbaija and Armenia	an, Georgia	Page: 1 of 1
Reporting period: January	2003 – April 18, 2004	Prepared on: Ap	ril 18, 2004		EC Consultant: LE	BSA	N.V.
Project objectives: Compo ender Documents for thr	onent 1: Supervision of six of the tunnels	civil works contracts	s, assistance to PIU, 0	Component	2: Pre-Feasibility Stu	udies, Compon	ent 3: Design and
Period	Main Activities un	ndertaken <sup>1</sup>	EC Consultant <sup>2</sup>		INPU	TS UTILISED	
4, -				MATERIALS AND EQUIPMENT			OTHER
23-26 March 2003	Project Management to G	Georgia	4 Working days	n/a		Train, 3 n	ights per diem
1-3 July 2003	Project Management to A		3 Working days	n/a			ights per diem
3-7 July 2003	Project Management to C	Seorgia	5 Working days	n/a			ights per diem
8-9 October 2003	Project Management to C	Seorgia	2 Working days	n/a		Flight, 1 n	ight per diem
15-16 November 2003	Project Management to C	Seorgia	2 Working days	n/a		Flight, 1 n	ight per diem
16-18 November 2003	Project Management to A	rmenia	3 Working days	n/a		Car, 2 nig	hts per diem
19-22 November 2003	Project Management to C	Seorgia	4 Working days	n/a		Car, 3 nig	hts per diem
5-10 January 2004	Preparation of Consultan	t Payment	6 Working days	n/a		5 nights p	er diem
19-21 February 2004	Preparation of Draft Final	Report, Georgia	3 Working days	n/a		Car, 2 nig	hts per diem
22-29 February 2004	Tender Documents, Armo	enia	8 Working days	n/a		Car, 7 nig	hts per diem
1-3 March 2004	Submission of Draft Final	Report, Georgia	3 Working days	n/a		Car, 2 nig	hts per diem
April 2004 (Potential)	Submission of Final Repo	ort, Georgia and	5 working days	n/a		Car, 4 nig	hts per diem
Different dates as per Time sheets (R. Degheim, TL)	Project Management to 0	Sanja-Gazakh	9 Working days	n/a		Car, 1 nig	ht per diem
	Total		57		n/a		37

<sup>&</sup>lt;sup>1</sup> Project Director Visits are not included; <sup>2</sup> For more details please refer to tables 5.4; 5.5; 5.6 and 5.7.

#### **FORM 3.3: OUTPUT PERFOMANCE SUMMARY**

Project title: Rehabilitation of Caucasian Highways	Project nr: Europeaid/113179/C/SV/MULTI	Country: Azerbaijan, Georgia and Armenia	Page: 1 of 2			
Prepared on: April 18, 2004		EC Consultant: LBSA				
Output results	Deviation original plan + or - %	Reason for deviation	Comments on constrains & assumptions			
Component 2: Pre-feasibility Study for modernization of Poti-Tbilisi-Red Bridge Road in Georgia  2.1Data Collection and Surveys 2.2Develop Technical Specifications 2.3Perform Environmental Assessment 2.4Assessment of Economic Costs 2.5Perform Economic Analysis 2.6Determining Cost Estimates 2.7Reporting  Total reports produced on Component 2. Georgia = 3 reports including this one  Component 3: Design and Tender Documents for three tunnels on the road from Vanadzor to the Georgian Border in Armenia	Completed Completed Completed Completed Completed Completed Completed Completed		April Inception Report signed with objections  No comments No comments No comments No comments No comments Draft Final Report postponed to 19 February 2004 without any change to the overall calendar time frame as specified in the project Terms of Reference.			

<sup>&</sup>lt;sup>1</sup> Please refer to **Annex 1** of this Report for more details on reports produced; <sup>2</sup> Please refer to **Annex 1** of this Report for more details.

3.1Field Investigations 3.2Design Works 3.3Determination of Excavation Works 3.4Technical Description of	Completed Completed Completed Completed	No comments No comments No comments No comments
Construction and Engineering Process 3.5Cost Estimates 3.6Preparation of the Tender Documents	Completed Completed	No comments Additional Tender Documents for 3 tunnels mutually has been prepared
3.7Reporting	Completed	No comments
Total reports produced on Component 3, Armenia = 5 reports including this one. <sup>2</sup>		

#### 5.0 LESSONS LEARNT AND RECOMMENDATIONS

#### 5.1 Planning Performance and Utilisation

The planning inputs were outlined in the inception reports for Components 2 and 3. Table 5.1 shows local staff inputs realized during the project implementation of the Pre-feasibility study. Tables 5.2 and 5.3 illustrate the Local Staff position and inputs man / working day as planned and realized for the design and preparation of Tender Documents for the three tunnels.

Table 5.1 Local Staff Inputs realized - Component 2 Georgia

Position /Month	May 03	June 03	July 03	Aug 03	Sep 03	Oct 03	Nov 03	Dec 03	Jan 04	Feb 04	Mar 04	Total
Highway Eng.	20	20	20	20	22	20	20	20	18	14	20	214
CAD Bridge Eng.	20	19	19	14	14	20	20	20	0	0	0	146
Bridge Eng.	20	19	20	11	10	20	20	20	0	0	0	140
CAD Bridge Eng.	20	19	19	14	12	20	20	20	0	0	0	144
Geot. Eng	20	19	19	12	12	20	20	20	0	0	0	142
CAD Road	20	20	19	14	14	20	20	20	0	0	0	147
Surveyor	20	20	20	20	22	20	20	20	18	14	0	194
Highway Eng.	20	20	20	20	22	20	20	20	18	14	0	194
CAD Road	0	0	0	0	0	0	0	0	18	14	11	43
CAD Highway	0	0	0	0	0	0	0	0	18	14	11	43
Cost Est.	0	0	0	0	0	0	0	0	18	14	11	43
Surveyor	0	0	0	0	0	0	0	0	18	14	0	32
Bridge Eng.	0	0	0	0	0	0	0	0	18	14	4	36
Total	160	156	156	125	128	160	160	160	144	112	57	1518

Table 5.2 Local Staff Planned Inputs - Component 3 Armenia

Position /Month	May 03	June 03	July 03	Aug 03	Sep 03	Oct 03	Nov 03	Dec 03	Jan 04	Feb 04	Total
Highway Eng.	22	22	23	23	22	23	20	23	22	20	220
CAD Eng.	22	22	23	23	22	23	20	23	22	20	220
Traffic	0	22	23	0	0	21	0	0	0	0	66
Tunnel	22	22	23	23	22	23	20	23	22	20	220
Cost Est.	0	0	0	0	0	0	20	13	21	12	66
Surveyor	20	22	23	22	22	23	0	0	0	0	132
Bridge	22	22	0	0	0	0	0	0	0	0	44
Drainage	22	22	0	10:	0	0	0	0	0	0	44
Pavement	21	22	23	22	0	0	0	0	0	0	88
Env. Eng.	0	0	0	0)	0	0	0	22	22	0	44
Geot. Eng.	20	22	23	22	22	23	0	0	0	0	132
Contract Specialist	0	0	0	0	0	0	23	20	15	8	66
Total	171	198	161	135	110	136	103	124	124	80	1342

Table 5.3	Local S	staff rea	lized i	nputs -	Compo	nent 3	Armen	ia)				
Position /Month	May 03	June 03	July 03	Aug 03	Sep 03	0ct 03	Nov 03	Dec 03	Jan 04	7ab 04	Mar 04	Total
Highway Eng.	20)	22	23	21	22	23	20)	20	18	20)	11	220
CAD Eng.	20	22	23	21	22	23	20	20	18	20	編11 開	220
Traffic Eng.	0	22	23	0	0	23	0	0	0	0		68
Tunnel Eng.	20	22	23	21	22	23	20	20	18	20	11	220
Cost Estimator	0	0	0	0	0	0	20	11	18	17	0	66
Surveyor	20	22	23	21	22	23	0	0	0	0	0	131
Bridge Eng.	20	22	0	0	0	0	0	0	0	0	0	42
Drainage Eng.	20	22	0	0	0	0	0	0	0	0	0	42
Pavement Eng.	20	22	23	21	0	0	0	0	0	0	0	86
Env. Eng.	0	0	0	0	0	0	0	20	18	15	0	53
Geot. Eng.	20	22	23	21	22	23	0	0	0	0	0	131
Contract Specialist	0	0	0	0	0	23	20	0	0	20	0	63
Total	160	198	161	126	110	161	100	91	90	112	33	1342

As can be seen from the above tables, there are no changes to the total planned and realized man/working days on each component over the duration of the project.

Working days realized during 2003 and 2004 and financial topics are shown in **Tables 5.4**, **5.5** and **5.6** respectively.

Table 5.6 exemplifies working days billed in the first six-month (period 1, January-June 2003) and the second six month (period 2, July-December 2003) on the Local staff for each components including component 1. Local staff long and short-term experts have been classified into senior and junior. Consultant has adjusted inputs all through project progress and achievement in order to keep the contract value consistent.

Working days performed by International experts are shown in Table 5.7 of this Report.

Final financial implication and data would be reported in the Final Report when the overall project would be achieved (at termination of **Component 1**, Azerbaijan). However, Consultant has assessed and planned staff working days without any additional financial implication to the project. **Table 5.8** illustrates Consultant arrangement for the whole project performance.

Table 5.8- Adjustment of Local staff without additional cost

Item	Original Contract	Adjustment
Local long-term senior	2192	2042
Local long-term junior ,	2077	2027
Local short-term senior	1118	1268
Local short-term junior	716	766
Total	6103	6103

Reports produced on Components 2 and 3 including this one are detailed in Annex 1 of this Report.

Important correspondences are attached in Annex 3 to this Report.

#### 5.2 Lesson Learnt

Consultant would like to express thanks to Local Authorities, National Coordinating Unit (NCU), EC and all Project's Partner for their specific actions to overcome of problems arisen during the project implementation.

Being the project objectives are implemented for 3 countries with no contact between 2 of them has affected delay in reports delivery and difficulty in communication.

Consultant recommends that Mot and SRD, Armenia, to engage with tendering procedures for the 3 tunnels.

