

Project No: LE9809.01

Title: Via Baltica Road safety improvement in Bauska city

1. Location

Via Baltica (TEN Corridor # 1), Bauska District, Latvia adjacent to Lithuania

2. Objectives

Overall:

The overall objective of the project is to implement significant improvements to the road system in Bauska city, which will raise safety standards for all road users and pedestrians in Bauska city and improve the flow of traffic along the Via Baltica (the Trans European Corridor #1 crossing Latvia).

Specific:

- Complete redesigning of the crossings, drastically improved road safety conditions for local and transit traffic, road users and pedestrians.
- To serve as a pilot project for more improvements of this kind along Via Baltica or in other Latvian Districts.

National Programme for European Integration

Priority Theme 2: Developing the Economy to cope with Competitive Pressures

- Sub-priority 5; Measure 5.3: Integration into European transportation network.

Accession Partnership

Medium term: To provide necessary investment for transport infrastructure, notably extension of Trans-European networks.

3. Description

The road safety situation in Latvia is one of the worst in Europe, with 19,9 fatalities per 10.000 vehicles in 1995, which is about 10 times higher than in Sweden or Finland. In that year, the urban road network accounted for 74% of registered accidents causing 62% of the injured and 43% of fatalities. The Phare master plan for the maintenance, development and operation of the road network and highway safety programme (June 1997) calculated that Latvia would avoid 300 fatalities per year by reaching the EU level of road safety. Using established methods of costing road accidents, the master plan concluded that the total economic costs of road accidents to the Latvian economy in 1995 amounted to almost Ls 72 million (about ECU 110 million).

The project forms part of the road safety improvement component of the World Bank "Latvia Highway Project" 1997-1999, which accounts for \$6 million out of a total project cost of almost \$57 million. Bauska city has been identified in the World Bank staff appraisal report as an accident black spot (along with the Iecava region).

The second element of this project is the preparation of project documentation for further road improvements along the VIA Baltica to ensure further integration of Latvian transport infrastructure into Trans-European transport network.

The proposed project of Bauska sections entails various works aimed at significant traffic and pedestrian safety improvements. These include the reconstruction of primary and private road junctions, a throughway through the urban area, pedestrian and bicycle traffic improvement, lighting, speed regulation, removal of obstacles from the road reserve and roadside, new relief driving lanes, and reconstruction of pavement (asphalt).

The two components of the project are:

Component 1: Bauska city

Detailed design (financed by LRA - year 1998)

- A. Tendering and contracting
- B. Preparation and Construction works.

The main project components connected with traffic safety improvements are:

1. Crossings with traffic-lights = 3 (+ 9 pedestrian crossings);
2. Crossings without traffic-lights = 7 (+15 pedestrian crossings);
3. Pedestrian sidewalks = 4,6 km
4. Barriers + 1,6 km
5. Elimination of obstacles to traffic turning left at junctions.

Inputs: construction materials, expertise.

Component 2: Project preparation

Additional improvements are planned along the VIA Baltica to improve road safety and road conditions according to Community standards. The aim of Component 2 is to finance project preparation facilities for high priority projects.

Expected results and outputs

The result of the project will be road safety improvements on Via Baltica road in Bauska city, with a saving in human lives, hospital costs and vehicle repair costs, and promotion of European integration through efficient transport systems for both passengers and freight.

Traffic accident statistics show that 34 accidents occurred in central Bauska city in 1996. Using established techniques for valuing the cost of road accidents, the total cost of these is estimated at 188 000 Ls (290 000 ECU). The planned safety improvements will reduce the number of accidents by an estimated 70%.

The concrete outputs of the project will be the following:

- a) Streets widened according to the perspective traffic intensity;
- b) Buildings representing obstacles demolished;
- c) New parking lots built and existing ones reconstructed;
- d) New underground facilities built and existing ones reconstructed;
- e) Uzvaras street connection to Kalna street (at major traffic junctions) totally rebuilt;
- f) Pavement renewed;
- g) Traffic lights reconstructed, pedestrian crossings organized, carriageway painted, traffic signs and lighting reconstructed.

The project will make a major contribution to the safety of all road passenger and freight traffic along TEN Corridor #1.

4. Institutional Framework

Recipient institution will be the Latvian Road Administration (LRA), the Implementing Agency will be the Ministry of Transport. LRA is responsible for the maintenance and development of all state roads (20,466 km out of which 7,700 km are paved). The Administration is presently divided into nine divisions and two project implementation units, one for the implementation of a pavement management system, the other for foreign aid financed projects such as the proposed project. There are 26 regional units under the supervision of LRA. Partner institutions will be the Road department of the Ministry of Transport and Latvian Road Traffic Safety Administration. Both the Latvian Road Administration and the Road Department in the Ministry of Transport have all the necessary expertise to conduct the project. They have just completed the major project of a road bypass of the city of Jelgava. LRA management and its PIU are experienced users of foreign technical assistance, and they can also rely on the experience of the PMU in the Ministry of Transport in Riga.