# Rehabilitation of Caucasian Highways Azerbaijan, Georgia and Armenia SUMMARY OF WORKING DAY IN 2003

Table 5.4

No	Name/Month	Title	Long-Term	Short-term	RTD+TR	Jan	Feb	Mar	April	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total Realised 2003		Available for Remainder
	1. Local Experts																			
	1.1 Azerbaljan										_									
1	Sabir Safarov	Foundation Engineer		STS	20 S			0 (	0	0	0	0	12	16	0	0	14	42	64	
2	Allahveren Hajiyev	Structural (Bridge) Engineer	LTJ		10 J			0 (	0	0	7	27	26	26	27	25	27	165	450	285
3	Kerim Mamedov	ARE Bridge Engineer	LTS	STS	20 S			0 1	0	12	24	27	26	26	27	25	22	189	460	27
4	Jelal Hasanov	Surveyor	LTJ	STJ	20 J			0 0	0 0	12	24	27	26	26	27	25	27	194	460	260
5	Tengiz Orujov	Quantity Surveyor	LTS			(		0 (	0 0	0	0	0	12	26	27	25	27	117	440	
6	Medjnun Valiyev	Material Engineer	LTJ		12 J	(		0 0	0 0	0	7	27	26	26	27	25	27	165	452	287
7	Gunduz Mehtiyev	Assistant Resident Engineer	LTS		37 S	(		0	0 0	12	24	27	26	26	27	25	23	190	477	
8	Telman Pashanov	Second Surveyor	LTJ					0	0 0	0	0		0	0	0	0		0	440	
	Total					-		0 0	0	36	86	135	154	172	162	150	167	1062	3243	
	1.2 Georgia																			
9	Otar Mxeidze	Senior Highway Engineer	LTS			1	0	0	0 0	20	20	20	20	22	20	20	20	162	214	53
10	Tamara Samkharadze	CAD Bridge Engineer		STS					0 0							20				
11	Jemal Kartozia	Bridge Engineer		STS				0	0 0			20	11	10		20			140	
12	Dima Loginov	CAD Bridge Engineer		STS				0	0 0	20	19	19	14	12		20			144	
13	Ramaz Nebieridze	Senior Geotechnical Engineer		STJ					0 0							20				
14	Dodo Goderdzishvilli	CAD Road Engineer	LTJ						0 0							20				
15	Tengiz Butkuzi	Senior Striveyor	LTS				0		0 (	-						20				
16	Shota Utmelidze	Senior Highway Engineer	LTS						0 0	-						20				
16-1	Besarion Andrazashvili	CAD Road Engineer		STS		-	_		0 0		_			_	_	0				
16-2	Manana Tabaladze	CAD Highway Engineer		STS		-	_		0 0		-					0				
16-3	Lyudmila Krivolapchuk	Cost Estimator		STS		-			0 0	0	_	_		_	0					
16-4	Salakaia Vashia	Surveyor		STS		-	_		0 0		_	_	_			1				
16-5	Boris Ivashenko	Bridge Engineer		STJ		_	0		0 0		1				1					
100	Total	Dridge Engineer		0.0		_			0 0	-	156			128	160	160		-		
	1.3 Armenia		1			1	+	1	-	100	100	1	120	120	100	100	100	1200	10.0	
17	Davit Hovsepyan	Local Team Leader	LTS				0	0	0 0	20	22	2 23	3 21	22	23	20	20	171	220	4
18	Sevak Afrikyan	CAD Design Engineer	LTJ			_	0		0 0							20				
19	Vigen Matnishvan	Tunnel Engineer	LTJ			_	_		0 0											
20	Hunan Haroyan	Bridge Engineer	2.10	STS		-	_		0 0	+										
21	Artur Avagyan	Engineer Surveyor		STS		_	0		0 0	+										
22	Valeri Hairapetyan	Drainage Engineer		STJ		-	_		0 0											
23	Stepan Hakopyan	Pavement Engineer	_	STS		_	0		0 0											
24	Pavel Makinyan	Geotechnical Engineer		STS			0		0 0											
25	Miasnik Ghazarvan	Traffic Engineer		STJ		_	0		0 0											
26	Anania Safaryan	Cost Estimator		STS			0		0 0											
27	Sonan Badalyan	Environmental Engineer	-	STJ		_	0		0 0		-	-	0 0	_		(				
28	Karine Gasparvan	Contract Specialist		STJ		_	0		0				-							
otal	Irwinie Gasparyan	Tooritiact opecialist	1	313	-				0 0	_				110		100			1342	
	otal Local experts				-	1		0	-	100	198	161	126	1110	107	100	1 60	3374	6103	

# Rehabilitation of Caucasian Highways Azerbaijan, Georgia and Armenia SUMMARY OF WORKING DAY IN 2004

Table 5.5

No	Name/Month	Title	Long-Term	Short-term	RTD+TR	Jan	Feb	Mar	April	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total Realised 2004	Total Realised 2003	Total Planned	Available for Remainder
	1. Local Experts																				
	1.1 Azerbaljan																				
1	Sabir Safarov	Foundation Engineer			20 S	0													42	54	12
1-1	Amongaldi Rakhimov	CAD Engineer		STS		0												10			
2		Structural (Bridge) Engineer	LTJ		10 J	25	24	27	7							3		70			
3		ARE Bridge Engineer	LTS		20 S	22	20	23	3									65	189		206
4	Jelal Hasanov	Surveyor	LTJ	STJ	20 J	20	19	2	1									60	194	460	200
5	Tengiz Orujov	Quantity Surveyor	LTS			26	24	2	7									7	117	440	246
6	Medinun Vallyev	Material Engineer	LTJ		12 J	25	24											70	160	452	2 21
7	Gunduz Mehtiyev	Assistant Resident Engineer	LTS		37 S	22					$\overline{}$		$\overline{}$					6			7 22
8	Telman Pashanov	Second Surveyor	LTJ			8	24											5	9	440	
	Total					148												488		324	
	1.2 Georgia								1	-	+	$\overline{}$					1		1		
9	Otar Mxeidze	Senior Highway Engineer	LTS			18	14	20	1	_	$\overline{}$	-		1	_	_	1	5	2 16	214	4 (
10	Tamara Samkharadze	CAD Bridge Engineer	1	STS		1		0 0											140		
11	Jernal Kartozia	Bridge Engineer		STS							-	-		-	-	-	-		140		
12	Dima Loginov	CAD Bridge Engineer	1	STS					0	-	+	$\overline{}$	_	_	_	-	-		14		
13	Ramaz Nebieridze	Senior Geotechnical Engineer		STJ		1			0										0 14		
14	Dodo Goderdzishvilli	CAD Road Engineer	LTJ					_					$\overline{}$			_	_		14		
15	Tengiz Butkuzi	Senior Surveyor	LTS			18			0	_	-	+	$\overline{}$	-	_	+	_	3			
16	Shota Utmelidze	Senior Highway Engineer	LTS			18				_	_	_			1		_	3			
16-1	Besarion Andrazashvili	CAD Road Engineer		STS		18				_	_		_	1	1	1		4			
16-2	Manana Tabaladze	CAD Highway Engineer	_	STS		18	_			-	+	+	-	_	+	+	_	4			
16-3	Lyudmila Krivolapchuk	Cost Estimator	_	STS		18	-			_	+	+	+-	+	+	+	_	1 4		4	
16-4	Salakaia Vashia	Surveyor	_	STS		18	_		ol .	_	-	_	+	_	+	+	-	3			
16-5	Boris Ivashenko	Bridge Engineer	_	STJ		18			_	+	+	+	+	-	-	+	-	3			
100	Total	Dridge Engineer	+	313	_	144				+	+	+	_	+	+	+	+	31:			
	1.3 Armenia		_			144	1 "	-	+	_	+	_	_	+	+	_			1200	1010	+
17	Davit Hovsepyan	Local Team Leader	LTS			18	2	0 1	1	+	+	+	+	1	+	+	+	4	9 17	1 22	0
18	Sevak Afrikyan	CAD Design Engineer	LTJ	_	_	18				+	+	-	+	+	-	+	+	1 4			
19	Vigen Matnishyan	Tunnel Engineer	LTJ		_	18				+	+	+	+	+	+	+	+	1 4			
20	Hunan Haroyan	Bridge Engineer	FIS	STS	_	1 7				+	+-	+	+	+	+	+	_		0 4		
21	Artur Avagyan	Engineer Surveyor	_	STS	_	1 2		_	0	+	-	+	_	-	+	+	+		0 13		
22	Valeri Hairapetyan	Drainage Engineer	+	STJ		1				+	+	+	-	+	+	+	1		0 4		
23	Stepan Hakopyan	Pavement Engineer	+	STS	_	1		-		+	+	+	+	+	+	+	+		0 8		
24	Pavel Makinyan	Geotechnical Engineer		STS	_	1 2				+	+	+	+	+	+	+	+		0 13		
25	Miasnik Ghazaryan	Traffic Engineer	_	STJ	_	1	_		0	-	+	+	+	+	+	+	+		0 6		
26	Anania Safaryan	Cost Estimator		STS	_		_		0	-	+	+	+	-	+	+	+	3			
27	Sonan Badalyan	Environmental Engineer	_	STJ	_	18			0	+	-	-	-	-	+-	+-	+	3			
28	Karine Gasparyan		_	STJ	_	1 10				+	+-	+	+	+	+-	+-	-				
	Inamine Gasparyan	Contract Specialist		217	_				0	-	-	+	-	+	+-	-	-	2			
Total	otal Local experts				_	90	112	2 3	5								1	103			

# Rehabilitation of Caucasian Highways Azerbaijan, Georgia and Armenia SUMMARY OF BILLED WORKING DAYS /Local

Tables 5.6 Billed From January-June 2003 (Period 1)

Long Term	AZ	GE	AR	AZ	GE	AR	Total
Senior		N9 (40); N15 (40); N 16 (40)	N 17(42)		120	42	162
Junior		N 14 (40)	N 18 (42); N19(42)		40	84	124
Short Term							
Senior	N3 (36);N7 (36)	N10 (39); N11(39); N12 (39)	N20;21;23;24(168)	72	117	168	357
Junior	N2 (7); N4 (36); N6 (7)	N13 (39)	N22(42);N25(22)	50	39	64	153
Total	130 310 310	3.00		122	316	358	796

#### Billed From July-December 2003 (Period 2)

Long Term	AZ	GE	AR	AZ	GE	AR	Total
Senior	N3(69);N5(117); N7(153)	N9(122); N15(122); N16(122)	N17(129)	339	366	129	834
Junior	N2(155); N4(74); N6(153)	N14(107)	N18 (129);N19(129)	382	107	258	747
Short Term			1. Commission of the commissio				
Senior	N1(42); N3(84); N7(1)	N 10(107); N11(101);N12(105)	20;21;23;24;26=253	127	313	253	693
Junior	N2 (3);N4(84); N6(5)	N13(103)	25(46);27(20);28(43)	92	103	109	304
Total				940	889	749	2578

#### Local Staff Adjustment

Component	Local	Item No	Planned and or adjusted	Working Day to be Billed	Total to be billed	Grand Total
Azerbaijan	LTS	3;5;7		271+323+287	881	1220
	LTJ	2;4;6;8		285+266+287+220	1058	1440
	STS	1		22	22	221
	STJ	8		220	220	362
Total Local					2181	3243
Georgia	LTS	1;15;16		(32+20)+32+32	116	602
	LTJ					147
	STS	16-1 to 16-4		161	161	591
	STJ	16-5		36	36	178
Total					313	1518
Armenia	LTS	17		38+(11)	49	220
	LTJ	18;19		38+38+(11)+(11)	98 35 53	440
	STS	26		35	35	456
	STJ	27;28		33+20	53	226
Total					235	1342
Financial	Local	OriginalContract		Fee rates	Contract	Actual
	LTS	2192	2042			
	LTJ	2077	2027		1	
	STS	1118	1268		T .	
	STJ	716	766		1	
		6103	6103			

# Rehabilitation of Caucasian Highways Azerbaijan, Georgia and Armenia SUMMARY OF WORKING DAY IN 2003/International

Tables 5.7

No	Name/Month	Title	Jan	Feb	Mar	April	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total Realised 2003	Planned	Realized 2004	Available for Remainder
	Long-term International																	
1	G. Tremlett	Team Leader	14	2	2	23	21	10	0	0	0	0	0	0	110			
2	K.Zukhurov	Acting TL	0			0	0	10	25	4	0	0	0	0	39			
3	Razek Degheim	Team Leader		) (		0	0	0	0	16	22	18	18	17	91		-	
	Total Team Leader	li and the second secon													240	440		200
4	Svetlozar Dotchev	Resident Engineer			19	22	20	21	23	21	22	18	17	19	211	440	0	229
5	Piotr Pecenik	Highway Engineer				0	0	11	23	21	10	21	20	16	122	220	0	98
	Total Long-term														573	1100	(	527
	Short-term International																	
6	K.Zukhurov	Training Specialist				0	0	1 4	- 0	0	0	0	0	0	4	10	0	6
7	lan Trumbell	Tunnel Expert; Armenia	1			0	14			5	0	0	0	0	19	15	(	) 4
8	Eleni Kritikou	Bridge Expert	1			1	12	2			0	0	0	0	15	5		
9	John Rigby	Bridge Expert				0					7	1	0	0	8	10		-13
10	Irvin Cohen	Transport Economist;Georgia				0 0					0	0	0	0	0	36	6 (	36
11	Laurie Gardiner	Environmental Engineer:Georgia			0	0 0		) (			0	7	0	0	7	7	-	
12	Alexander Arobelidze	Environmental Engineer;Georgia	(		0	0 0					0	0	0	0	0	22	2	15
13	Mike Heelis	Pavement Engineer			0	0 0				1 8	3 (	0	0	0	9	10		1
	Total Short-term														62	103	3 (	41

Rehabilitation of Caucasian Highways Azerbaijan, Georgia and Armenia SUMMARY OF WORKING DAY IN 2004 (end of March 2004) /International

No	Name/Month	Title	Jan	Feb	Mar	April	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total Realised 2004	Planned	Total Realized 2003	Available for Remainder
	Long-term International																	
1	G. Tremlett	Team Leader	0	- 0	) (	) (	) (		) (	0 0	) (	0 0	0		0			
2	K.Zukhurov	Acting TL	0			0 0				0		0 0	0		0			
3	Razek Degheim	Team Leader	14	21	22	2 (	) (		) (	0 0		0 0	0		57			
	Total Team Leader														57	440	240	
4	Svetlozar Dotchev	Resident Engineer	15	19	2	1 (	) (			0 0		0 0	0		55	440	211	
5	Piotr Pecenik	Highway Engineer	11	17	7 (	0 (		0 (		0 0		0 0	0		28	220	122	70
	Total Long-term														140	1100	573	387
	Short-term International																	
6	K.Zukhurov	Training Specialist	0	(	) (	0 (		0 (		0 0		0 0			0	10	4	6
7	lan Trumbell	Tunnel Expert; Armenia	0	(	0 (	0 (		0 (		0 0		0 0	) (		0	15	19	-4
8	Eleni Kritikou	Bridge Expert	0	(		0 0		0 (		0 0		0 0			0		15	-15
9	John Rigby	Bridge Expert	0			0 0		0 (		0 0		0 0		) (	0	10	8	2
10	Irvin Cohen	Transport Economist; Georgia	17		5 (	0 0		0 (		0 0		0 0			22	36	0	14
11	Laurie Gardiner	Environmental Engineer;Georgia	0	(	) (	0 (		0 (		0 0		0 0	0	) (	0		7	-7
12	Alexander Arobelidze	Environmental Engineer;Georgia	12	(	6 (	0 (	) (	0 (		0 0		0 0			18	22	0	4
13	Mike Heelis	Pavement Engineer	0	(		0 (	) (	0 (		0 0		0 0			0	10	9	1
	Total Short-term			-	-	-								•	40	103	62	1

Annex 1
Summary of Reports produced
(It contains 2 pages excluding this one)

#### Rehabilitation of Caucasian Highways Azerbaijan, Georgia and Armenia EUROPEAID/113179/C/SV/MULTI

#### Reports Produced on Components 2 and 3

#### 1) Georgia: Component 2

Item	Title	Date of Issue	Prepared by	Expert	Report Number
1	Inception Report	August, 2003	R. Degheim	Long-Term Exp. PM	IRP/No1/2003/GE
2	Draft Final Report	February, 2004	P. Pecenik	Long-Term Expert	DFR/No1/2004/GE
3	Final Report	April 20, 2004	R. Degheim	Long-Term Expert	FR/No 1/2004/GE and AR
	Total				3

#### 2) Armenia: Component 3

Item	Title	Date of Issue	Prepared by	Expert	Report Number
1.	Technical Report on Survey of Tunnels <sup>1</sup>	July 2003	V.Matnishyan	Short- Term Local Tunnel Engineer	TRP/No1/2003/AR
2	Site Inspection and Rehabilitation Works Proposal <sup>2</sup>	August 2003	I.Turnbull	Short-Term Exp. Tunnel Engineer	TRP/No2/2003/AR
3	Engineering- Geological Conclusion <sup>3</sup>	August 2003	P.Makinyan	Short-Term local Geotechnical Eng.	TRP/No3/2003/AR
4	Inception Report <sup>4</sup>	November 2003	R. Degheim	Long-Term Exp. PM	IRP/No 4/2003/AR
5	Final Report <sup>5</sup>	April 20, 2004	R. Degheim	Long-Term Expert	FR/No1/2004/GE and AR
	Total				5

<sup>&</sup>lt;sup>1</sup> Report enclosed in Annex 4 to the 6 months Progress Report dated July 27; <sup>2</sup> Report enclosed in Annex 5 to the Quarterly Report dated October 15, 2003; <sup>3</sup> Report enclosed in Annex A to the Site Inspection and Rehabilitation Works Proposal;

<sup>&</sup>lt;sup>4</sup> Report enclosed in the Second Progress Report (July-December 2003);

<sup>&</sup>lt;sup>5</sup> In conjunction with Component 2, Georgia.

#### 3) General for Components 1, 2 and 3

Item	Title	Date of Issue	Prepared by	Expert	Report Number
1	Inception Report	April 2003	G.Tremlett	Long-Term Exp. PM	IRP/No1/2003/G
2	First Progress Report	July 2003	K.Zukhurov	Long-Term Exp. acting PM	PRP/No1/2003/G
3	Quarterly Progress Report <sup>6</sup>	October 2003	R. Degheim	Long-Term Exp. PM	QRP/No1/2003/G
4	Second Progress Report	January 2004	R. Degheim	Long-Term Exp. PM	PRP/No2/2003/G
5	Quarterly Progress Report	April 2004	R. Degheim	Long-Term Exp. PM	QRP/No2/2004/G
	Total				5

<sup>&</sup>lt;sup>6</sup> Progress Report for Georgia was produced with this Report.

Annex 2
EC's Staff approval
(It contains 3 pages excluding this one)

Table 1- International Experts, Long and Short-term Georgia and Armenia

No	Name	Expert	Position	EC Approval Date/Letter No	Remarks
1	Kakhraman Zukhurov	International Short-term	Acting TL	10.06.03 Side letter No 06	Shared with other Components
2	Ian Trunbull	International Short-term	Tunnel Expert	05.05.03. Side letter No 05	Armenia
3	Jonathan Pagan	International Short-term	Transport Economist	05.05.03. Side letter No 05	Georgia
4	Laurence Gardinier	International Short-term	Environnemental Eng.	25.09.03 Side letter No 09	Georgia
5	Razek Dégheim	International Long-term	Team Leader	Addendum 1 to Contract 2002/027 531(date not clear)	Shared with other Components
6	Irvin Cohen	International Short-term	Transport Economist	29.10.03 Side letter No 10	Georgia
7	Alexander Arobelidze	International Short-term	Environmental Engineer	01.12.03 Side letter No 11	Georgia
8	Piotr Pecenik	International Long-term	Highway Engineer	Original Proposal	Georgia and Armenia
9	Geoffrey Tremlett	International Long-term	Team Leader	Original Proposal	Shared with other Components

Table 2- Local Experts, Component 2 (Georgia)

No	Name	Position	EC Approval Date/Letter No
1	Butkhuzi Tengiz	Surveyor	06.03.03 Side letter No 01
2	Goderzishvili Dodo	CAD Bridge Eng.	06.03.03 Side letter No 01
3	Kartozia Jemal	Bridge Eng.	06.03.03 Side letter No 01
4	Loginov Dimitri	CAD Bridge Eng.	06.03.03 Side letter No 01
5	Mxeidze Otar	Highway Eng.	06.03.03 Side letter No 01
6	Nebieridze Ramaz	Geot. Eng.	06.03.03 Side letter No 01
7	Samkhardze Tamara	CAD Bridge Eng.	06.03.03 Side letter No 01
8	Utmelidze Shota	Surveyor	06.03.03 Side letter No 01
9	Besarion Andrazashvili	CAD Road Eng.	06.03.03 Side letter No 01
10	Manana Tabatadze	CAD Highway Eng.	06.03.03 Side letter No 01
11	Lyudmila Krivolapchuk	Cost Estimator	06.03.03 Side letter No 01
12	Salakaia Vashja	Surveyor	06.03.03 Side letter No 01
13	Boris Ivashenko	Bridge Eng.	06.03.03 Side letter No 01

Table 3- Local Experts, Component 3 (Armenia)