5. Budget

The following cost estimates are based on the pre-feasibility study. The final cost structure will be provided by Latvian Road Administration after the detailed design and tendering.

	Investment	Institution building	Total Phare (=I+IB)	Recipient SRF	IFT*	TOTAL*
	2 500 000	n/a	2 500 000	300 000**	n/a	2 800 000
TOTAL	2 500 000	n/a	2 500 000	300 000**	n/a	2 800 000

* In cases of co-financing only

SRF - State Road Fund

** VAT is not included

VAT will be financed by Latvian Road Administration (State Road Fund) and for all Road Safety improvement project in Bauska city it is 505 072 ECU.

The project is one part of overall "Latvia Highway Project". The total funding estimates are shown below:

<i>PHARE</i>	5,8	million \$	5,2	MECU
<i>IFI</i>	28,8	million \$	26,0	MECU
<i>SRF</i>	4,1	million \$	3,7	MECU
<i>PIP</i>	8,5	million \$	7,7	MECU
Total:	47,2	million \$	42,6	MECU

Without contingencies and VAT

6. Implementation Arrangements

Technical Implementation:

This will be the responsibility of the Latvian Road Administration (LRA)

Contractual & Financial Implementation:

This will be the responsibility of the Ministry of Transport, Investment and Transit Policy Department (*Implementing Agency*), PAO - Vigo Legzdins, Director

7. Implementation Schedule

The Pre-Feasibility Study (Improvement of traffic safety and capacity at throughpass of Bauska City) was prepared under the PHARE Project “Master Plan for the Maintenance, Development and Operation of the Road Network and Highway Safety Program, Latvia” 1997 - Viatek Group Ltd. in association with the company Celuprojekts.

Project is the part of World Bank “Latvia Highway Project” 1997-1999. This Latvia Highway Project will among other components provide USD 28,4 million for road maintenance, USD 12,3 million for bridges, and USD 6,0 million for road safety improvements (including central part of Bauska city).

- The design and bidding document preparation will be carried out by ‘COWI’ consultant, local design companies and the Latvian Road Administration
- Works will be tendered according to the Phare procurement rules, with Decentralised Implementation System

	98-I	98-II	98-III	98-IV	99-I	99-II	99-III	99-IV	00-I
Detailed design									
Tendering and contracting									
Construction works									
TOTAL									

8. Equal Opportunity

The main criteria in the tender process for staff evaluation are professional qualifications and experience in similar assignments. Equal opportunity for both men and women will be ensured.

9. Environment

Environmental assessment of proposed works is included in the “Traffic Safety review report of Via Baltica”. No objections have been raised in this respect. The same conclusions have also been made during the project appraisal of the World Bank “Latvia Highway Project”.

The above-mentioned reports can be obtained at the Latvian Road Administration.

10. Rates of return

Economic internal rate of return 65 %

The project will generate benefits in safety improvements, reduced fatalities, number of injured and property damages and better acceptance of road infrastructure between the resident population. Several studies have been carried out and estimates of accident costs have been elaborated. The staff appraisal report of the Highway project, financed by the World Bank, which includes the present project, using the Highway Design and maintenance Model (HDM III), with 12% discount rate and 20 years of project life, estimated various economic internal rates of return (EIRR) and net present value (NPV). The road safety improvements' section of the Highway project including black spot improvements and Bauska and Iecava regions presented an EIRR of 65%. A sensitivity analysis with statistical cost of fatalities and of injury decreased by 20% and an annual reduction of only 6 fatalities and 39 accidents with injuries would still give an EIRR of 34%. Therefore, the project shows a very high economic return.