No	Name	Position	EC Approval Date/Letter No
1	Davit Hovsepyan	H.E./Local TL	05.05.03 Side letter No 05
2	Sevak Afrikyan	CAD Design Engineer	05.05.03 Side letter No 05
3	Vigen Matnishyan	Tunnel Engineer	05.05.03 Side letter No 05
4	Miasnik Ghazaryan	Traffic Engineer	05.05.03 Side letter No 05
5	Anania Safaryan	Cost Estimator	05.05.03 Side letter No 05
6	Artur Avagyan	Engineer Surveyor	05.05.03 Side letter No 05
7	Hunan Haroyan	Bridge Engineer	05.05.03 Side letter No 05
8	Valeri Hairapetyan	Drainage Engineer	05.05.03 Side letter No 05
9	Stepan Hakopyan	Pavement Engineer	05.05.03 Side letter No 05
10	Sonan Badalyan	Environmental Engineer	05.05.03 Side letter No 05
11	Pavel Makinyan	Geotechnical Engineer	05.05.03.Side letter No 05
12	Karine Gasparyan	Contract Specialist	05.05.03 Side letter No 05

Annex 3
Important Correspondances
(It contains 31 pages excluding this one)



Louis Berger S.A. Mercure III 55 Bis quai de Gronelle 75015 Paris





#### Rehabilitation of Caucasian Highways Azerbaijan Georgia and Armenia

#### EUROPEAID/113179/C/SV/MULTI

TRACECA

This Project is funded by the European Union

Reference: PS277/P78/03/400/RD/fb

12 November 2003

**EUROPEAN COMMUNITY** 

Commission of the European Communities

Europe Aid Co-operation

Office, L41 04/6

B-1049

Brussels

Task Manager

Brussels

Subject: Rehabilitation of Caucasian Highways-Azerbaijan, Georgia and Armenia (Georgian Component)

For the attention of Mr. E. Dalamangas

Dear Sir.

Clause 4.2 (7) milestones of the ToR for Georgian Component requires that Draft Final Report to be produced end of month 6.

We respectfully request a change to the reporting date of the Pre-Feasibility Study Draft Final reporting date from + 6 months after commencement of the project to + 8 months. This request remains in line with the overall reporting requirement of + 10 months for the Final Report so that there is no change to the overall calendar time frame as specified in the project Terms of Reference. This request would mean that the time frame between the Draft Final Report and the Final Report would be two months instead of four, which accords with the reporting time frame for the Armenia component of the project.

We should be most grateful for your approval to change the reporting date for the Draft Final Report to +8 months. In terms of our reporting schedule, this would mean a submission date of 19 February 2004 as opposed to 19 December 2003.

Best regards.

Fabrice Signor

then 316

Deputy General Manager

Cc: R. Degheim

émis par: 33 (0)1.45.77.74.69 Un' Ton CECANS010608-91DCD 84 + 80033145777469 12/2003 13:02 EUROPEAN COMMISSION EuropeAid Ocoperation Office - Fax b Sue 14-11-07 Europe, Osucasus, Central Asia Unit A 4 COURRIER L.B. PARIS Multisectoral Themetic Support ARRIVE LE 0 3 DEC. 2003 Ta: Louis Berger S.A. COPIE: PSICCBIRF

Mr Fabrice Signor

Mercure H

55 bis Qual de Grenelle

F - 75015 Paris

FAX: 0032 1 45 77 74 69

Subject: Side Letter Nº 11 to Contract 2002 / 027-531

Rehabilitation of Caucasian Highways Project Title:

In Azerbaljan, Georgia and Armenia

EUROPEAID/113179/SV/MULTI Project N:

presson from

Dear Sirs.

We hereby confirm our agreement with the inclusion of the following experts, as requested in your letters of 14 and 27 November 2003, to perform duties under the above mentioned project and we accept their Curricula Vitae.

Long-term local expert (junior expert):

Mr Nabi GASIMOV

Short-term international expert:

Mr Alexander AROBELIDZE

All other conditions of the contract remain unchanged.

Yours faithfully.

For the Contracting Authority,

Efstathios DALAMANGAS Project Manager

Rus de la Loi 200, B-1049 Brusses/Wetetrazt 200, B-1049 Brussel - Belgiuni





**EUROPEAN COMMISSION** EuropeAld Cooperation Office

Europe, Caucasus, Central Asia Unit A 4 Multisectoral Thematic Survey

COURRIER L.B. PARIS ARRIVE LE :

2 9 OCT. 2003

COPIE: FRICCAIRE

To:

Louis Berger S.A. Mr Fabrice Signor Mercure III 55 bis Qual de Grenelle F • 75015 Paris

FAX: 0033 1 45 77 74 69

Subject:

Side Letter Nº 10 to Contract 2002 / 027-531

Project Title:

Rehabilitation of Caucasian Highways in Azerbaljan, Georgia and Armenia

Project Nº:

EUROPEAID/113179/SV/MULTI

Dear Sirs,

We hereby confirm our agreement with the replacement of Mr Pagan by Mr Irvin S. Cohen (international short-term expert), as requested in your letter of 15 October 2003, to perform duties under the above mentioned project and we accept his Curriculum Vitae.

All other conditions of the contract remain unchanged.

Yours faithfully.

For the Contracting Authority,

Project Manager

In Brussels, Date:

Rua de la Loi 200, B-1049 Broxelles/Wetstraut 200, B-1049 Brussel - Belgium

74.69 Louis Beryer CANS010608-AIDCO A4 + 00033145777469 NO.741 Received by Fax from Pour -4ile 195 EUROPEAN COMMISSION Europeald Cooperation Office - File Fax IN Europe, Ozucasus, Central Asia 17/11gs Multisectoral Thematic Support COURTER THE WAR 2 9 SEP. 2003 O: FS Louis Berger S.A. To: COME: CCIRF Mr Fabrice Signor Mercure (II 55 bis Quai de Grenelle F - 75015 Paris

FAX: 0033 1 45 77 74 69

Subject: Side Letter N° 09 to Contract 2002 / 027-531

Project Title: Rehabilitation of Caucasian Highways

In Azerbaijan, Georgia and Armenia

Project N°: EUROPEAID/113179/SV/MULTI

Dear Sirs,

We hereby confirm our agreement with the inclusion of the following expert into the list of experts, as requested in your fax of 17 September 2003, to perform duties under the above mentioned project and we accept his Curriculum Vitae.

Short-term international expert:

Mr Laurence GARDINER

All other conditions of the contract remain unchanged.

Yours faithfully.

For the Contracting Authority,

Entantios DALAMANGAS

Project Manager

In Brussels, 26. 29/03 Date:

Faue de la Loi 200, B-1049 Bruxellea/Wetstrapt 200, B-1049 Brussel - Belgium



EUROPEAN COMMISSION EuropeAid Cooperation Office

Europe, Caucasus, Central Asia Unit A 4 **Multisectoral Thematic Support** 

To:

Louis Berger S.A. Mr Fabrice Signor Mercure III

55 bis Quai de Grenelle

F - 75015 Paris

FAX: 0033 1 45 77 74 69

Subject:

Side Letter N° 05 to Contract 2002 / 027-531

Project Title:

Rehabilitation of Caucasian Highways

In Azerbaijan, Georgia and Armenia

Project N°:

EUROPEAID/113179/\$V/MULTI

Dear Sirs,

We hereby confirm our agreement with the inclusion of the following experts into the list of experts, as requested in your faxes of 25 and 28 April 2003, to perform duties under the above mentioned project and we accept their Curricula Vitae.

International short-term experts:

TUNNEL Mr Iain TURNBULL

· JAUJEL SOD Mr Jonathan PAGAN

ELEN, ERITIKON /Silk

COURRIER L.B. PARIS

ARRIVE LE:

0 6 MAI 2003

Local short-term experts:

Mr David HOVSEPYAN

Mr Sevak AFRIKYAN

Mr Miasnik GHAZARYAN

Mr Vigen MATNISHYAN Ms Anania SAFARYAN

Mr Artur AVAGYAN

Mr Valeri HAIRAPETYAN

Mr Stepan HAKOBYAN

Ms Sona BADALYAN Mr Pavel MAKINYAN

Ms Karine GASPARYAN

Mr Hunan HAROYAN

Local long-term experts:

Mr Gunduz MEHTIYEV

Mr Jalal HASANOV

Mr Karlm MAMEDOV

All other conditions of the contract remain unchanged.

Yours faithfully.

For the Confracting Authority,

Efstathing CALAMANGAS

Project Manager

05.05.03 In Brussels,

Date:

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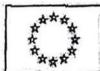
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11/03/2003

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EUROPEAN COMMISSION EuropeAid Cooperation Office

Europe, Caucasus, Central Asia Unit A 4 Energy, Transport, Infrastructure

To:

Louis Berger S.A. Mr Fabrice Signor Mercure III

55 bis-Qual de Grenelle

F - 75015 Paris

FAX: 0033 1 45 77 74 69

COURK

1 1 MAR. 2003

COPIE: FS RF

Subject:

Side Letter Nº 01 to Contract 2002 / 027-531

**Project Title:** 

Rehabilitation of Caucasian Highways

in Azerbaijan, Georgia and Armenia

Project No:

EUROPEAID/113179/SV/MULTI

Dear Sirs.

We hereby confirm our agreement with the inclusion of the following *local experts* in your team, as requested in your letter of 28 February 2003, to perform duties under the above mentioned project and we accept their Curricula Vitae:

Besarion ANDRAZASHVILI
Tengis BUTKHUZI
Nugzar GETZADZE
Boris IVASENKO
Jemal KARTOZIA
Dimitri LOGINOV
Otar MXEIDZE
Nodar NOZADZE
Vladimir GONGADZE
Tamara SAMKHARADZE
Tali TALIASHVILI

Nana BASILIDZE
Revaz CHIKOVANI
Dodo GODERDZISHVILI
Vladimer JIKIA
Ljudmila KRIVOLAPCHUK
Shalva MACHITIDZE
Ramaz NEBIERIDZE
Simon PAPUASHVILI
Vajsha SALAKAIA
Manana TABATADZE
Shota UTMELIDZE

All other conditions of the contract remain unchanged.

Yours faithfully.

For the Contracting Authority,

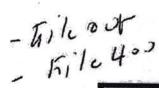
Efstathios DALAMANGAS Project Manager

In Brussels,

Date:

06.09.03









# Rehabilitation of Caucasian Highways Azerbaijan Georgia and Armenia

EUROPEAID/113179/C/SV/MULTI

This Project is funded by the European Union

eam Leader

Baku

Reference: PS277/ rel +994 12 98 84 31

Tel/Fax +994 12 93 24 76

To: TACIS Senior Monitoring

or attention of Mr. Tornike GOTSIRIDZE

19rd January 2004

Subject: Pre-Feasibility Study for the modernization of the existing road Poti -Tbilisi-Red Bridge

Dear Sir,

Please find attached a CD-Rom contains the Draft Final Report, Volume III with Annexes, Volume IV, Volume V and Power Point Presentation of some maps, charts, figures and tables from volume III, in English and Russian versions.

Yours Sincerely,

Razek Degheim LBSA Project Manager/ Team Leader

Received: P. Deaganie







# Rehabilitation of Caucasian Highways Azerbaijan Georgia and Armenia



#### EUROPEAID/113179/C/SV/MULTI

This Project is funded by the European Union

Team Leader Baku Reference PS277/P142/04/500/RD/fb Tel + 994 12 98 84 31 Fax + 994 12 93 24 76 Tacis Local Support Office - NCU

Yerevan

08March, 2004

Subject: Tender Documents, Environmental Impact Assessment, Armenia

Dear Sir.

We refer to our letter PS277/P131/04/500/RD/fb dared 26 February 2004 concerning the submission of the Tender Documents.

Please find attached the outstanding Documents translated into Russian Language.

Thanking you in advance.

Yours Sincerely,

Razek Degheim

LBSA Team Leader/ Project Manager

Recived by T. Grigoryan

17.03.04







## Rehabilitation of Caucasian Highways Azerbaljan Georgia and Armenia

# TRACECA

#### EUROPEAID/113179/C/SV/MULTI

This Project is funded by the European Union

Team Leader Baku

Reference PS277/P141/04/500/RD/fb

Tel + 994 12 98 84 31 Fax + 994 12 93 24 76

Ministry of Transport and Telecommunications, Armenia

Yerevan

08 March, 2004

Subject: Tender Documents, Environmental Impact Assessment, Armenia

For the attention of Mr. Eduard Karapetyan

Dear Sir.

We refer to our letter PS277/P133/04/500/RD/fb dated26 February 2004 concerning the submission of the Tender Documents.

Please find attached the outstanding Tender Documents translated to Russian Language.

Thanking you in advance.

Yours Sincerely,

Razek Degheim

LBSA Team Leader/ Project Manager

F. My 17.03.04







## Rehabilitation of Caucasian Highways Azerbaijan Georgia and Armenia

## EUROPEAID/113179/C/SV/MULTI

This Project is funded by the European Union

Team Leader Baku Reference PS277/P140//500/RD/fb Tel + 994 12 98 84 31

Fax + 994 12 93 24 76 Road Department of Armenia

Yerevan

08 March, 2004

Subject: Tender Documents, Environmental Impact Assessment, Armenia

For attention of Mr. Hakob Petrosyan

Dear Sir.

We refer to our letter PS277/P132/04/500/RD/fb dated 26 February 2004 concerning the submission of Tender Documents.

Please, find attached a hard copy in Russian version of the outstanding Tender Documents including the Volume I in Armenian Language as per your request during my last mission to Yerevan.

Thanking you in advance.

Yours Sincerely,

Razek Degheim

LBSA Team Leader/ Project Manager

Recieved by My 17.03.2004







#### Rehabilitation of Caucasian Highways Azerbaijan Georgia and Armenia

Received up

TRACECA

EUROPEAID/113179/C/SV/MULTI

This Project is funded by the European Union

Reference: PS277/P130/04/195/RD/fb

4th March 2004

EUROPEAN COMMISSION Europe Aid Co-operation Office, L41 04/67 B-1049 Brussels

Contract Title:

Rehabilitation of Caucasian Highways

Azerbaljan Georgia and Armenia

Contract No:

2002/027-531

Subject:

Pre-Feasibility Study - Component 2 - Georgia

Attention Mr. E. Dalamangas

Dear Mr. E. Dalamangas

Please find enclosed the Draft Final Report concerning the Pre-Feasibility Study of the existing road Poti-Tbilisi-Red Bridge.

The following Documents are attached:

- Draft Final Report DFR/Ne1/2004/GE dated February 2004;
- Volume I, Explanatory note and tables of main works;
- · Volume II, Drawings and Photographs;
- Volume III, Road Transport economics:

Annex A - Level of Service calculations;

Annex B - HDM Road Network impact data;

· Volume IV, Environmental Assessment Report.

Yours sincerely,

Fabrice Signor

Deputy General Manager

cc: - R. Degheim







#### Rehabilitation of Caucasian Highways Azerbaijan Georgia and Armenia

TBACEGA

#### EUROPEAID/113179/C/SV/MULTI

This Project is funded by the European Union

Team Leader Baku Reference PS277/P120/04/400/RD/fb Tel + 994 12 98 84 31 Fax + 994 12 93 24 76 TACIS Local Support Office Tbilisi

19 February, 2004 Subject: Pre-Feasibility Study - Draft Final Report №1, Georgia

For the attention of Mr. M. CHANTLADZE

Dear Sir,

Please, find attached a hard copy of the Draft Final Report in English and Russian versions.

I would be grateful if you could make any comments on the attached page and return it to us. If you have no comments please write "No comments".

Thanking you in advance.

Yours Sincerely,

Razek Degheim LBSA Team Leader/ Project Manager

Руководитель Группы PS277/P120/04/400/RD/fb Тел + 994 12 98 84 31 Факс + 994 12 93 24 76 Местное Отделение TACIS Тбилиси

19-ое февраля 2004 Тема: Сбор и анализ исходных Черновой вариант Завершающего Отчёта №1, Грузия

Уважаемый Г-н

Мы прилагаем копии Чернового варианта Завершающего Отчёта на английском и русском языках.

Я буду благодарен Вам, если Вы предоставите любые комментарии по данному отчёту на прилагаемом листе и затем вышлете их нам. Но если у Вас не будет никаких комментарий, укажите «Комментариев нет».

Заранее благодарю.

С уважением,

Разек Дегхем Руководитель Группы LBSA / Менеджер Проекта

Enc: - hard copy in English and Russian versions (2 documents);

- The General Progress Report Comments (1 page).

Прилаг: - копия на английском и русском языках (2 документа);

M. Chinf. - лист для комментарнев по Общему Отчёту о Проделанной Работе (1 стр).

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#### Rehabilitation of Caucasian Highways Azerbaijan Georgia and Armenia Реабилитация Кавказских Магистралей Азербайджан Грузия и Армения

#### EUROPEAID/113179/C/SV/MULTI

This Project is funded by the European Union Этот Проект финансируется Европейским Союзом

Draft Final Report Comments Page Черновой вариант Завершающего Отчёта Лист Примечаний

Received by Ministry of Transport and Communications Georgia / Полученно Министерством Транспорта и Связи Грузии

04/304

89.03.

Comments / Примечания







## Rehabilitation of Caucasian Highways Azerbaijan Georgia and Armenia

TRACECA

#### EUROPEAID/113179/C/SV/MULTI

This Project is funded by the European Union

Team Leader
Baku
Reference PS277/P119/04/400/RD/fb
Tel + 994 12 98 84 31
Fax + 994 12 93 24 76
State Department of Road
Georgia

19 February, 2004 Subject: Pre-Feasibility Study - Draft Final Report №1, Georgia

For attention of Mr. R. Dalakishvili Dear Sir.

Please, find attached a hard copy of the Draft Final Report in English and Russian versions.

The soft copy in the CD is also being attached.

I would be grateful if you could make any comments on the attached page and return it to us. If you have no comments please write "No comments".

Thanking you in advance.

Razek Degheim

Yours Sincerely,

LBSA Team Leader/ Project Manager

Руководитель Группы Баку PS277/P119/04/400/RD/fb Тел+ 994 12 98 84 31 Факс + 994 12 93 24 76 Государственный Дорожный Департамент Грузия 19-ое февраля 2004

Тема: Сбор и анализ исходных данных - Черновой вариант Завершающего Отчёта №1, Грузия Ко вниманию Г-на Р. Далакишвили Уважаемый Г-н,

Мы прилагаем копии Чернового варианта Завершающего Отчёта на английском и русском языках.

Версия на CD также прилагается.

Я буду благодарен Вам, если Вы предоставите любые комментарии по данному отчёту на прилагаемом листе и затем вышлете их нам. Но если у Вас не будет никаких комментарий, укажите «Комментариев нет».

Заранее благодарю.

С уважением,

Разек Дегхем

Руководитель Группы LBSA /

Менеджер Проекта

Enc: - hard copy in English and Russian versions (2 documents);

- CD (1);

- The General Progress Report Comments (1 page).

Прилаг: - копия на английском и русском языках (2 документа);

- CD (1);

- лист для комментариев по Общему Отчёту о Проделанной Работе (1 стр).

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## Rehabilitation of Caucasian Highways Azerbaijan Georgia and Armenia Реабилитация Кавказских Магистралей Азербайджан Грузия и Армения

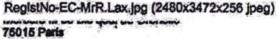
## EUROPEAID/113179/C/SV/MULTI

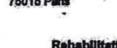
This Project is funded by the European Union Этот Проект финансируется Европейским Союзом

Draft Final Report Comments Page Черновой вариант Завершающего Отчёта Лист Примечаний

Received by State Department of Road Georgia / Полученно Государственным Дорожным Департаментом Грузии

Comments / Примечания











#### Rehabilitation of Caucasian Highways Azerbaijan Georgia and Armenia

#### EUROPEAID/113179/C/SV/MULTI

#### This Project is funded by the European Union

Team Leader
Baku
Reference PS277/P118/04/400/RD/fb
Tel + 994 12 98 84 31
Fax + 994 12 93 24 76
EC Delegation - Georgia
12, Chitadze str.
Tbilisi, Georgia
19 February, 2004
Subject: Pre-Feasibility Study - Draft
Final Report №1, Georgia

For attention Mr. R.LAX

Dear Sir.

Please, find attached a hard copy of the Draft Final Report in English and Russian versions.

I would be grateful if you could make any comments on the attached page and return it to us. If you have no comments please write "No comments".

Thanking you in advance.

to olom

Yours Sincerely.

Razek Degheim LBSA Team Leader/ Project Manager Руководитель Группы Баку PS277/P118/04/400/RD/fb Тел + 994 12 98 84 31 Факс + 994 12 93 24 76 Делегация ЕК - Грузия Ул. Читадзе 12 Тбилиси, Грузия 19-ое февраля 2004

Тема: Сбор и анализ исходных данных - Черновой вариант Завершающего Отчёта №1, Грузия Ко вниманию Г-на Шоты Хелдисквили

Уважаемый Г-н

Мы прилагаем копии Чернового варианта Завершающего Отчёта на английском и русском языках.