11. Investment Criteria

1. Catalytic: The implementation of the 5 year Investment Programme for Via Baltica is essential step towards further integration of Latvian transport infrastructure into Trans-European transport network. The present project constitutes a priority task to be fulfilled in order to improve the level of comfort for the users of Via Baltica, as well as citizens living along the route. This may generate further spin-off effects for the Latvian economy itself, or Bauska city in particular.
2. Cofinancing: The project is part of the World bank "Highway Project", where 5,2 MECU is PHARE financing, 26,0 MECU - IFIs, 3,7 MECU - State Road Fund (beneficiary's financing), 7,7 MECU - Public Investment Programme.
3. Additionality: Phare intervention will not displace other financiers from the private sector or IFIs.
4. Project Readiness and Size: The following environmental studies, feasibility studies and design plans related to the project have been completed:
"Feasibility study of Via Baltica", Viatek (1993);
"Five Year Investment Programme Report", high level working party on Via Baltica (January 1996);
"Latvia Road Maintenance Reorganisation Study", Scott Wilson Kirkpatrick (September 1996);
"Via Baltica Road Safety Audit", Viatek and SweRoad (August 1996);
"Phare Master Plan for the maintenance, development and operation of the road network and highway safety programme", Viatek and SweRoad (December 1996);
"Staff appraisal report on Latvia Highway Project", World Bank Infrastructure Division (December 1996).
5. Sustainability: The total cost of the whole safety improvement programme for Bauska city is estimated around 2.35 MECU and for the completion of the other components of the construction works additional funds will be sought from PHARE CBC 1998 and Road Fund. Being a part of the already agreed project

under the framework of the World Bank “Latvia Highway Project”, the implementation will be completed by the end of 2000. Maintenance and operational costs will be later covered by the Bauska Municipality (and LRA).

6. Competition: All actions financed will respect the competition provision of the Europe Agreement.

12. Conditionality and Sequencing

- Co-financing via national budget
- The project forms a prioritised part of a long-term transport infrastructure plan
- Adequate implementation structures available
- The Pre-Feasibility Study (Improvement of traffic safety and capacity at throughpass of Bauska City) is prepared under the PHARE Project “Master Plan for the Maintenance, Development and Operation of the Road Network and Highway Safety Program, Latvia” 1997 - Viatek Group Ltd. in association with the company Celuprojekts.
- The detailed design project will be finished in June, 1998 by the company Celuprojekts.
- Tendering and contracting will start immediately afterwards under the supervision of the Latvian Road Administration (LRA).
- LRA has 3-years experience in tendering and contracting of works using international procedures under the framework of the EBRD and WB loan projects. Additional project management resources are not necessary.
- LRA Project Implementation unit (which is supported by assistance from foreign consultants e.g. Finra, SweRoad) is responsible for Project management.

Annex 1

LOGFRAME PLANNING MATRIX FOR VIA BALTICA ROAD SAFETY IMPROVEMENT IN BAUSKA CITY			Contracting period expires: 31.10.00	Date of drafting: April 1998 Disbursement period expires: 31.10.01
<i>Project Number LE9809.01</i>			Total Budget: 2.80 (MECU)	Phare contribution: 2.50 (MECU)
Wider Objective	Indicators of Achievement*	How, When and By Whom Indicators Will Be Measured	Assumptions and Risks	
<ul style="list-style-type: none"> Integration of Latvian transport infrastructure into Trans-European transport network by improvement of the Trans European Corridor # 1 (Via Baltica) crossing Latvia. 	<ul style="list-style-type: none"> Improved trafficflows; Compliance with Community standards. 	<ul style="list-style-type: none"> Official reports; Statistical data 	<ul style="list-style-type: none"> Possible changes of governmental policy and priority in the transport sector on account of political reasons. 	
Immediate Objectives	Indicators of Achievement*	How, When and By Whom Indicators Will Be Measured	Assumptions and Risks	
<ul style="list-style-type: none"> To improve the road safety in Bauska city on the Trans European Corridor # 1 (Via Baltica) crossing Latvia; To ensure further improvements along the Trans European Corridor # 1 (Via Baltica). 	<ul style="list-style-type: none"> Reduced number of accidents; Reduced number of injured; Increased number of traffic; Documentation prepared for further road improvement projects. 	<ul style="list-style-type: none"> Surveys and Statistics from the Management and Information Systems of the Latvian Road Administration and the Latvian Road Safety Directorate; Project reports. 	<ul style="list-style-type: none"> Support from local municipality; Well prepared design. 	
Outputs	Indicators of Achievement*	How, When and By Whom Indicators Will Be Measured	Assumptions and Risks	
<ul style="list-style-type: none"> Streets widened according to the forecast traffic intensity. Improved domestic and transit traffic in the city, inclusive of Via Baltica. Increased parking spaces. Reconstruction of traffic lights, pedestrian crossings, traffic signs and lighting. 	<ul style="list-style-type: none"> Reduced number of road accidents; Crossings with traffic-lights = 3 (+ 9 pedestrian crossings); Crossings without traffic-lights = 7 (+ 15 pedestrian crossings); Pedestrian sidewalks = 4,6 km Barriers + 1,6 km Elimination of obstacles to traffic turning left at junctions. 	<ul style="list-style-type: none"> Official reports Final inspection 	<ul style="list-style-type: none"> Good weather conditions; Traffic restrictions during the works. 	
Inputs	Indicators of Achievement*	How, When and By Whom Indicators Will Be Measured	Assumptions and Risks	
<ul style="list-style-type: none"> Sufficient labor force; High quality materials; Experts. 	<ul style="list-style-type: none"> Smooth project management; No personnel problems 	<ul style="list-style-type: none"> Official records; Inspection reports 	<ul style="list-style-type: none"> Sufficient funds made available; Financial viability of the company. 	