Я буду благодарен Вам, если Вы предоставите любые комментарии по данному отчёту на прилагаемом листе и затем вышлете их нам. Но если у Вас не будет никаких комментарий, укажите «Комментариев нет».

Заранее благодарю.

С уважением,

Разек Дегхем

Руководитель Группы LBSA /

Менеджер Проекта

Enc: - hard copy in English and Russian versions (2 documents);

- The General Progress Report Comments (1 page).

Прилаг: - копия на английском и русском языках (2 документа);

- лист для комментариев по Общему Отчёту о Проделанной Работе (1 стр).

REG. No	0392
DATE RECD.	09.03.04

hozněving: no 150605 9/11-20046.







## Rehabilitation of Caucasian Highways Azerbaijan Georgia and Armenia

TRACECA

#### EUROPEAID/113179/C/SV/MULTI

This Project is funded by the European Union

Team Leader Baku Reference PS277/P99/04/180/RD/fb Tel + 994 12 98 84 31 Fax + 994 12 93 24 76 State Department of Road Georgia

22 January, 2004 Subject: General Progress Report №2

For attention of Mr. R. Dalakishvili Dear Sir.

Please, find attached a hard copy of the Report General Progress Nº o PRP/2/2003/G in English and Russian PRP/2/2003/G versions.

The soft copy in the CD is also being Версия на CD также прилагается. attached.

I would be grateful if you could make any comments on the attached page and return it to us. If you have no comments please write "No comments".

Thanking you in advance.

Razek Degheim

Yours Sincerely,

LBSA Team Leader/ Project Manager

Руководитель Группы PS277/P99/04/180/RD/fb Тел+ 994 12 98 84 31 Факс + 994 12 93 24 76 Государственный Дорожный Департамент

> Грузия 22-ое января 2004

Тема: Общий Отчёт о Проделанной Работе №2

Ко вниманию Г-на Р. Далакишвили Уважаемый Г-н.

Мы прилагаем копии Общего Отчёта Проделанной Работе английском на И русском языках.

Я буду благодарен Вам, если Вы предоставите любые комментарии по данному отчёту на прилагаемом листе и затем вышлете их нам. Но Bac V не будет никаких комментарий, укажите «Комментариев нет».

Заранее благодарю.

С уважением,

Разек Дегхем

Руководитель Группы LBSA /

Менеджер Проекта

Enc: - hard copy in English and Russian versions (2 documents);

- CD (1);

- The General Progress Report Comments (1 page).

- копия на английском и русском языках (2 документа); Прилаг:

- CD (1);

Received: K. Sa







## Rehabilitation of Caucasian Highways Azerbaljan Georgia and Armenia



#### EUROPEAID/113179/C/SV/MULTI

This Project is funded by the European Union

Team Leader
Baku
Reference PS277/P94/04/180/RD/fib
Tel + 994 12 98 84 31
Fax + 994 12 93 24 76
National Coordination Unit
Director of European Relations
Department
12, Chitadze str.
Tbilisi, Georgia
22 January, 2004
Subject: General Progress Report №2

For attention Mr. Shota Kheldiskvili

Dear Sir,

Please, find attached a hard copy of the General Progress Report № PRP/№2/2003/G in English and Russian versions.

I would be grateful if you could make any comments on the attached page and return it to us. If you have no comments please write "No comments".

Thanking you in advance.

Razek Degheim

Yours Sincerely,

LBSA Team Leader/ Project Manager

Руководитель Группы Баку PS277/P94/04/180/RD/fb Тел + 994 12 98 84 31 Факс + 994 12 93 24 76 Национальное Координационное Бюро Директор Департамента по Европейским

Отношениям Ул. Читадзе 12 Тбилиси, Грузия

22-ое января 2004 Тема: Общий Отчёт о Проделанной Работе №2

Ко вниманию Г-на Шоты Хелдисквили

Уважаемый Г-н

Мы прилагаем копии Общего Отчёта о Проделанной Работе № PRP/№2/2003/G на английском и русском языках.

Я буду благодарен Вам, если Вы предоставите любые комментарии по данному отчёту на прилагаемом листе и затем вышлете их нам. Но если у Вас не будет никаких комментарий, укажите «Комментариев нет».

Заранее благодарю.

С уважением,

Разек Дегхем

Руководитель Группы LBSA /

Менеджер Проекта

Enc: - hard copy in English and Russian versions (2 documents);

- The General Progress Report Comments (1 page).

Прилаг: - копия на английском и русском языках (2 документа);

- лист для комментариев по Общему Отчёту о Проделанной Работе (1 стр).

3.03.20046







## Rehabilitation of Caucasian Highways Azerbaijan Georgia and Armenia

## EUROPEAID/113179/C/SV/MULTI



This Project is funded by the European Union

Acting Team Leader
Baku
Reference PS277/P93/04/180/RD/fb
Tel + 994 12 98 84 31
Fax + 994 12 93 24 76
Ministry of Transport and Communications
Georgia

22 January, 2004 Subject: **General Progress Report №2**  Руководитель Группы Баку PS277/P93/04/180/RD/fb Тел + 994 12 98 84 31 Факс + 994 12 93 24 76 Министерство Транспорта и Связи Грузия

> 22-ое января 2004 Тема: Общий Отчёт о Проделанной Работе №2

Dear Sir,

Уважаемый Г-н

Please, find attached a hard copy of the General Progress Report № PRP/№2/2003/G in Russian version.

Мы прилагаем копии Общего Отчёта о Проделанной Работе № PRP/№2/2003/G на русском языке.

The soft copy in the CD is also being attached.

Версия на CD также прилагается.

I would be grateful if you could make any comments on the attached page and return it to us. If you have no comments please write "No comments".

Я буду благодарен Вам, если Вы предоставите любые комментарии по данному отчёту на прилагаемом листе и затем вышлете их нам. Но если у Вас не будет никаких комментарий, укажите «Комментариев нет».

Thanking you in advance.

Заранее благодарю.

Yours Sincerely,

С уважением,

Razek Degheim

LBSA Team Leader/ Project Manager

Разек Дегхем

Руководитель Группы LBSA /

Менеджер Проекта

Enc: - hard copy in Russian version (1 document);

CD (1);

- The General Progress Report Comments (1 page).

Прилаг: - копия на русском языке (1 документ);

- CD (1);

- лист для комментариев по Общему Отчёту о Проделанной Работе (1 стр).

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Received Lung my minite - File







Economie

## Rehabilitation of Caucasian Highways Azerbaijan Georgia and Armenia

TRACECA

#### EUROPEAID/113179/C/SV/MULTI

This Project is funded by the European Union

Team Leader
Baku
Reference PS277/P33/03/180/RD/fb
Tel + 994 12 98 84 31
Fax + 994 12 93 24 76
Ministry of Transport and Communications
Armenia
28<sup>th</sup> August, 2003
Subject: First Progress Report of 27<sup>th</sup>
July 2003 (Revised Version)

Aménagement

For the attention of Mr. Gagik Grigoryan

Dear Sir,

We refer to our letter referenced PS277/2/KZ/014 dated 26<sup>th</sup> July 2003 regarding the submission of the First Progress Report on the above-mentioned project.

Please, find attached the First Progress Report (Revised Version) for the abovementioned project in Russian version. The soft copy in the CD is also being attached.

Thanking you in advance

Руководитель Группы Баку PS277/P33/03/180/RD/fb Тел + 994 12 98 84 31 Факс + 994 12 93 24 76 Министерство Транспорта и Связи Армения 28-ое августа 2003

Тема: Первый Отчёт о Проделанной Работе за 27-ое июля 2003 (Изменённый Вариант) Ко вниманию г-на Гагика Григоряна

Уважаемый Г-н

Ссылаясь на наше письмо за номером PS277/2/KZ/014 от 26-го июля 2003, касаясь предоставления Первого Отчёта о Проделанной Работе по вышеуказанному проекту.

Мы прилагаем копии «Изменённого Варианта» на русском языке. CD копия также прилагается.

Заранее благодарю.

Yours Sincerely

С уважением,

Razek Degheim

LBSA Team Leader/ Project Manager

Разек Дегхем

Руководитель Группы LBSA /

Менеджер Проекта

Enc: - hard copy Russian version (1 document);

- CD (1).

Прилаг: - копия на русском языке (1 документ);

- CD (1).

Received 13.10.03

S.A. AU CAPITAL DE 300 000 EUROS - RCS PARIS 302 588 801 - SIRET +/00027 - CODE APE 742C - TVA N° INTRACOMMUNICIDIES FR 63 302 5

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Louis Berger S.A. Mercure III 55 Bis quai de Grenelle 75015 Paris





## Rehabilitation of Caucasian Highways Azerbaijan Georgia and Armenia

TRACECA

EUROPEAID/113179/C/SV/MULTI

This Project is funded by the European Union

Team Leader Baku Reference PS277/P133/04/500/RD/fb Tel + 994 12 98 84 31 Fax + 994 12 93 24 76 Ministry of Transport and Telecommunications, Armenia

Yerevan

26 February, 2004

Subject: Tender Documents, Environmental Impact Assessment, Armenia

For the attention of Mr. Eduard Karapetyan

Dear Sir,

Please, find attached the following Documents:

- 1) A hard copy in Russian version of the Volume III (Drawings) of the Tender Documents regarding the rehabilitation of the 3 Tunnels. The Russian Version of the Volumes I, II and IV would be submitted within 2 weeks;
- The cost estimate in Russian Version;
- 3) The soft copy of Drawings in Russian Version and for Tender documents (4 complete sets in English Version is also being attached).

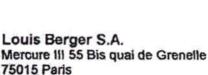
Thanking you in advance.

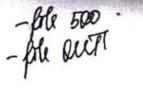
Yours Sincerely,

Razek Degheim

LBSA Team Leader/ Project Manager

F. In 27.02.04p.









## Rehabilitation of Caucasian Highways Azerbaijan Georgia and Armenia

TRACECA

EUROPEAID/113179/C/SV/MULTI

This Project is funded by the European Union

Team Leader Baku Reference PS277/P132/04/500/RD/fb Tel + 994 12 98 84 31 Fax + 994 12 93 24 76 Road Department of Armenia Yerevan

26 February, 2004

Subject: Tender Documents, Environmental Impact Assessment, Armenia

For attention of Mr. Hakob Petrosyan

Dear Sir,

Please, find attached a hard copy in English version of the following Documents:

- 1) Complete set of the Tender Documents for tunnel No 1;
- Complete set of the Tender Documents for tunnel No 2;
- 3) Complete set of the Tender Documents for tunnel No 3;
- Complete set of the Tender Documents for tunnels No 1, 2 and 3;
- Environmental Impact Assessment Report.

The hard copy of the Volume III (Drawings) in Russian Version is also being attached for the 3 tunnels. The Russian Version for Volumes I, II and IV would be submitted within 2 weeks.

The cost estimate on the 3 tunnels in Russian Version is attached.

The soft copy is also being attached.

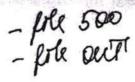
Thanking you in advance.

Yours Sincerely,

Razek Degheim

LBSA Team Leader/ Project Manager

Recieved 27.02.04. Mylupous Petrosyan









## Rehabilitation of Caucasian Highways Azerbaijan Georgia and Armenia

**TRACECA** 

EUROPEAID/113179/C/SV/MULTI

This Project is funded by the European Union

Team Leader Baku Reference P

Reference PS277/P131/04/500/RD/fb

Tel + 994 12 98 84 31

Fax + 994 12 93 24 76

Tacis Local Support Office TNC U - Yererzy

Yerevan

26 February, 2004

Subject: Tender Documents, Environmental Impact Assessment, Armenia

Dear Sir,

Please, find attached a hard copy in English version of the following Documents:

- 1) Complete set of the Tender Documents for tunnel No 1;
- 2) Complete set of the Tender Documents for tunnel No 2;
- 3) Complete set of the Tender Documents for tunnel No 3;
- 4) Complete set of the Tender Documents for tunnels No 1, 2 and 3;
- 5) Environmental Impact Assessment Report.

The hard copy of the Volume III (Drawings) in Russian Version is also being attached for the 3 tunnels. The Russian Version for Volumes I, II and IV would be submitted within 2 weeks.

The soft copy is also being attached.

Thanking you in advance.

Yours Sincerely,

Razek Degheim

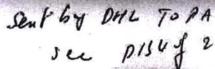
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LBSA Team Leader/ Project Manager

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Louis Berger S.A. Mercure III 55 Bis quai de Grenelle 75015 Paris





# Rehabilitation of Caucasian Highways Azerbaijan Georgia and Armenia

TRACECA

EUROPEAID/113179/C/SV/MULTI

This Project is funded by the European Union

Team Leader

3aku

Reference PS277/P130/04/500/RD/fb

Tel + 994 12 98 84 31

Fax + 994 12 93 24 76

Task Manager

3russels

26 February, 2004

Subject: Tender Documents, Environmental Impact Assessment, Armenia

For attention of Mr. E. Dalamangas

Dear Sir,

Please, find attached a hard copy in English version of the following Documents:

- 1) Complete set of the Tender Documents for tunnel No 1;
- 2) Complete set of the Tender Documents for tunnel No 2;
- 3) Complete set of the Tender Documents for tunnel No 3;
- 4) Complete set of the Tender Documents for tunnels No 1, 2 and 3;
- 5) Environmental Impact Assessment Report.

The soft copy is also being attached.

Thanking you in advance.

Yours Sincerely,

Razek Degheim

LBSA Team Leader/ Project Manager

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L B LOUIS BERGER S.A.

MERCURE III 55 BIS, GUAL DE GRENEUE, 75015 PARIS TEL UI 45 78 39 39 \* International +33 1 45 78 39 39 \*AX 91 45 77 74.69 \* International +33 1 45 77 74 69

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Economie

Amenagement





## Rehabilitation of Caucasian Highways Azerbaijan Georgia and Armenia

TRACECA

EUROPEAID/113179/C/SV/MULTI

This Project is funded by the European Union

Team Leader
Baku
Reference PS277/2/KZ/022
Tel + 994 12 98 84 31
Fax + 994 12 93 24 76
National Coordination Unit
Director of European Relations
Department
12, Chitadze str.
Tbilisi, Georgia
21<sup>st</sup> August, 2003
Subject: The First Progress Report

For Attention Mr Shota Kheldiskvili

Dear Sir Kheldiskvili

Please find attached the First Progress Report (January-July, 2003) for the above-mentioned project in English and Russian versions. The soft copy in the CD is also being attached.

I would be grateful if you would make any comments you may have on the attached page and return it to us. If you have no comments please write "no comment"

Thanking you in advance

gherm

Руководитель Группы Баку

PS277/2/K3/022 Тел + 994 12 98 84 31

Факс + 994 12 93 24 76

Национальное Координационное Бюро Директор Департамента по Еаропейским

Отношениям Улю Читадзеб 12

Тбилиси, Грузия 21-ое августа 2003

Тема: Первый Отчёт о Проделанной Работе

Г-ну Шоте Хелдисквили

Уважаемый Г-н Хелдисквили

К указанному выше проекту МЫ прилагаем Первый Отчёт Проделанной Работе (январь-июль 2003) английской B русской Также версиях. прилагаются электронные версии отчёта на этих же языках.

Я буду благодарен Вам, если Вы предоставите любые комментарии по данному отчёту на прилагаемом листе и затем вышлете их нам. Но если у Вас не будет никаких комментарий, укажите «Комментарий нет»

Заранее благодарю.

С уважением,

Razek Degheim LBSA Team Leader

Yours Sincerely

Разек Дегхем Руководитель Группы LBSA

5.4 ALT CAPITAL DE 300 000 EUROS : RCS PARIS 302 588 801 - SIRET + 00027 CODE APE 742C : TVA Nº ENTRACOMMUNALITAIRE ER 63 302 5

#### Rehabilitation of Caucasian Highways Azerbaijan Georgia and Armenia Реабилитация Кавказских Магистралей Азербайджан Грузия и Армения

#### EUROPEAID/113179/C/SV/MULTI

This Project is funded by the European Union Этот Проект финансируется Европейским Союзом

The First Progress Report Comments Page Первый Отчёт о Проделанной Работе Лист Примечаний

- 1/265. 426 -

eceived by National Coordination Unit – Georgia Толученно Национальным Координационным Бюро - Грузия

comments / Примечания

1



# LOUIS BERGER S.A.

MERCURE III - 55 BIS, QUAI DE GRENEILE, 75015 PARIS TEL 01.45.78.39.39 • International +33.1.45.78.39.39 FAX 01.45.77.74.69 • International +33.1.45.77.74.69 FAX 01.15.77.74.69 • International +33.1.45.77.74.69

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Economie

Aménagement





## Rehabilitation of Caucasian Highways Azerbaijan Georgia and Armenia

TRACECA

## EUROPEAID/113179/C/SV/MULTI

This Project is funded by the European Union

Acting Team Leader Baku Reference PS277/2/KZ/011 Tel + 994 12 98 84 31 Fax + 994 12 93 24 76 TACIS Local Support Office

Tbilisi

26<sup>th</sup> July, 2003

Subject: The First Progress Report

И.О. Руководителя Группы

PS277/2/K3/011

Тел Факс

Местное Отделение TACIS

Тбилиси

26-ое тюля 2003

Тема: Первый Отчёт о Проделанной

Работе

Dear Sir

Please find attached the First Progress Report (January-July, 2003) for the above-mentioned project in English and Russian versions. Уважаемый Г-н

К указанному выше проекту мы прилагаем Первый Отчёт о Проделанной Работе (январь-июль 2003) в английской и русской версиях.

I would be grateful if you would make any comments you may have on the attached page and return it to us. If you have no comments please write "no comment"

Я буду благодарен Вам, если Вы предоставите любые комментарии по данному отчёту на прилагаемом листе и затем вышлете их нам. Но если у Вас не будет никаких комментарий, укажите «Комментарий нет».

Thanking you in advance

Заранее благодарю.

Yours Sincerely

С уважением,

K Zukhurov

LBSA Acting Team Leader/ Project Manager

К. Зухуров И.О. Руководителя Группы LBSA /

Менеджер Проекта

R. Dragam

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# OUIS BERGER S.A.

MERCURE III - 55'BIS, QUAI DE GRENELLE, 7501 5 PARIS FEL. 01.45.78.39.39 • International +33.1.45.78.39.39 FAX 01.45.77.74.69 • International +33.1.45.77.74.69 -(Mail : Incom/@feutharms.com

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Francia

Aménagemen





## Rehabilitation of Caucasian Highways Azerbaijan Georgia and Armenia

TRACECA

#### EUROPEAID/113179/C/SV/MULTI

This Project is funded by the European Union

Acting Team Leader

Baku

Reference PS277/2/KZ/08

Tel + 994 12 98 84 31

Fax + 994 12 93 24 76

Ministry of Transport and Communications

Georgia

26th July, 2003

Subject: The First Progress Report

И.О. Руководителя Группы

Баку

PS277/2/K3/08

Тел

Факс

Министерство Транспорта и Связи

Грузия

26-ое июля 2003

Тема: Первый Отчёт о

Проделанной Работе

For Attention Mr

Г-ну

Dear Sir

Please find attached the First Progress Report (January-July, 2003) for the abovementioned project in English and Russian versions. The soft copy in the CD is also

being attached.

Уважаемый Г-н

К указанному выше проекту мы прилагаем Первый Отчёт о Проделанной Работе (январь-июль 2003) в английской и русской версиях. Также прилагаются электронные версии отчёта на этих же языках.

I would be grateful if you would make any comments you may have on the attached page and return it to us. If you have no comments please write "no comment"

Я буду благодарен Вам, если Вы предоставите любые комментарии по данному отчёту на прилагаемом листе и затем вышлете их нам. Но если у Вас не будет никаких комментарий, укажите «Комментарий нет».

Thanking you in advance

Заранее благодарю.

Yours Sincerely

С уважением,

K Zukhurov

LBSA Acting Team Leader/ Project Manager

К. Зухуров

И.О. Руководителя Группы LBSA /

Менеджер Проекта

a grahywhood 15 5

From:

Ministry of Environment and the Natural Resources Protection of Georgia 68a Kostava St, 380015 Tbilisi, Georgia. Tel (+995 32) 23 06 64; Fax (+995 32) 94 36 70; e-mail: <a href="mailto:gmep@access.sanet.ge">gmep@access.sanet.ge</a>

Let.# 13-12/1815 dated 05 December 2003

To: Mr Razek Degheim, Project Manager, TACIS - Rehabilitation of Caucasian Highways Azerbaijan, Georgia and Armenia

Subject: Prefeasibility Study for the Modernization of the Poti-Red Bridge road to the European Standards.

Dear Mr Degheim

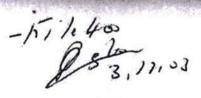
The MoE has discussed your letter dated 02 December 2003 and the attached (proposed) structure for the Preliminary Environmental Assessment.