* Must be **quantified** and **measurable**

Annex 2

Detailed Cost Breakdown (MECU) - LE 9809.01

Component	Phare	State Road Fund	Total
Construction works*	2.00	0.30	2.30
Preparation of projects	0.50	0	0.50
Total	2.50	0.30	2.80

*The detailed design is already under preparation financed by the State Road Fund and will be completed by mid 1998. The total cost estimate was calculated in the pre-feasibility study.

Annex 3

IMPLEMENTATION SCHEDULE OF THE PROGRAMME - LE 9809.01					Date of Drafting	April 1998
					Planning Period	31.10.98-31.10.00
Programme Title	VIA BALTICA ROAD SAFETY IMPROVEMENT IN BAUSKA CITY					
Projects Sub-Projects	Implementation Schedule (Semesters)					Budget Allocation Cost Estimate
	P L A N N E D					
	I Oct 98-Mar 99	II Apr 99-Sep 99	III Oct 99-Mar 00	IV Apr 00-Sep 00	MECU	
1. VIA Baltica Road Safety Improvement in Bauska City	D, C, I	I	I		2.00	
2. Assistance in Preparation of Tender Documents for Investment Projects	D, C, I	I	I		0.50	
Total Programme					2.50 MECU	
Legend						
D = Design of sub-project						
C = Tendering and contracting						
I = Contract implementation and payment						

Annex 4

COMMITMENT (CONTRACT) SCHEDULE - LE 9809.01					Date of Drafting	April 1998
					Planning Period	31.10.98-31.10.00
<i>Programme Title</i>	VIA BALTICA ROAD SAFETY IMPROVEMENT IN BAUSKA CITY					
Projects	Expected Contractual Commitments (Semesters)					Budget Allocation
Sub-Projects						Cost Estimate
	P L A N N E D					
	I Oct 98-Mar 99	II Apr 99-Sep 99	III Oct 99-Mar 00	IV Apr 00-Sep 00	MECU	
1. VIA Baltica Road Safety Improvement in Bauska City	2.00	2.00	2.00	2.00	2.00	
2. Assistance in Preparation of Tender Documents for Investment Projects	0.50	0.50	0.50	0.50	0.50	
Total Programme	2.50	2.50	2.50	2.50	2.50	

Annex 4

DISBURSEMENT (PAYMENT) SCHEDULE - LE 9809.01					Date of Drafting	April 1998
					Planning Period	31.10.98-31.10.00
<i>Programme Title</i>	VIA BALTICA ROAD SAFETY IMPROVEMENT IN BAUSKA CITY					
Projects	Disbursement (Payment) Schedule (Semesters)				Budget Allocation	
Sub-Projects					Cost Estimate	
	P L A N N E D					
	I Oct 98-Mar 99	II Apr 99-Sep 99	III Oct 99-Mar 00	IV Apr 00-Sep 00	MECU	
1. VIA Baltica Road Safety Improvement in Bauska City	0.70	1.40	2.00	2.00	2.00	
2. Assistance in Preparation of Tender Documents for Investment Projects	0.20	0.40	0.50	0.50	0.50	
Total Programme	0.90	1.80	2.50	2.50	2.50	

Annex 5
LE 9809.01

**Relation of the project with previous Phare activities and with ongoing projects
financed from other sources (national, bilateral or multilateral)**

The project is related to other projects intended for road traffic safety improvement on Via Baltica road financed from Phare funds. They may be listed as follows:

- Financed from CBC 1996 programme: FC 75 - TA for the bridge over Memele river in Bauska, Latvia;
- Financed form CBC 1997 programme: Iecava road safety improvement in Iecava city on Via Baltica;
- Financed form CBC 1998 programme: Via Baltica Road Safety Improvement in Bauska City;

Reference to feasibility/pre-feasibility studies.

Concerning the Via Baltica Road Safety Improvement project, there are the following feasibility studies and investment programmes available:

- Via Baltica Feasibility Study completed in November 1993 by VIATEK Group company;
- Via Baltica - A Five-year Investment Programme completed in January 1996 by High Level Working Party on Via Baltica;
- Via Baltica - Road Safety Audit completed in August 1996 by VIATEK/SweRoad, and financed by SIDA, Sweden.
- World Bank staff appraisal report "Republic of Latvia Highway project" (February 1997).