In this regards we would like to inform you on the following:

- In general, the submitted structure for the Environmental Assessment satisfies the
  requirements that are necessary on the current stage of the Project. We consider, that the
  Preliminary Assessment conducted in correspondence with the proposed format will allow for
  optimum planning of environmental components on the subsequent stages of the Project.
- 2. In the same time we have certain comments and thoughts regarding the format of proposed preliminary assessment:
  - In the list of expected impact receptors it is advisable to consider the sensitive areas represented by wetlands (for instance at Poti section), despite of weather they are or not within the designated boundaries of protected areas;
  - it is also significant to preliminarily assess the protection of the mineral resources from the potential negative impact, including the issue of utilization during the construction stage. It would be appropriate to have preliminary assessment of the project needs for mineral resources (inert materials) in terms of type, quantity, extraction locations;
  - some sections of the route alternatives are crossing the agricultural lands. According
    the current legislation, the changes in landuse status are subject to EIA. So we
    consider these issues to be reflected in the preliminary assessment as well;
  - the Environmental Management Plan, for both the construction and operations/maintenance stages, shall contain the preliminary assessment of mitigation needs for the specific sections, including in terms of surface/waste water collection and treatment, waste management, geology (erosion, landslides) and othe issues;
  - considering that all stages of the Project development are based on EU standards, it
    is advisable in the legal chapter to present wider review of the relevant EU standards
    and the analysis of how applicable they are to local conditions;
  - we consider the Screening and Scoping consultations are possible in full range only based on review of the results of preliminary assessment, because the material we have currently at our disposal is very general and not sufficient for the proper Screening and Scoping processes.

From our part - we are ready for cooperation as well













Rehabilitation of Caucasian Highways Azerbaijan Georgia and Armenia

EUROPEAID/113179/C/SV/MUI TI

This Project is funded by the European Union

Tbilisi, 02/12/03

TRACECA

To: Minister of Environment of Georgia

Ms Nino Chkhobadze

Dear Ms Chkhobadze

As you probably know the Pre-feasibility Study for the Poti-Red Bridge Road Modernization is currently on the way under the TRACECA programme. The Study is financed by TACIS and is very limited in terms of resources and the timeframe. The contract for the Study has been awarded to International engineering consulting company Louis Berger Group, who is working in cooperation with the Georgian State Department of Roads.

Considering the fact that the pre-feasibility study does not contain a final/detailed design solutions, it is important for us to know the format for the preparation/submission of the materials to the MoE and other authorities or stakeholders, to obtain their comments and approvals. Especially for the new sections and route alternatives - in order to make an "early decision" on which option should be considered for the next (design) stage of the project - i.e. during the preparation of the both design documents and the detailed EIA report.

The EU legislation and the Georgian legislation as well, consider the Screening and Scoping procedures which allows, through the consultations with the competent authority, to determine the type of the environmental assessment, where and whether it is necessary, as well as its format (content, extent of details, etc.). This type of consultations have been started with your Ministry in October.

We are asking you to provide us with the Screening and Scoping opinion, as well as give us your opinion on the new sections and alternative routs. As we know the State Department of Roads has already submitted the corresponding maps.

From our part we are also enclosing the tentative structure of the Preliminary Environmental Assessment report, that we are using currently in work.

Many thanks for your kind cooperation.

Respectfully

Razek DEGHEIM

Project Manager

Annex 4
Record of Meetings
(It contains 2 pages excluding this one)

## REHABILITATION OF CAUCAUSUS HIGHWAYS PRE-FEASIBILITY STAGE – GEORGIA

等的建设的重要的连续经验。 一点不够的 的第三人称形式 医动脉结合的 网络克格尔

#### **ENVIRONMENTAL ASSESSMENT**

## Record of Meeting

Time/Date:

12.00 noon, 17th October 2003

Location:

Dept. of Biodiversity offices, 5th Floor, 68 Kostava St, Tibilisi

Present:

Soso Kartsivadze (Head of Dept)

Givi Ninikashvili (Deputy Head of Dept)

Ms Henrita Lolua (Head of protected Areas Office)

Ms Anna Rukhadze

Representative from Dept of Surface Water Resources

and Dept of Land Resources

Piotr Pecenik (Highway & Traffic Engineer - Louis Berger) Laurie Gardiner (Environmental Consultant - Jacobs)

Zviad Gogiashvili (Interpreter)

Purpose:

To outline project objectives and to seek baseline data on environmental constraints and features within the highway corridor to assist completion of

an initial environmental assessment.

- 1. PP explained background to project, the road sections that are to be rehabilitated and the need for bypasses on the larger populated areas; LG explained the need for baseline environmental data within the corridor to inform the choice of alignments;

  1:50,000 route maps showing the proposed alternatives were discussed briefly.
- The Dept of Biodiversity has a list of protected areas in the country but work is still in a protected areas in the country but work in the country but work
- 3. The main PA of concern for the road corridor is the Kolkheti National Park situated adjacent to Poti but there may be others along the route they will need a copy of the route maps before giving comment (e.g. there is a PA south of Kutaisi in the road corridor which will need consideration).
- 4. Apart from the Dept of Biodiversity, the Dept of Reserves and Hunting Areas also administers Protected Areas and will need to be consulted.
  - 5. The proposed alternative (green variant) which intersects the Kolkheti NP at its eastern end would not be permitted. (Note: this is an internationally protected wetland under the Ramsar Convention to which Georgia is a signatory; studies on the area are being funded by Global Environmental Facility, World Bank and Germany).
  - 6. The alignment of the other proposed off-line route intersects agricultural land and could have a significant impact on the livelihood of subsistence farmers the actual alignment would need to be agreed in discussion between the Ministry of Agriculture and the Local Authority.
  - Representatives asked whether there is a scheme for compensating environmental damage or expropriation of housing.
  - 8. No problem was raised with the mountainous section between Zestaponi and Khashuri as long as the route follows the existing road; an alternative via Kharagauli would not be acceptable as this could impact the Borjomi NP and the road passes through National Park forests.
  - 9. The Dept of Surface Water Resources representative stated that potential contamination of rivers could arise during construction and measures would need to be taken to protect these. He also noted the presence of a sanitary protection zone at Natakhtari which is crossed by the route as this is a main water source for Tbilisi. The study also needs to identify areas prone to landslides/landslips.
  - LG requested 1:50,000 maps of the road corridor showing PAs and other relevant environmental data.
  - 11. Mr Kartsivadze stated that before information could be handed over the State Roads Department of Georgia would need to write to the Ministry of Environment requesting them to initiate a pre-feasibility study for the environmental assessment. END

## REHABILITATION OF CAUCAUSUS HIGHWAYS PRE-FEASIBILITY STAGE - GEORGIA

#### ENVIRONMENTAL ASSESSMENT

## Record of Meeting

Time/Date:

17:00, 17<sup>th</sup> October 2003

Location:

Dept. for Protection of Mineral Resources and Mining, 2nd Floor, 87 Z.

Paliashvili St., Tbilisi

Present:

Zurab Kotelia (Head of Dept.)

Nicholoz Labartkava (Deputy Head of Dept.)

Otar Turmanidze (Deputy Head - representing the Dept of Environmental

Expertise and Licences and Dept of Land Resources)

Piotr Pecenik (Highway & Traffic Engineer - Louis Berger) Laurie Gardiner (Environmental Consultant - Jacobs)

Zviad Gogiashvili (Interpreter)

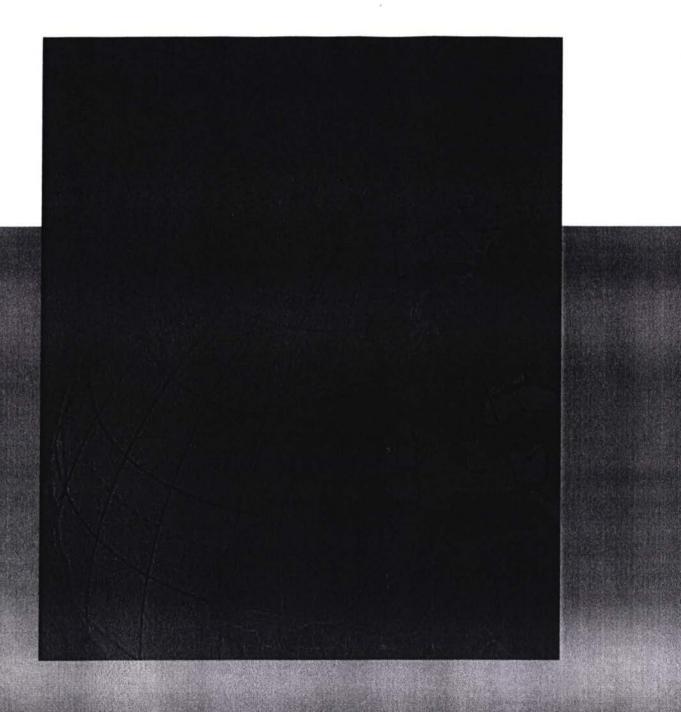
Purpose:

to mally consulted

To outline project objectives and to seek baseline data on environmental constraints and features within the highway corridor to assist completion of

an initial environmental assessment.

- 1. PP explained background to project, the road sections that are to be rehabilitated and the need for bypasses on the larger populated areas; LG explained the need for baseline environmental data within the corridor to inform the choice of alignments; 1:50,000 route maps showing the proposed alternatives were discussed briefly. itation of Caucasian (Georgia) Highways
  - If project as a includes project is classified as a Category 1 (large) project as it includes widening to under the Law of Environmental Permits.
- information on in 30 for 30 for Mr Kotelia said his Dept could provide information on mineral resources and quarry gates but needs a copy of the that could be used for road aggregates but needs a copy of the route maps.
- the alternative Aroutes Representatives asked who had prepared the alternative routes and whether there Latside the State Dept of had been any consultation on this topic outside the State Dept of Roads. They wis may not be acceptab expressed the view that these alternatives may not be acceptable and that other governmental departments will need to be formally consulted.
  - The question of compensation was raised has the Roads Dept determined which land is private and which is State owned? This will have cost implications which need to be included in the economic analysis of alternatives. Expropriation and compensation were major issues in the BTC pipeline project.
  - 6. Representatives stated that the project concerns a trans-national highway and as a though potent about 60% of the route will be off-line there is significant potential for environmental and social impacts (resettlement and loss of livelihood). There is a need for early consultation with other statutory bodies on selection of alternative routes to ensure of happened and it proposals are acceptable. To date this has not happened and there is a risk that the project will fail to get an environmental permit.
  - 'a waa gavarament o The Ministry of Environment and all other relevant government departments who have an interest in the project should be invited to a forum by the State Dept of Roads to agree on an approach to proceed with the pre-feasibility study with all parties involved. END.





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